



Price list

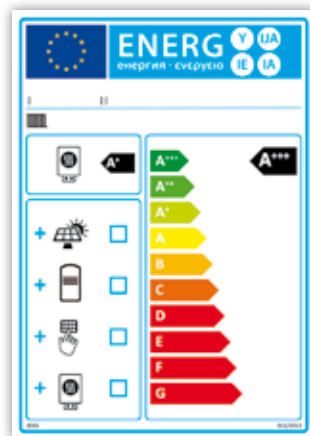
Ventilation system

Issue March 2016



Das Wolf ErP-Portal

Für die simple Erstellung von Etiketten und Datenblättern



Berechnung der
Effizienz der
Verbundanlage



Etikett und Datenblatt



Datenblatt



Etikett und Datenblatt

Das Wolf ErP-Portal im Überblick:

Mit dem Wolf ErP-Portal erstellen Sie selbst im Handumdrehen das richtige Verbundanlagen-Etikett für Ihren Wolf-Systemvorschlag. Einfacher und sicherer geht es nicht:

- Etiketten und Datenblätter für Verbundanlagen können gemäß der Verordnungen (EU) Nr. 811/2013 und 812/2013 erstellt werden
- Nach Auswahl des Hauptwärmeerzeugertyps (Öl-/Gaskessel, Kraft-Wärme-Kopplungsgerät oder Wärmepumpe) folgt ein jeweiliges Berechnungstool.
- Produkte und die zutreffenden Anlagefunktionen (z.B. Warmwasserbereitung) können gemäß dem Angebot eingegeben werden. Dabei sind nur diejenigen Produkte wählbar, welche unter die Verordnungen (EU) Nr. 811/2013 und 812/2013 fallen.

Ihre Zugangsdaten erhalten Sie von Ihrem zuständigen Wolf-Verkaufsbüro. Weitere Informationen zur Ökodesign-Richtlinie ErP finden Sie auf unserer Homepage: www.wolf-heiztechnik.de

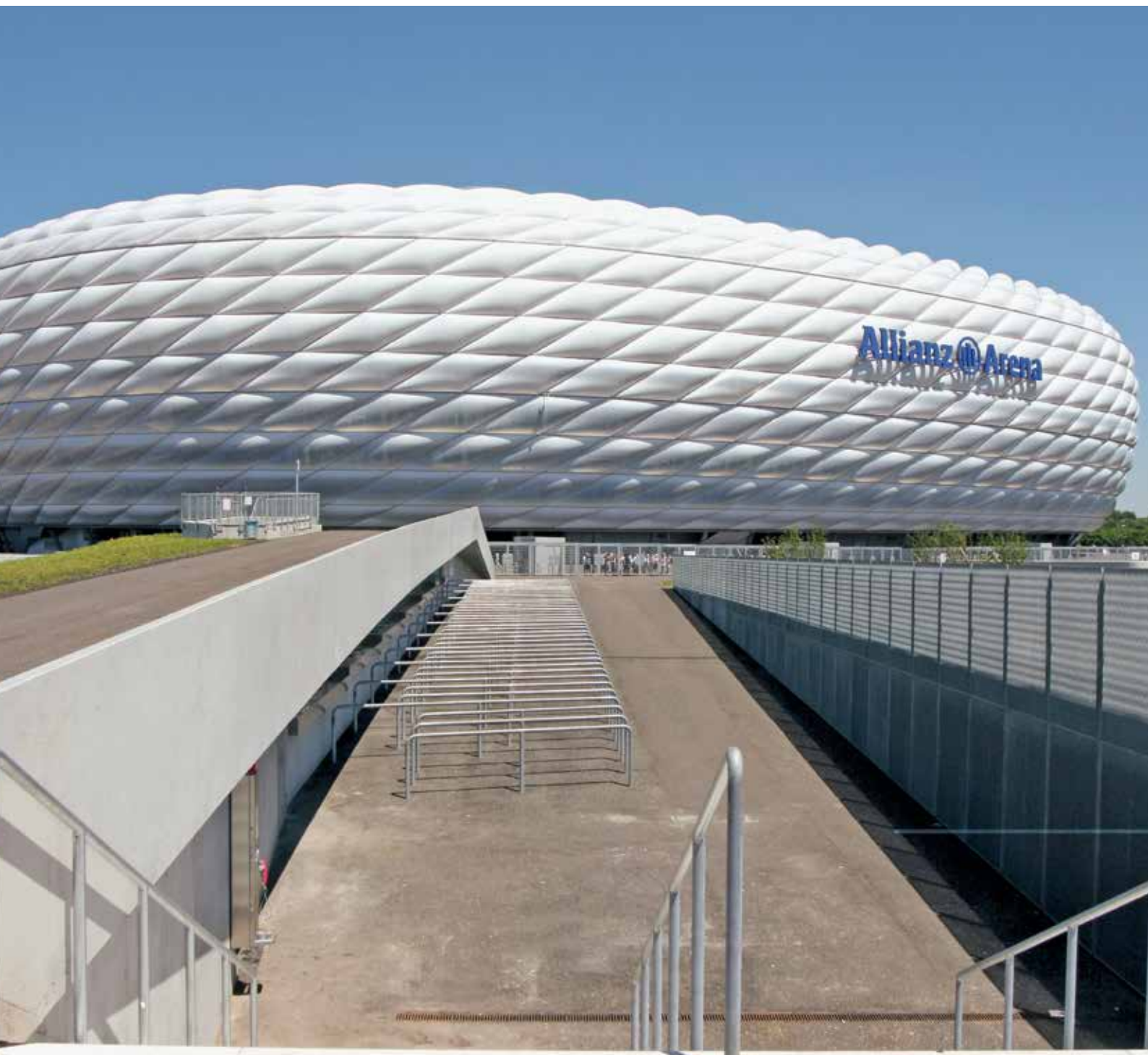
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Energiesparen und Klimaschutz serienmäßig

Allianz Arena, München

54 Wolf-Klimageräte mit Wärmerückgewinnung



LH-EC / LH / LH-ATEX Unit heater

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Unit heater with discharge louvre for wall or ceiling mounting,
 Outside air, mixed air or return air operation for heating or ventilation.
 Casing: Galvanised sheet steel.
 Discharge louvre: "Wolf silver"
 Full motor protection by temperature monitoring
 Energy saving EC-fans (1x230V)

LH-EC

EC-motor 230V / 50Hz

	LH-EC 25		LH-EC 40		LH-EC 63		LH-EC 100	
	Art. no.	€	Art. no.	€	Art. no.	€	Art. no.	€
Heat exchanger: Copper-aluminium								
Type 1	65 23 823	1.055,-	65 23 833	1.440,-	65 23 843	1.995,-	65 23 902	2.540,-
Type 2	65 23 824	1.105,-	65 23 834	1.480,-	65 23 844	2.045,-	65 23 903	2.735,-
Type 3	65 23 825	1.160,-	65 23 835	1.615,-	65 23 845	2.240,-	65 23 904	3.005,-
Type 4	65 23 826	1.235,-	65 23 836	1.685,-	65 23 846	2.370,-	65 23 905	3.095,-
Type D*	65 23 827	1.160,-	65 23 837	1.615,-	65 23 847	2.235,-	65 23 906	2.955,-
Heat exchanger: Galvanised steel								
Type 1	65 23 828	1.185,-	65 23 838	1.645,-	65 23 848	2.250,-	65 23 907	2.885,-
Type 2	65 23 829	1.255,-	65 23 839	1.705,-	65 23 849	2.540,-	65 23 908	3.520,-
Type 3	65 23 830	1.400,-	65 23 840	1.860,-	65 23 850	2.685,-	65 23 909	3.845,-
Type D* (AF horizontal)	65 23 831	1.340,-	65 23 841	1.785,-	65 23 851	2.540,-	65 23 910	3.380,-
(AF vertical)	65 23 832	1.340,-	65 23 842	1.785,-	65 23 852	2.540,-	65 23 911	3.380,-

* Note: With unit heater LH-EC in combination with electrical or steam coil, controller by request!



Unit heater with discharge louvre for wall or ceiling mounting,
Outside air, mixed air or return air operation for heating or ventilation.

Casing: Galvanised sheet steel.

Discharge louvre: "Wolf silver"

Single phase AC motor 230V / 50Hz

Three-phase motor: 3 x 400V

LH

Single phase AC motor 230V / 50Hz

	LH 25		LH 40		LH 63		LH 100	
	Art. no.	€	Art. no.	€	Art. no.	€	Art. no.	€
Heat exchanger: Copper-aluminium								
Type 1	65 23 604	880,-	65 23 614	1.140,-	65 23 624	1.450,-	-	-
Type 2	65 23 605	930,-	65 23 615	1.180,-	65 23 625	1.500,-	-	-
Type 3	65 23 606	985,-	65 23 616	1.315,-	65 23 626	1.695,-	-	-
Type 4	65 23 607	1.060,-	65 23 617	1.390,-	65 23 627	1.825,-	-	-
Type D *	65 23 608	985,-	65 23 618	1.315,-	65 23 628	1.690,-	-	-
Heat exchanger: Galvanised steel								
Type 1	65 23 609	1.015,-	65 23 619	1.345,-	65 23 629	1.705,-	-	-
Type 2	65 23 610	1.080,-	65 23 620	1.410,-	65 23 630	1.995,-	-	-
Type 3	65 23 611	1.225,-	65 23 621	1.565,-	65 23 631	2.140,-	-	-
Type D * (AF horizontal)	65 23 612	1.165,-	65 23 622	1.485,-	65 23 632	1.995,-	-	-
(AF vertical)	65 23 613	1.165,-	65 23 623	1.485,-	65 23 633	1.995,-	-	-

Three-phase motor 3 x 400V

	LH 25		LH 40		LH 63		LH 100	
	Art. no.	€	Art. no.	€	Art. no.	€	Art. no.	€
Heat exchanger: Copper-aluminium								
Type 1	65 23 554	745,-	65 23 564	1.005,-	65 23 574	1.305,-	65 23 584	1.715,-
Type 2	65 23 555	795,-	65 23 565	1.060,-	65 23 575	1.355,-	65 23 585	1.910,-
Type 3	65 23 556	865,-	65 23 566	1.180,-	65 23 576	1.550,-	65 23 586	2.185,-
Type 4	65 23 557	925,-	65 23 567	1.265,-	65 23 577	1.680,-	65 23 587	2.270,-
Type D *	65 23 558	865,-	65 23 568	1.180,-	65 23 578	1.550,-	65 23 588	2.135,-
Heat exchanger: Galvanised steel								
Type 1	65 23 559	890,-	65 23 569	1.215,-	65 23 579	1.565,-	65 23 589	2.060,-
Type 2	65 23 560	945,-	65 23 570	1.280,-	65 23 580	1.850,-	65 23 590	2.700,-
Type 3	65 23 561	1.095,-	65 23 571	1.440,-	65 23 581	2.005,-	65 23 591	3.020,-
Type D * (AF horizontal)	65 23 562	1.045,-	65 23 572	1.350,-	65 23 582	1.850,-	65 23 592	2.560,-
(AF vertical)	65 23 563	1.045,-	65 23 573	1.350,-	65 23 583	1.850,-	65 23 593	2.560,-
* Heat exchanger: Electrical (incl. safety limiter)								
2 x 3kW = 6kW (AF horizontal)	65 23 594	1.600,-	-	-	-	-	-	-
(AF vertical)	65 23 595	1.600,-	-	-	-	-	-	-
3 x 3kW = 9kW (AF horizontal)	65 23 596	1.750,-	-	-	-	-	-	-
(AF vertical)	65 23 597	1.750,-	-	-	-	-	-	-
4 x 3kW = 12kW (AF horizontal)	65 23 598	2.010,-	-	-	-	-	-	-
(AF vertical)	65 23 599	2.010,-	-	-	-	-	-	-
without heat exchangers	65 23 600	575,-	65 23 601	730,-	65 23 602	915,-	65 23 603	1.260,-





* Note: With unit heater LH in combination with electrical or steam coil, controller by request!

Accessories for unit heater LH-EC / LH

Changed art. no. are marked in red.

	WRS control systems	for products	Art. no.	€
	Ventilation operating module BML <ul style="list-style-type: none"> • Room temperature-compensated temperature control • Graphic display with backlight • Simple menu navigation through plain text display • Operation using rotary knob with push-function • 4 function keys for frequently used functions (information, temperature, speed setting, fresh air proportion) • Mounted optionally in the ventilation module or in the wall holder as remote control • Only one ventilation operating module BML is needed to operate up to 7 zones • Demand-optimised boiler water temperature demand via eBus • eBus interface 	LH-EC, LH	27 44 634	364,-
	Wall holder <ul style="list-style-type: none"> • Wall holder for using the ventilation operating module BML as remote control 	LH-EC, LH	27 44 275	27,70
	Ventilation module LM1 (incl. room temperature sensor) <ul style="list-style-type: none"> • Ventilation module for controlling unit heaters with two-stage motor • Simple configuration of the controller by selecting predefined system diagrams • Demand-optimised room temperature control via the rotary speed of the unit heater • Operation of the heating circuit pump • Operation of the heat generator • Demand-optimised boiler water temperature demand via eBus • eBus interface with automatic energy management • Ventilation operating module BML can be clipped on 	LH	27 44 603	390,-
	Ventilation module LM2 <ul style="list-style-type: none"> • Ventilation module LM2 for controlling the room temperature by means of the rotation speed or the mixer control • 2-stage motor control in connection with ventilation module LM1 or variable speed control via EC-motor • Simple configuration of the controller by selecting predefined system diagrams • Operation of the heat generator • Demand-optimised boiler water temperature demand via eBus • eBus interface with automatic energy management • Ventilation operating module BML can be clipped on • Mixed air flap control • Induction louvre control 	LH-EC, LH	27 44 604	390,-
	Outside, ceiling or room temperature sensor	LH-EC, LH	27 92 021 99	28,70

Accessories for unit heater LH-EC / LH

WRS control systems		for products	Art. no.	€
	Differential pressure switch for on-site control	loose LH-EC, LH	27 44 030	112,-
	mounted LH-EC, LH		65 23 043	204,-
	5-position switch Electronic five-stage speed controller, input 0-10V	LH		
	(2A, 400V)		27 44 840	950,-
	(4A, 400V)		27 44 841	950,-
	(6A, 230V)		27 45 066	670,-
	Supply air sensor (NTC 5K) for measuring the supply air temperature	LH-EC, LH	88 52 829	53,-
	Sensor holder for supply air sensor	LH-EC, LH	27 92 029	24,50
	ISM 5 - LON-interface module to connect ventilation modules LM1 and LM2 to a building management system applying LON-standard network variables	LH-EC, LH	27 45 029	1.600,-

Unit heater in explosion proof design for Zone 2 explosion risk areas (II 3G c IIB T4 X).

Unit heater with discharge louvre for wall or ceiling mounting.

Outdoor air, mixed air or return air operation for heating or ventilation.

Casing: Galvanised sheet steel.

Discharge louvre: "Wolf silver"

Three-phase motor: 3 x 400V/50Hz, 2-stage Δ/Y

Full motor protection with built-in thermistors.





LH-ATEX

	LH 25-ATEX		LH 40-ATEX		LH 63-ATEX		LH 100-ATEX	
	Art. no.	€	Art. no.	€	Art. no.	€	Art. no.	€
Heat exchanger Co/Al								
Type 1	65 23 013	1.000,-	65 23 020	1.260,-	65 23 027	1.575,-	65 23 034	1.995,-
Type 2	65 23 014	1.055,-	65 23 021	1.310,-	65 23 028	1.650,-	65 23 035	2.195,-
Type 3	65 23 015	1.115,-	65 23 022	1.450,-	65 23 029	1.835,-	65 23 036	2.465,-
Type 4	65 23 016	1.175,-	65 23 023	1.520,-	65 23 030	1.960,-	65 23 037	2.555,-
Heat exchanger galvanised steel								
Type 1	65 23 017	1.305,-	65 23 024	1.705,-	65 23 031	2.165,-	65 23 038	2.850,-
Type 2	65 23 018	1.355,-	65 23 025	1.760,-	65 23 032	2.440,-	65 23 039	3.505,-
Type 3	65 23 019	1.515,-	65 23 026	1.915,-	65 23 033	2.600,-	65 23 040	3.825,-

RAL and special colours by request.




Accessories for unit heater LH-ATEX

Accessories	for products	Art. no.	€
 <p>Explosion proof ATEX-terminal box fitted and wired</p>	LH-ATEX	65 23 042	386,-
 <p>Thermistor triggering unit suitable for installation in wiring board on site</p> <p>Note: Triggering unit to be fitted outside the Ex-zone only.</p>	LH-ATEX	22 10 060	171,-

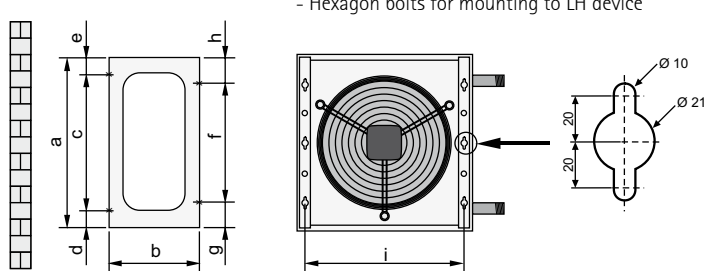
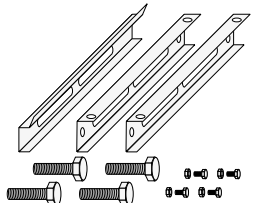
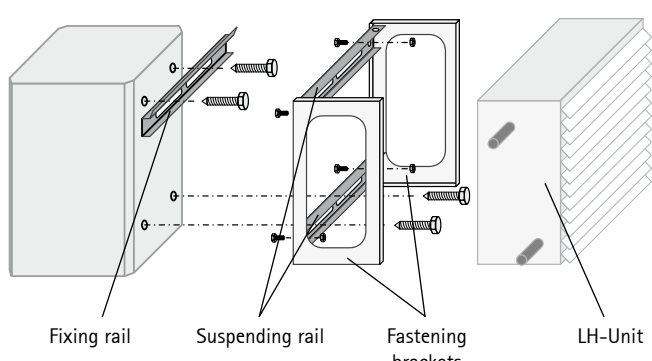
Dimensions, basic units LH-EC / LH / LH-ATEX

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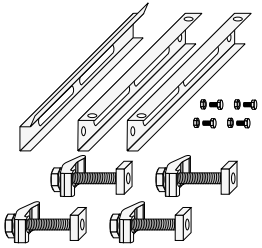
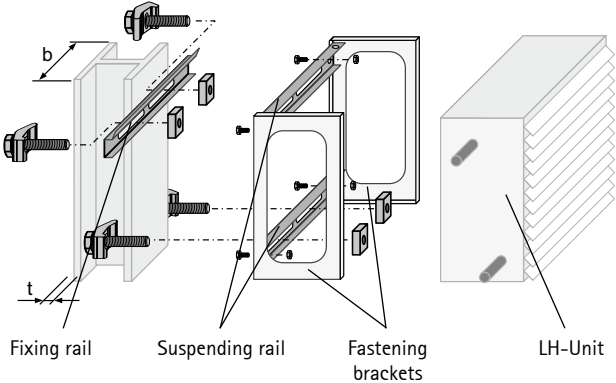
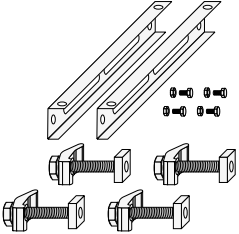
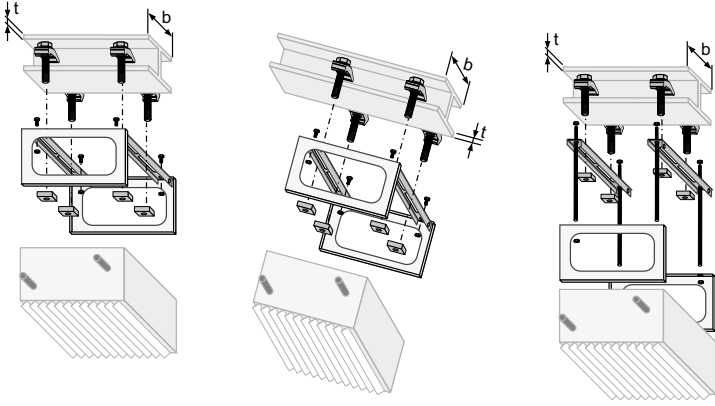
Accessories for unit heater LH-EC / LH / LH-ATEX

Connecting accessories		for products	Art. no.	€
	Shut-off sets for heat exchanger for flow and return consisting of: Threaded connection 1" for connecting to feed and return with flat gasket, automatic vent valve, fill and drain cock, ball valves with female thread 1" in feed and return, connecting facility 3/4" male thread (e.g. for the thermometer) in feed and return suitable for hot water temperatures up to max. 110 °C and operating pressure up to max. 10 bar.			
	Passage design	LH-EC/LH 25, LH25-ATEX Type 2/3/4 LH-EC/LH 40, LH40-ATEX Type 2/3/4 LH-EC/LH 63, LH63-ATEX Type 1 LH-EC/LH 100, LH100-ATEX Type 1	20 08 030	108,-
	Shut-off sets for heat exchanger for flow and return consisting of: Threaded connection 1" for connecting to feed and return with flat gasket, automatic vent valve, fill and drain cock, ball valves with female thread 1" in feed and return, connecting facility 3/4" male thread (e.g. for the thermometer) in feed and return suitable for hot water temperatures up to max. 110 °C and operating pressure up to max. 10 bar.			
	Corner design	LH-EC/LH 25, LH25-ATEX Type 2/3/4 LH-EC/LH 40, LH40-ATEX Type 2/3/4 LH-EC/LH 63, LH63-ATEX Type 1 LH-EC/LH 100, LH100-ATEX Type 1	20 08 040	115,-
	Hydraulic balancing valve	LH-EC, LH, LH-ATEX		
	DN 20 4 - 15 l/min		20 70 931	217,-
	DN 20 8 - 30 l/min		20 70 932	217,-
	DN 25 6 - 20 l/min		20 70 933	226,-
	DN 25 10 - 40 l/min		20 70 934	226,-
	DN 32 20 - 70 l/min		20 70 935	279,-
	DN 40 30 - 120 l/min		20 70 936	368,-
	Flange set consisting of 2 threaded flanges, 2 welding neck flanges and 2 flat gaskets, plus hexagonal bolts and hexagonal nuts			
	DN 20 R 3/4"	LH-EC/LH 25, 40, Type 1 LH 25-ATEX Type 1	20 70 201	71,-
	DN 25 R 1"	LH-EC/LH 25, 40, Type 2/3/4 LH 25/40-ATEX Type 2/3/4 LH-EC/LH 63,100, Type 1 LH 63/100-ATEX Type 1	20 70 202	75,-
	DN 32 R 1 1/4"	LH-EC/LH 63, Type 2/3/4 LH 63-ATEX Type 2/3/4	20 70 203	105,-
	DN 40 R 1 1/2"	LH-EC/LH 100, Type 2/3/4 LH 100-ATEX Type 2/3/4	20 70 204	117,-

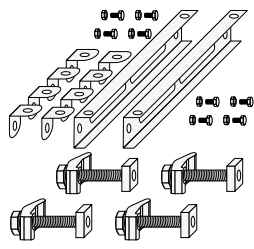
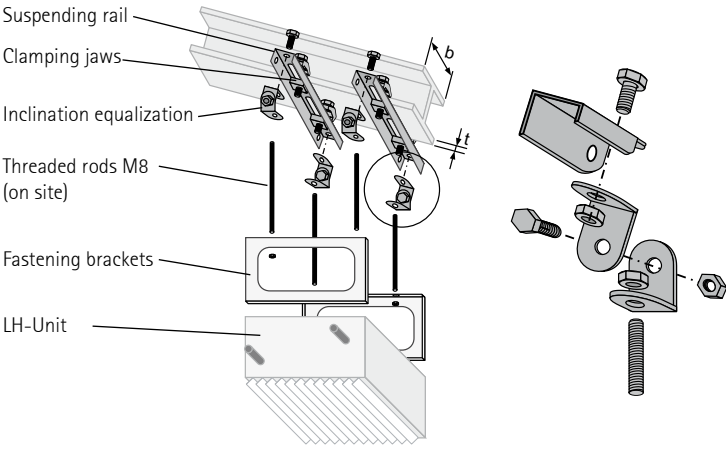
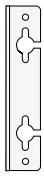
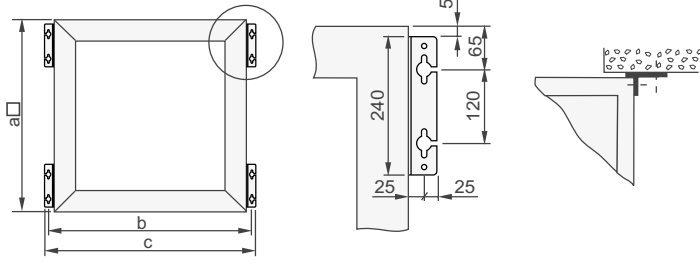
Accessories for unit heater LH-EC / LH / LH-ATEX

Device fastenings		for products	Art. no.	€																																																		
<p>Fastening brackets for wall and ceiling mounting of folded sheet steel 2mm, galvanised</p> <p>Consisting of: - 2 brackets - Hexagon bolts for mounting to LH device</p> 		LH-EC/LH 25, 40, LH 25-ATEX, 40-ATEX LH-EC/LH 63, 100, LH 63-ATEX, 100-ATEX	65 00 638 65 00 639	53,- 62,-																																																		
<table border="1"> <thead> <tr> <th>LH-EC/LH</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> <th>f</th> <th>g</th> <th>h</th> <th>i</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>480</td> <td>250</td> <td>380</td> <td>70</td> <td>30</td> <td>170</td> <td>155</td> <td>155</td> <td>434</td> </tr> <tr> <td>40</td> <td>480</td> <td>250</td> <td>2x170</td> <td>90</td> <td>50</td> <td>2x170</td> <td>70</td> <td>70</td> <td>564</td> </tr> <tr> <td>63</td> <td>784</td> <td>350</td> <td>170+340+170</td> <td>72</td> <td>32</td> <td>3x170</td> <td>137</td> <td>137</td> <td>734</td> </tr> <tr> <td>100</td> <td>784</td> <td>350</td> <td>170+340+170</td> <td>72</td> <td>32</td> <td>3x170</td> <td>137</td> <td>137</td> <td>894</td> </tr> </tbody> </table>		LH-EC/LH	a	b	c	d	e	f	g	h	i	25	480	250	380	70	30	170	155	155	434	40	480	250	2x170	90	50	2x170	70	70	564	63	784	350	170+340+170	72	32	3x170	137	137	734	100	784	350	170+340+170	72	32	3x170	137	137	894			
LH-EC/LH	a	b	c	d	e	f	g	h	i																																													
25	480	250	380	70	30	170	155	155	434																																													
40	480	250	2x170	90	50	2x170	70	70	564																																													
63	784	350	170+340+170	72	32	3x170	137	137	734																																													
100	784	350	170+340+170	72	32	3x170	137	137	894																																													
 <p>Fastening set for concrete bar – vertical for mounting to a concrete support by suspending from pre-mounted fixing rails.</p> <p>Consisting of: Fixing rail, 2 pcs suspending rails, Nuts and bolts (only in conjunction with fastening brackets, Art. no. 65 00 638) galvanized sheet steel</p> 		LH-EC/LH 25, LH 25-ATEX LH-EC/LH 40, LH 40-ATEX	65 00 781 65 00 782	83,- 83,-																																																		

Accessories for unit heater LH-EC / LH / LH-ATEX

Gerätebefestigungen	for products	Art. no.	€
 <p>Fastening set for steel bar – vertical For mounting to a steel girder by suspending from a pre-mounted mounting rail with clamping jaws. Suitable for all steel girders with flange width „b” from 100mm to 300mm and a flange thickness „t” from 6mm to 21mm. Consisting of: Fixing rail, 2 pcs. suspending rails, 4 pcs clamping jaws, nuts and bolts (only in conjunction with fastening brackets, Art. no. 65 00 638) galvanized sheet steel</p>  <p>Fixing rail Suspending rail Fastening brackets LH-Unit</p>	LH-EC/LH 25, LH 25-ATEX LH-EC/LH 40, LH 40-ATEX	65 00 783 65 00 784	161,- 161,-
 <p>Fastening set for steel bar – horizontal and inclined without inclination equalization. For fastening to a horizontal or inclined steel bar at a flange width „b” of 100-300 mm, and a flange thickness „t” of 6-21 mm. Consisting of: 2 pcs. suspending rails, 4 pcs. clamping jaws, screws and nuts. (only in conjunction with fastening brackets, Art. no. 65 00 638) galvanized sheet steel</p>  <p>Direct fastening on horizontal steel bar Direct fastening on inclined steel bar Indirect fastening on horizontal steel bar</p>	LH-EC/LH 25, LH 25-ATEX LH-EC/LH 40, LH 40-ATEX	65 00 785 65 00 786	155,- 155,-
<p>Attention: Prior to the application of fastening sets the static conditions of the concrete or steel bars have to be checked and taken into account. Assembly exclusively with basic units at a total depth of 300mm.</p>			

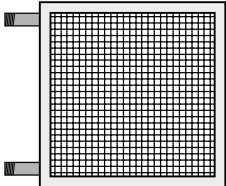
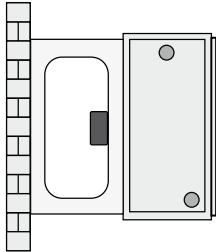
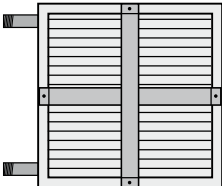
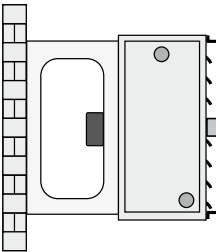
Accessories for unit heater LH-EC / LH / LH-ATEX

Device fastenings	for products	Art. no.	€																				
 <p>Fastening set for steel bar – inclined with inclination equalization For fastening an LH-Unit to a steel bar at a flange width „b” of 100-300 mm, and a flange thickness „t” of 6-21 mm. Consisting of: 2 pcs. suspending rails, 4 pcs. clamping jaws, 4 pcs. inclination equalization, screws and nuts (only in conjunction with fastening brackets, Art. no. 65 00 638) galvanized sheet steel</p> 	LH-EC/LH 25, LH 25-ATEX LH-EC/LH 40, LH 40-ATEX	65 00 787 65 00 788	176,- 176,-																				
 <p>Hanging bracket, loose for wall or ceiling mounting the LH device with fitted mixed air recirculation air, outdoor air or filter box. Galvanized sheet steel For mounting, 4 hanging brackets are necessary. These are included with the corresponding intake accessories. (Sealing against the wall/ceiling by the customer)</p> <table border="1"> <thead> <tr> <th>LH</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>500</td> <td>550</td> <td>600</td> </tr> <tr> <td>40</td> <td>630</td> <td>680</td> <td>730</td> </tr> <tr> <td>63</td> <td>800</td> <td>850</td> <td>900</td> </tr> <tr> <td>100</td> <td>1000</td> <td>1050</td> <td>1100</td> </tr> </tbody> </table> 	LH	a	b	c	25	500	550	600	40	630	680	730	63	800	850	900	100	1000	1050	1100	LH-EC, LH, LH-ATEX	1 item 65 11 454 2-piece set 65 23 052 4-piece set 65 23 053	7,80 15,60 31,30
LH	a	b	c																				
25	500	550	600																				
40	630	680	730																				
63	800	850	900																				
100	1000	1050	1100																				

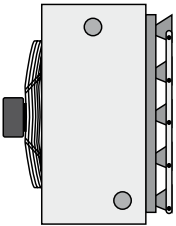
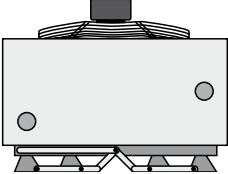

Accessories for unit heater LH-EC / LH / LH-ATEX

Discharge accessories		for products	Art. no.	€																													
	<p>Discharge cone For increasing the jet range when mounted high. Galvanized sheet steel.</p>	LH-EC/LH 25, LH 25-ATEX LH-EC/LH 40, LH 40-ATEX LH-EC/LH 63, LH 63-ATEX LH-EC/LH 100, LH 100-ATEX	65 13 541 65 13 542 65 13 543 65 13 544	96,- 112,- 119,- 173,-																													
	<table border="1"> <thead> <tr> <th>LH-EC/LH</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>280</td> <td>460</td> <td>200</td> <td>750</td> </tr> <tr> <td>40</td> <td>370</td> <td>590</td> <td>240</td> <td>790</td> </tr> <tr> <td>63</td> <td>430</td> <td>760</td> <td>270</td> <td>920</td> </tr> <tr> <td>100</td> <td>530</td> <td>920</td> <td>320</td> <td>1010</td> </tr> </tbody> </table>	LH-EC/LH	a	b	c	d	25	280	460	200	750	40	370	590	240	790	63	430	760	270	920	100	530	920	320	1010							
LH-EC/LH	a	b	c	d																													
25	280	460	200	750																													
40	370	590	240	790																													
63	430	760	270	920																													
100	530	920	320	1010																													
	<p>Discharge nozzle For large jet ranges, suitable as air curtain at doors. Discharge temperature for air curtain approx. 10-15 °C above room temperature. Galvanized sheet steel.</p>	LH-EC/LH 25, LH 25-ATEX LH-EC/LH 40, LH 40-ATEX LH-EC/LH 63, LH 63-ATEX LH-EC/LH 100, LH 100-ATEX	65 13 051 65 13 052 65 13 053 65 13 054	115,- 130,- 163,- 209,-																													
	<table border="1"> <thead> <tr> <th>LH-EC/LH</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>460</td> <td>420</td> <td>190</td> <td>390</td> <td>940</td> </tr> <tr> <td>40</td> <td>590</td> <td>550</td> <td>250</td> <td>480</td> <td>1030</td> </tr> <tr> <td>63</td> <td>760</td> <td>720</td> <td>260</td> <td>585</td> <td>1235</td> </tr> <tr> <td>100</td> <td>920</td> <td>880</td> <td>320</td> <td>685</td> <td>1375</td> </tr> </tbody> </table>	LH-EC/LH	a	b	c	d	e	25	460	420	190	390	940	40	590	550	250	480	1030	63	760	720	260	585	1235	100	920	880	320	685	1375		
LH-EC/LH	a	b	c	d	e																												
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100	920	880	320	685	1375																												
	<p>Four-way-discharge With adjustable air guide fins, suitable for heating low rooms, even air distribution to all four sides. Galvanized sheet steel. Fins in "Wolf silver", similar to RAL 9006.</p>	LH-EC/LH 25, LH 25-ATEX LH-EC/LH 40, LH 40-ATEX LH-EC/LH 63, LH 63-ATEX LH-EC/LH 100, LH 100-ATEX	65 13 061 65 13 062 65 13 063 65 13 064	141,- 161,- 185,- 204,-																													
	<table border="1"> <thead> <tr> <th>LH-EC/LH</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>500</td> <td>155</td> <td>705</td> </tr> <tr> <td>40</td> <td>630</td> <td>155</td> <td>705</td> </tr> <tr> <td>63</td> <td>800</td> <td>155</td> <td>805</td> </tr> <tr> <td>100</td> <td>1000</td> <td>155</td> <td>845</td> </tr> </tbody> </table>	LH-EC/LH	a	b	c	25	500	155	705	40	630	155	705	63	800	155	805	100	1000	155	845												
LH-EC/LH	a	b	c																														
25	500	155	705																														
40	630	155	705																														
63	800	155	805																														
100	1000	155	845																														

Accessories for unit heater LH-EC / LH / LH-ATEX

Discharge accessories		for products	Art. no.	€																		
 	<p>Wide spread discharge For greater lateral spread of the hot air jet. Air jet cone up to about 120°; horizontal and vertical fins individually adjustable. Powder-coated, colour "Wolf silver", similar to RAL 9006.</p>	LH-EC/LH 25, LH 25-ATEX LH-EC/LH 40, LH 40-ATEX LH-EC/LH 63, LH 63-ATEX LH-EC/LH 100, LH 100-ATEX	25 65 020 25 65 120 25 65 220 25 65 320	115,- 141,- 204,- 264,-																		
	<p>Discharge cross (loose) Improvement of the air circulation and temperature distribution through thorough mixing of the hot air jet with the room air. The reduced temperature of the hot air jet increases its range. Reducing the air temperature in the roof area, so reducing ventilation and transmission heat losses; energy saving up to 15%.</p>	LH-EC/LH 25, LH 25-ATEX LH-EC/LH 40, LH 40-ATEX LH-EC/LH 63, LH 63-ATEX LH-EC/LH 100, LH 100-ATEX	65 13 821 65 13 822 65 13 823 65 13 824	112,- 119,- 130,- 141,-																		
 	<p>Adaptor cone for induction louvre For increasing the jet range in higher halls in which the maximum mounting height of the ceiling-mounted units with induction louvre alone is no longer sufficient. Galvanised sheet steel.</p> <table border="1"> <thead> <tr> <th>LH-EC/LH</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> </tr> </thead> <tbody> <tr> <td>63</td> <td>460</td> <td>760</td> <td>270</td> <td>1040</td> <td>120</td> </tr> <tr> <td>100</td> <td>590</td> <td>920</td> <td>320</td> <td>1130</td> <td>120</td> </tr> </tbody> </table> <p>Required size of the induction louvre: for adaptor cone LH63: induction louvre LH25 for adaptor cone LH100: induction louvre LH40 see accessories "Induction louvre for ceiling-mounted unit"</p>	LH-EC/LH	a	b	c	d	e	63	460	760	270	1040	120	100	590	920	320	1130	120	LH-EC/LH 63, LH 63-ATEX LH-EC/LH 100, LH 100-ATEX	65 00 934 65 00 937	123,- 173,-
LH-EC/LH	a	b	c	d	e																	
63	460	760	270	1040	120																	
100	590	920	320	1130	120																	

Accessories for unit heater LH-EC / LH / LH-ATEX

Discharge accessories		for products	Art. no.	€
 <p>Induction louvre for wall-mounted unit</p> <p>manual setting</p> <p>with actuator 230V / 50Hz fitted</p> <p>with actuator 24V ~ fitted</p>		LH-EC/LH 25, LH 25-ATEX	65 00 473	217,-
		LH-EC/LH 40, LH 40-ATEX	65 00 485	254,-
		LH-EC/LH 63, LH 63-ATEX	65 00 502	293,-
		LH-EC/LH 100, LH 100-ATEX	65 00 513	330,-
		LH-EC/LH 25	65 00 475	408,-
		LH-EC/LH 40	65 00 487	447,-
		LH-EC/LH 63	65 00 504	483,-
		LH-EC/LH 100	65 00 515	520,-
		LH-EC/LH 25	65 00 957	408,-
		LH-EC/LH 40	65 00 958	447,-
		LH-EC/LH 63	65 00 959	483,-
		LH-EC/LH 100	65 00 960	520,-
 <p>Induction louvre for ceiling-mounted unit</p> <p>manual setting</p> <p>with actuator 230V / 50Hz fitted</p> <p>with actuator 24V ~ fitted</p>		LH-EC/LH 25, LH 25-ATEX	65 00 474	314,-
		LH-EC/LH 40, LH 40-ATEX	65 00 486	360,-
		LH-EC/LH 63, LH 63-ATEX	65 00 503	415,-
		LH-EC/LH 100, LH 100-ATEX	65 00 514	484,-
		LH-EC/LH 25	65 00 476	510,-
		LH-EC/LH 40	65 00 488	555,-
		LH-EC/LH 63	65 00 505	605,-
		LH-EC/LH 100	65 00 516	675,-
		LH-EC/LH 25	65 00 961	510,-
		LH-EC/LH 40	65 00 962	555,-
		LH-EC/LH 63	65 00 963	605,-
		LH-EC/LH 100	65 00 964	675,-
 <p>Key button for (230V / 50Hz)</p> <p>Actuator for induction louvre</p>		LH-EC, LH	27 01 063	88,-

Induction louvre for optimising air throw and temperature distribution

Functional description

The induction louvre with secondary-air cone divides the warm air into separate flows and inducts secondary air (room air) directly into the current of warm air downstream from the deflector vanes. The inducted secondary air causes intensive mixing of the warm air with the ambient air over a very short distance, thus reducing the temperature of the warm air stream. This reduction in temperature prevents the warm air from rising, thus extending throw and depth of penetration into the room, especially in systems with high air-discharge temperatures. The induction louvre (and thus the direction of the warm air stream) is adjustable either by hand or with the aid of an actuator and can therefore be set to suit any operating conditions or room.

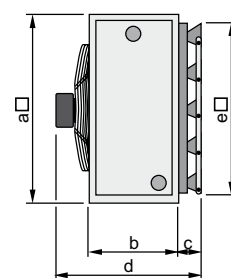
Energy savings

Avoids high temperatures close to the ceiling and the associated heat losses by ventilation and transmission. Energy savings up to 15% are possible. Easily retrofitted for upgrading. The induction louvre is easily installed, so upgrading existing systems poses no problems.

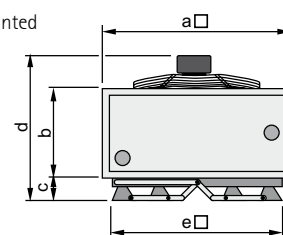
Scope of supply

Induction louvre, manually adjustable.
Alternative:
Induction louvre mounted to LH-Unit, with actuator 230V/50 Hz suitable for drive via key button or Actuator, 24V, controllable by ventilation module LM2.

Wall-mounted unit

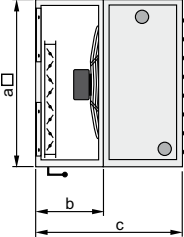
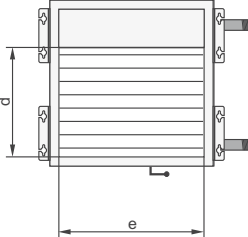
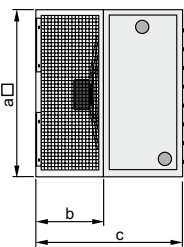
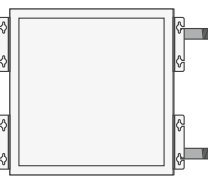


Ceiling-mounted unit

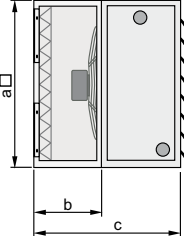
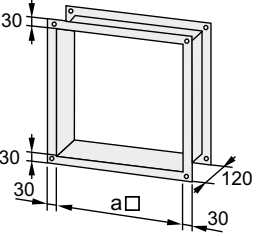


LH-EC/LH/ LH-ATEX	a	b	c	d	e
25	500	300	120	530	460
40	630	300	120	535	590
63	800	300	120	540	760
100	1000	340	120	605	920

Accessories for unit heater LH-EC / LH / LH-ATEX

Intake accessories		for products	Art. no.	€																														
<p>Mixing box For individual adaptation to the outdoor air amount. Outdoor air intake on the back panel, recirculation air intake at the side or, when turning mixed air box around by 90°, from the top. Stepless manual adjustment from pure return air operation to mixed air operation to pure outdoor air operation. Galvanised sheet steel. Suspension bracket as standard.</p> <p>Note: When used in fresh air operation unit heaters are covered by the scope of application CE 1253/2014.</p> <p>Alternative: (see page 22) Actuator, 230V, stepless (Art. no. 22 69 522) or in conjunction with ventilation module LM2 Actuator, 24V, stepless (Art. no. 22 69 521)</p> <p>Mixing box galvanized sheet steel Damper with bronze bearing</p>		<p>LH-EC/LH 25 LH-EC/LH 40 LH-EC/LH 63 LH-EC/LH 100</p>	<p>on request</p>	<p>on request</p>																														
  <table border="1"> <thead> <tr> <th>LH-EC/LH</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>500</td> <td>500</td> <td>800</td> <td>400</td> <td>400</td> </tr> <tr> <td>40</td> <td>630</td> <td>500</td> <td>800</td> <td>360</td> <td>530</td> </tr> <tr> <td>63</td> <td>800</td> <td>500</td> <td>800</td> <td>530</td> <td>700</td> </tr> <tr> <td>100</td> <td>1000</td> <td>540</td> <td>880</td> <td>690</td> <td>860</td> </tr> </tbody> </table>		LH-EC/LH	a	b	c	d	e	25	500	500	800	400	400	40	630	500	800	360	530	63	800	500	800	530	700	100	1000	540	880	690	860	<p>LH-ATEX</p>	<p>on request</p>	<p>on request</p>
LH-EC/LH	a	b	c	d	e																													
25	500	500	800	400	400																													
40	630	500	800	360	530																													
63	800	500	800	530	700																													
100	1000	540	880	690	860																													
<p>Recirculation air box with lateral intake For recirculation air intake through two grids at the side or, when turned by 90°, intake from top and bottom. Galvanized sheet steel. Suspension bracket as standard.</p>   <table border="1"> <thead> <tr> <th>LH-EC/LH</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>500</td> <td>300</td> <td>600</td> </tr> <tr> <td>40</td> <td>630</td> <td>500</td> <td>800</td> </tr> <tr> <td>63</td> <td>800</td> <td>500</td> <td>800</td> </tr> <tr> <td>100</td> <td>1000</td> <td>540</td> <td>880</td> </tr> </tbody> </table>		LH-EC/LH	a	b	c	25	500	300	600	40	630	500	800	63	800	500	800	100	1000	540	880	<p>LH-EC/LH 25, LH 25-ATEX LH-EC/LH 40, LH 40-ATEX LH-EC/LH 63, LH 63-ATEX LH-EC/LH 100, LH 100-ATEX</p>	<p>65 13 251 65 13 252 65 13 253 65 13 254</p>	<p>156,- 185,- 215,- 258,-</p>										
LH-EC/LH	a	b	c																															
25	500	300	600																															
40	630	500	800																															
63	800	500	800																															
100	1000	540	880																															

Accessories for unit heater LH-EC / LH / LH-ATEX

Intake accessories		for products	Art. no.	€																					
	<p>Filter box With filter element as dust trap in outdoor-air and mixed-air modes, filter category G4. Angle brackets optional. Galvanized sheet steel</p>	<table border="1"> <thead> <tr> <th>LH-EC/LH</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>500</td> <td>300</td> <td>600</td> </tr> <tr> <td>40</td> <td>630</td> <td>300</td> <td>600</td> </tr> <tr> <td>63</td> <td>800</td> <td>300</td> <td>600</td> </tr> <tr> <td>100</td> <td>1000</td> <td>340</td> <td>680</td> </tr> </tbody> </table>	LH-EC/LH	a	b	c	25	500	300	600	40	630	300	600	63	800	300	600	100	1000	340	680	LH-EC/LH 25, LH 25-ATEX LH-EC/LH 40, LH 40-ATEX LH-EC/LH 63, LH 63-ATEX LH-EC/LH 100, LH 100-ATEX	65 13 091 65 13 092 65 13 093 65 13 094	254,- 350,- 386,- 474,-
	LH-EC/LH	a	b	c																					
25	500	300	600																						
40	630	300	600																						
63	800	300	600																						
100	1000	340	680																						
<p>Flexible connection, 4-hole profil</p> <p>Note: In combination with LH-ATEX, an earthing strap is required for potential equalisation (Art. no. 27 65 450).</p>	<table border="1"> <thead> <tr> <th>LH-EC/LH</th> <th>a</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>400</td> </tr> <tr> <td>40</td> <td>530</td> </tr> <tr> <td>63</td> <td>700</td> </tr> <tr> <td>100</td> <td>860</td> </tr> </tbody> </table>	LH-EC/LH	a	25	400	40	530	63	700	100	860	LH-EC/LH 25, LH 25-ATEX LH-EC/LH 40, LH 40-ATEX LH-EC/LH 63, LH 63-ATEX LH-EC/LH 100, LH 100-ATEX	25 25 025 25 25 040 25 25 063 25 25 100	48,- 74,- 100,- 112,-											
LH-EC/LH	a																								
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100	860																								
																									










Accessories for unit heater LH-EC / LH / LH-ATEX

	Switching devices	for products	Art. no.	€
	Stepless speed controller For stepless operation of one or several unit heaters with EC-motor. (0 - 10V)	LH-EC	27 45 100	197,-
	1-position switch D1-2 Full motor protection switch (8A, 400V) with reclosure preventing device Note: In combination with LH-ATEX, mounting only outside the explosion risk area. Motor full protection is effected by PTC in connection with PTC triggering unit for control panel installation.	LH, LH-ATEX	27 45 465	149,-
	2-position switch D5-2 Full motor protection switch (8A, 400V) with reclosure preventing device Note: In combination with LH-ATEX, mounting only outside the explosion risk area. Motor full protection is effected by PTC in connection with PTC triggering unit for control panel installation.	LH, LH-ATEX	27 45 467	249,-
	3-position switch E 3-7T Full motor protection switch (7A, 230V) with reclosure preventing device	LH	27 01 064	269,-
	3-position switch D 3-4 Full motor protection switch (4A, 400V) with reclosure preventing device Note: In combination with LH-ATEX, mounting only outside the explosion risk area.	LH, LH-ATEX	27 01 065	378,-
	5-position switch D5... Full motor protection switch with reclosure preventing device D5-1 (1A, 400V) D5-3 (2A, 400V) D5-7 (4A, 400V) D5-12 (7A, 400V) D5-19 (12A, 400V) Note: In combination with LH-ATEX, mounting only outside the explosion risk area.	LH, LH-ATEX LH, LH-ATEX LH, LH-ATEX LH, LH-ATEX LH, LH-ATEX	27 40 015 27 40 010 27 40 013 27 40 014 27 40 017	378,- 424,- 520,- 615,- 980,-
	5-position switch E5-7T Full motor protection switch (7A, 230V) with reclosure preventing device	LH	27 40 011	344,-
	All-pole Isolator AR8 fitted and wired	LH-EC, LH	79 65 015	204,-

Accessories for unit heater LH-EC / LH / LH-ATEX

	Switching controllers / Servomotors	for products	Art. no.	€
	A1 Ü controller , w/out ex-proof switch (only suitable for one unit) Note: In combination with LH-ATEX, mounting only outside the explosion risk area.	LH 40-ATEX, 63-ATEX, 100-ATEX	79 65 030	176,-
	Ex-proof switch for A1 Ü controller, operating voltage 690 V, max. current 16 A (4A), protection class IP 66	LH-ATEX	27 39 000	108,-
	A1 automatic relay for Open/Close actuator (3.15A, 230V)	LH-EC, LH	79 65 020	88,-
	A1S automatic relay for actuator, stepless, with built-in position indicator (0 to 100%) (3,15A, 230V)	LH-EC, LH	79 40 101	198,-
	Actuator, 24V, stepless, for mixed air damper in connection with ventilation module LM2	LH-EC, LH	22 69 521	306,-
	Open/Close actuator 24V, for outdoor air damper	LH-EC, LH	22 69 556	223,-
	Open/Close actuator 230V / 50Hz, for outdoor air damper (i.e. A1S automatic relay Art. no. 79 65 020)	LH-EC, LH	22 69 523	288,-
	Actuator, 230V / 50 Hz, stepless, for mixed air damper (i.e. A1S automatic relay Art. no. 79 40 101)	LH-EC, LH	22 69 522	301,-
	Position controller for installation on wiring board front for progressive actuator in connection with automatic relay A1.	LH-EC, LH	27 44 360	80,-
	for front-panel installation in control cabinet for controlling the stepless actuator in conjunction with automatic relay A1.	LH-EC, LH	27 44 389	115,-

Accessories for unit heater LH-EC / LH / LH-ATEX

	Thermostats / Terminal box	for products	Art. no.	€
	Room thermostat	LH-EC, LH	27 34 000	45,-
	Room thermostat with summer/winter switch	LH-EC, LH	27 34 700	79,-
	Room thermostat clock with weekly program	LH-EC, LH	27 44 079	217,-
	Remote sensor for room thermostat timer	LH-EC, LH	27 44 051	34,60
	Room thermostat, industrial version	LH-EC, LH	27 35 300	88,-
	Anti-frost thermostat mounted	LH-EC/LH 25, 40, 63 LH-EC/LH 100	27 30 050 27 30 150	162,- 167,-
	Analogue timer for reduced operation with weekly program	LH-EC	27 36 251	150,-
	Earthing strap for potential equalization	LH-EC, LH, LH-ATEX	27 65 450	5,10
	Intermediate terminal box for parallel operation up to 3 LH Note: In combination with LH-ATEX, mounting only outside the explosion risk area.	LH, LH-ATEX	79 65 043	144,-



Energiesparen und Klimaschutz serienmäßig

Parkhotel Schönbrunn, Wien

8 Geräte der Baureihe KG Top mit integrierter Wärmerückgewinnung



TLH-EC / TLH TopWing Unit heater

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TLH Basic units	Page 27
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Dimensions TLH-EC / TLH	Page 30
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Device fastenings	Page 32
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Intake accessories	Page 38
Switching devices	Page 39
Thermostats / Terminal box	Page 41



Unit heater with discharge louvre
 for wall or ceiling mounting;
 outdoor air, mixed air or return air operation;
 for heating or ventilation.
 Casing: traffic white RAL 9016
 Discharge louvre: "Wolf silver"
 Full motor protection by temperature monitoring
 Energy saving EC-fans (1x230V)

TopWing TLH-EC

EC motor 230V / 50Hz

Heat exchanger *: copper-aluminium LPHW	TLH-EC 25		TLH-EC 40		TLH-EC 63		TLH-EC 100	
	Art. no.	€	Art. no.	€	Art. no.	€	Art. no.	€
Type 1	65 23 853	1.270,-	65 23 857	1.765,-	65 23 861	2.445,-	65 23 912	3.095,-
Type 2	65 23 854	1.355,-	65 23 858	1.860,-	65 23 862	2.510,-	65 23 913	3.225,-
Type 3	65 23 855	1.425,-	65 23 859	1.960,-	65 23 863	2.680,-	65 23 914	3.540,-
Type 4	65 23 856	1.495,-	65 23 860	2.060,-	65 23 864	2.860,-	65 23 915	3.715,-

* Heat exchanger galvanised steel, steam by request.
 RAL and special colours by request.



Unit heater with discharge louvre
for wall or ceiling mounting;
outdoor air, mixed air or return air operation;
for heating or ventilation.
Casing: traffic white RAL 9016
Discharge louvre: "Wolf silver"
Full motor protection with built-in thermal overload PTCe

TopWing TLH

Single phase AC motor 230V / 50Hz

Heat exchanger *: copper-aluminium LPHW	TLH 25		TLH 40		TLH 63		TLH 100	
	Art. no.	€	Art. no.	€	Art. no.	€	Art. no.	€
Type 1	65 00 156	1.095,-	65 00 164	1.465,-	65 23 674	1.900,-	-	-
Type 2	65 00 157	1.180,-	65 00 165	1.565,-	65 23 675	1.965,-	-	-
Type 3	65 00 158	1.250,-	65 00 166	1.660,-	65 23 676	2.135,-	-	-
Type 4	65 00 159	1.320,-	65 00 167	1.765,-	65 23 677	2.315,-	-	-

Three-phase motor 3 x 400V

Heat exchanger *: copper-aluminium LPHW	TLH 25		TLH 40		TLH 63		TLH 100	
	Art. no.	€	Art. no.	€	Art. no.	€	Art. no.	€
Type 1	65 23 634	985,-	65 23 638	1.315,-	65 23 642	1.755,-	65 23 646	2.270,-
Type 2	65 23 635	1.045,-	65 23 639	1.455,-	65 23 643	1.83,-	65 23 647	2.400,-
Type 3	65 23 636	1.105,-	65 23 640	1.525,-	65 23 644	1.990,-	65 23 648	2.720,-
Type 4	65 23 637	1.205,-	65 23 641	1.650,-	65 23 645	2.175,-	65 23 649	2.895,-




* Heat exchanger galvanised steel, steam by request.
RAL and special colours by request.

Accessories for TLH-EC / TLH TopWing unit heater

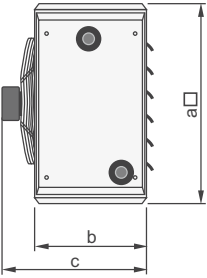
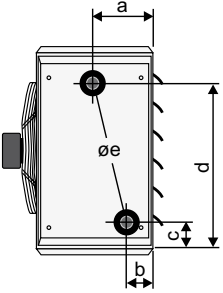
Changed art. no. are marked in red.

	WRS control systems	for products	Art. no.	€
	<p>Ventilation operating module BML</p> <ul style="list-style-type: none"> • Room temperature-compensated temperature control • Graphic display with backlight • Simple menu navigation through plain text display • Operation using rotary knob with push-function • 4 function keys for frequently used functions (information, temperature, speed setting, fresh air proportion) • Mounted optionally in the ventilation module or in the wall holder as remote control • Only one ventilation operating module BML is needed to operate up to 7 zones • Demand-optimised boiler water temperature demand via eBus • eBus interface 	TLH-EC, TLH	27 44 634	364,-
	<p>Wall holder</p> <ul style="list-style-type: none"> • Wall holder for using the ventilation operating module BML as remote control 	TLH-EC, TLH	27 44 275	27,70
	<p>Ventilation module LM1 (incl. room temperature sensor)</p> <ul style="list-style-type: none"> • Ventilation module for controlling unit heaters with two-stage motor • Simple configuration of the controller by selecting predefined system diagrams • Demand-optimised room temperature control via the rotary speed of the unit heater • Operation of the heating circuit pump • Operation of the heat generator • Demand-optimised boiler water temperature demand via eBus • eBus interface with automatic energy management • Ventilation operating module BML can be clipped on 	TLH	27 44 603	390,-
	<p>Ventilation module LM2</p> <ul style="list-style-type: none"> • Ventilation module LM2 for controlling the room temperature by means of the rotation speed or the mixer control • 2-stage motor control in connection with ventilation module LM1 or variable speed control via EC-motor • Simple configuration of the controller by selecting predefined system diagrams • Operation of the heat generator • Demand-optimised boiler water temperature demand via eBus • eBus interface with automatic energy management • Ventilation operating module BML can be clipped on • Mixed air flap control • Induction louvre control 	TLH-EC, TLH	27 44 604	390,-
	<p>Outside, ceiling or room temperature sensor</p>	TLH-EC, TLH	27 92 021 99	28,70





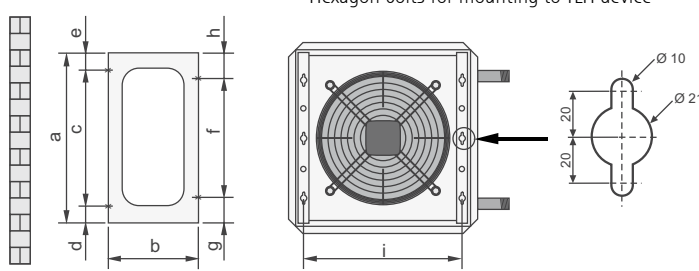
Accessories for TLH-EC / TLH TopWing unit heater

WRS control systems		for products	Art. no.	€
	Differential pressure switch for on-site control	loose TLH-EC, TLH	27 44 030	112,-
	mounted TLH-EC, TLH		65 23 043	204,-
	5-position switch Electronic five-stage speed controller, input 0-10V	TLH		
	(2A, 400V)		27 44 840	950,-
	(4A, 400V)		27 44 841	950,-
	(6A, 230V)		27 45 066	670,-
	Supply air sensor (NTC 5K) for measuring the supply air temperature	TLH-EC, TLH	88 52 829	53,-
	Sensor holder for supply air sensor	TLH-EC, TLH	27 92 029	24,50
	ISM 5 - LON-interface module to connect ventilation modules LM1 and LM2 to a building management system applying LON-standard network variables	TLH-EC, TLH	27 45 029	1.600,-

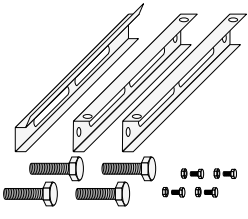
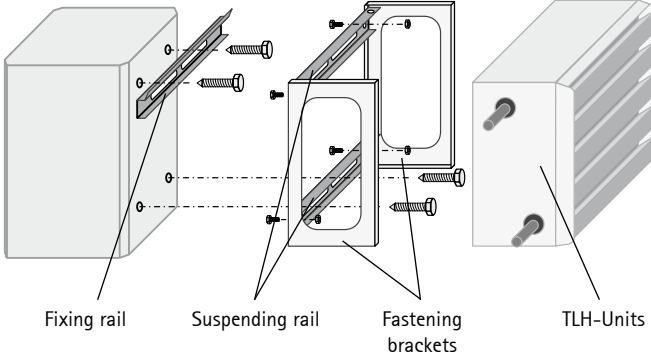
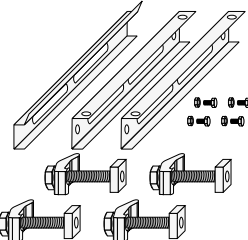
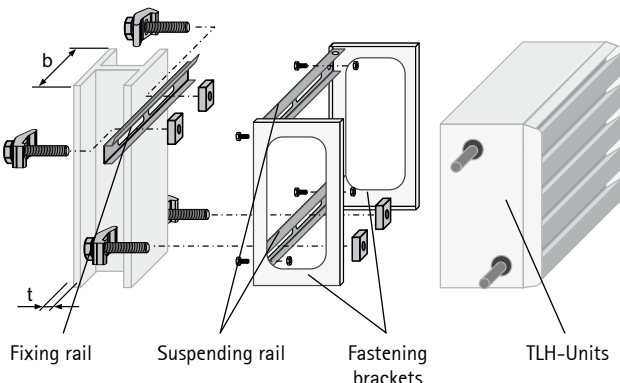
Accessories for TLH-EC / TLH TopWing unit heater

Dimensions, basic units	for products	Art. no.	€																																																						
 <p>Dimensions, basic units</p> <table border="1"> <thead> <tr> <th>TLH-EC/TLH</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>540</td> <td>300</td> <td>410</td> </tr> <tr> <td>40</td> <td>670</td> <td>300</td> <td>415</td> </tr> <tr> <td>63</td> <td>840</td> <td>300</td> <td>420</td> </tr> <tr> <td>100</td> <td>1040</td> <td>340</td> <td>485</td> </tr> </tbody> </table>	TLH-EC/TLH	a	b	c	25	540	300	410	40	670	300	415	63	840	300	420	100	1040	340	485	TLH-EC, TLH																																				
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 <p>Connections, basic units</p> <table border="1"> <thead> <tr> <th>TLH-EC/TLH</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>Øe</th> </tr> </thead> <tbody> <tr> <td>25-1</td> <td>98</td> <td>68</td> <td>92</td> <td>445</td> <td>¾"</td> </tr> <tr> <td>25-2/-3/-4</td> <td>158</td> <td>68</td> <td>95</td> <td>445</td> <td>1"</td> </tr> <tr> <td>40-1</td> <td>98</td> <td>68</td> <td>96</td> <td>574</td> <td>¾"</td> </tr> <tr> <td>40-2/-3/-4</td> <td>143</td> <td>83</td> <td>100</td> <td>570</td> <td>1"</td> </tr> <tr> <td>63-1</td> <td>103</td> <td>63</td> <td>95</td> <td>746</td> <td>1"</td> </tr> <tr> <td>63-2/-3/-4</td> <td>143</td> <td>83</td> <td>98</td> <td>742</td> <td>1¼"</td> </tr> <tr> <td>100-1</td> <td>124</td> <td>84</td> <td>115</td> <td>926</td> <td>1"</td> </tr> <tr> <td>100-2/-3/-4</td> <td>179</td> <td>89</td> <td>109</td> <td>932</td> <td>1½"</td> </tr> </tbody> </table>	TLH-EC/TLH	a	b	c	d	Øe	25-1	98	68	92	445	¾"	25-2/-3/-4	158	68	95	445	1"	40-1	98	68	96	574	¾"	40-2/-3/-4	143	83	100	570	1"	63-1	103	63	95	746	1"	63-2/-3/-4	143	83	98	742	1¼"	100-1	124	84	115	926	1"	100-2/-3/-4	179	89	109	932	1½"	TLH-EC, TLH		
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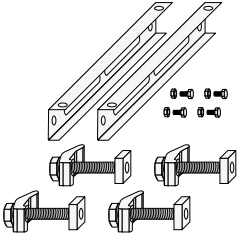
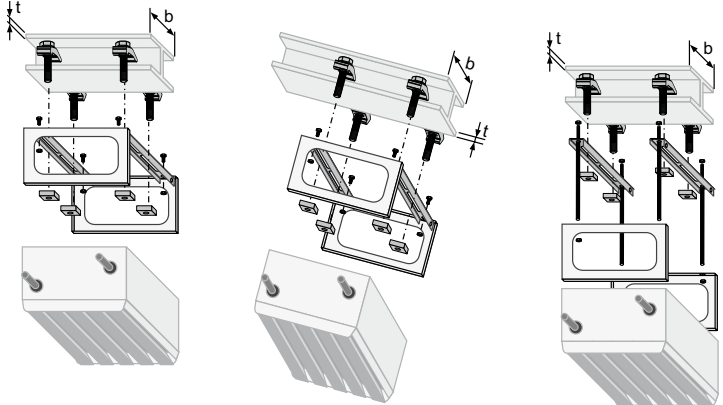
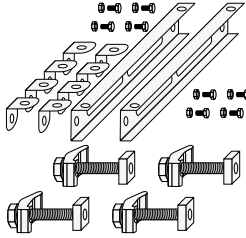
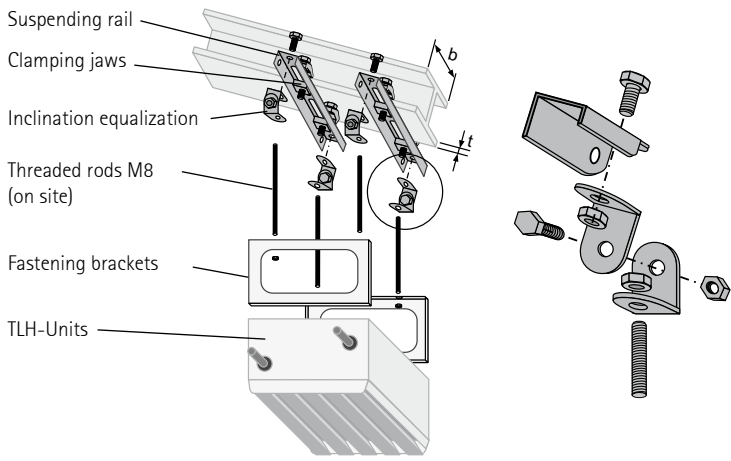
Accessories for TLH-EC / TLH TopWing unit heater

Connecting accessories / Device fastenings		for products	Art. no.	€																																																		
	Shut-off sets for heat exchanger for flow and return consisting of: Threaded connection 1" for connecting to feed and return with flat gasket, automatic vent valve, fill and drain cock, ball valves with female thread 1" in feed and return, connecting facility 3/4" male thread (e.g. for the thermometer) in feed and return suitable for hot water temperatures up to max. 110 °C and operating pressure up to max. 10 bar.																																																					
	Passage design	TLH-EC/TLH 25 Type 2/3/4 TLH-EC/TLH 40 Type 2/3/4 TLH-EC/TLH 63 Type 1 TLH-EC/TLH 100 Type 1	20 08 030	108,-																																																		
	Corner design	TLH-EC/TLH 25 Type 2/3/4 TLH-EC/TLH 40 Type 2/3/4 TLH-EC/TLH 63 Type 1 TLH-EC/TLH 100 Type 1	20 08 040	115,-																																																		
	Hydraulic balancing valve	TLH-EC, TLH																																																				
	DN 20 4 - 15 l/min		20 70 931	217,-																																																		
	DN 20 8 - 30 l/min		20 70 932	217,-																																																		
	DN 25 6 - 20 l/min		20 70 933	226,-																																																		
	DN 25 10 - 40 l/min		20 70 934	226,-																																																		
	DN 32 20 - 70 l/min		20 70 935	279,-																																																		
	DN 40 30 - 120 l/min		20 70 936	368,-																																																		
	Flange set consisting of 2 threaded flanges, 2 welding neck flanges and 2 flat gaskets, plus hexagonal bolts and hexagonal nuts																																																					
	DN 20 R 3/4"	TLH-EC/TLH 25, 40, Type 1	20 70 201	71,-																																																		
	DN 25 R 1"	TLH-EC/TLH 25, 40, Type 2/3/4 TLH-EC/TLH 63,100, Type 1	20 70 202	75,-																																																		
	DN 32 R 1 1/4"	TLH-EC/TLH 63, Type 2/3/4	20 70 203	105,-																																																		
	DN 40 R 1 1/2"	TLH-EC/TLH 100, Type 2/3/4	20 70 204	117,-																																																		
	Fastening brackets For wall- and ceiling-mounting, made of folded sheet steel, 2mm thick, powder-coated, colour traffic white RAL 9016.	TLH-EC/TLH 25, 40 TLH-EC/TLH 63, 100	65 00 494 65 00 497	53,- 62,-																																																		
	Consisting of: - 2 brackets - Hexagon bolts for mounting to TLH device																																																					
<table border="1"> <thead> <tr> <th>TLH-EC/TLH</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> <th>f</th> <th>g</th> <th>h</th> <th>i</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>480</td> <td>250</td> <td>380</td> <td>70</td> <td>30</td> <td>170</td> <td>155</td> <td>155</td> <td>434</td> </tr> <tr> <td>40</td> <td>480</td> <td>250</td> <td>2x170</td> <td>90</td> <td>50</td> <td>2x170</td> <td>70</td> <td>70</td> <td>564</td> </tr> <tr> <td>63</td> <td>784</td> <td>350</td> <td>170+340+170</td> <td>72</td> <td>32</td> <td>3x170</td> <td>137</td> <td>137</td> <td>734</td> </tr> <tr> <td>100</td> <td>784</td> <td>350</td> <td>170+340+170</td> <td>72</td> <td>32</td> <td>3x170</td> <td>137</td> <td>137</td> <td>894</td> </tr> </tbody> </table>	TLH-EC/TLH	a	b	c	d	e	f	g	h	i	25	480	250	380	70	30	170	155	155	434	40	480	250	2x170	90	50	2x170	70	70	564	63	784	350	170+340+170	72	32	3x170	137	137	734	100	784	350	170+340+170	72	32	3x170	137	137	894				
TLH-EC/TLH	a	b	c	d	e	f	g	h	i																																													
25	480	250	380	70	30	170	155	155	434																																													
40	480	250	2x170	90	50	2x170	70	70	564																																													
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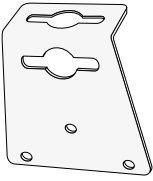
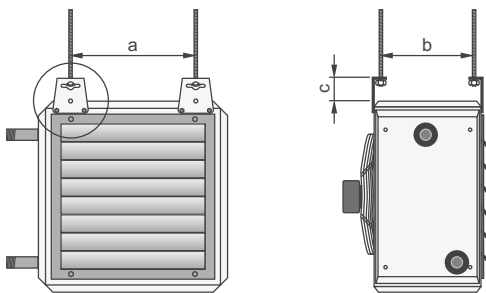
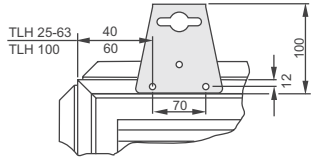
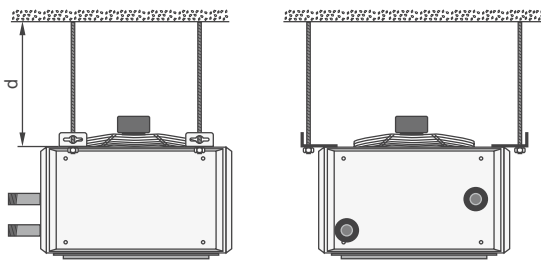
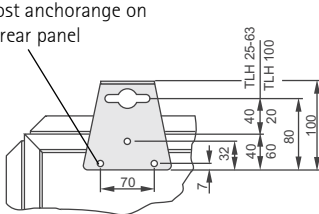
Accessories for TLH-EC / TLH TopWing unit heater

Device fastenings	for products	Art. no.	€
 <p>Fastening set for concrete bar - vertical for mounting to a concrete support by suspending from pre-mounted fixing rails. Consisting of: Fixing rail, 2 pcs suspending rails, Nuts and bolts (only in conjunction with fastening brackets, Art. no. 65 00 494) galvanized sheet steel</p>  <p>Fixing rail Suspending rail Fastening brackets TLH-Units</p>	<p>TLH-EC/TLH 25 TLH-EC/TLH 40</p>	<p>65 00 781 65 00 782</p>	<p>83,- 83,-</p>
 <p>Fastening set for steel bar - vertical For mounting to a steel girder by suspending from a pre-mounted mounting rail with clamping jaws. Suitable for all steel girders with flange width „b“ from 100mm to 300mm and a flange thickness „t“ from 6mm to 21mm. Consisting of: Fixing rail, 2 pcs suspending rails, 4 pcs clamping jaws, nuts and bolts (only in conjunction with fastening brackets, Art. no. 65 00 494) galvanized sheet steel</p>  <p>Fixing rail Suspending rail Fastening brackets TLH-Units</p>	<p>TLH-EC/TLH 25 TLH-EC/TLH 40</p>	<p>65 00 783 65 00 784</p>	<p>161,- 161,-</p>

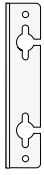
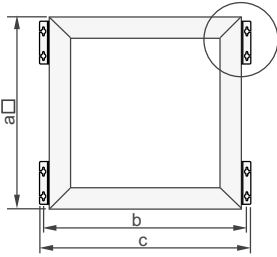
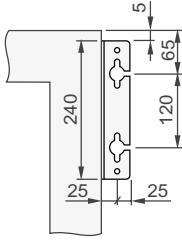
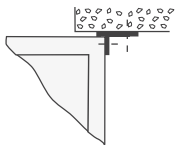
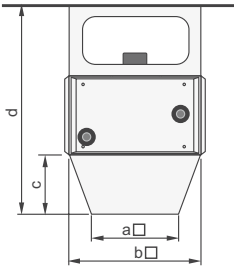
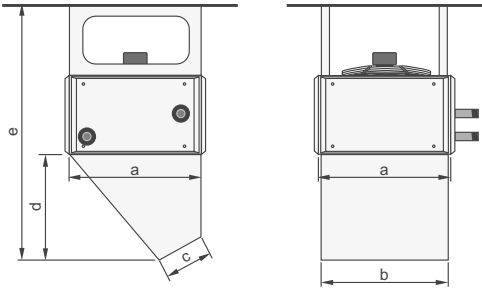
Accessories for TLH-EC / TLH TopWing unit heater

Device fastenings	for products	Art. no.	€
 <p>Fastening set for steel bar – horizontal and inclined without inclination equalization. For fastening to a horizontal or inclined steel bar at a flange width „b” of 100-300 mm, and a flange thickness „t” of 6-21 mm. Consisting of: 2 pcs. suspending rails, 4 pcs. clamping jaws, screws and nuts. (only in conjunction with fastening brackets, Art. no. 65 00 494) galvanized sheet steel</p>  <p>Direct fastening on horizontal steel bar Direct fastening on inclined steel bar Indirect fastening on horizontal steel bar</p> <p>Attention: Prior to the application of fastening sets the static conditions of the concrete or steel bars have to be checked and taken into account.</p>	TLH-EC/TLH 25 TLH-EC/TLH 40	65 00 785 65 00 786	155,- 155,-
 <p>Fastening set for steel bar – inclined with inclination equalization For fastening an LH-Unit to a steel bar at a flange width „b” of 100-300 mm, and a flange thickness „t” of 6-21 mm. Consisting of: 2 pcs. suspending rails, 4 pcs. clamping jaws, 4 pcs. inclination equalization, screws and nuts (only in conjunction with fastening brackets, Art. no. 65 00 494) galvanized sheet steel</p>  <p>Suspending rail Clamping jaws Inclination equalization Threaded rods M8 (on site) Fastening brackets TLH-Units</p>	TLH-EC/TLH 25 TLH-EC/TLH 40	65 00 787 65 00 788	176,- 176,-

Accessories for TLH-EC / TLH TopWing unit heater

Device fastenings	for products	Art. no.	€																									
 <p>Hangers for configurations with horizontal / vertical air flow For suspending the TLH heater horizontally / vertically from the ceiling, powder-coated, color traffic white RAL 9016. Suitable for use in conjunction with threaded rods or perforated strip for configurations with horizontal air flow. 1 Set = 4 items</p>	TLH-EC, TLH	65 00 038	33,20																									
<p>Horizontal air flow</p>  <table border="1"> <thead> <tr> <th>TLH-EC/TLH</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>350</td> <td>266</td> <td>60</td> </tr> <tr> <td>40</td> <td>480</td> <td>266</td> <td>60</td> </tr> <tr> <td>63</td> <td>650</td> <td>266</td> <td>60</td> </tr> <tr> <td>100</td> <td>810</td> <td>306</td> <td>60</td> </tr> </tbody> </table> 	TLH-EC/TLH	a	b	c	25	350	266	60	40	480	266	60	63	650	266	60	100	810	306	60								
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40	480	266	60																									
63	650	266	60																									
100	810	306	60																									
<p>Vertical air flow</p>  <p>Outermost anchorage on rear panel</p>  <table border="1"> <thead> <tr> <th>TLH-EC/TLH</th> <th>a</th> <th>b</th> <th>c</th> <th>d_{min}</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>270</td> <td>580</td> <td>620</td> <td>250</td> </tr> <tr> <td>40</td> <td>440</td> <td>710</td> <td>750</td> <td>250</td> </tr> <tr> <td>63</td> <td>610</td> <td>880</td> <td>920</td> <td>350</td> </tr> <tr> <td>100</td> <td>780</td> <td>1040</td> <td>1080</td> <td>350</td> </tr> </tbody> </table>	TLH-EC/TLH	a	b	c	d _{min}	25	270	580	620	250	40	440	710	750	250	63	610	880	920	350	100	780	1040	1080	350			
TLH-EC/TLH	a	b	c	d _{min}																								
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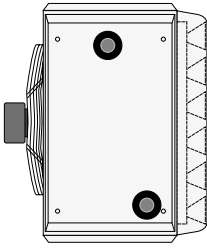
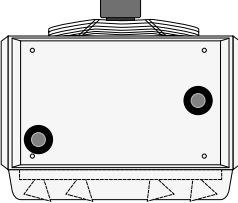

Accessories for TLH-EC / TLH TopWing unit heater

Device fastenings / Discharge accessories	for products	Art. no.	€																														
 <p>Hanging bracket, loose for wall or ceiling mounting the TLH device with fitted mixed air recirculation air, outdoor air or filter box. Powder-coated, color traffic white RAL 9016. For mounting, 4 hanging brackets are necessary. These are included with the corresponding intake accessories. (Sealing against the wall/ceiling by the customer)</p> <table border="1"> <thead> <tr> <th>TLH-EC/TLH</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>500</td> <td>550</td> <td>600</td> </tr> <tr> <td>40</td> <td>630</td> <td>680</td> <td>730</td> </tr> <tr> <td>63</td> <td>800</td> <td>850</td> <td>900</td> </tr> <tr> <td>100</td> <td>1000</td> <td>1050</td> <td>1100</td> </tr> </tbody> </table>   	TLH-EC/TLH	a	b	c	25	500	550	600	40	630	680	730	63	800	850	900	100	1000	1050	1100	TLH-EC, TLH 1 item 4-piece set	65 00 325 65 23 054	8,10 33,-										
TLH-EC/TLH	a	b	c																														
25	500	550	600																														
40	630	680	730																														
63	800	850	900																														
100	1000	1050	1100																														
 <p>Discharge cone For increasing the jet range when mounted high. Powder-coated, color traffic white RAL 9016.</p> <table border="1"> <thead> <tr> <th>TLH-EC/TLH</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>280</td> <td>460</td> <td>200</td> <td>750</td> </tr> <tr> <td>40</td> <td>370</td> <td>590</td> <td>240</td> <td>790</td> </tr> <tr> <td>63</td> <td>430</td> <td>760</td> <td>270</td> <td>920</td> </tr> <tr> <td>100</td> <td>530</td> <td>920</td> <td>320</td> <td>1010</td> </tr> </tbody> </table>	TLH-EC/TLH	a	b	c	d	25	280	460	200	750	40	370	590	240	790	63	430	760	270	920	100	530	920	320	1010	TLH-EC/TLH 25 TLH-EC/TLH 40 TLH-EC/TLH 63 TLH-EC/TLH 100	65 00 333 65 00 403 65 00 406 65 00 409	108,- 126,- 136,- 198,-					
TLH-EC/TLH	a	b	c	d																													
25	280	460	200	750																													
40	370	590	240	790																													
63	430	760	270	920																													
100	530	920	320	1010																													
 <p>Discharge nozzle For large jet ranges, suitable as air curtain at doors. Discharge temperature for air curtain approx. 10-15 °C above room temperature. Powder-coated, color traffic white RAL 9016.</p> <table border="1"> <thead> <tr> <th>TLH-EC/TLH</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>460</td> <td>420</td> <td>190</td> <td>390</td> <td>940</td> </tr> <tr> <td>40</td> <td>590</td> <td>550</td> <td>250</td> <td>480</td> <td>1030</td> </tr> <tr> <td>63</td> <td>760</td> <td>720</td> <td>260</td> <td>585</td> <td>1235</td> </tr> <tr> <td>100</td> <td>920</td> <td>880</td> <td>320</td> <td>685</td> <td>1375</td> </tr> </tbody> </table>	TLH-EC/TLH	a	b	c	d	e	25	460	420	190	390	940	40	590	550	250	480	1030	63	760	720	260	585	1235	100	920	880	320	685	1375	TLH-EC/TLH 25 TLH-EC/TLH 40 TLH-EC/TLH 63 TLH-EC/TLH 100	65 00 412 65 00 424 65 00 436 65 00 448	130,- 150,- 189,- 244,-
TLH-EC/TLH	a	b	c	d	e																												
25	460	420	190	390	940																												
40	590	550	250	480	1030																												
63	760	720	260	585	1235																												
100	920	880	320	685	1375																												

Accessories for TLH-EC / TLH TopWing unit heater

Discharge accessories		for products	Art. no.	€																			
	<p>Four-way-discharge With adjustable air guide fins, suitable for heating low rooms, even air distribution to all four sides. Powder-coated, color traffic white RAL 9016. Fins in "Wolf silver", similar to RAL 9006.</p>	TLH-EC/TLH 25 TLH-EC/TLH 40 TLH-EC/TLH 63 TLH-EC/TLH 100	65 00 460 65 00 465 65 00 467 65 00 469	161,- 185,- 213,- 238,-																			
	<table border="1"> <thead> <tr> <th>TLH-EC/TLH</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>500</td> <td>155</td> <td>705</td> </tr> <tr> <td>40</td> <td>630</td> <td>155</td> <td>705</td> </tr> <tr> <td>63</td> <td>800</td> <td>155</td> <td>805</td> </tr> <tr> <td>100</td> <td>1000</td> <td>155</td> <td>845</td> </tr> </tbody> </table>	TLH-EC/TLH	a	b	c	25	500	155	705	40	630	155	705	63	800	155	805	100	1000	155	845		
TLH-EC/TLH	a	b	c																				
25	500	155	705																				
40	630	155	705																				
63	800	155	805																				
100	1000	155	845																				
	<p>Wide spread discharge For greater lateral spread of the hot air jet Air jet cone up to about 120°; horizontal and vertical fins individually adjustable. Powder-coated, colour "Wolf silver", similar to RAL 9006.</p>	TLH-EC/TLH 25 TLH-EC/TLH 40 TLH-EC/TLH 63 TLH-EC/TLH 100	25 65 020 25 65 120 25 65 220 25 65 320	115,- 141,- 204,- 264,-																			
	<p>Flexible connection, 4-hole profile</p>	TLH-EC/TLH 25 TLH-EC/TLH 40 TLH-EC/TLH 63 TLH-EC/TLH 100	25 25 025 25 25 040 25 25 063 25 25 100	48,- 74,- 100,- 112,-																			
	<table border="1"> <thead> <tr> <th>TLH-EC/TLH</th> <th>a</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>400</td> </tr> <tr> <td>40</td> <td>530</td> </tr> <tr> <td>63</td> <td>700</td> </tr> <tr> <td>100</td> <td>860</td> </tr> </tbody> </table>	TLH-EC/TLH	a	25	400	40	530	63	700	100	860												
TLH-EC/TLH	a																						
25	400																						
40	530																						
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100	860																						

Accessories for TLH-EC / TLH TopWing unit heater

Discharge accessories		for products	Art. no.	€
 <p>Induction louvre for wall-mounted unit with secondary-air cone color traffic white RAL 9016</p> <p>manual setting</p> <p>with actuator 230V~ fitted</p> <p>with actuator 24V~ fitted</p>		TLH-EC/TLH 25	65 00 477	286,-
		TLH-EC/TLH 40	65 00 489	331,-
		TLH-EC/TLH 63	65 00 506	380,-
		TLH-EC/TLH 100	65 00 517	427,-
		TLH-EC/TLH 25	65 00 479	461,-
		TLH-EC/TLH 40	65 00 491	510,-
		TLH-EC/TLH 63	65 00 508	555,-
		TLH-EC/TLH 100	65 00 519	605,-
		TLH-EC/TLH 25	65 00 618	461,-
		TLH-EC/TLH 40	65 00 619	510,-
		TLH-EC/TLH 63	65 00 620	555,-
		TLH-EC/TLH 100	65 00 621	605,-
 <p>Induction louvre for ceiling-mounted unit with secondary-air cone color traffic white RAL 9016</p> <p>manual setting</p> <p>with actuator 230V~ fitted</p> <p>with actuator 24V~ fitted</p>		TLH-EC/TLH 25	65 00 478	411,-
		TLH-EC/TLH 40	65 00 490	467,-
		TLH-EC/TLH 63	65 00 507	540,-
		TLH-EC/TLH 100	65 00 518	625,-
		TLH-EC/TLH 25	65 00 480	580,-
		TLH-EC/TLH 40	65 00 492	635,-
		TLH-EC/TLH 63	65 00 509	715,-
		TLH-EC/TLH 100	65 00 520	805,-
		TLH-EC/TLH 25	65 00 622	580,-
		TLH-EC/TLH 40	65 00 623	635,-
		TLH-EC/TLH 63	65 00 624	710,-
		TLH-EC/TLH 100	65 00 625	805,-
 <p>Key button for (230V / 50Hz) Actuator for induction louvre with secondary-air cone</p>		TLH-EC/TLH 25, 40, 63, 100	27 01 063	88,-

Induction louvre for optimising air throw and temperature distribution

Functional description

The induction louvre with secondary-air cone divides the warm air into separate flows and inducts secondary air (room air) directly into the current of warm air downstream from the deflector vanes. The inducted secondary air causes intensive mixing of the warm air with the ambient air over a very short distance, thus reducing the temperature of the warm air stream. This reduction in temperature prevents the warm air from rising, thus extending throw and depth of penetration into the room, especially in systems with high air-discharge temperatures. The induction louvre (and thus the direction of the warm air stream) is adjustable either by hand or with the aid of an actuator and can therefore be set to suit any operating conditions or room.

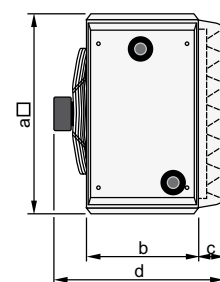
Energy savings

Avoids high temperatures close to the ceiling and the associated heat losses by ventilation and transmission. Energy savings up to 15% are possible. Easily retrofitted for upgrading. The induction louvre is easily installed, so upgrading existing systems poses no problems.

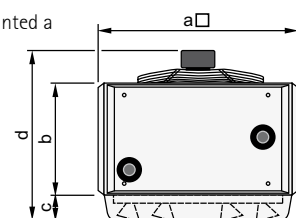
Scope of supply

Induction louvre, manually adjustable.
Alternative:
Induction louvre mounted to LH-Unit, with actuator 230V/50 Hz suitable for drive via key button or Actuator, 24V, controllable by ventilation module LM2.

Wall-mounted unit



Ceiling-mounted a unit



TLH-EC/TLH	a	b	c	d
25	540	300	120	530
40	670	300	120	535
63	840	300	120	540
100	1040	340	120	605

Accessories for TLH-EC / TLH TopWing unit heater

Intake accessories		for products	Art. no.	€																														
<p>Mixing box/thermally insulated mixing box Mixed air box in thermally insulated design to avoid condensate accumulation. For individual adaptation to the outdoor air amount. Outdoor air intake on the back panel, recirculation air intake on side or, when turning mixed air box around 90°, from top or bottom. Stepless manual adjustment from pure return air operation to mixed air operation to pure outdoor air operation. Powder-coated, colour traffic white RAL 9016. Suspension bracket as standard.</p> <p style="text-align: center;">without thermal insulation</p> <p style="text-align: center;">with thermal insulation</p> <p>Note: When used in fresh air operation unit heaters are covered by the scope of application CE 1253/2014.</p> <p>Alternative: (see Page 40) Actuator, 230V, stepless (Art. no. 22 69 522) or in conjunction with ventilation module LM2 Actuator, 24V, stepless (Art. no. 22 69 521)</p>		<p>TLH-EC/TLH 25 TLH-EC/TLH 40 TLH-EC/TLH 63 TLH-EC/TLH 100</p> <p>TLH-EC/TLH 25 TLH-EC/TLH 40 TLH-EC/TLH 63 TLH-EC/TLH 100</p>	<p>on request</p> <p>on request</p>	<p>on request</p> <p>on request</p>																														
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TLH-EC/ TLH	a	b	c	d	e																													
25	500	500	800	245	400																													
40	630	500	800	360	530																													
63	800	500	800	530	700																													
100	1000	540	880	690	860																													
<p>Recirculation air box with lateral intake for recirculation air intake through two grids at the side or, when turned by 90°, intake from top and bottom. Powder-coated, color traffic white RAL 9016. Suspension bracket as standard.</p>		<p>TLH-EC/TLH 25 TLH-EC/TLH 40 TLH-EC/TLH 63 TLH-EC/TLH 100</p>	<p>65 00 331 65 00 389 65 00 393 65 00 397</p>	<p>181,- 213,- 251,- 297,-</p>																														
	<table border="1"> <thead> <tr> <th>TLH-EC/TLH</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>500</td> <td>300</td> <td>600</td> </tr> <tr> <td>40</td> <td>630</td> <td>500</td> <td>800</td> </tr> <tr> <td>63</td> <td>800</td> <td>500</td> <td>800</td> </tr> <tr> <td>100</td> <td>1000</td> <td>540</td> <td>880</td> </tr> </tbody> </table>	TLH-EC/TLH	a	b	c	25	500	300	600	40	630	500	800	63	800	500	800	100	1000	540	880													
TLH-EC/TLH	a	b	c																															
25	500	300	600																															
40	630	500	800																															
63	800	500	800																															
100	1000	540	880																															
<p>Filter box With filter element as dust trap in outdoor-air and mixed-air modes, filter category G4 for TLH 63 and G3 for TLH 25/40/100. Angle brackets optional. Powder-coated, color traffic white RAL 9016.</p>		<p>TLH-EC/TLH 25 TLH-EC/TLH 40 TLH-EC/TLH 63 TLH-EC/TLH 100</p>	<p>65 00 549 65 00 554 65 00 559 65 00 564</p>	<p>293,- 402,- 444,- 545,-</p>																														
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63	800	300	600																															
100	1000	340	680																															










Accessories for TLH-EC / TLH TopWing unit heater

Switching devices		for products	Art. no.	€
	Stepless speed controller For stepless operation of one or several unit heaters with EC-motor. (0 - 10V)	TLH-EC	27 45 100	197,-
	1-position switch D1-2 Full motor protection switch (8A, 400V) with reclosure preventing device	TLH	27 45 465	149,-
	2-position switch DS-2 Full motor protection switch (AA, 400V) with reclosure preventing device	TLH	27 45 467	249,-
	3-position switch D 3-4 Full motor protection switch (4A, 400V) with reclosure preventing device	TLH	27 01 065	378,-
	5-position switch D5... Full motor protection switch with reclosure preventing device	TLH	27 40 015	378,-
	D5-1 (1A, 400V)	TLH	27 40 010	424,-
	D5-3 (2A, 400V)	TLH	27 40 013	520,-
	D5-7 (4A, 400V)	TLH	27 40 014	615,-
	D5-12 (7A, 400V)	TLH	27 40 017	980,-
D5-19 (12A, 400V)	TLH			
	3-position switch E 3-7T Full motor protection switch (7A, 230V) with reclosure preventing device	TLH	27 01 064	269,-

Accessories for TLH-EC / TLH TopWing unit heater

	Switching devices	for products	Art. no.	€
	5-position switch E5-7T Full motor protection switch (7A, 230V) with reclosure preventing device	TLH	27 40 011	344,-
	All-pole Isolator AR8 fitted and wired	TLH-EC, TLH	79 65 015	204,-
	A1 automatic relay for Open/Close actuator (3.15A, 230V) (for Art. no. 22 36 600)	TLH-EC, TLH	79 65 020	88,-
	A1S automatic relay for actuator, stepless, with built-in position indicator (0 to 100%) (3,15A, 230V) (für Art. no. 22 36 550)	TLH-EC, TLH	79 40 101	198,-
	Position controller for installation on wiring board front for progressive actuator in connection with automatic relay A1. (for Art. no. 79 65 020)	TLH-EC, TLH	27 44 360	80,-
	for front-panel installation in control cabinet for controlling the stepless actuator in conjunction with automatic relay A1. (for Art. no. 79 65 020)	TLH-EC, TLH	27 44 389	115,-
	Actuator, 24V, stepless, for mixed air damper in connection with ventilation module LM2	TLH-EC, TLH	22 69 521	306,-
	Open/Close actuator 24V, for outdoor air damper	TLH-EC, TLH	22 69 556	223,-
	Open/Close actuator 230V / 50Hz, for outdoor air damper (i.e. A1S automatic relay Art. no. 79 65 020)	TLH-EC, TLH	22 69 523	288,-
	Actuator, 230V / 50 Hz, stepless, for mixed air damper (i.e. A1S automatic relay Art. no. 79 40 101)	TLH-EC, TLH	22 69 522	301,-

Accessories for TLH-EC / TLH TopWing unit heater

	Thermostats / Terminal box	for products	Art. no.	€
	Room thermostat	TLH-EC, TLH	27 34 000	45,-
	Room thermostat with summer/winter switch	TLH-EC, TLH	27 34 700	79,-
	Room thermostat clock with weekly program	TLH-EC, TLH	27 44 079	217,-
	Remote sensor for room thermostat timer	TLH-EC, TLH	27 44 051	34,60
	Room thermostat, industrial version	TLH-EC, TLH	27 35 300	88,-
	Anti-frost thermostat mounted	TLH-EC/TLH 25, 40, 63 TLH-EC/TLH 100	27 30 050 27 30 150	162,- 167,-
	Analogue timer for reduced operation with weekly program	TLH-EC	27 36 251	150,-
	Earthing strap for potential equalization	TLH-EC, TLH	27 65 450	5,10
	Intermediate terminal box for parallel operation up to 3 LH	TLH	79 65 043	144,-



Energiesparen und Klimaschutz serienmäßig

Wolf KG Top Klimasysteme der Zukunft



TLHK-EC / TLHK TopWing Unit heater

Basic units TLHK-EC	Page 44
Basic units TLHK	Page 45
WRS control systems	Page 45
Dimensions TLHK-EC /TLHK	Page 48
Connecting accessories	Page 49
Device fastenings	Page 50
Intake accessories	Page 52



Unit heater for heating or cooling
in return air or mixed air operation
for wall mounting,
Discharge louvre: traffic white RAL 9016
Full motor protection by temperature monitoring
Energy saving EC-fans (1x230V)

TopWing TLHK-EC

Heat exchangers copper-aluminium LPHW / ch.w.
Induction louvre with secondary air cone
Free condensate drain

Manually adjustable induction louvre	TLHK-EC 25		TLHK-EC 40		TLHK-EC 63		TLHK-EC 100	
	Art. no.	€	Art. no.	€	Art. no.	€	Art. no.	€
EC motor 230V / 50Hz	65 23 865	1.800,-	65 23 868	2.330,-	65 23 871	3.025,-	65 23 916	3.385,-

Induction louvre with servomotor 230V / 50Hz For control via pushbutton	TLHK-EC 25		TLHK-EC 40		TLHK-EC 63		TLHK-EC 100	
	Art. no.	€	Art. no.	€	Art. no.	€	Art. no.	€
EC motor 230V / 50Hz	65 23 866	1.950,-	65 23 869	2.495,-	65 23 872	3.190,-	65 23 917	3.545,-

Induction louver with servomotor 24V can be controlled via LM2 ventilation control unit	TLHK-EC 25		TLHK-EC 40		TLHK-EC 63		TLHK-EC 100	
	Art. no.	€	Art. no.	€	Art. no.	€	Art. no.	€
EC motor 230V / 50Hz	65 23 867	1.950,-	65 23 870	2.495,-	65 23 873	3.190,-	65 23 918	3.545,-

RAL and special colours by request.



Unit heater for heating or cooling
in return air or mixed air operation
for wall mounting,
Discharge louvre: traffic white RAL 9016
Full motor protection with built-in thermal overload PTC

TopWing TLHK

Heat exchangers copper-aluminium LPHW / ch.w.
Induction louvre with secondary air cone
Free condensate drain


Manually adjustable induction louvre	TLHK 25		TLHK 40		TLHK 63		TLHK 100	
	Art. no.	€	Art. no.	€	Art. no.	€	Art. no.	€
Single phase AC motor 230V / 50Hz	65 23 375	1.625,-	65 23 377	2.030,-	65 23 678	2.485,-	-	-
Three-phase motor 3 x 400V	65 23 650	1.505,-	65 23 651	1.910,-	65 23 652	2.375,-	65 23 653	2.565,-

Induction louvre with servomotor 230V / 50Hz For control via pushbutton	TLHK 25		TLHK 40		TLHK 63		TLHK 100	
	Art. no.	€	Art. no.	€	Art. no.	€	Art. no.	€
Single phase AC motor 230V / 50Hz	65 23 391	1.775,-	65 23 395	2.195,-	65 23 679	2.645,-	-	-
Three-phase motor 3 x 400V	65 23 654	1.665,-	65 23 655	2.070,-	65 23 656	2.535,-	65 23 657	2.725,-

Induction louver with servomotor 24V can be controlled via LM2 ventilation control unit	TLHK 25		TLHK 40		TLHK 63		TLHK 100	
	Art. no.	€	Art. no.	€	Art. no.	€	Art. no.	€
Single phase AC motor 230V / 50Hz	65 23 393	1.775,-	65 23 397	2.195,-	65 23 680	2.645,-	-	-
Three-phase motor 3 x 400V	65 23 658	1.665,-	65 23 659	2.070,-	65 23 660	2.535,-	65 23 661	2.725,-

RAL and special colours by request.

Accessories for TLHK-EC / TLHK TopWing unit heater







	WRS control systems	for products	Art. no.	€
	Key button for (230V / 50Hz) Actuator for induction louvre with secondary-air cone		TLHK-EC, TLHK	27 01 063

Accessories for TLHK-EC / TLHK TopWing unit heater

Changed art. no. are marked in red.

	WRS control systems	for products	Art. no.	€
	<p>Ventilation operating module BML</p> <ul style="list-style-type: none"> • Room temperature-compensated temperature control • Graphic display with backlight • Simple menu navigation through plain text display • Operation using rotary knob with push-function • 4 function keys for frequently used functions (information, temperature, speed setting, fresh air proportion) • Mounted optionally in the ventilation module or in the wall holder as remote control • Only one ventilation operating module BML is needed to operate up to 7 zones • Demand-optimised boiler water temperature demand via eBus • eBus interface 	TLHK-EC, TLHK	27 44 634	364,-
	<p>Wall holder</p> <ul style="list-style-type: none"> • Wall holder for using the ventilation operating module BML as remote control 	TLHK-EC, TLHK	27 44 275	27,70
	<p>Ventilation module LM1 (incl. room temperature sensor)</p> <ul style="list-style-type: none"> • Ventilation module for controlling unit heaters with two-stage motor • Simple configuration of the controller by selecting predefined system diagrams • Demand-optimised room temperature control via the rotary speed of the unit heater • Operation of the heating circuit pump • Operation of the heat generator • Demand-optimised boiler water temperature demand via eBus • eBus interface with automatic energy management • Ventilation operating module BML can be clipped on 	TLHK	27 44 603	390,-
	<p>Ventilation module LM2</p> <ul style="list-style-type: none"> • Ventilation module LM2 for controlling the room temperature by means of the rotation speed or the mixer control • 2-stage motor control in connection with ventilation module LM1 or variable speed control via EC-motor • Simple configuration of the controller by selecting predefined system diagrams • Operation of the heat generator • Demand-optimised boiler water temperature demand via eBus • eBus interface with automatic energy management • Ventilation operating module BML can be clipped on • Mixed air flap control • Induction louvre control 	TLHK-EC, TLHK	27 44 604	390,-
	<p>Outside, ceiling or room temperature sensor</p>	TLHK-EC, TLHK	27 92 021 99	28,70

Accessories for TLHK-EC / TLHK TopWing unit heater

WRS control systems		for products	Art. no.	€											
	Anti-frost thermostat mounted	TLHK-EC/TLHK 25, 40, 63 TLHK-EC/TLHK 100	27 30 050 27 30 150	162,- 167,-											
		Differential pressure switch for on-site control <table style="margin-left: 20px;"> <tr> <td>loose</td> <td>TLHK-EC, TLHK</td> <td>27 44 030</td> <td>112,-</td> </tr> <tr> <td>mounted</td> <td>TLHK-EC, TLHK</td> <td>65 23 043</td> <td>204,-</td> </tr> </table>	loose	TLHK-EC, TLHK	27 44 030	112,-	mounted	TLHK-EC, TLHK	65 23 043	204,-					
loose	TLHK-EC, TLHK	27 44 030	112,-												
mounted	TLHK-EC, TLHK	65 23 043	204,-												
	Earthing strap for potential equalization	TLHK-EC, TLHK	27 65 450	5,10											
	5-position switch Electronic five-stage speed controller, input 0-10V <table style="margin-left: 20px;"> <tr> <td>(2A, 400V)</td> <td>TLHK</td> <td>27 44 840</td> <td>950,-</td> </tr> <tr> <td>(4A, 400V)</td> <td></td> <td>27 44 841</td> <td>950,-</td> </tr> <tr> <td>(6A, 230V)</td> <td></td> <td>27 45 066</td> <td>670,-</td> </tr> </table>	(2A, 400V)	TLHK	27 44 840	950,-	(4A, 400V)		27 44 841	950,-	(6A, 230V)		27 45 066	670,-		
(2A, 400V)	TLHK	27 44 840	950,-												
(4A, 400V)		27 44 841	950,-												
(6A, 230V)		27 45 066	670,-												
	Supply air sensor (NTC 5K) for measuring the supply air temperature	TLHK-EC, TLHK	88 52 829	53,-											
	Sensor holder for supply air sensor	TLHK-EC, TLHK	27 92 029	24,50											
	ISM 5 - LON-interface module to connect ventilation modules LM1 and LM2 to a building management system applying LON-standard network variables	TLHK-EC, TLHK	27 45 029	1.600,-											

Dimensions TLHK-EC / TLHK TopWing unit heater

Dimensions, basic units		for products	Art. no.	€																														
	Dimensions, basic units <table border="1"> <thead> <tr> <th>TLHK-EC/TLHK</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>540</td> <td>300</td> <td>120</td> <td>530</td> </tr> <tr> <td>40</td> <td>670</td> <td>300</td> <td>120</td> <td>535</td> </tr> <tr> <td>63</td> <td>840</td> <td>300</td> <td>120</td> <td>540</td> </tr> <tr> <td>100</td> <td>1040</td> <td>340</td> <td>120</td> <td>605</td> </tr> </tbody> </table>	TLHK-EC/TLHK	a	b	c	d	25	540	300	120	530	40	670	300	120	535	63	840	300	120	540	100	1040	340	120	605	TLHK-EC / TLHK							
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	Connections, basic units <table border="1"> <thead> <tr> <th>TLHK-EC/TLHK</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>Øe</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>158</td> <td>68</td> <td>94</td> <td>445</td> <td>1"</td> </tr> <tr> <td>40</td> <td>143</td> <td>83</td> <td>99</td> <td>570</td> <td>1"</td> </tr> <tr> <td>63</td> <td>143</td> <td>83</td> <td>99</td> <td>743</td> <td>1¼"</td> </tr> <tr> <td>100</td> <td>179</td> <td>89</td> <td>109</td> <td>932</td> <td>1½"</td> </tr> </tbody> </table>	TLHK-EC/TLHK	a	b	c	d	Øe	25	158	68	94	445	1"	40	143	83	99	570	1"	63	143	83	99	743	1¼"	100	179	89	109	932	1½"	TLHK-EC / TLHK		
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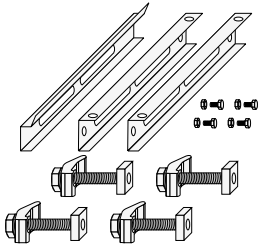
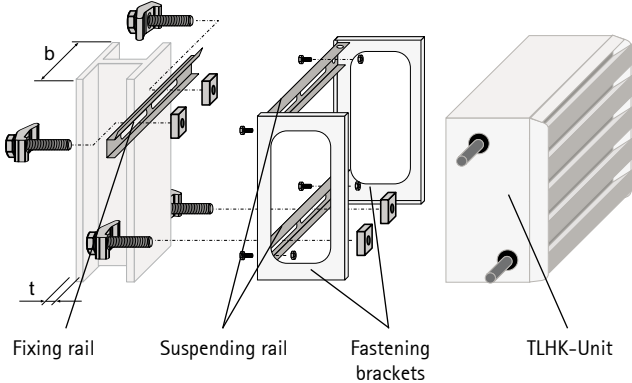
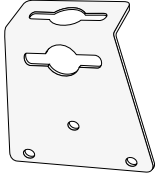
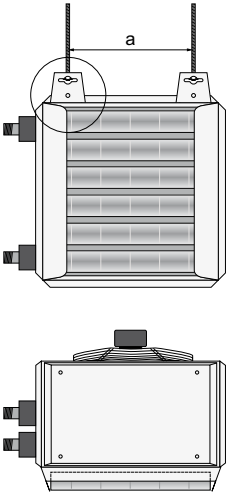
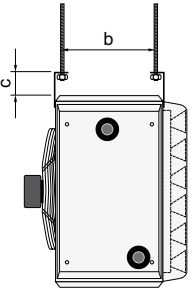
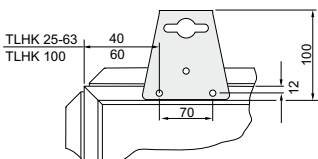
Accessories for TLHK-EC / TLHK TopWing unit heater

Connecting accessories		for products	Art. no.	€
	Shut-off sets for heat exchanger for flow and return consisting of: Threaded connection 1" for connecting to feed and return with flat gasket, automatic vent valve, fill and drain cock, ball valves with female thread 1" in feed and return, connecting facility 3/4" male thread (e.g. for the thermometer) in feed and return suitable for hot water temperatures up to max. 110 °C and operating pressure up to max. 10 bar.			
	Passage design	TLHK-EC/TLHK 25, 40	20 08 030	108,-
				
	Corner design	TLHK-EC/TLHK 25, 40	20 08 040	115,-
	Flange set consisting of 2 threaded flanges, 2 welding neck flanges and 2 flat gaskets, plus hexagonal bolts and hexagonal nuts			
	DN 25 R 1"	TLHK 25, 40	20 70 202	75,-
	DN 32 R 1 1/4"	TLHK 63	20 70 203	105,-
	DN 40 R 1 1/2"	TLHK 100	20 70 204	117,-
	Hydraulic balancing valve	TLHK-EC, TLHK		
	DN 20 4 - 15 l/min		20 70 931	217,-
	DN 20 8 - 30 l/min		20 70 932	217,-
	DN 25 6 - 20 l/min		20 70 933	226,-
	DN 25 10 - 40 l/min		20 70 934	226,-
	DN 32 20 - 70 l/min		20 70 935	279,-
	DN 40 30 - 120 l/min		20 70 936	368,-
	Condensate pump with potential-free alarm output consisting of: Condensate pump with potential-free alarm output, PVC hose 10mm (6m long), non-return valve	TLHK-EC, TLHK	20 71 268	227,-
		Tundish R1 with siphon and rosette Transparent plastic	TLHK-EC, TLHK	20 11 005


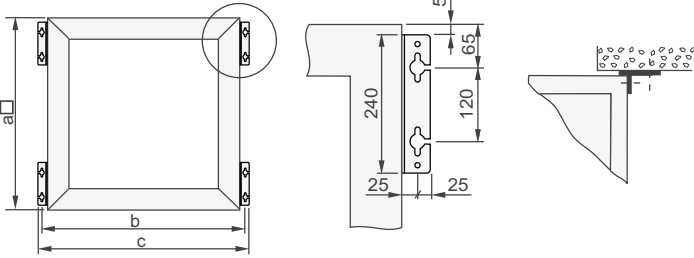
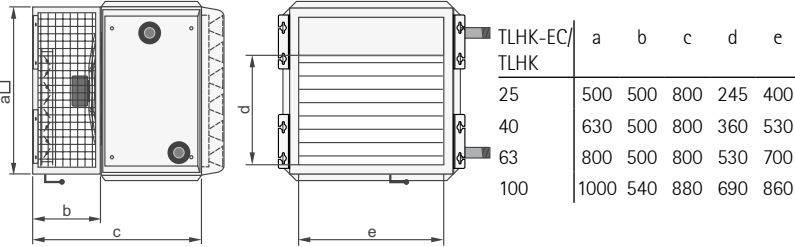
Accessories for TLHK-EC / TLHK TopWing unit heater

Device fastenings		for products	Art. no.	€																																																		
<p>Fastening brackets For wall- and ceiling-mounting, made of folded, sheet steel, 2mm thick, powder-coated, colour traffic white RAL 9016.</p> <p>Consisting of: - 2 brackets - Hexagon bolts for mounting to TLHK device</p>		TLHK-EC/TLHK 25, 40 TLHK-EC/TLHK 63, 100	65 00 494 65 00 497	53,- 62,-																																																		
<table border="1"> <thead> <tr> <th>TLHK-EC/TLHK</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> <th>f</th> <th>g</th> <th>h</th> <th>i</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>480</td> <td>250</td> <td>380</td> <td>70</td> <td>30</td> <td>170</td> <td>155</td> <td>155</td> <td>434</td> </tr> <tr> <td>40</td> <td>480</td> <td>250</td> <td>2x170</td> <td>90</td> <td>50</td> <td>2x170</td> <td>70</td> <td>70</td> <td>564</td> </tr> <tr> <td>63</td> <td>784</td> <td>350</td> <td>170+340+170</td> <td>72</td> <td>32</td> <td>3x170</td> <td>137</td> <td>137</td> <td>734</td> </tr> <tr> <td>100</td> <td>784</td> <td>350</td> <td>170+340+170</td> <td>72</td> <td>32</td> <td>3x170</td> <td>137</td> <td>137</td> <td>894</td> </tr> </tbody> </table>	TLHK-EC/TLHK	a	b	c	d	e	f	g	h	i	25	480	250	380	70	30	170	155	155	434	40	480	250	2x170	90	50	2x170	70	70	564	63	784	350	170+340+170	72	32	3x170	137	137	734	100	784	350	170+340+170	72	32	3x170	137	137	894				
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<p>Fastening set for concrete bar - vertical for mounting to a concrete support by suspending from pre-mounted fixing rails. consisting of: Fixing rail, 2 pcs. suspending rails, Nuts and bolts (only in conjunction with fastening brackets, Art. no. 65 00 494) galvanized sheet steel</p>		TLHK-EC/TLHK 25 TLHK-EC/TLHK 40	65 00 781 65 00 782	83,- 83,-																																																		

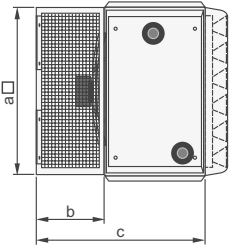
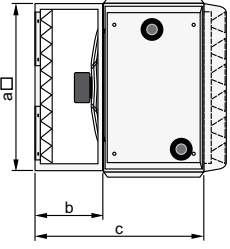
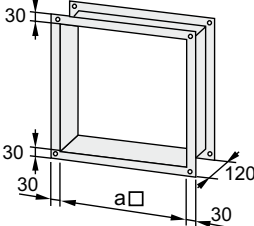
Accessories for TLHK-EC / TLHK TopWing unit heater

Device fastenings	for products	Art. no.	€																				
 <p>Fastening set for steel bar - vertical For mounting to a steel girder by suspending from a pre-mounted mounting rail with clamping jaws. Suitable for all steel girders with flange width „b“ from 100mm to 300mm and a flange thickness „t“ from 6mm to 21mm. Consisting of: Fixing rail, 2 pcs suspending rails, 4 pcs clamping jaws, nuts and bolts (only in conjunction with fastening brackets, Art. no. 65 00 494) galvanized sheet steel</p>  <p>Fixing rail Suspending rail Fastening brackets TLHK-Unit</p>	TLHK-EC/TLHK 25 TLHK-EC/TLHK 40	65 00 783 65 00 784	161,- 161,-																				
 <p>Hangers for configurations with horizontal air flow For suspending the TLHK vertically from the ceiling, powder-coated, color traffic white RAL 9016. Suitable for use in conjunction with threaded rods or perforated strip for configurations with horizontal air flow. 1 set = 4 items</p> <p>Horizontal air flow</p>   <table border="1"> <thead> <tr> <th>TLHK-EC/TLHK</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>350</td> <td>266</td> <td>60</td> </tr> <tr> <td>40</td> <td>480</td> <td>266</td> <td>60</td> </tr> <tr> <td>63</td> <td>650</td> <td>266</td> <td>60</td> </tr> <tr> <td>100</td> <td>810</td> <td>306</td> <td>60</td> </tr> </tbody> </table>  <p>TLHK 25-63 40 60 TLHK 100 70 12 100</p>	TLHK-EC/TLHK	a	b	c	25	350	266	60	40	480	266	60	63	650	266	60	100	810	306	60	TLHK-EC, TLHK	65 00 038	33,20
TLHK-EC/TLHK	a	b	c																				
25	350	266	60																				
40	480	266	60																				
63	650	266	60																				
100	810	306	60																				

Accessories for TLHK-EC / TLHK TopWing unit heater

Device fastenings / Intake accessories	for products	Art. no.	€																														
 <p>Hanging bracket, loose TLHK 25, 40, 63, 100 recirculation air, outdoor air or filter box. Powder-coated, color traffic white RAL 9016. For mounting, 4 hanging brackets are necessary. These are included with the corresponding intake accessories. (Sealing against the wall/ceiling by the customer)</p> <table border="1"> <thead> <tr> <th>TLHK-EC/TLHK</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>500</td> <td>550</td> <td>600</td> </tr> <tr> <td>40</td> <td>630</td> <td>680</td> <td>730</td> </tr> <tr> <td>63</td> <td>800</td> <td>850</td> <td>900</td> </tr> <tr> <td>100</td> <td>1000</td> <td>1050</td> <td>1100</td> </tr> </tbody> </table> 	TLHK-EC/TLHK	a	b	c	25	500	550	600	40	630	680	730	63	800	850	900	100	1000	1050	1100	TLHK-EC, TLHK 1 item 4-piece set	65 00 325 65 23 054	8,10 33,-										
TLHK-EC/TLHK	a	b	c																														
25	500	550	600																														
40	630	680	730																														
63	800	850	900																														
100	1000	1050	1100																														
<p>Mixing box/thermally insulated mixing box Mixed air box in thermally insulated design to avoid condensate accumulation. For individual adaptation to the outdoor air amount. Outdoor air intake on the back panel, recirculation air intake on side or, when turning mixed air box around 90°, from top or bottom. Stepless manual adjustment between pure return air and mixed air operation. Powder-coated, colour traffic white (RAL 9016). Suspension bracket as standard.</p> <p>without thermal insulation</p> <p>TLHK-EC/TLHK 25 TLHK-EC/TLHK 40 TLHK-EC/TLHK 63 TLHK-EC/TLHK 100</p> <p>with thermal insulation</p> <p>TLHK-EC/TLHK 25 TLHK-EC/TLHK 40 TLHK-EC/TLHK 63 TLHK-EC/TLHK 100</p> <p>Note: When used in fresh air operation unit heaters are covered by the scope of application CE 1253/2014.</p> <p>Alternative: (see Page 22) Actuator, 24V, stepless (Art. no. 22 69 521)</p>  <table border="1"> <thead> <tr> <th>TLHK-EC/ TLHK</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>500</td> <td>500</td> <td>800</td> <td>245</td> <td>400</td> </tr> <tr> <td>40</td> <td>630</td> <td>500</td> <td>800</td> <td>360</td> <td>530</td> </tr> <tr> <td>63</td> <td>800</td> <td>500</td> <td>800</td> <td>530</td> <td>700</td> </tr> <tr> <td>100</td> <td>1000</td> <td>540</td> <td>880</td> <td>690</td> <td>860</td> </tr> </tbody> </table>	TLHK-EC/ TLHK	a	b	c	d	e	25	500	500	800	245	400	40	630	500	800	360	530	63	800	500	800	530	700	100	1000	540	880	690	860	TLHK-EC/TLHK 25 TLHK-EC/TLHK 40 TLHK-EC/TLHK 63 TLHK-EC/TLHK 100 TLHK-EC/TLHK 25 TLHK-EC/TLHK 40 TLHK-EC/TLHK 63 TLHK-EC/TLHK 100	on request on request	on request on request
TLHK-EC/ TLHK	a	b	c	d	e																												
25	500	500	800	245	400																												
40	630	500	800	360	530																												
63	800	500	800	530	700																												
100	1000	540	880	690	860																												

Accessories for TLHK-EC / TLHK TopWing unit heater

Intake accessories		for products	Art. no.	€																			
	<p>Recirculation air box with lateral intake for recirculation air intake through two grids at the side or, when turned by 90°, intake from top and bottom. powder-coated, color traffic white RAL 9016. Suspension bracket as standard.</p>	TLHK-EC/TLHK 25 TLHK-EC/TLHK 40 TLHK-EC/TLHK 63 TLHK-EC/TLHK 100	65 00 331 65 00 389 65 00 393 65 00 397	181,- 213,- 251,- 297,-																			
	<table border="1"> <thead> <tr> <th>TLHK-EC/TLHK</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>500</td> <td>300</td> <td>600</td> </tr> <tr> <td>40</td> <td>630</td> <td>500</td> <td>800</td> </tr> <tr> <td>63</td> <td>800</td> <td>500</td> <td>800</td> </tr> <tr> <td>100</td> <td>1000</td> <td>540</td> <td>880</td> </tr> </tbody> </table>	TLHK-EC/TLHK	a	b	c	25	500	300	600	40	630	500	800	63	800	500	800	100	1000	540	880		
TLHK-EC/TLHK	a	b	c																				
25	500	300	600																				
40	630	500	800																				
63	800	500	800																				
100	1000	540	880																				
	<p>Filter box With filter element as dust trap in outdoor-air and mixed-air modes, filter category G4 for TLH 63 and G3 for TLH 25/40/100. Angle brackets optional. Powder-coated, color traffic white RAL 9016.</p>	TLHK-EC/TLHK 25 TLHK-EC/TLHK 40 TLHK-EC/TLHK 63 TLHK-EC/TLHK 100	65 00 549 65 00 554 65 00 559 65 00 564	293,- 402,- 444,- 545,-																			
	<table border="1"> <thead> <tr> <th>TLHK-EC/TLHK</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>500</td> <td>300</td> <td>600</td> </tr> <tr> <td>40</td> <td>630</td> <td>300</td> <td>600</td> </tr> <tr> <td>63</td> <td>800</td> <td>300</td> <td>600</td> </tr> <tr> <td>100</td> <td>1000</td> <td>340</td> <td>680</td> </tr> </tbody> </table>	TLHK-EC/TLHK	a	b	c	25	500	300	600	40	630	300	600	63	800	300	600	100	1000	340	680		
TLHK-EC/TLHK	a	b	c																				
25	500	300	600																				
40	630	300	600																				
63	800	300	600																				
100	1000	340	680																				
	<p>Flexible connection, 4-hole profile</p>	TLHK-EC/TLHK 25 TLHK-EC/TLHK 40 TLHK-EC/TLHK 63 TLHK-EC/TLHK 100	25 25 025 25 25 040 25 25 063 25 25 100	48,- 74,- 100,- 112,-																			
	<table border="1"> <thead> <tr> <th>TLHK-EC/TLHK</th> <th>a</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>400</td> </tr> <tr> <td>40</td> <td>530</td> </tr> <tr> <td>63</td> <td>700</td> </tr> <tr> <td>100</td> <td>860</td> </tr> </tbody> </table>	TLHK-EC/TLHK	a	25	400	40	530	63	700	100	860												
TLHK-EC/TLHK	a																						
25	400																						
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100	860																						



Energiesparen und Klimaschutz serienmäßig

Lidl Logistikzentrum, Wundschuh

Wolf KG Top W, CKL und CWL für ein optimiertes Klimatisierungs- und Lüftungskonzept



LHD Unit Heater

Basic units	Page 56
WRS control systems	Page 57
Switching devices	Page 58
Terminal box / Room thermostate / Zubehör	Page 59

Unit heater for direct mounting on the ceiling in return air operation.
 Air intake vertical, air outlet horizontal.
 Colour: traffic white RAL 9016
 Full motor protection with built-in thermal overload PTCe



LHD

Heat exchanger: copper-aluminium LPHW	LHD 40		LHD 63	
	Art. no.	€	Art. no.	€
LHD Motor 3 x 400 V	65 23 662	820,-	65 23 664	1.225,-

Dimensions basic units LHD, horizontal discharge																
	<table border="1"> <thead> <tr> <th>LHD</th> <th>a</th> <th>b</th> <th>c</th> <th>Ød</th> </tr> </thead> <tbody> <tr> <td>40</td> <td>630</td> <td>718</td> <td>280</td> <td>1"</td> </tr> <tr> <td>63</td> <td>800</td> <td>900</td> <td>280</td> <td>1"</td> </tr> </tbody> </table>	LHD	a	b	c	Ød	40	630	718	280	1"	63	800	900	280	1"
LHD	a	b	c	Ød												
40	630	718	280	1"												
63	800	900	280	1"												

Accessories for unit heater LHD

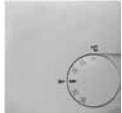





Changed art. no. are marked in red.

WRS control systems		for products	Art. no.	€
 <p>Ventilation operating module BML</p> <ul style="list-style-type: none"> • Room temperature-compensated temperature control • Graphic display with backlight • Simple menu navigation through plain text display • Operation using rotary knob with push-function • 4 function keys for frequently used functions (information, temperature, speed setting, fresh air proportion) • Mounted optionally in the ventilation module or in the wall holder as remote control • Only one ventilation operating module BML is needed to operate up to 7 zones • Demand-optimised boiler water temperature demand via eBus • eBus interface 	LHD	27 44 634	364,-	
 <p>Wall holder</p> <ul style="list-style-type: none"> • Wall holder for using the ventilation operating module BML as remote control 	LHD	27 44 275	27,70	
 <p>Ventilation module LM1 (incl. room temperature sensor)</p> <ul style="list-style-type: none"> • Ventilation module for controlling unit heaters with two-stage motor • Simple configuration of the controller by selecting predefined system diagrams • Demand-optimised room temperature control via the rotary speed of the unit heater • Operation of the heating circuit pump • Operation of the heat generator • Demand-optimised boiler water temperature demand via eBus • eBus interface with automatic energy management • Ventilation operating module BML can be clipped on 	LHD	27 44 603	390,-	
 <p>Ventilation module LM2</p> <ul style="list-style-type: none"> • Ventilation module LM2 for controlling the room temperature by means of the rotation speed or the mixer control • 2-stage motor control in connection with ventilation module LM1 or 5-stage motor control via 0-10 V signal in connection with 5-stage switch • Simple configuration of the controller by selecting predefined system diagrams • Operation of the heat generator • Demand-optimised boiler water temperature demand via eBus • eBus interface with automatic energy management • Ventilation operating module BML can be clipped on • Mixed air flap control • Induction louvre control 	LHD	27 44 604	390,-	
 <p>Outside or room temperature sensor</p>	LHD	27 92 021 99	28,70	

Accessories for unit heater LHD

	WRS control systems	for products	Art. no.	€
	5-position switch Electronic five-stage speed controller, input 0-10V (2A, 400V) (4A, 400V)	LHD	27 44 840	950,-
			27 44 841	950,-
	Supply air sensor (NTC 5K) for measuring the supply air temperature	LHD	88 52 829	53,-
	Sensor holder for supply air sensor	LHD	27 92 029	24,50
	ISM 5 - LON-interface module to connect ventilation modules LM1 and LM2 to a building management system applying LON-standard network variables	LHD	27 45 029	1.600,-
	Switching devices	for products	Art. no.	€
	1-position switch D1-2 Full motor protection switch (8A, 400V) with reclosure preventing device	LHD	27 45 465	149,-
	2-position switch DS-2 Full motor protection switch (AA, 400V) with reclosure preventing device	LHD	27 45 467	249,-
	3-position switch D 3-4 Full motor protection switch (4A, 400V) with reclosure preventing device	LHD	27 01 065	378,-
	5-position switch D5... Full motor protection switch with reclosure preventing device			
	D5-1 (1A, 400V)	LHD	27 40 015	378,-
	D5-3 (2A, 400V)	LHD	27 40 010	424,-
	D5-7 (4A, 400V)	LHD	27 40 013	520,-
	D5-12 (7A, 400V)	LHD	27 40 014	615,-

Accessories for unit heater LHD

	Terminal box / Room thermostat / Accessories	for products	Art. no.	€
	Intermediate terminal box for parallel operation up to 3 LHD	LHD	79 65 043	144,-
	Room thermostat	LHD	27 34 000	45,-
	Room thermostat clock with weekly program	LHD	27 44 079	217,-
	Remote sensor for room thermostat timer	LHD	27 44 051	34,60
	Room thermostat, industrial version	LHD	27 35 300	88,-
	Hydraulic balancing valve DN 20 4 - 15 l/min DN 20 8 - 30 l/min DN 25 6 - 20 l/min DN 25 10 - 40 l/min DN 32 20 - 70 l/min DN 40 30 - 120 l/min	LHD	20 70 931 20 70 932 20 70 933 20 70 934 20 70 935 20 70 936	217,- 217,- 226,- 226,- 279,- 368,-
	Flange set consisting of 2 threaded flanges, 2 welding neck flanges and 2 flat gaskets, plus hexagonal bolts and hexagonal nuts DN 25 R 1"	LHD	20 70 202	75,-



Energiesparen und Klimaschutz serienmäßig

Wolf Referenzen

O2-World, Berlin



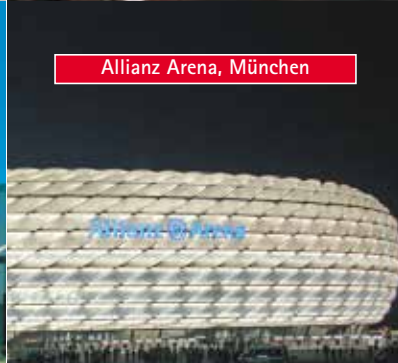
Marie-Elisabeth-Lüders-Haus, Berlin



Messe, Wien



Allianz Arena, München



Europäische Sternwarte ESO, Chile



Seit 50 Jahren ist Wolf eines der führenden Unternehmen in Europa für Klima-, Heizungs- und Lüftungstechnik.

Weltweite Referenzen belegen diese Kompetenz von Wolf in Technik, Service und Know-How.

Kreml, Moskau



Porsche Zentrum, Dortmund



Die Kompetenzmarke
für Energiesparsysteme

TLHD-EC / TLHD-K-EC / TLHD / TLHD-K

TopWing Unit heater

Basic units TLHD-EC for heating	Page 62
Basic units TLHD-K-EC for heating or cooling	Page 62
Basic units TLHD for heating	Page 63
Basic units TLHD-K for heating or cooling	Page 63
WRS control systems	Page 64
Accessories	Page 66
Controllers	Page 70
Controllers / Electrical accessories	Page 71
Thermostates	Page 72



Unit heater for heating,
for mounting on the ceiling for return air operation
or on an intermediate ceiling for
return air or mixed air operation.

Colour: traffic white RAL 9016

Full motor protection by temperature monitoring

Energy saving EC-fans (1x230V)

TopWing TLHD-EC

Basic units for return air operation

Heat exchanger: copper-aluminium LPHW	TLHD-EC 40		TLHD-EC 63	
	Art. no.	€	Art. no.	€
Heating (230V)	65 23 782	1.945,-	65 23 784	2.730,-

Basic units for mixed air operation*

with additional thermal insulation of the unit for the avoidance of condensate accumulation on the unit

Heat exchanger: copper-aluminium LPHW	TLHD-EC 40		TLHD-EC 63	
	Art. no.	€	Art. no.	€
Heating (230V)	65 23 783	2.015,-	65 23 785	2.785,-

* Mixing temperature before the heat exchanger min. +5°C.



Unit heater for heating or cooling,
for mounting on the ceiling for return air operation
or on an intermediate ceiling for
return air or mixed air operation.

Colour: traffic white RAL 9016

Full motor protection by temperature monitoring

Energy saving EC-fans (1x230V)

TopWing TLHD-K-EC

Basic units for return air operation

with integrated condensate pump

Heat exchanger: copper-aluminium LPHW / ch.w.	TLHD-K-EC 40		TLHD-K-EC 63	
	Art. no.	€	Art. no.	€
Heating / Cooling (230V)	65 23 786	2.580,-	65 23 788	3.325,-

Basic units for mixed air operation*

with integrated condensate pump and additional thermal insulation of the unit for the avoidance of condensate accumulation on the unit

Heat exchanger: copper-aluminium LPHW / ch.w.	TLHD-K-EC 40		TLHD-K-EC 63	
	Art. no.	€	Art. no.	€
Heating / Cooling (230V)	65 23 787	2.620,-	65 23 789	3.380,-

* Mixing temperature before the heat exchanger min. +5°C.



Unit heater for heating,
for mounting on the ceiling for return air operation
or on an intermediate ceiling for
return air or mixed air operation.
Colour: traffic white RAL 9016
Full motor protection with built-in thermal overload PTC

TopWing TLHD

Basic units for return air operation

Heat exchanger: copper-aluminium LPHW	TLHD 40		TLHD 63	
	Art. no.	€	Art. no.	€
Heating (400V)	65 23 074	1.315,-	65 23 082	1.670,-

Basic units for mixed air operation*

with additional thermal insulation of the unit for the avoidance of condensate accumulation on the unit

Heat exchanger: copper-aluminium LPHW	TLHD 40		TLHD 63	
	Art. no.	€	Art. no.	€
Heating (400V)	65 23 076	1.390,-	65 23 084	1.775,-

* Mixing temperature before the heat exchanger min. +5°C.



Unit heater for heating or cooling,
for mounting on the ceiling for return air operation
or on an intermediate ceiling for
return air or mixed air operation.
Colour: traffic white RAL 9016
Full motor protection with built-in thermal overload PTCe

TopWing TLHD-K

Basic units for return air operation

with integrated condensate pump

Heat exchanger: copper-aluminium LPHW / ch.w.	TLHD-K 40		TLHD-K 63	
	Art. no.	€	Art. no.	€
Heating / Cooling (400V)	65 23 078	1.815,-	65 23 086	2.160,-

Basic units for mixed air operation*

with integrated condensate pump and additional thermal insulation of the unit for the avoidance of condensate accumulation on the unit

Heat exchanger: copper-aluminium LPHW / ch.w.	TLHD-K 40		TLHD-K 63	
	Art. no.	€	Art. no.	€
Heating / Cooling (400V)	65 23 080	1.890,-	65 23 088	2.270,-

* Mixing temperature before the heat exchanger min. +5°C.





Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater



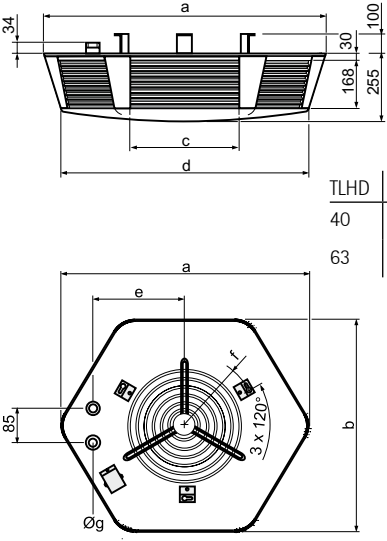



Changed art. no. are marked in red.

	WRS control systems	for products	Art. no.	€
	<p>Ventilation operating module BML</p> <ul style="list-style-type: none"> • Room temperature-compensated temperature control • Graphic display with backlight • Simple menu navigation through plain text display • Operation using rotary knob with push-function • 4 function keys for frequently used functions (information, temperature, speed setting, fresh air proportion) • Mounted optionally in the ventilation module or in the wall holder as remote control • Only one ventilation operating module BML is needed to operate up to 7 zones • Demand-optimised boiler water temperature demand via eBus • eBus interface 	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	27 44 634	364,-
	<p>Wall holder</p> <ul style="list-style-type: none"> • Wall holder for using the ventilation operating module BML as remote control 	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	27 44 275	27,70
	<p>Ventilation module LM1 (incl. room temperature sensor)</p> <ul style="list-style-type: none"> • Ventilation module for controlling unit heaters with two-stage motor • Simple configuration of the controller by selecting predefined system diagrams • Demand-optimised room temperature control via the rotary speed of the unit heater • Operation of the heating circuit pump • Operation of the heat generator • Demand-optimised boiler water temperature demand via eBus • eBus interface with automatic energy management • Ventilation operating module BML can be clipped on 	TLHD, TLHD-K	27 44 603	390,-
	<p>Ventilation module LM2</p> <ul style="list-style-type: none"> • Ventilation module LM2 for controlling the room temperature by means of the rotation speed or the mixer control • 2-stage motor control in connection with ventilation module LM1 or 5-stage motor control via 0-10 V signal in connection with 5-stage switch • Simple configuration of the controller by selecting predefined system diagrams • Operation of the heat generator • Demand-optimised boiler water temperature demand via eBus • eBus interface with automatic energy management • Ventilation operating module BML can be clipped on • Mixed air flap control • Induction louvre control 	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	27 44 604	390,-
	<p>Outside or room temperature sensor</p>	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	27 92 021 99	28,70

Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

WRS control systems		for products	Art. no.	€
	Differential pressure switch for on-site control	loose mounted	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 27 44 030	112,-
			TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 65 23 043	204,-
	5-position switch Electronic five-stage speed controller, input 0-10V	(2A, 400V) (4A, 400V)	TLHD, TLHD-K 27 44 840 27 44 841	950,- 950,-
	Supply air sensor (NTC 5K) for measuring the supply air temperature		TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 88 52 829	53,-
	Sensor holder for supply air sensor		TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 27 92 029	24,50
	ISM 5 - LON-interface module to connect ventilation modules LM1 and LM2 to a building management system applying LON-standard network variables		TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 27 45 029	1.600,-

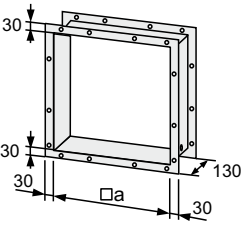
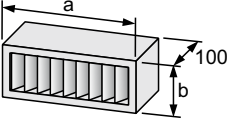
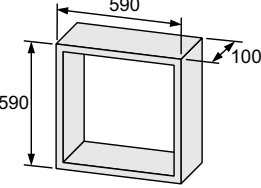
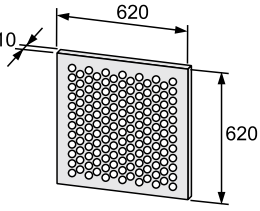
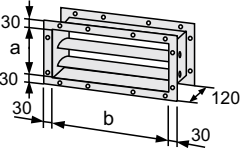
Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

Accessories	for products	Art. no.	€																								
<p>Dimensions, basic units</p>  <table border="1"> <thead> <tr> <th>TLHD</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> <th>f</th> <th>Øg</th> </tr> </thead> <tbody> <tr> <td>40</td> <td>960</td> <td>860</td> <td>326</td> <td>815</td> <td>288</td> <td>R 317</td> <td>1"</td> </tr> <tr> <td>63</td> <td>1120</td> <td>1000</td> <td>405</td> <td>975</td> <td>358</td> <td>R 382</td> <td>1"</td> </tr> </tbody> </table>	TLHD	a	b	c	d	e	f	Øg	40	960	860	326	815	288	R 317	1"	63	1120	1000	405	975	358	R 382	1"	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K		
TLHD	a	b	c	d	e	f	Øg																				
40	960	860	326	815	288	R 317	1"																				
63	1120	1000	405	975	358	R 382	1"																				
 <p>Shut-off sets for heat exchanger for flow and return* consisting of: Threaded connection 1" for connecting to feed and return with flat gasket, automatic vent valve, fill and drain cock, ball valves with female thread 1" in feed and return, connecting facility 3/4" male thread (e.g. for the thermometer) in feed and return suitable for hot water temperatures up to max. 110 °C and operating pressure up to max. 10 bar. * not suitable for direct mounting on the unit</p> <p>Passage design</p> <p>Corner design</p>	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	20 08 030	108,-																								
 <p>Hydraulic balancing valve</p> <table border="1"> <tbody> <tr> <td>DN 20</td> <td>4 - 15</td> <td>l/min</td> </tr> <tr> <td>DN 20</td> <td>8 - 30</td> <td>l/min</td> </tr> <tr> <td>DN 25</td> <td>6 - 20</td> <td>l/min</td> </tr> <tr> <td>DN 25</td> <td>10 - 40</td> <td>l/min</td> </tr> <tr> <td>DN 32</td> <td>20 - 70</td> <td>l/min</td> </tr> <tr> <td>DN 40</td> <td>30 - 120</td> <td>l/min</td> </tr> </tbody> </table>	DN 20	4 - 15	l/min	DN 20	8 - 30	l/min	DN 25	6 - 20	l/min	DN 25	10 - 40	l/min	DN 32	20 - 70	l/min	DN 40	30 - 120	l/min	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	20 70 931 20 70 932 20 70 933 20 70 934 20 70 935 20 70 936	217,- 217,- 226,- 226,- 279,- 368,-						
DN 20	4 - 15	l/min																									
DN 20	8 - 30	l/min																									
DN 25	6 - 20	l/min																									
DN 25	10 - 40	l/min																									
DN 32	20 - 70	l/min																									
DN 40	30 - 120	l/min																									
 <p>Tundish R1 with siphon and rosette Transparent plastic</p>	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	20 11 005	21,40																								

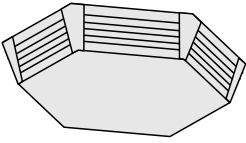
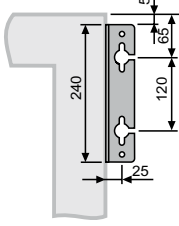
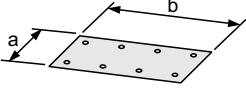
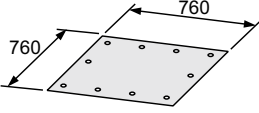
Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

Accessories		for products	Art. no.	€								
	Top filter for TLHD-EC, TLHD-K-EC, TLHD, TLHD-K, grade G4 (not suitable for duct connection)	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40 TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63	65 23 097 65 23 098	71,- 79,-								
	<table border="1"> <thead> <tr> <th>TLHD</th> <th>Ø</th> <th>b</th> </tr> </thead> <tbody> <tr> <td>40</td> <td>520</td> <td>40</td> </tr> <tr> <td>63</td> <td>650</td> <td>50</td> </tr> </tbody> </table>	TLHD	Ø	b	40	520	40	63	650	50		
TLHD	Ø	b										
40	520	40										
63	650	50										
	Suction ring for the lining of the intake air gap when assembling directly to the ceiling or as decorative cover in all installation colour traffic white RAL 9016	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40 TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63	65 11 553 65 11 554	254,- 269,-								
	Empty element panelling double-walled 25mm, insulated galvanised sheet steel	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40 TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63	65 11 577 65 11 578	314,- 415,-								
	<table border="1"> <thead> <tr> <th>TLHD</th> <th>a</th> <th>b</th> </tr> </thead> <tbody> <tr> <td>40</td> <td>630</td> <td>300</td> </tr> <tr> <td>63</td> <td>800</td> <td>345</td> </tr> </tbody> </table>	TLHD	a	b	40	630	300	63	800	345		
TLHD	a	b										
40	630	300										
63	800	345										
	Metal adapter sheet for the connection of round shifter piece with empty element or attachment frames, insulated galvanised sheet steel	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40 TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63	65 11 587 65 11 588	136,- 176,-								
	<table border="1"> <thead> <tr> <th>TLHD</th> <th>a</th> <th>Ø</th> </tr> </thead> <tbody> <tr> <td>40</td> <td>590</td> <td>453</td> </tr> <tr> <td>63</td> <td>760</td> <td>569</td> </tr> </tbody> </table>	TLHD	a	Ø	40	590	453	63	760	569		
TLHD	a	Ø										
40	590	453										
63	760	569										
	Shifter piece to equalize dimensional differences l min = 300mm, l max = 500mm galvanised sheet steel	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40 TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63	25 26 040 25 26 063	226,- 264,-								
	<table border="1"> <thead> <tr> <th>TLHD</th> <th>Ø</th> </tr> </thead> <tbody> <tr> <td>40</td> <td>453</td> </tr> <tr> <td>63</td> <td>569</td> </tr> </tbody> </table>	TLHD	Ø	40	453	63	569					
TLHD	Ø											
40	453											
63	569											
	Flexible canvas connector for connection to TLHD	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40 TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63	65 11 535 65 11 537	112,- 141,-								
	<table border="1"> <thead> <tr> <th>TLHD</th> <th>Ø</th> </tr> </thead> <tbody> <tr> <td>40</td> <td>453</td> </tr> <tr> <td>63</td> <td>569</td> </tr> </tbody> </table>	TLHD	Ø	40	453	63	569					
TLHD	Ø											
40	453											
63	569											
	Flexible connection, 4-hole profile for connection to duct	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40 TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63	25 24 015 25 24 020	53,- 68,-								
	<table border="1"> <thead> <tr> <th>TLHD</th> <th>a</th> <th>b</th> </tr> </thead> <tbody> <tr> <td>40</td> <td>200</td> <td>530</td> </tr> <tr> <td>63</td> <td>245</td> <td>700</td> </tr> </tbody> </table>	TLHD	a	b	40	200	530	63	245	700		
TLHD	a	b										
40	200	530										
63	245	700										

Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

	Accessories	for products	Art. no.	€									
 <p>Diagram showing a square profile with four holes. Dimensions: 30mm offset from each corner, total width 'a', and a 130mm depth.</p>	<p>Flexible connection, 4-hole profile for connection to roof lead-through</p> <table border="1"> <thead> <tr> <th>TLHD</th> <th>a</th> </tr> </thead> <tbody> <tr> <td>40</td> <td>530</td> </tr> <tr> <td>63</td> <td>700</td> </tr> </tbody> </table>	TLHD	a	40	530	63	700	<p>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40 TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63</p>	<p>25 25 040 25 25 063</p>	<p>74,- 100,-</p>			
TLHD	a												
40	530												
63	700												
 <p>Diagram of a rectangular box with a filter. Dimensions: length 'a', height 100mm, and width 'b'.</p>	<p>Filter attachment box with filter grade G4 galvanised sheet steel</p> <table border="1"> <thead> <tr> <th>TLHD</th> <th>a</th> <th>b</th> </tr> </thead> <tbody> <tr> <td>40</td> <td>630</td> <td>300</td> </tr> <tr> <td>63</td> <td>800</td> <td>345</td> </tr> </tbody> </table>	TLHD	a	b	40	630	300	63	800	345	<p>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40 TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63</p>	<p>61 05 100 61 05 101</p>	<p>273,- 300,-</p>
TLHD	a	b											
40	630	300											
63	800	345											
 <p>Diagram of an insulated frame. Dimensions: 590mm width and height, and 100mm depth.</p>	<p>Attachment frame insulated For installation in grid ceiling 620 x 620 for the connection of the louvre damper or adaptor plate to the recirculation air intake grille galvanised sheet steel</p>	<p>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K</p>	<p>65 11 595</p>	<p>156,-</p>									
 <p>Diagram of a square plate with a grid pattern. Dimensions: 620mm width and height, and 10mm thickness.</p>	<p>Recirculation air intake plate colour traffic white RAL 9016 for the installation into the attachment frame suitable for Euro grid ceiling</p>	<p>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K</p>	<p>65 23 104</p>	<p>100,-</p>									
 <p>Diagram of a shutter with slats. Dimensions: 30mm offset from corners, total width 'a', total height 'b', and a 120mm depth.</p>	<p>Shutter for duct galvanised sheet steel</p> <table border="1"> <thead> <tr> <th>TLHD</th> <th>a</th> <th>b</th> </tr> </thead> <tbody> <tr> <td>40</td> <td>200</td> <td>530</td> </tr> <tr> <td>63</td> <td>245</td> <td>700</td> </tr> </tbody> </table>	TLHD	a	b	40	200	530	63	245	700	<p>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40 TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63</p>	<p>25 75 984 25 75 985</p>	<p>97,- 147,-</p>
TLHD	a	b											
40	200	530											
63	245	700											

Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

Accessories	for products	Art. no.	€									
 <p>Ceiling exhaust TD Housing such as TLHD(-EC), without heat exchangers, without fan motor unit, as ceiling colour traffic white RAL 9016</p>	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40 TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63	65 11 549 65 11 550	665,- 875,-									
 <p>Hanging bracket For mounting of fan element / supply air device and empty elements, directly on ceiling (For mounting, 4 hanging brackets are necessary.) Galvanised sheet steel</p>	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 1 item 2-piece set 4-piece set	65 11 454 65 23 052 65 23 053	7,80 15,60 31,30									
 <p>Universal panelling metal sheet, front side as transition from empty element / fan element to duct on site. The openings must be prepared individually on site. Galvanised sheet steel</p> <table border="1"> <thead> <tr> <th>TLHD</th> <th>a</th> <th>b</th> </tr> </thead> <tbody> <tr> <td>40</td> <td>260</td> <td>590</td> </tr> <tr> <td>63</td> <td>305</td> <td>760</td> </tr> </tbody> </table>	TLHD	a	b	40	260	590	63	305	760	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40 TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63	60 13 102 60 01 131	47,- 58,-
TLHD	a	b										
40	260	590										
63	305	760										
 <p>Universalverkleidungsblech quadratisch as transition from empty element TLHD(-ED) 63 to accessory shutter / shifter piece TLHD(-ED) 40. The openings must be prepared individually on site. Galvanised sheet steel</p>	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63	60 11 123	58,-									

Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater




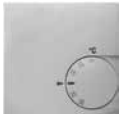




	Controller	for products	Art. no.	€
	Variable speed controller for continuous operation of one or several unit heaters with EC-motors (0 - 10V)	TLHD-EC / TLHD-K-EC	27 45 100	197,-
	1-position switch D1-2 Full motor protection switch (8A, 400V) with reclosure preventing device	TLHD / TLHD-K	27 45 465	149,-
	2-position switch DS-2 Full motor protection switch (8A, 400V) with reclosure preventing device	TLHD / TLHD-K	27 45 467	249,-
	3-position switch D 3-4 Full motor protection switch (4A, 400V) with reclosure preventing device	TLHD / TLHD-K	27 01 065	378,-
	5-position switch D5... Full motor protection switch with reclosure preventing device D5-1 (1A, 400V) D5-3 (2A, 400V) D5-7 (4A, 400V) D5-12 (7A, 400V) D5-19 (12A, 400V)	TLHD / TLHD-K TLHD / TLHD-K TLHD / TLHD-K TLHD / TLHD-K TLHD / TLHD-K	27 40 015 27 40 010 27 40 013 27 40 014 27 40 017	378,- 424,- 520,- 615,- 980,-
	Analogue time switch for setback mode with 7-day program	TLHD-EC, TLHD-K-EC	27 36 251	150,-

Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

	Controller / Electrical accessories	for products	Art. no.	€
	All-pole Isolator AR8 / 1Ö+1S	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	27 44 649	74,-
	A1 automatic relay for Open/Close actuator (3,15A, 230V)	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	79 65 020	88,-
	A1S automatic relay for actuator, stepless, with built-in position indicator (0 to 100%) (3,15A, 230V)	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	79 40 101	198,-
	Actuator 230V/50Hz for damper or mixer, stepless	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	22 69 522	301,-
	Actuator, 230V / 50Hz, for opening/closing the damper	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	22 69 523	288,-
	Position controller for installation on wiring board front for progressive actuator in connection with automatic relay A1. for front-panel installation in control cabinet for controlling the stepless actuator in conjunction with automatic relay A1.	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	27 44 360 27 44 389	80,- 115,-

Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater



Thermostates		for products	Art. no.	€
	Frost protection contact thermostat Setting range 0°C to 60 °C (to be mounted on the return)	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	27 30 100	76,-
	Anti-frost thermostat SP-1 incl. sensor well (to be mounted in the return)	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	27 97 005	44,-
	Anti-frost thermostat mounted	TLHD(-EC) 40 TLHD-K(-EC) 40 TLHD(-EC) 63 TLHD-K(-EC) 63	65 23 478 65 23 479 65 23 480 65 23 481	107,- 107,- 107,- 107,-
	Room thermostat	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	27 34 000	45,-
	Room thermostat with summer/winter switch	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	27 34 700	79,-
	Room thermostat clock with weekly program	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	27 44 079	217,-
	Remote sensor for room thermostat timer	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	27 44 051	34,60
	Room thermostat, industrial version	TLHD-EC, TLHD-K-EC, TLHD, TLHD-K	27 35 300	88,-

TL-2 Warm air curtain unit

Basic units

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Accessories

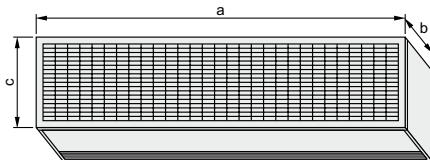
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TL-2

Basic unit without controller*

Warm air curtain device with intake filter
 Filter: renewable, category G2
 LPHW - heat exchanger, Co / Ai
 Fans 230V / 50Hz
 Casing: traffic with RAL 9016







TL-2	A10-30			A40		
	a	b	c	a	b	c
1000	1000	555	260	1000	610	290
1500	1500	555	260	1500	610	290
2000	2000	555	260	2000	610	290
2500	2500	555	260	2500	610	290
3000	3000	555	260	3000	610	290

		Art. no.	€																																																
<p>Basic unit without controller*</p> <p>Warm air curtain device with intake filter Filter: renewable, category G2 LPHW - heat exchanger, Co / Ai Fans 230V / 50Hz Casing: traffic with RAL 9016</p> <table border="1"> <thead> <tr> <th rowspan="2">TL-2</th> <th colspan="3">A10-30</th> <th colspan="3">A40</th> </tr> <tr> <th>a</th> <th>b</th> <th>c</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>1000</td> <td>1000</td> <td>555</td> <td>260</td> <td>1000</td> <td>610</td> <td>290</td> </tr> <tr> <td>1500</td> <td>1500</td> <td>555</td> <td>260</td> <td>1500</td> <td>610</td> <td>290</td> </tr> <tr> <td>2000</td> <td>2000</td> <td>555</td> <td>260</td> <td>2000</td> <td>610</td> <td>290</td> </tr> <tr> <td>2500</td> <td>2500</td> <td>555</td> <td>260</td> <td>2500</td> <td>610</td> <td>290</td> </tr> <tr> <td>3000</td> <td>3000</td> <td>555</td> <td>260</td> <td>3000</td> <td>610</td> <td>290</td> </tr> </tbody> </table>	TL-2	A10-30			A40			a	b	c	a	b	c	1000	1000	555	260	1000	610	290	1500	1500	555	260	1500	610	290	2000	2000	555	260	2000	610	290	2500	2500	555	260	2500	610	290	3000	3000	555	260	3000	610	290	TL-2 A10/1000	21 38 003	2.140,-
		TL-2	A10-30			A40																																													
	a		b	c	a	b	c																																												
	1000	1000	555	260	1000	610	290																																												
	1500	1500	555	260	1500	610	290																																												
	2000	2000	555	260	2000	610	290																																												
	2500	2500	555	260	2500	610	290																																												
	3000	3000	555	260	3000	610	290																																												
	TL-2 A10/1500	21 38 004	2.990,-																																																
	TL-2 A10/2000	21 38 005	3.425,-																																																
	TL-2 A10/2500	21 38 006	4.585,-																																																
	TL-2 A10/3000	21 38 007	5.880,-																																																
	TL-2 A20/1000	21 38 008	2.485,-																																																
	TL-2 A20/1500	21 38 009	3.055,-																																																
	TL-2 A20/2000	21 38 010	3.935,-																																																
	TL-2 A20/2500	21 38 011	4.925,-																																																
	TL-2 A20/3000	21 38 012	6.390,-																																																
	TL-2 A30/1000	21 38 013	2.790,-																																																
	TL-2 A30/1500	21 38 014	3.485,-																																																
	TL-2 A30/2000	21 38 015	4.800,-																																																
	TL-2 A30/2500	21 38 016	5.435,-																																																
	TL-2 A30/3000	21 38 017	7.165,-																																																
	TL-2 A40/1000																																																		
	TL-2 A40/1500																																																		
TL-2 A40/2000	on request	on request																																																	
TL-2 A40/2500																																																			
TL-2 A40/3000																																																			
Steam heat exchanger		on request	on request																																																
Electric heat exchanger		on request	on request																																																

* It is compulsory to use a control of type WTC3 or WTC5 for the operation of the warm air curtain devices.

Accessories for TL-2 Warm air curtain unit

Accessories		für Produkte	Art. no.	€
	Control system WTMC 300 Operating module wired (remote control), Control board (Master) and optional power board (Slave) For a 3-stage or progressive control of warm air curtain units <ul style="list-style-type: none"> Graphical display and adaption via touch panel 2-language, easy and self explaining menu guiding Extendable up to 9 units and controllable in parallel Hand/automatic function: room thermostat and/or door contact Summer/winter function: control of magnetic valve or pump Key blocking Display of malfunctions via memory for remote diagnosis 	TL-2 A10-30 	21 38 615	439,-
	Control system WTMC 500 Operating module wired (remote control), Control board (Master) and optional power board (Slave) For a 5-stage or progressive control of warm air curtain units <ul style="list-style-type: none"> Graphical display and adaption via touch panel 2-language, easy and self explaining menu guiding Extendable up to 9 units and controllable in parallel Hand/automatic function: room thermostat and/or door contact with adjustable run-on-time Summer/winter function: control of magnetic valve or pump Key blocking Display of malfunctions via memory for remote diagnosis Integrated, electronic filter monitoring Potential-free release, operating and malfunction message to BMS 	TL-2 A10-30 	21 38 616	830,-
Control system type WTMC 300 E Suitable for warm air curtain units with electric heating coil		TL-2 A10-30 	on request	on request
Anti-frost thermostat type WTF		TL-2 A10-40	21 00 355	197,-
Ceiling mounting set type WDH 4		TL-2 A20/1000, TL-2 A20/1500, TL-2 A20/2000 TL-2 A20/1000, TL-2 A20/1500, TL-2 A20/2000 TL-2 A30/1000, TL-2 A30/1500, TL-2 A30/2000 TL-2 A40/1000, TL-2 A40/1500, TL-2 A40/2000	21 00 358	71,-
Ceiling mounting set type WDH 6		TL-2 A10/2500, TL-2 A10/3000 TL-2 A20/2500, TL-2 A20/3000 TL-2 A30/2500, TL-2 A30/3000 TL-2 A40/2500, TL-2 A40/3000	21 00 359	104,-
Thermostatic control valve type WTR 2, loose				
2-way straight-through valve DN20/k _{vS} 5,0		TL-2 A10-40	21 00 361	162,-
Angle valve DN20/k _{vS} 7,0		TL-2 A10-40	21 00 363	162,-
Thermostatic mixing valve WTR 3, loose				
Angle valve DN20/k _{vS} 4,5 DN25/k _{vS} 6,5 DN32/k _{vS} 9,5		TL-2 A10-40 TL-2 A10-40 TL-2 A10-40	21 00 371 on request	365,- on request
Thermoelectric shut-off valve type WTAV, loose in connection with speed/air amount controller				
2-way straight-through valve DN20/k _{vS} 1,1		TL-2 A10-40	21 00 380	215,-
Angle valve DN20/k _{vS} 1,1		TL-2 A10-40	21 00 381	215,-



Energiesparen und Klimaschutz serienmäßig

Schlosshotel Lerbach, Bergisch Gladbach

GTK 35 M, MGK 250 und eine Speicherladestation LS von Wolf



LD 15 Ceiling fan

Basic unit

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Accessories

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Ceiling fan for
**high air circulation rate and
 low power consumption,
 low-noise operation,
 energy saving through warm air return in winter operation,
 cooling in summer operation,
 long service life and high operational reliability.**

LD 15

Basic unit	Art. no.	€
Ceiling-mounted fan, overall height 690mm Impeller diameter 142cm Protection class IP20	22 40 050	185,-

* Actuation also possible via ventilation module LM1 and LM2.

Custom models	Art. no.	€
shorter or longer suspension rods overall height 440mm Protection class IP54 With protection grille Air throw up to 20m room height	on request	

* Actuation also possible via ventilation module LM1 and LM2.

Accessories LD 15 Ceiling fan

Accessories		für Produkte	Art. no.	€
	Warm air return control system 230V / 50Hz Current max. 8A (4A motor power) 1 changeover, relay contactt	LD 15	27 01 060	386,-
	Stepless speed control 230V / 50Hz maximum five ceiling fans only	LD 15	Current max. 1,5A Current max. 3,0A	27 44 439 27 01 062

WS Warm air heater

Basic units / Drive	Page 80
Accessories for air inlet	Page 81
Accessories for air outlet	Page 82
Other accessories / Flue gas pipe	Page 83
Electrical accessories	Page 84
Mounting accessories / Wiring	Page 85



Wolf warm air heater for fuel oil, natural gas and liquefied petroleum gas, usable as a vertical or horizontal device.

Casing: Galvanised sheet steel


WS

Basic units




		Art. no.	€
Warm air heater type 1	WS 40	70 14 001	1.490,-
	WS 63	70 24 001	1.740,-
	WS 100	70 34 001	2.420,-
	WS 160	70 44 001	3.500,-
	WS 250	70 54 001	4.645,-
	WS 400*	70 64 001	5.740,-
Warm air heater type 2	WS 40	70 14 002	1.490,-
	WS 63	70 24 002	1.740,-
	WS 100	70 34 002	2.540,-
	WS 160	70 44 002	3.500,-
	WS 250	70 54 002	4.875,-
	WS 400	70 64 002	6.155,-
Warm air heater type 3	WS 40*	70 14 003	1.495,-
	WS 63*	70 24 003	1.745,-
	WS 100*	70 34 003	2.420,-
	WS 160*	70 44 003	3.550,-
	WS 250	70 54 003	5.180,-
	WS 400*	70 64 003	6.730,-
Warm air heater type 4	WS 250*	70 54 004	5.435,-

* These device types are available only for foreign countries

Accessories for WS warm air heater

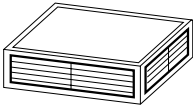
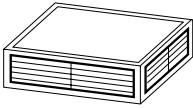
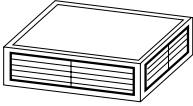
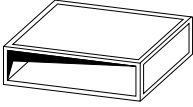
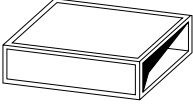

		for products	Art. no.	€
	Drive 3-stage, 230V	0,37 kW WS 40, 63 0,55 kW WS 40, 63	21 17 110 21 17 130	620,- 875,-
	Switch board for electric motor, 3-stage, 230V	0,37 kW WS 40, 63 0,55 kW WS 40, 63	79 70 020 79 70 020	273,- 273,-
Drive 1-stage, 3 x 400V	0,37 kW	WS 100 - 400	70 34 030	461,-
	0,55 kW	WS 100 - 400	70 34 031	493,-
	0,75 kW	WS 100 - 400	70 34 032	520,-
	1,1 kW	WS 100 - 400	70 34 033	565,-
	1,5 kW	WS 100 - 400	70 34 034	625,-
	2,2 kW	WS 100 - 400	70 34 035	675,-
	3,0 kW	WS 100 - 400	70 44 030	790,-
	4,0 kW	WS 100 - 400	70 64 030	915,-
	5,5 kW	WS 100 - 400	70 54 030	1.120,-
	7,5 kW	WS 100 - 400	70 64 031	1.290,-
	11 kW	WS 100 - 400	70 64 032	1.775,-
Switch board for electric motor, 1-stage, 3 x 400V	0,37 kW	WS 100 - 400	79 70 030	360,-
	0,55 kW	WS 100 - 400	79 70 030	360,-
	0,75 kW	WS 100 - 400	79 70 030	360,-
	1,1 kW	WS 100 - 400	79 70 030	360,-
	1,5 kW	WS 100 - 400	79 70 030	360,-
	2,2 kW	WS 100 - 400	79 70 030	360,-
	3,0 kW	WS 100 - 400	79 70 030	360,-
	4,0 kW	WS 100 - 400	79 70 040	745,-
	5,5 kW	WS 100 - 400	79 70 040	745,-
	7,5 kW	WS 100 - 400	79 70 040	745,-
	11 kW	WS 100 - 400	79 70 040	745,-

Accessories for WS warm air heater


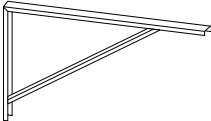
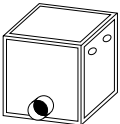

	Accessories for air inlet	for products	Art. no.	€
	Duct connection frame galvanised sheet steel	WS 40	25 76 149	39,40
		WS 63	25 76 151	47,-
		WS 100	25 76 153	51,-
		WS 160	25 76 156	74,-
		WS 250	25 76 159	115,-
		WS 400	25 76 162	115,-
	Duct connection frame over cross-section galvanised sheet steel	WS 40	25 76 150	39,40
		WS 63	25 76 152	47,-
		WS 100	25 76 154	51,-
		WS 160	25 76 157	74,-
		WS 250	25 76 160	115,-
		WS 400	25 76 160	115,-
	Dummy plate at the bottom galvanised sheet steel	WS 40	60 11 122	39,40
		WS 63	70 22 510	47,-
		WS 100	70 32 510	51,-
		WS 160	60 52 605	74,-
		WS 250	60 52 606	115,-
		WS 400	60 52 606	115,-
	Air intake grille at the bottom galvanised sheet steel	WS 40	70 12 500	39,40
		WS 63	70 22 500	47,-
		WS 100	70 32 500	51,-
		WS 160	70 42 500	74,-
		WS 250	70 52 500	115,-
		WS 400	70 62 500	115,-
	Slide-in filter with mat grade G4	WS 40	70 12 210	204,-
		WS 63	70 22 210	286,-
	Filter frame with mat grade G4	WS 100	70 32 240	115,-
		WS 160	70 42 240	121,-
		WS 250	70 52 240	144,-
		WS 400	70 62 240	189,-
	Filter mat for slide-in filter/filter frame grade G4	WS 40	70 14 022	39,40
		WS 63	70 24 022	47,-
		WS 100	70 34 022	28,70
		WS 160	70 44 022	39,40
		WS 250	70 54 022	51,-
		WS 400	70 64 022	74,-
	Duct air filter with mat, grade G4 galvanised sheet steel	WS 100	70 32 210	352,-
		WS 160	70 42 210	505,-
		WS 250	70 52 210	550,-
		WS 400	70 62 210	675,-
	Duct air filter with mat grade G4	WS 100	70 34 023	74,-
		WS 160	70 44 023	104,-
		WS 250	70 54 023	144,-
		WS 400	70 64 023	249,-
	Damper galvanised sheet steel	WS 40	25 75 972	121,-
		WS 63	25 75 995	189,-
		WS 100	25 75 996	235,-
		WS 160	25 75 997	258,-
		WS 250	25 75 998	316,-
		WS 400	25 75 999	365,-

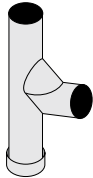




Accessories for WS warm air heater

Accessories for air inlet	for products	Art. no.	€
Manual lever with lock, stepless galvanised sheet steel	WS 40	70 14 025	51,-
	WS 63	70 24 025	51,-
	WS 100	70 34 025	51,-
	WS 160	70 44 025	51,-
	WS 250	70 54 025	51,-
	WS 400	70 64 025	51,-
Connecting rod for 2 control flaps galvanised sheet steel	WS 40	70 14 026	71,-
	WS 63	70 24 026	71,-
	WS 100	70 34 026	79,-
	WS 160	70 44 026	79,-
	WS 250	70 54 026	104,-
	WS 400	70 64 026	104,-



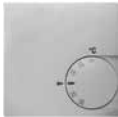


Accessories for air outlet	for products	Art. no.	€
 Air outlet hood with 2 grilles galvanised sheet steel blades black	WS 40	70 14 010	262,-
	WS 63	70 24 010	269,-
	WS 100	70 34 010	293,-
	WS 160	70 44 010	390,-
	WS 250	70 54 010	510,-
	WS 400	70 64 010	510,-
 Air outlet hood with 3 grilles galvanised sheet steel blades black	WS 40	70 14 011	286,-
	WS 63	70 24 011	304,-
	WS 100	70 34 011	308,-
	WS 160	70 44 011	399,-
	WS 250	70 54 011	555,-
	WS 400	70 64 011	555,-
 Air outlet hood with 4 grilles galvanised sheet steel blades black	WS 40	70 14 012	308,-
	WS 63	70 24 012	332,-
	WS 100	70 34 012	360,-
	WS 160	70 44 012	411,-
	WS 250	70 54 012	565,-
	WS 400	70 64 012	565,-
 Duct connection hood, broad side galvanised sheet steel	WS 40	70 14 015	262,-
	WS 63	70 24 015	269,-
	WS 100	70 34 015	286,-
	WS 160	70 44 015	360,-
	WS 250	70 54 015	510,-
	WS 400	70 64 015	510,-
 Duct connection hood, narrow side galvanised sheet steel	WS 40	70 14 016	262,-
	WS 63	70 24 016	269,-
	WS 100	70 34 016	286,-
	WS 160	70 44 016	360,-
	WS 250	70 54 016	510,-
	WS 400	70 64 016	510,-
 Duct connection frame galvanised sheet steel	WS 40	25 76 150	39,40
	WS 63	25 76 152	47,-
	WS 100	25 76 154	51,-
	WS 160	25 76 157	74,-
	WS 250	25 76 160	115,-
	WS 400	25 76 160	115,-

Accessories for WS warm air heater

Other accessories		for products	Art. no.	€
	Earthing strap for potential equalization	WS	27 65 450	5,10
	Set of brackets for horizontal design galvanised sheet steel	WS 40 WS 63 WS 100 WS 160	70 12 540 70 22 540 70 32 540 70 42 540	121,- 143,- 198,- 308,-
	Combustion air intake hood galvanised sheet steel	WS 40 WS 63 WS 100 WS 160 WS 250 WS 400	70 13 229 70 23 229 70 33 229 70 43 229 70 53 229 70 63 229	204,- 235,- 286,- 355,- 520,- 520,-
	Set of lifting lugs for horizontal appliance	WS 40 WS 63 WS 100 WS 160 WS 250	70 14 020 70 24 020 70 34 020 70 44 020 70 54 020	119,- 119,- 163,- 204,- 204,-
	Cleaning brush	WS	24 40 200	45,-

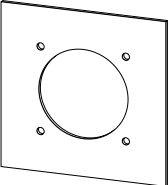
Flue gas pipe		for products	Art. no.	€
	Flue gas pipe branch with soot pot	WS 40 WS 63 WS 100 WS 160 WS 250 WS 400	26 15 501 26 18 501 26 18 501 26 20 501 26 25 501 26 35 501	247,- 253,- 253,- 290,- 345,- 515,-
	Flue gas pipe rain hood	WS 40 WS 63 WS 100 WS 160 WS 250 WS 400	26 15 502 26 18 502 26 18 502 26 20 502 26 25 502 26 35 502	42,- 82,- 82,- 114,- 147,- 228,-
	Flue gas pipe 1000mm long, pluggable up to WS 250	WS 40 WS 63 WS 100 WS 160 WS 250 WS 400	26 15 503 26 18 503 26 18 503 26 20 503 26 25 503 26 35 503	29,30 37,80 37,80 41,- 49,- 124,-
	Exhaust pipe collar for WS 400	WS 400	26 35 504	52,-
	Flue gas pipe elbow 90° with cleaning flap	WS 40 WS 63 WS 100 WS 160 WS 250 WS 400	26 15 505 26 18 505 26 18 505 26 20 505 26 25 505 26 35 505	31,60 41,- 41,- 46,- 54,- 124,-

Accessories for WS warm air heater

	Electrical accessories	for products	Art. no.	€
	Double and safety thermostat, fitted	WS	27 30 001	227,-
	Terminal box, fitted	WS 40 - 160 WS 250, 400	70 14 008 70 54 008	80,- 108,-
	Room thermostat	all WS	27 34 000	45,-
	Room thermostat clock with weekly program	all WS	27 44 079	217,-
	Actuator, 230V, for opening/closing the damper, attached	WS 40 - 160 WS 250, 400	70 14 006 70 54 006	382,- 432,-

	Surcharge for control panel	for products	Art. no.	€
	with hours run meter	allw WS	79 70 039	79,-
	with contactor control for threephase current burner, 1-stage	WS 160 - 400	70 44 007	215,-
	with time switch with daily or weekly program and power reserve	WS	27 36 250	235,-

Accessories for WS warm air heater

Mounting accessories / Wiring		for products	Art. no.	€	
	Wiring complete		WS 40	70 14 009	108,-
			WS 63	70 24 009	108,-
			WS 100	70 34 009	176,-
			WS 160	70 44 009	185,-
			WS 250	70 54 009	238,-
			WS 400	70 64 009	304,-
	Burner plate				
		type A	WS 40 - 100	70 13 180	45,-
		type B	WS 40 - 100	70 13 190	45,-
		type C	WS 160, 250	70 43 170	58,-
	type D	WS 160 - 400	70 43 180	58,-	
	type E	WS 160 - 400	70 43 190	58,-	
Burner plate special design					
		WS 40 - 100	-	69,-	
		WS 160 - 250	-	73,-	
		WS 400	-	91,-	



Energiesparen und Klimaschutz serienmäßig

Wolf – das Unternehmen

Die Wolf GmbH ist einer der führenden Anbieter der Klima- und Heizungsbranche. Beginn einer rasanten Entwicklung in die Spitze der europäischen Gebäudetechnik war zunächst die Klima- und Lüftungstechnik. Opernhäuser, Flughäfen, Sportstadien und Bürogebäude sind mit Klima- und Lüftungsgeräten von Wolf ausgerüstet.

Der Einstieg in die Heiztechnik in den achtziger Jahren war ein bedeutender Meilenstein in der erfolgreichen Geschichte des Unternehmens. Umweltfreundliche und wirtschaftliche Heizprodukte von Wolf haben sich schnell als Markenfabrikate mit anspruchsvoller Qualität etabliert. Produktion und Service auf höchstem Niveau sind die Grundlage dafür.



Die Kompetenzmarke für Energiesparsysteme

ER Smoke extract fans

Basic unit

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Accessories

Page 89









Smoke extract fan
RDM 56: 400°C / 120min.
RDM 57: 600°C / 120min.

ER




Basic unit

Smoke extract fans with back draught damper		Art. no.	€
RDM 56, 400°C / 120 min.	RDM 56-2528-2W-11	21 36 848	1.690,-
	RDM 56-2531-4D-10	21 36 849	1.725,-
	RDM 56-3535-4D-10	21 36 850	1.835,-
	RDM 56-3540-4D-10	21 36 851	1.875,-
	RDM 56-3545-4W-13	21 36 852	1.965,-
	RDM 56-3545-HD-10	21 36 853	2.180,-
	RDM 56-4550-4W-16	21 36 854	2.400,-
	RDM 56-4550-HD-14	21 36 855	2.740,-
	RDM 56-4556-4W-17	21 36 856	2.780,-
	RDM 56-4556-6W-13	21 36 857	2.605,-
	RDM 56-4556-HD-16	21 36 858	3.000,-
	RDM 56-5663-6W-16	21 36 859	3.470,-
	RDM 56-5663-HD-19	21 36 860	3.975,-
	RDM 56-5671-6W-21	21 36 861	3.915,-
	RDM 56-5671-HD-24	21 36 862	4.685,-
	RDM 56-7180-6W-24	21 36 863	5.295,-
	RDM 56-7180-8D-21	21 36 864	5.310,-
	RDM 56-7180-HD-28	21 36 865	6.160,-
	RDM 56-7190-6W-28	21 36 866	6.605,-
	RDM 56-7190-HD-26	21 36 867	8.235,-
RDM 56-9090-4W-31	21 36 868	9.885,-	
RDM 56-9090-GD-34	21 36 869	13.045,-	
RDM 56-9090-ID-34	21 36 870	11.705,-	
RDM 57, 600°C / 120min.	RDM 57-2528-2W-11	21 36 825	1.835,-
	RDM 57-2531-4D-10	21 36 826	1.885,-
	RDM 57-3535-4D-10	21 36 827	1.995,-
	RDM 57-3540-4D-10	21 36 828	2.015,-
	RDM 57-3545-4W-13	21 36 829	2.145,-
	RDM 57-3545-HD-10	21 36 830	2.340,-
	RDM 57-4550-4W-16	21 36 831	2.595,-
	RDM 57-4550-HD-14	21 36 832	2.910,-
	RDM 57-4556-4W-17	21 36 833	3.000,-
	RDM 57-4556-6D-13	21 36 834	2.825,-
	RDM 57-4556-HD-16	21 36 835	3.220,-
	RDM 57-5663-6W-16	21 36 836	3.685,-
	RDM 57-5663-HD-19	21 36 837	4.190,-
	RDM 57-5671-6W-21	21 36 838	4.110,-
	RDM 57-5671-HD-24	21 36 839	4.900,-
	RDM 57-7180-6W-24	21 36 840	5.590,-
	RDM 57-7180-8D-21	21 36 841	5.605,-
	RDM 57-7180-HD-28	21 36 842	6.435,-
	RDM 57-7190-6W-28	21 36 843	6.965,-
	RDM 57-7190-HD-26	21 36 844	8.625,-
RDM 57-9090-4W-31	21 36 845	10.865,-	
RDM 57-9090-GD-34	21 36 846	14.040,-	
RDM 57-9090-ID-34	21 36 847	14.465,-	

Accessories for ER smoke extract fans



Accessories		for products	Art. no.	€
	ZBS Flat roof upstand 600°C External material aluminium, Interior lining made of coated sheet steel	RDM 56/57 - 25	21 36 806	424,-
		RDM 56/57 - 35	21 36 807	468,-
		RDM 56/57 - 45	21 36 808	550,-
		RDM 56/57 - 56	21 36 809	600,-
		RDM 56/57 - 71	21 36 810	865,-
		RDM 56/57 - 90	21 36 811	1.530,-
	ZBS Flat roof upstand 400°C galvanised sheet steel (only in combination with duct connection and RDM 56, otherwise ZBS flat roof base 600°C)	RDM 56 - 25	21 36 537	238,-
		RDM 56 - 35	21 36 538	258,-
		RDM 56 - 45	21 36 539	304,-
		RDM 56 - 56	21 36 540	390,-
		RDM 56 - 71	21 36 541	486,-
		RDM 56 - 90	21 36 817	1.295,-
	ZKE intake connecting piece (flexible connection)	RDM 56/57 - 25	21 36 818	217,-
		RDM 56/57 - 35	21 36 819	300,-
		RDM 56/57 - 45	21 36 820	353,-
		RDM 56/57 - 56	21 36 821	451,-
		RDM 56/57 - 71	21 36 822	610,-
		RDM 56/57 - 90	21 36 823	1.475,-
	ZKF Intake flange / Mating flange galvanised sheet steel	RDM 56/57 - 25	21 36 698	23,70
		RDM 56/57 - 35	21 36 699	26,60
		RDM 56/57 - 45	21 36 700	42,-
		RDM 56/57 - 56	21 36 701	49,-
		RDM 56/57 - 71	21 36 702	68,-
		RDM 56/57 - 90	21 36 824	146,-
	ZSG Mesh safety guard	RDM 56/57 - 25	21 36 682	42,-
		RDM 56/57 - 35	21 36 683	49,-
		RDM 56/57 - 45	21 36 684	60,-
		RDM 56/57 - 56	21 36 685	77,-
		RDM 56/57 - 71	21 36 686	89,-
		RDM 56/57 - 90	21 36 687	137,-
	ZDS Silencer upstand coated sheet steel	RDM 56/57 - 25	21 36 721	865,-
		RDM 56/57 - 35	21 36 722	1.050,-
		RDM 56/57 - 45	21 36 723	1.350,-
		RDM 56/57 - 56	21 36 724	1.800,-
		RDM 56/57 - 71	21 36 725	2.910,-

Accessories for ER smoke extract fans

Accessories	for products	Art. no.	€	
	ESH 21 Isolator switch			
	RDM 56/57 2528-2W-11 RDM 56/57 2531-4D-10 RDM 56/57 3535-4D-10 RDM 56/57 3540-4D-10 RDM 56/57 3545-4W-13 RDM 56/57 4550-4W-16 RDM 56/57 4556-4W-17 RDM 56/57 4556-6W-13 RDM 56/57 5663-6W-16 RDM 56/57 5671-6W-21 RDM 56/57 7180-8D-21	21 36 668	48,-	
	RDM 56/57 3545-HD-10 RDM 56/57 4550-HD-14 RDM 56/57 4556-HD-16 RDM 56/57 5663-HD-19 RDM 56/57 5671-HD-24 RDM 56/57 7180-HD-28 RDM 56/57 7180-6W-24	21 36 678	88,-	
	RDM 56/57 7190-6W-28 RDM 56/57 7190-HD-26	21 36 715	127,-	
	RDM 56/57 9090-4W-31 RDM 56/57 9090-ID-34 RDM 56/57 9090-GD-34	21 36 804 21 36 805	205,- 436,-	
 	ARM-1 Automatic smoke detector	all smoke extract fans	21 38 101	344,-
	AMM-2 Automatic multi sensor smoke detector	all smoke extract fans	21 38 102	383,-

Accessories for ER smoke extract fans

Changed art. no. are marked in red.

	Accessories	for products	Art. no.	€
	<p>DKM-2K-OR Manual activation button</p>	<p>all smoke extract fans</p>	<p>21 38 100</p>	<p>122,-</p>
	<p>EBG Smoke detector switch panel</p> <p>Performs the following tasks in case of fire</p> <ul style="list-style-type: none"> - automatically switches on a smoke extraction fan - switches two-speed fan motors to the high speed - disconnects a built-in frequency converter from the main supply and connects the motor directly to the mains supply - provides emergency power for the control for 72h (Observe battery lifetime) 	<p>RDM 56/57 2528-2W-11 RDM 56/57 2531-4D-10 RDM 56/57 3535-4D-10 RDM 56/57 3540-4D-10 RDM 56/57 3545-4W-13 RDM 56/57 4550-4W-16 RDM 56/57 4556-4W-17 RDM 56/57 4556-6W-13 RDM 56/57 5663-6W-16 RDM 56/57 5671-6W-21 RDM 56/57 7180-8W-21</p> <p>RDM 56/57 3545-HD-10 RDM 56/57 4550-HD-14 RDM 56/57 4556-HD-16 RDM 56/57 5663-HD-19 RDM 56/57 5671-HD-24</p> <p>RDM 56/57 7180-6W-24 RDM 56/57 7190-6W-28</p> <p>RDM 56/57 7180-HD-28 RDM 56/57 7190-HD-26</p> <p>RRDM 56/57 9090-4W-31</p> <p>RDM 56/57 9090-ID-34</p> <p>RDM 56/57 9090-GD-34</p>	<p>21 37 039</p> <p>21 37 043</p> <p>21 37 040</p> <p>21 37 044</p> <p>21 37 045</p> <p>21 37 046</p> <p>21 37 047</p>	<p>4.645,-</p> <p>5.390,-</p> <p>5.395,-</p> <p>5.630,-</p> <p>6.765,-</p> <p>6.850,-</p> <p>7.145,-</p>



Energiesparen und Klimaschutz serienmäßig

Comfort-Wohnungs-Lüftung

Bestes Raumklima und höchste Effizienz



DV-2 Roof extract fans

DV-2 Basic units

Page 94

Accessories

Page 94



Roof extract fans with attached isolator switch, for the extraction of used air from rooms.

With Energy saving EC-fans, variable speed control.

casing of plastic, can be recycled to 100%, colour light grey (RAL 7035)


DV-2







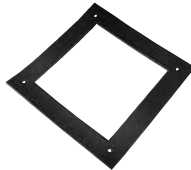


Basic units

DV-2 Roof extract fans		Art. no.	€
	DV-2-225-230V	21 38 620	1.925,-
	DV-2-225-400V	21 38 621	2.165,-
	DV-2-250-230V	21 38 622	2.145,-
	DV-2-250-400V	21 38 623	2.340,-
	DV-2-315-230V	21 38 624	2.260,-
	DV-2-315-400V	21 38 625	2.450,-
	DV-2-400-400V	21 38 626	2.885,-
	DV-2-450-400V	21 38 627	3.165,-
	DV-2-500-400V	21 38 628	4.835,-

Accessories DV-2 roof extract fans

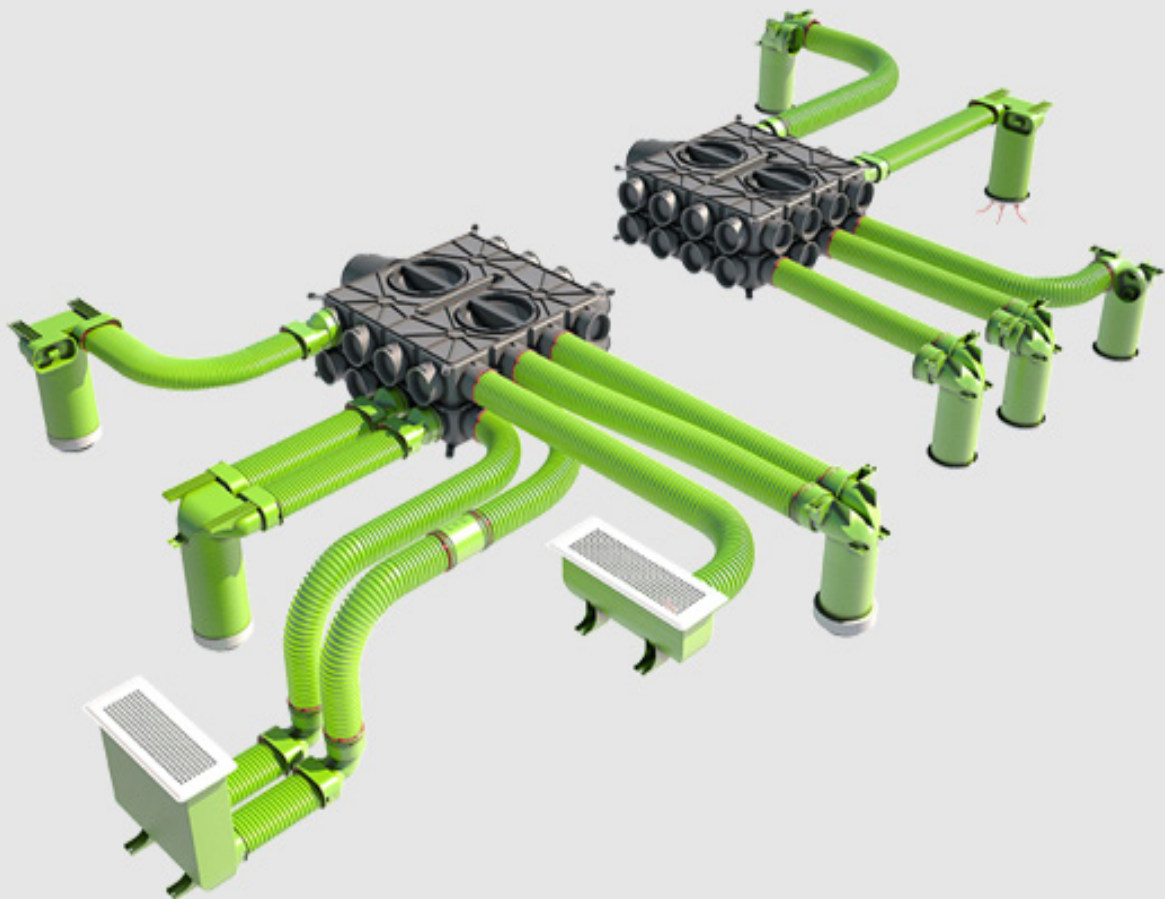
Accessories	for products	Art. no.	€
 <p>Flat roof upstand for flat roof installation plastic, RAL 7035, with insulation Height: 200mm</p>	DV-2-225	21 38 630	300,-
	DV-2-250/DV-2-315	21 38 631	344,-
	DV-2-400	21 38 632	448,-
	DV-2-450	21 38 633	510,-
	DV-2-500	21 38 634	610,-
	<p>Flat roof upstand high for flat roof installation plastic, RAL 7035 Integration of a silencer possible Height DV-2 -225 up to DV-2-400: 500mm Height DV-2-450/ DV-2-500: 700mm</p>	DV-2-225	21 38 635
DV-2-250/DV-2-315		21 38 636	476,-
DV-2-400		21 38 637	600,-
DV-2-450		21 38 638	795,-
DV-2-500		21 38 639	975,-

Accessories for DV-2 roof extract fans

Accessories		for products	Art. no.	€
	Automatic closing flap for flat roof upstand galvanised sheet steel with plastic fins	DV-2-225	21 38 640	176,-
		DV-2-250/DV-2-315	21 38 641	212,-
		DV-2-400	21 38 642	276,-
		DV-2-450	21 38 643	296,-
		DV-2-500	21 38 644	408,-
	Automatic closing flap for flat roof upstand high galvanised sheet steel with plastic fins	DV-2-225	21 38 645	176,-
		DV-2-250/DV-2-315	21 38 646	212,-
		DV-2-400	21 38 647	276,-
		DV-2-450	21 38 648	296,-
		DV-2-500	21 38 649	408,-
	Intake silencer galvanised sheet steel for installation on air intake of roof extract fan Combination possible with flat roof upstand and flat roof upstand high	DV-2-225	21 38 650	344,-
		DV-2-250/DV-2-315	21 38 651	428,-
		DV-2-400	21 38 652	580,-
		DV-2-450	21 38 653	630,-
		DV-2-500	21 38 654	875,-
	Duct connection panel galvanised sheet steel for connection of a round duct	Ø 200 DV-2-225	21 38 655	92,-
		Ø 250 DV-2-225	21 38 656	92,-
		Ø 250 DV-2-250/DV-2-315	21 38 657	100,-
		Ø 315 DV-2-250/DV-2-315	21 38 658	100,-
		Ø 355 DV-2-400	21 38 659	124,-
		Ø 400 DV-2-400	21 38 660	124,-
		Ø 400 DV-2-450	21 38 661	144,-
		Ø 450 DV-2-450	21 38 662	144,-
Ø 560 DV-2-500	21 38 663	176,-		
	Sealing panel of weather resistant, closed-cell plastic, for sealing the fan base, silencer and roof upstand	DV-2-225	21 38 664	24,-
		DV-2-250/DV-2-315	21 38 665	32,-
		DV-2-400	21 38 666	36,-
		DV-2-450	21 38 667	40,-
		DV-2-500	21 38 668	60,-
	Intermediate piece galvanised sheet steel to provide an airtight connection to the silencer/closing flap	DV-2-225	21 38 669	112,-
		DV-2-250/DV-2-315	21 38 670	144,-
		DV-2-400	21 38 671	152,-
		DV-2-450	21 38 672	164,-
		DV-2-500	21 38 673	212,-
	Variable speed controller for continuous operation of the roof extract fan	DV-2	27 45 937	88,-

Luftverteilsystem

So individuell wie Ihr Bauvorhaben



Das „Alles-ist-möglich-Konzept“

Air Excellent ist ein ausgereiftes und vollständiges System zur Erstellung eines hochwertigen Lüftungssystems. Es ist einfach durch Klick-Verbindungen zu installieren.

Das Luftkanalsystem besteht neben dem eigentlichen Luftkanal aus einer Vielzahl weiterer Komponenten für Kanalführung und Verteilung im Gebäude und Luftauslässen. Hochwertiges Material gewährleistet eine lange Lebensdauer.

Comfort home ventilation system CWL

CWL	Comfort home ventilation system CWL	CWL Excellent CWL-T Excellent CWL-F Excellent	Page 98 Page 99 Page 100
	Decentral ventilation units with heat recovery	CWL-D-70	Page 101
	Control systems and electrical accessories		Page 102
	Accessories		Page 105
	ISO pipe system		Page 106
	Roof connections		Page 107
	Outside wall connections and silencers		Page 108
	Air distributor		Page 109
	Flexible hose system, round		Page 110
	Accessories flexible hose system round and flat duct		Page 111
	Flat duct system Excellent		Page 112
	Air supply / extraction valves		Page 114
	Filters		Page 115



CWL-180 Excellent

CWL-300/400 Excellent

The comfort home ventilation system from Wolf offers energy-saving and convenient ventilation all year. Suitable for apartments, detached houses, apartment blocks and offices. The heat in the extract air is extracted by the cross- and counter-flow heat exchanger and supplied to the fresh supply air.

CWL Excellent

Central ventilation units with heat recovery

TYPE		CWL-180 Excellent	CWL-300 Excellent	CWL-400 Excellent
Energy efficiency class		B ¹⁾	A ²⁾	A ²⁾
Max. air flow rate at 150 Pa	m ³ /h	180	300	400
Max. power consumption	W	16 - 132	3 - 138	3 - 172
Duct connection diameter	mm	125	160	180
Dimensions H x W x D	mm	600 x 560 x 315	765 x 677 x 564	765 x 677 x 564
Weight	kg	25	38	38
• Compact design for wall mounting		✓	✓	✓
• Clean, pollen-free fresh air – airing with your windows closed, excluding street noise (not only for those suffering from allergies)		✓	✓	✓
• Removable cross countercurrent plate-type heat exchanger made from plastic		✓	✓	✓
• Up to 95% heat recovery		✓	✓	✓
• Bypass as standard		-	✓	✓
• Automatic frost stat control		✓	✓	✓
• Constant flow fans		✓	✓	✓
• Low energy consumption through DC fans		✓	✓	✓
• BM-2 for operation(optional)		✓	✓	✓
• elektr. preheater 1000W integrated in device		-	✓	✓
• Filter grade G4 optional G7 as accessorie		-	✓	✓
• Fully wired. Filter change requirement indicated at the device, the programming unit or at the 4-step switch.		✓	✓	✓
• DIBt approval		-	✓	✓
• Passive house certificate		-	✓	✓
Designs				
4/0 L	Art. no.	21 37 995*	21 37 990	21 37 942
	€	2.235,-	2.675,-	3.250,-
2/2 L	Art. no.	-	21 37 991	21 37 943*
	€	-	2.675,-	3.250,-
3/1 L	Art. no.	-	-	21 37 944*
	€	-	-	3.250,-
4/0 R	Art. no.	21 37 994	21 37 992*	21 37 939*
	€	2.235,-	2.675,-	3.250,-
2/2 R	Art. no.	-	21 37 993*	21 37 940*
	€	-	2.675,-	3.250,-
3/1 R	Art. no.	-	-	21 37 941*
	€	-	-	3.250,-

* Delivery time on request

¹⁾ A with time switch and minimum one sensors

²⁾ A+ with minimum two sensors



The comfort home ventilation system from Wolf offers energy-saving and convenient ventilation all year. Suitable for apartments, detached houses, apartment blocks and offices. The heat in the extract air is extracted by the cross- and counter-flow heat exchanger and supplied to the fresh supply air.

CWL-T Excellent

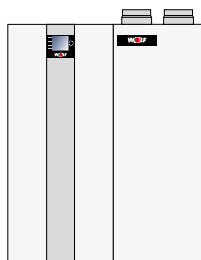
Central ventilation units with heat recovery

TYPE	CWL-T-300 Excellent	
Energy efficiency class	A ¹⁾	
Max. air flow rate at 150 Pa	m ³ /h	300
Max. power consumption	W	10 - 164
Duct connection diameter	mm	150/160
Dimensions H x W x D	mm	1287,5 x 475 x 586
Weight	kg	50
• Compact design for floor standing		✓
• Clean, pollen-free fresh air – airing with your windows closed, excluding street noise (not only for those suffering from allergies)		✓
• Removable cross countercurrent plate-type heat exchanger made from plastic		✓
• Up to 95% heat recovery		✓
• Bypass as standard		✓
• Automatic frost stat control		✓
• Constant Flow Ventilatoren		✓
• Low energy consumption through DC fans		✓
• Siphon included		✓
• elektr. preheater 1000W integrated in device		✓
• Filter grade G4 optional F7 as accessorie		✓
• Fully wired. Filter change requirement indicated at the programming unit or at the 4-step switch.		✓
• DIBt approval		applied
• Passive house certificate		applied
• Hydraulic postheating element (optional)		✓
Designs		
Note: BM-2 is required for operation		
4/0 L	Art. no.	21 38 103
	€	2.615,-

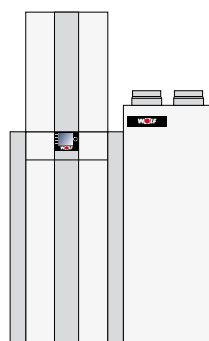
¹⁾ A+ with minimum two sensors

Installation options

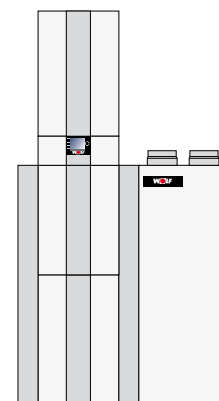
to the right or the left of the heat generator



In conjunction with TOB oil condensing boiler



In conjunction with CGS-2 gas condensing centre



In conjunction with BWL-1S split heat pump



The comfort home ventilation system with integrated bypass from Wolf offers energy-saving and convenient ventilation all year.

Suitable for apartments, detached houses, apartment blocks and offices. The heat in the extract air is extracted by the cross- and counter-flow heat exchanger and supplied to the fresh supply air.

CWL-F Excellent

Central ventilation units with heat recovery

TYPE		CWL-F-150 Excellent	CWL-F-300 Excellent
Energy efficiency class		A ¹⁾	A ²⁾
Max. air flow rate at 150 Pa	m ³ /h	150	300
Max. power consumption	W	11 - 72	9 - 163
Duct connection diameter	mm	125	160
Dimensions H x W x D	mm	1000 x 660 x 198	1185 x 644 x 310
Weight	kg	25	37
• Compact design for ceiling and wall mounting		✓	✓
• Clean, pollen-free fresh air – airing with your windows closed, excluding street noise (not only for those suffering from allergies)		✓	✓
• Removable cross countercurrent plate-type heat exchanger made from plastic		✓	✓
• Up to 95% heat recovery		✓	✓
• Bypass as standard		✓	✓
• Automatic frost stat control		✓	✓
• Constant Flow Ventilatoren		✓	✓
• Low energy consumption through DC fans		✓	✓
• elektr. preheater 375W integrated in device		✓	-
• Filter grade G4 optional F7 as accessorie		✓	✓
• Fully wired. Filter change requirement indicated at the programming unit or at the 4-step switch.		✓	✓
• DIBt approval		✓	✓
• Passive house certificate		✓	✓
Designs			
Note: BM-2 is required for operation			
without preheater	Art. no.	21 38 091*	21 38 098
	€	2.225,-	2.585,-
with preheater	Art. no.	21 38 099	-
	€	2.330,-	-

* Delivery time on request

¹⁾ In combination with BM-2

²⁾ A+ with minimum two sensors



Decentral ventilation units with heat recovery

CWL-D-70

NEW

 available
April 2016






Decentral ventilation units with heat recovery

TYPE	CWL-D-70	
Energy efficiency class	A	
Max. air flow rate	m ³ /h	70
Diameter unit connection	mm	250
Tapping drill hole	Ø mm	260 (with 3° slope to the outside)
for wall thicknesses (with accessories)	mm	500-600 (300-500)
Weight	kg	12 (13,5 incl. front cover)
• Internal cover white		✓
• Clean, pollen-free fresh air – airing with your windows closed, excluding street noise (not only for those suffering from allergies)		✓
• removable synthetic cross-/counterflow plate heat exchanger		✓
• Minimum 80% heat recovery		✓
• Bypass as standard		✓
• Automatic frost stat control		✓
• Low energy consumption through DC fans		✓
• elektr. preheater 275W integrated in device		✓
• Filter grade G4 optional F7 as accessorie for supply air		✓
• Fully wired. Filter change requirement indicated at the device.		✓
• DIBt approval		applied
• Passive house certificate		applied
Designs		
Outside wall hood white (RAL9010)	Art. no.	21 38 512
	€	930,-
Outside wall hood stainless steel	Art. no.	21 38 513
	€	930,-

Accessories

Accessories	for products	Art. no.	€
Extension 200mm for wall thicknesses 300-400mm	white (RAL 9010) stainless steel	CWL-D-70	25 77 614 110,-
			25 77 615 125,-
Extension 100mm for wall thicknesses 400-500mm	white (RAL 9010) stainless steel	CWL-D-70	25 77 616 75,-
			25 77 617 90,-
Additional PCB (required for connecting sensors)	CWL-D-70	25 77 618	120,-
CO₂ sensor intern	CWL-D-70	25 77 619	412,-
Humidity sensor intern	CWL-D-70	25 77 620	292,-
Power switch optional	CWL-D-70	25 77 621	65,-
G4 Filter-Set (2xG4 + 1xG4 Ø180)	CWL-D-70	16 69 246	58,-
F7 Filter-Set (2xG4 + 1xF7 Ø180)	CWL-D-70	16 69 247	98,-


Control systems and electrical accessories

	Control systems	for products	Art. no.	€
	BM-2 operating module without outside temperature sensor	CWL Excellent, CWL-T Excellent, CWL-F Excellent	27 45 306	377,-
	Wall holder for BM-2 Wall holder for using the operating module BM-2 as remote control	CWL Excellent, CWL-T Excellent, CWL-F Excellent	17 31 129	27,70
	Air quality sensor (VOC) Mixed gas sensor for determining the air quality; Output signal 0 - 10V, power supply 24V Extension kit for additional functions with the CWL-180 Excellent and CWL-F-300 Excellent art. no. 27 45 273 is required	CWL Excellent, CWL-T Excellent, CWL-F Excellent	27 44 756	355,-
	Humidity sensor for capturing the relative humidity; Output signal 0 - 10V, power supply 24V Extension kit for additional functions with the CWL-180 Excellent and CWL-F-300 Excellent art. no. 27 45 273 is required	CWL Excellent, CWL-T Excellent, CWL-F Excellent	27 45 192	215,-
	CO₂-Sensor for surface mounting for capturing the CO ₂ value, Output signal 0-10V, power supply 24V Extension kit for additional functions with the CWL-180 Excellent and CWL-F-300 Excellent art. no. 27 45 273 is required	CWL Excellent, CWL-T Excellent, CWL-F Excellent	27 44 854	488,-
	CO₂-Sensor eBus for flush mounting for capturing the CO ₂ value, Output signal 0-10V, power supply 24V Extension kit for additional functions with the CWL-180 Excellent and CWL-F-300 Excellent art. no. 27 45 273 is required	CWL Excellent, CWL-T Excellent, CWL-F Excellent	27 45 666	488,-

Control systems and electrical accessories

	Control systems	for products	Art. no.	€
	<p>ISM7e – external interface module</p> <ul style="list-style-type: none"> - LAN and WLAN interface module for wall mounting or mobile application - Connection of Wolf heating appliances to the Wolf Smartset portal/App - mobile application for parametrisation of the heating system - Voltage supply via mains adapter or USB <p>consisting of: Interface module ISM7e, installation and operation manual, eBus-cable, mains adapter, network cable</p> <p>Note: Only used together with BM-2.</p>	CWL Excellent, CWL-T Excellent, CWL-F Excellent	27 45 596	406,-
	<p>KNX – external interface module-kit</p> <p>Interface kit for an integration of Wolf ventilation units into a KNX network</p> <p>consisting of: Interface module ISM8i, KNX-IP-BAOS Modul, installation and operation manual, network cable</p> <p>Note: Only used together with BM-2.</p>	CWL Excellent, CWL-T Excellent, CWL-F Excellent	27 45 738	845,-
	<p>Mod-Bus-external interface kit</p> <p>Interface kit for an integration of Wolf ventilation units into a Mod-Bus network</p>	CWL Excellent, CWL-T Excellent, CWL-F Excellent	27 45 805	386,-
	<p>Extension kit for additional functions</p> <p>9-pole plug connection for</p> <ul style="list-style-type: none"> - postheating element - air quality sensor - humidity sensor - smoke detector 	CWL-180 Excellent, CWL-F-300 Excellent	27 45 273	88,-
	<p>Modular distributor RJ12</p> <p>consisting of: cable and splitter</p>	CWL Excellent, CWL-T Excellent, CWL-F Excellent	27 45 312	28,70
	<p>RH-Duct work sensor, for capturing the relative humidity;</p> <p>optional: Connection kit for RH-duct work sensor Art.-no. 27 45 372 Reduction DN180 to DN 200</p>	CWL Excellent, CWL-T Excellent, CWL-F Excellent	27 45 372	233,-
	<p>CWL-Sevicetool for an easy parametrization</p> <p>Free software to be found on our homepage.</p>	CWL Excellent, CWL-T Excellent, CWL-F Excellent	25 77 544	256,-

Control systems and electrical accessories

Control systems		for products	Art. no.	€
	4-stage switch with filter replacement indicator Note: Connecting cable, black necessary.	CWL Excellent, CWL-T Excellent, CWL-F Excellent	27 44 518	77,-
	Surface mounted housing for 4-stage switch	CWL Excellent, CWL-T Excellent, CWL-F Excellent	27 44 519	46,-
	Remote control consisting of transmitter and receiver Note: Connecting cable, black necessary.	CWL Excellent, CWL-T Excellent, CWL-F Excellent	27 44 523	535,-
	Connecting cable, black for 4-step switch and operating module	CWL Excellent, CWL-T Excellent, CWL-F Excellent		
	5 metres (2 x RJ12/6)		27 44 520	20,90
	10 metres (2 x RJ12/6)		27 44 521	31,-
	15 metres (2 x RJ12/6)		27 44 522	42,-
	Electrical preheater 1000 W DN125	CWL-180 Excellent, CWL-F-150 Excellent	27 45 444	389,-
	DN160	CWL-F-300 Excellent	27 45 259	389,-
	Electrical reheater 1000 W - Extension kit for additional functions with the CWL-180 Excellent and CWL-F-300 Excellent art. no. 27 45 273 is required - A DN150/125 reducer art. no. 25 75 793 is required with the CWL-180 Excellent			
	DN125	CWL-180 Excellent, CWL-F-150 Excellent	27 45 445	402,-
	DN160	CWL-300 Excellent, CWL-F-300 Excellent, CWL-T 300 Excellent	27 45 258	402,-
	DN180	CWL-400 Excellent	27 45 206	402,-

Accessories

	Accessories	for products	Art. no.	€
	Ball syphon	CWL-300/400 Excellent CWL-T-300 Excellent	25 77 348	107,-
	Ball syphon	CWL-F-150 Excellent CWL-F-300 Excellent	 25 77 580	119,-
	Enthalpy heat exchanger for moisture recovery	CWL-300/400 Excellent CWL-F-300 Excellent	20 71 748 20 71 749	1.880,- 1.655,-
	Hydraulic postheating element 3000 W incl. flow valve with thermostatic head, automatic vent and corrugated stainless steel pipes	CWL-T Excellent	27 45 587	935,-
	Automatic condensate pumping station with potential-free ready to plug consisting of: Condensate pump with potential-free alarm output, PVC hose 10mm (6m long), non-return valve, condensate feed adapter	CWL Excellent, CWL-T Excellent, CWL-F Excellent	20 71 268	227,-
	Summer replacement cassette Alternative insert instead of standard heat exchanger, without heat recovery.	CWL-180 Excellent	21 37 931	173,-
	Syphon Barrier height 90mm	CWL-300/400 Excellent	86 11 033	17,-

ISO pipe system

ISO pipe system		for products	Art. no.	€
	ISO-pipe	DN125	CWL-180 Excellent, CWL-F-150 Excellent	25 77 369 66,-
	Length 2000mm	DN160	CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent	25 77 362 69,-
		DN180	CWL-400 Excellent	25 77 371 86,-
	ISO-pipe bend 90°	DN125	CWL-180 Excellent, CWL-F-150 Excellent	25 76 009 27,70
		DN160	CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent	25 77 363 18,50
		DN180	CWL-400 Excellent	25 76 011 31,50
	ISO-pipe bend 45°	DN125	CWL-180 Excellent, CWL-F-150 Excellent	25 76 012 20,90
		DN160	CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent	25 77 364 14,60
		DN180	CWL-400 Excellent	25 76 014 27,70
	ISO-pipe T-piece	DN125	CWL-180 Excellent, CWL-F-150 Excellent	25 76 019 52,-
		DN160	CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent	25 77 572 61,-
	ISO-pipe Y-piece 45°	DN180	CWL-400 Excellent	25 75 792 106,-
	ISO-pipe reducing piece		CWL Excellent, CWL-T Excellent, CWL-F Excellent	
		DN160/125		25 77 404 19,60
		DN180/125		25 75 795 19,60
		DN180/160		25 77 463 19,60
	Locking ring for ISO-pipe	DN125	CWL-180 Excellent, CWL-F-150 Excellent	25 76 020 7,30
	One clamping ring is needed for each joint	DN160	CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent	25 77 365 7,30
		DN180	CWL-400 Excellent	25 76 022 8,30
	Assembly knife with special teeth for trimming pipes to length quickly and cleanly		CWL Excellent, CWL-T Excellent, CWL-F Excellent	17 30 534 47,-

Roof connections

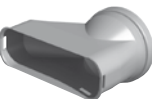

Roof connections		for products	Art. no.	€
	CWL roof lead-through, thermally insulated Length 1159mm			
	DN125, black	CWL-180 Excellent, CWL-F-150 Excellent	25 75 801	164,-
	DN125, red	CWL-180 Excellent, CWL-F-150 Excellent	25 76 999	164,-
	DN160, black	CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent	25 75 802	164,-
	DN160, red	CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent	25 77 000	164,-
	DN180, black	CWL-400 Excellent	25 75 803	183,-
	Sealing collar for roof lead-through	CWL Excellent, CWL-T Excellent, CWL-F Excellent	25 77 006	41,-
	Universal roof tile 25° to 45°			
	black	CWL-180 Excellent, CWL-300 Excellent, CWL-F-150 Excellent, CWL-F-300 Excellent	25 77 001	86,-
	red	CWL-180 Excellent, CWL-300 Excellent, CWL-F-150 Excellent, CWL-F-300 Excellent	25 77 003	86,-
	black	CWL-400 Excellent	25 77 002	176,-
	Ubbiflex high tack – glue to fasten the CWL universal tile on the roof tiles or roof	CWL Excellent, CWL-T Excellent, CWL-F Excellent	25 77 543	19,60
	CWL flat roof lead-through 0°			
	DN160	CWL-180 Excellent, CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-150 Excellent, CWL-F-300 Excellent	25 77 004	77,-
	DN180	CWL-400 Excellent	25 77 005	77,-
	Fastening clip for ISO pipe			
	DN125	CWL-180 Excellent, CWL-F-150 Excellent	25 77 007	5,90
	DN160	CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent	25 77 405	6,40
	DN180	CWL-400 Excellent	25 77 009	6,80

Outsidewall connections and silencers








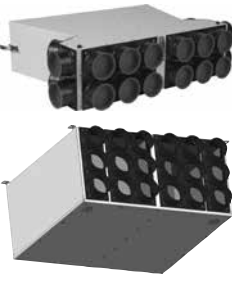

Outsidewall connections		for products	Art. no.	€
	Wall hood	DN125	CWL-180 Excellent, CWL-F-150 Excellent	25 75 806 89,-
	Colour: black	DN160	CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent	25 75 807 91,-
		DN180	CWL-400 Excellent	25 75 808 98,-
	Wall hood	DN125	CWL-180 Excellent, CWL-F-150 Excellent	25 75 809 89,-
	Colour: white (RAL 9010)	DN160	CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent	25 75 810 91,-
		DN180	CWL-400 Excellent	25 75 811 98,-
	Double grille, for outdoor and exhaust air Colour: white	DN125	CWL-180 Excellent, CWL-F-150 Excellent	25 77 458 125,-
		DN160	CWL-300 Excellent, CWL-F-300 Excellent, CWL-T-300 Excellent	25 77 579 160,- NEW
Silencer				
Silencer, for supply air or exhaust air Length 1000mm		for products		
		DN125, 50mm insulation	CWL-180 Excellent	25 75 812 96,-
		DN160, 50mm insulation	CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent	25 77 367 98,-
		DN180, 50mm insulation	CWL-400 Excellent	25 75 814 115,-
	Silencer, metal, for supply air and exhaust air Sound attenuating material, closed porous acc. to DIN 1946-6	for products		
		DN125, Length 482mm	CWL-F-150 Excellent	25 77 434 615,-
		DN160, Length 600mm	CWL-F-300 Excellent	25 77 606 615,- NEW
	Silencer and air flow control for connection DN125	CWL Excellent, CWL-T Excellent CWL-F Excellent		
	Silencer and air flow control für connection floor grille	CWL Excellent, CWL-T Excellent CWL-F Excellent		

Air distributor

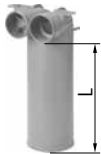
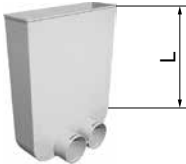




	for flexible hose system, round and flat duct	for products	Art. no.	€
	<p>Air distributor DN125-180, plastic, for supply air <u>or</u> extraction 8 necks DN75 with 4 pipe caps</p> <p>An adapter is required for connection of flexible hose or flat duct systems DN63, 50x100 and 50x140 to the air distributor. For 50x140 max. 6 connections possible.</p> <p>Note: Click ring and sealing ring DN75 obligatory!</p>	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 595	215,-
	<p>Air distributor DN125-180, plastic, for supply air <u>or</u> extraction 16 necks DN75 with 8 pipe caps</p> <p>An adapter is required for connection of flexible hose or flat duct systems DN63, 50x100 and 50x140 to the air distributor. For 50x140 max. 12 connections possible.</p> <p>Note: Click ring and sealing ring DN75 obligatory!</p>	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 596	230,-
	<p>Air distributor DN125-180, plastic, for supply air <u>or</u> extraction 24 necks DN75 with 12 pipe caps</p> <p>An adapter is required for connection of flexible hose or flat duct systems DN63, 50x100 and 50x140 to the air distributor. For 50x140 max. 18 connections possible.</p> <p>Note: Click ring and sealing ring DN75 obligatory!</p>	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 597	250,-
	<p>Adapter DN63 for connection to the air distributor DN125-180, plastic</p> <p>Note: Click ring and sealing ring DN63 obligatory!</p>	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 598	7,-
	<p>Adapter for flat duct 50x100 for connection to the air distributor DN125-180, plastic</p> <p>Note: Sealing ring 50x100 obligatory!</p>	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 599	16,-
	<p>Adapter for flat duct 50x140 for connection to the air distributor DN125-180, plastic</p> <p>Note: Sealing ring 50x140 obligatory!</p>	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 600	19,50
	<p>Orifice plate DN75 for air distributor DN125-180, plastic, bag of 10</p>	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 589	32,-
	<p>Closing cap DN75 for air distributor DN125-180, plastic</p>	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 590	5,40
	<p>Connection DN125-180 for air distributor DN125-180, plastic</p>	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 601	18,-
	<p>Revisionskappe for air distributor DN125-180, plastic</p>	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 602	6,60
	<p>Attenuator kit for air distributor DN125-180, plastic consisting of 10 plug-in elements Sound attenuating material, closed porous acc. to DIN 1946-6</p>	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 603	45,-







Flexible hose system, round

	Flexible hose system round	for products	Art. no.	€
	Air distribution hose with plain internal surface, DN63/52 , roll 50m with antistatic and antibacterial coating DN75/63 , roll 50m	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 411	249,-
	with plain internal surface DN63/52 , roll 50m DN75/63 , roll 50m		25 77 413 25 77 412 25 77 414	292,- 190,- 200,-
	Click connector for air distribution hose with antistatic and antibacterial coating DN63/52 DN75/63 Note: Click ring oand sealing ring DN63/52 or DN75/63 obligatory!	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 415	3,90
			25 77 416	3,90
	Sealing ring DN63/52 , bag of 10 DN75/63 , bag of 10	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 361	22,10
			25 77 360	23,30
	Click ring DN63/52 , bag of 10 DN75/63 , bag of 10	CWL Excellent, CWL-T Excellent CWL-F Excellent	25 77 547	22,10
			25 77 548	23,60
5x  10x  10x 	Click connector kit for air distribution hose with antistatic and antibacterial coating consisting of: 5 Click connectors for air distribution hose 10 Sealing rings 10 Click rings DN63/52 DN75/63	CWL Excellent, CWL-T Excellent, CWL-F Excellent	25 77 555	63,-
			25 77 556	65,-
	Air distributor , metal, for supply air- and extraction incl. silencer for direct installation onto CWL-F-Excellent Sound attenuating material, closed porous acc. to DIN 1946-6 DN125: 2x10 necks 75/63 with 5 pipe caps Length 482mm DN160: 2x9 necks 75/63 with 5 pipe caps Length 600mm Note: Sealing ring DN75/63 obligatory!	CWL-F-150 Excellent CWL-F-300 Excellent 	25 77 417 25 77 607	865,- 865,-

Flexible hose system, round

Flexible hose system, round		for products	Art. no.	€
	Connecting piece for valve DN125, one pipe cape and two pipe sockets incl. cover connecting piece for valve DN125 DN63/52, L = 325mm DN75/63, L = 325mm	CWL Excellent, CWL-T Excellent, CWL-F Excellent	25 77 294 25 77 295	41,- 41,-
	Note: Click ring and sealing ring obligatory!			
	Connector for floor grille, one pipe cap and two pipe connectors Length L = 300mm DN63/52 DN75/63	CWL Excellent, CWL-T Excellent, CWL-F Excellent	25 77 281 25 77 575	88,- 88,-
	Note: Click ring and sealing ring obligatory!			
	Pipe cap for air distribution hose DN63/52 DN75/63	CWL Excellent, CWL-T Excellent, CWL-F Excellent	25 75 835 25 75 824	3,40 3,40
	Lubricant tube Contents 50ml	CWL Excellent, CWL-T Excellent, CWL-F Excellent	26 51 329	7,50

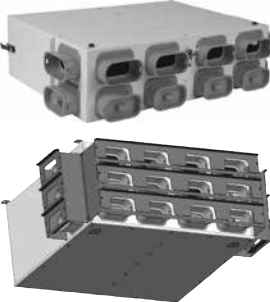




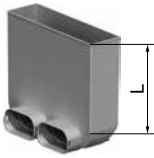
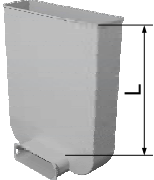


Accessories flexible hose system round and flat duct

Flexible hose system round		for products	Art. no.	€
	Extension for connecting piece DN125 Length = 150mm	CWL Excellent, CWL-T Excellent, CWL-F Excellent	25 77 186	20,-
	Cover connecting piece for valve DN125 Bag of 10		25 77 090	26,20
	Transition 90° from round to flat duct 50x100 Note: Click ring and sealing ring obligatory!	CWL Excellent, CWL-T Excellent, CWL-F Excellent	25 77 347	13,-
	Angular adapter 2x round DN75 to 1x flat duct 50x140 Note: Click ring and sealing ring DN75 obligatory!		25 77 594	20,60
	Universal clip for flat duct 50x100 and round tube Ø 63mm and Ø75 mm 10 pieces	CWL Excellent, CWL-T Excellent, CWL-F Excellent	25 77 574	21,60











Flat duct system Excellent

	Flat duct system Excellent	for products	Art. no.	€
	Flat duct with plain internal surface, with antistatic and antibacterial coating 50x100, roll 50m 50x140, roll 20m	CWL Excellent, CWL-T Excellent, CWL-F Excellent 	25 76 163 25 77 582	625,- 270,-
	Closing cap for flat duct with antistatic and antibacterial coating 50x100 bag of 10 50x140 bag of 10	CWL Excellent, CWL-T Excellent, CWL-F Excellent 	25 76 457 25 77 583	48,- 55,-
	Bend 90° CWL for flat duct with antistatic and antibacterial coating 50x100 vertical 50x140 vertical Note: Sealing ring obligatory!	CWL Excellent, CWL-T Excellent, CWL-F Excellent 	25 76 164 25 77 587	19,- 22,-
	Bend 90° CWL for flat duct with antistatic and antibacterial coating 50x100 horizontal 50x140 horizontal Note: Sealing ring obligatory!	CWL Excellent, CWL-T Excellent, CWL-F Excellent 	25 76 165 25 77 586	19,- 22,-
	Click connector for flat duct with antistatic and antibacterial coating 50x100 50x140 Note: Sealing ring obligatory!	CWL Excellent, CWL-T Excellent, CWL-F Excellent 	25 76 166 25 77 588	13,10 15,-
	Sealing ring for flat duct with antistatic and antibacterial coating 50x100 bag of 10	CWL Excellent, CWL-T Excellent, CWL-F Excellent	25 76 167	80,-
	Sealing ring for flat duct with antistatic and antibacterial coating 50x140 bag of 10	CWL Excellent, CWL-T Excellent, CWL-F Excellent 	25 77 585	98,-
	Pipe cap for formed component with antistatic and antibacterial coating 50x100 50x140	CWL Excellent, CWL-T Excellent, CWL-F Excellent 	25 76 168 25 77 591	3,80 4,10




Flat duct system Excellent

Flat duct system Excellent		for products	Art. no.	€
 <p>Air distributor, metal, for supply air- and extraction incl. silencer for direct installation onto CWL-F-Excellent Sound attenuating material, closed porous acc. to DIN 1946-6</p> <p>DN125: 2x6 necks 50x100 with 3 pipe caps Length 482mm</p> <p>DN160: 2x9 necks 50x100 with 5 pipe caps Length 600mm</p> <p>Note: Sealing ring 50x100 obligatory!</p>		CWL-F-150 Excellent	25 77 430	865,-
		CWL-F-300 Excellent	 25 77 608	865,-
 <p>Orifice plate for flat duct with antistatic and antibacterial coating</p> <p>50x100 bag of 10.</p>		CWL-F Excellent	25 76 459	33,30
 <p>Connecting piece for valve DN125, two pipe necks and one pipe cap with antistatic and antibacterial coating, incl. cover connecting piece for valve DN125</p> <p>Length L = 240mm 50x100 - 90° Length L = 330mm 50x140 - 90°</p> <p>Note: Sealing ring 50x100 or 50x140 obligatory!</p>		CWL Excellent, CWL-T Excellent, CWL-F Excellent	 25 76 172 25 77 592	41,- 44,-
 <p>Connecting piece for floor grille, one or two pipe necks and one pipe cap with antistatic and antibacterial coating incl. closing cover</p> <p>Länge L = 220mm</p> <p>50x100 (two pipe necks)</p> <p>Note: Sealing ring 50x100 obligatory!</p>		CWL Excellent, CWL-T Excellent, CWL-F Excellent	25 76 173	67,-
 <p>Connecting piece for floor grille, one or two pipe necks and one pipe cap with antistatic and antibacterial coating Length L = 240mm</p> <p>50x140 (one pipe neck)</p> <p>Note: Sealing ring 50x140 obligatory!</p>		CWL Excellent, CWL-T Excellent, CWL-F Excellent	 25 77 593	60,-
 <p>Floor grille, metal</p> <p>white stainless steel</p>		CWL Excellent, CWL-T Excellent, CWL-F Excellent	25 76 175 25 76 176	67,- 67,-

Air supply / extraction valves

	Air supply / extraction valves	for products	Art. no.	€
	Supply air valve, plastic, DN125 incl. installation frame with rubber lip gasket	CWL Excellent, CWL-T Excellent, CWL-F Excellent 	25 77 610	29,-
	Supply air valve, metal, DN125 incl. installation frame with rubber lip gasket	CWL Excellent, CWL-T Excellent, CWL-F Excellent 	25 77 611	29,-
	Exhaust air valve, plastic, DN125 incl. installation frame with rubber lip gasket	CWL Excellent, CWL-T Excellent, CWL-F Excellent 	25 77 612	29,-
	Filter bag (5 pieces)		71 00 595	43,-
	Exhaust air valve, metal, DN125 incl. installation frame with rubber lip gasket	CWL Excellent, CWL-T Excellent, CWL-F Excellent 	25 77 613	29,-
	Filter bag (5 pieces)		71 00 595	43,-
	Kitchen extract air valve with filter G3 (RAL 9010)	CWL Excellent, CWL-T Excellent, CWL-F Excellent	25 75 834	143,-
	Filter matt class G3 5 pieces, 200 x 190mm		16 69 236	18,60
	Commissioning CWL	Prices: net		
	without air adjustment with air adjustment		00 99 746 00 99 748	255,- 350,-

Filters

	Filters	for products	Art. no.	€
	Filter service set class G4 295 x 140mm 2 pieces	CWL-180, CWL-180 Excellent	16 68 492	24,80
	Filter service set class G4 415 x 237mm 2 pieces	CWL-300, CWL-400	16 68 493	28,70
	50 pieces		16 68 495	389,-
	Filter service set class G4 bypass 500 x 237mm 2 pieces	CWL-300 B, CWL-400 B	16 68 494	28,70
	50 pieces		16 68 496	389,-
	Filter service set class G4 522 x 184mm 2 pieces	CWL-300 Excellent, CWL-400 Excellent	16 69 013	28,70
	50 pieces		16 69 027	389,-
	Filter service set class G4 173 x 141mm 2 pieces	CWL-F-150 Excellent	16 69 163	28,70
	Filter service set class G4 245 x 177mm 2 pieces	CWL-F-300 Excellent	16 69 046	28,70
	Filter service set class G4 234 x 166mm 2 pieces	CWL-T-300 Excellent	16 69 200	42,-
	Filter service set class M6 415 x 237mm 2 pieces	CWL-300, CWL-400	16 68 497	112,-
	Filter service set class M6 500 x 237mm 2 pieces	CWL-300 B, CWL-400 B	16 68 498	120,-
	Filter service set class F7 295 x 140mm 2 pieces	CWL-180, CWL-180 Excellent	16 69 258	120,-
	Filter service set 1 x class G4 and 1 x class F7 522 x 184mm	CWL-300 Excellent, CWL-400 Excellent	16 69 014	62,-
	Filter service set 1 x class G4 and 1 x class F7 164 x 132mm	CWL-F-150 Excellent	16 69 162	53,-
	Filter service set 1 x class G4 and 1 x class F7 245 x 177mm	CWL-F-300 Excellent	16 69 047	53,-
	Filter service set 1 x class G4 and 1 x class F7 234 x 166mm	CWL-T-300 Excellent	16 69 199	53,-



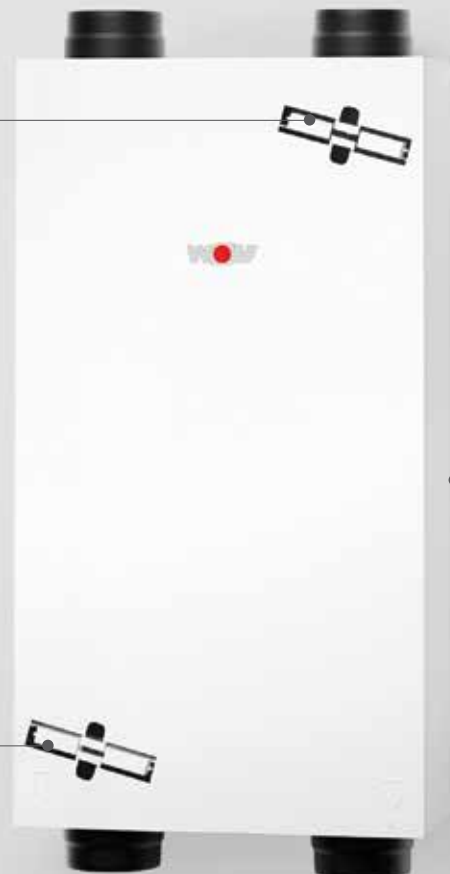
Energiesparen und Klimaschutz serienmäßig

Flach-Wohnungs-Lüftung CWL-F Excellent

FrISChe Luft, auch wenn es mal eng wird

Der Zuluft- und Abluftfilter können bei geschlossenem Gehäuse problemlos gewartet werden.

Die Bauhöhe von nur 20 bzw. 31 cm lässt das Gerät unter der Decke verschwinden.



CGL Comfort large area ventilation units

Central ventilation units with heat recovery	Page 118
Accessories CGL	Page 119
Intake / discharge accessories CGL	Page 120



The Comfort large area ventilation unit from Wolf offers energy-saving and convenient ventilation all year. Suitable for classrooms, kindergartens, conference rooms, club premises, open-plan offices and restaurants. With the high-efficiency cross/counter-flow heat exchanger made of aluminium, the heat contained in the extract air is removed and transferred to the fresh supply air. Casing: sheet steel, powder coated (traffic white RAL 9016)





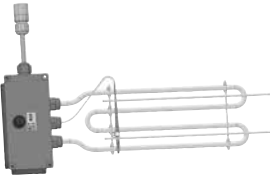
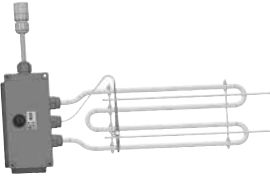


CGL

TYPE		CGL li	CGL re
Max. air volume	m³/h	1100 (with externally available duct pressure of approx. 100 Pa.)	1100 (with externally available duct pressure of approx. 100 Pa.)
Recommended air volume	m³/h	600 (with externally available duct pressure of approx. 550 Pa.)	600 (with externally available duct pressure of approx. 550 Pa.)
Power consumption			
with an air volume of 500m³/h	W	90	90
with an air volume of 600m³/h	W	135	135
with an air volume of 800m³/h	W	255	255
Sound pressure level 1 m in front of the device			
with an air volume of 500m³/h	dB(A)	37	37
with an air volume of 600m³/h	dB(A)	40	40
with an air volume of 800m³/h	dB(A)	45	45
Dimensions			
Total width	mm	1017	1017
Total depth	mm	508	508
Total height	mm	2137	2137
Weight	kg	250	250
consisting of:	€	on request	
<ul style="list-style-type: none"> compact, inherently stable, height-adjustable casing high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, continuously variable via latest EC motor technology with low energy consumption High-performance counterflow heat exchanger made of aluminium for heat recovery with integrated bypass for summer operation Microprocessor-controlled control system for fans, heat recovery and temperature, wired as standard Socket for BML ventilation operating module for CGL, mounted and wired in the device Flow-optimised splitter silencer for supply and extract air easily exchangeable compact panel filter: Supply air filter F7 (fine dust and pollen filter) Extract air filter F5 (fine dust filter) 			

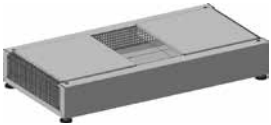
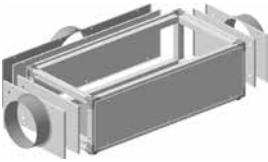






Note: Only possible in connection with BML ventilation control module for CGL.

Functionally necessary accessories		Art. no.	€
	BML programming module for CGL	68 00 152	364,-
	<ul style="list-style-type: none"> Only one BML ventilation control module for CGL is needed to actuate up to 7 CGL devices Mounted optionally in the CGL device or in the wall holder as a remote control 		

Accessories CGL

	Art. no.	€
 <p>Accessories</p> <p>Wall holder Wall holder for using the operating module BML as remote control</p>	27 44 275	27,70
 <p>Condensate pump required if no free condensate drain is possible</p> <p>consisting of: Plug-in condensate pump, float switch, alarm generator and bracket, up to 30 l/h and PVC hose 8mm (5m long)</p>	68 00 122	261,-
 <p>CO₂-sensor required for CO₂ dependent operation</p> <p>Plug-in, as control variable for the CO₂-controlled control system</p>	68 00 124	488,-
 <p>ISM 5 - LON-interface module to connect CGL to a building management system applying LON-standard network variables</p>	27 45 029	1.600,-
 <p>Filter pre-drying unit, 1000W recommended for an optimized unit operation, plug-in electric heater including overheat safety cutout (STB) and temperature monitoring (TW) with bracket, to protect the outdoor air filter from moisture penetration and to project heat recovery from frost</p>	68 00 120	219,-
 <p>Electric reheater, 1000W, modulating to rise the discharge temperature in case of low outside temperatures, suitable for progressive re-heating of the supply air temperature, plug-in, with bracket</p>	68 00 121	219,-
 <p>Tubular end damper DN250, with actuator (230V; open/closed) for connection on site</p>	25 76 453	488,-
 <p>Tubular silencer DN250 Length: 600mm insulation circumferentially 50mm (attenuation 6dB / 250Hz)</p>	21 37 635	257,-

Intake / discharge accessories CGL

Accessories		Art. no.	€								
	<p>Intake silencer to attenuate the noise by about 5dB with adjustable feet. Reduction of the total sound level 1m in front of the CGL by up to 3dB. Intake: left / right hand side, back</p>	68 00 994	585,-								
	<p>Intake plenum universal with adjustable feet. Intake: left / right hand side, back Ø 250mm left / right hand side 205 x 408mm back 205 x 915mm</p>	68 00 995	1.245,-								
	<p>Discharge plenum vertical with tubular dampers, with sound attenuating casing, discharge louvre horizontally and vertically adjustable; tubular damper connection Ø 250mm with actuators 230V open/closed 5Nm.</p>	CGL li 68 01 000	1.770,-								
		CGL re 68 02 067	1.770,-								
	<p>Discharge plenum vertical with sound attenuating casing, discharge louvre horizontally and vertically adjustable; terminal box (230V) for subsequent tubular end dampers; tube connection Ø 250mm</p>	CGL li 68 00 996	930,-								
		CGL re 68 02 068	930,-								
	<p>Discharge plenum horizontal, with sound attenuating casing, discharge louvre horizontally and vertically adjustable; terminal box (230V) for possible subsequent tubular en dampers; tube connection Ø 250mm</p>	CGL li 68 00 997	1.020,-								
		CGL re 68 02 069	1.020,-								
	<p>Lifting device for a subsequent installation of an intake silencer</p>	68 00 952	164,-								
	<p>Compact panel filter M5 particle filter</p> <table border="1"> <tr> <td>CGL</td> <td>a</td> <td>b</td> <td>c</td> </tr> <tr> <td></td> <td>372</td> <td>393</td> <td>96</td> </tr> </table>	CGL	a	b	c		372	393	96	16 68 664	156,-
		CGL	a	b	c						
	372	393	96								
	<p>Compact panel filter F7 particle and pollen filter</p> <table border="1"> <tr> <td>CGL</td> <td>a</td> <td>b</td> <td>c</td> </tr> <tr> <td></td> <td>404</td> <td>592</td> <td>96</td> </tr> </table>	CGL	a	b	c		404	592	96	16 68 665	174,-
		CGL	a	b	c						
	404	592	96								
<p>Commissioning of 1 basic device Appointment necessary (at least 8 working days before actual commissioning)</p>		00 99 799	420,-								
<p>Commissioning of further accessories Heating or cooling or multiple devices</p>		on request	on request								
		Net price									

CFL Comfort flat ventilation unit

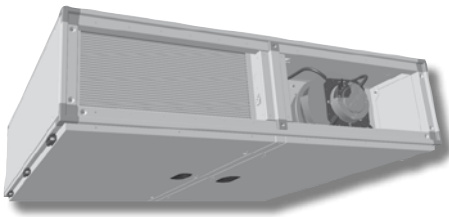
Combined supply and extract air unit CFL-WRG	Page 122
Supply and extract air unit CFL-EC	Page 123
Device accessories CFL	Page 124
Control systems WRS	Page 128
Control accessories CFL	Page 129

CKL Compact comfort ventilation unit Page 131

CRL Comfort rotary heat exchanger ventilation unit Page 143

The Comfort flat ventilation unit from Wolf (ceiling-mounted device with operation from below) offers energy-saving and comfortable ventilation all year round. Suitable for conference rooms, club premises, open-plan offices, restaurants, kindergartens and classrooms.

Casing: Galvanised sheet steel.
Device according to VDI 6022



CFL-WRG

TYPE		CFL 10-WRG	CFL 15-WRG	CFL 22-WRG	CFL 32-WRG
Air volume	m ³ /h	1000	1500	2200	3200
Dimensions					
Length	mm	1322	1322	1525	1932
Width	mm	1017	1423	1830	1932
Height	mm	367	367	411	495
Weight	kg	130	160	240	340
consisting of:					
<ul style="list-style-type: none"> high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, stepless controllable (0 - 10V) via latest EC motor technology with low energy consumption (1 x 230V) High performance counter-flow plate heat exchanger made of aluminium for heat recovery with integrated bypass for summer operation compact panel filter F7 (supply air) / F5 (extract air) External sensor, supply air sensor, extract air sensor, icing sensor, 2 x differential pressure switches for filter monitoring as standard, wired and installed in the device CO₂ or air quality sensor can optionally be integrated in the device, electrically pluggable execution WRS-K controller attached to the outside and wired BMK air conditioning control module, enclosed loose Temperature control, integrated: <ul style="list-style-type: none"> Supply air temperature control (Factory setting) Extract air temperature control (adjustable on the control unit) Room temperature control (adjustable on the control unit) 1 set of suspension brackets (4 pcs), enclosed loose 					
Versions for each connection side in supply air direction right / left: <ul style="list-style-type: none"> Combined supply and extract air unit CFL-WRG-PWW incl. WRS-K control system for actuating an lphw booster heater bank as well as a ch.w. cooler or a direct expansion coil* Combined supply and extract air unit CFL-WRG-E incl. WRS-K control system for actuating an electric booster heater bank as well as a ch.w. cooler or a direct expansion coil* 					
<ul style="list-style-type: none"> Connection side Supply air direction right <p>Combined supply and extract air units CFL-WRG-PWW / CFL-WRG-E</p>					
<ul style="list-style-type: none"> Connectionseite Supply air direction left <p>Combined supply and extract air units CFL-WRG-PWW / CFL-WRG-E</p>					
<ul style="list-style-type: none"> Access doors <p>2 additional access doors for an easy filter service</p>		✓	✓	✓	-
<ul style="list-style-type: none"> Transport sleigh <p>fitted, for transport facilitation in case of low access openings</p>		-	-	-	✓

High-efficiency HRS up to more than 90%

on request

* see page 124 for booster heater banks, see page 125 for ch.w. cooling coil and dx-coil


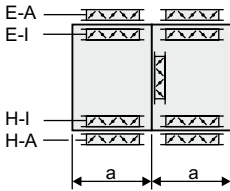

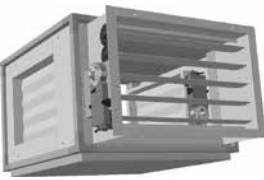
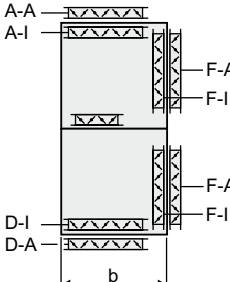

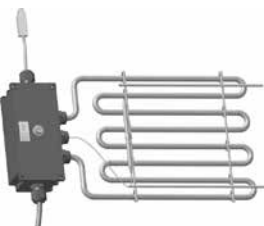
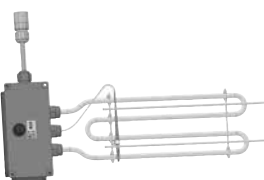
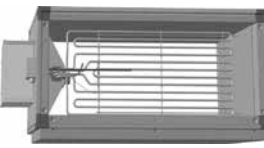
The Comfort flat ventilation unit from Wolf (ceiling-mounted device with operation from below) offers energy-saving and comfortable ventilation all year round. Suitable for conference rooms, club premises, open-plan offices, restaurants, kindergartens and classrooms.
 Casing: Galvanised sheet steel.
 Device according to VDI 6022



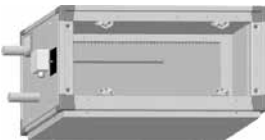


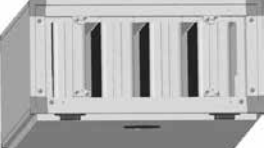
CFL-EC

TYPE		CFL 10-EC	CFL 15-EC	CFL 22-EC	CFL 32-EC
Air volume	m³/h	1300	1800	2600	3500
Dimensions CFL-EC-ZUL					
Length	mm	712	712	813	813
Width	mm	508	712	915	966
Height	mm	367	367	411	495
Weight CFL-EC-ZUL	kg	47	50	64	82
Dimensions CFL-EC-ABL					
Length	mm	508	508	610	610
Width	mm	508	712	915	966
Height	mm	367	367	411	495
Weight CFL-EC-ABL	kg	37	38	48	61
consisting of: <ul style="list-style-type: none"> • mcompact panel filter F7 (supply air unit) / F5 (extract air unit) with differential pressure switch for filter monitoring, mounted as standard • Supply air unit CFL-ZUL with lphw heat exchanger incl. frost protection thermostat, mounted as standard • high-efficiency, one-sided sucking, high-performance radial fan, stepless controllable (0 - 10V) via latest EC motor technology with low energy consumption (1 x 230V) • EC fan on terminal box, pre-wired • compact panel filter F7 (supply air) / F5 (extract air) • 1 set of suspension brackets (4 pcs), enclosed loose 					
Connection side Supply air direction right		Supply air unit CFL-EC-ZUL 			
Connection side Supply air direction left		Supply air unit CFL-EC-ZUL 			
Connection side Exhaust air direction right		Extract air unit CFL-EC-ABL 			
Connection side Exhaust air direction left		Extract air unit CFL-EC-ABL 			
on request					



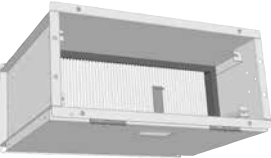


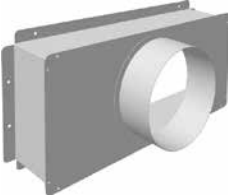
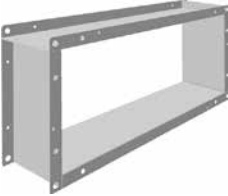
Accessories for CFL comfort flat ventilation unit

	Accessories	for products	Art. no.	€								
	<p>Mixing/exhaust air section short (MF-K) Intake and discharge position („E” or „H”) and option (external „A” or internal „I”) are freely selectable View:</p>  <table border="1"> <thead> <tr> <th>CFL</th> <th>a</th> </tr> </thead> <tbody> <tr> <td>CFL 10-MF-K</td> <td>347</td> </tr> <tr> <td>CFL 15-MF-K</td> <td>347</td> </tr> <tr> <td>CFL 22-MF-K</td> <td>391</td> </tr> </tbody> </table>	CFL	a	CFL 10-MF-K	347	CFL 15-MF-K	347	CFL 22-MF-K	391	CFL 10, CFL 15, CFL 22	on request	on request
CFL	a											
CFL 10-MF-K	347											
CFL 15-MF-K	347											
CFL 22-MF-K	391											
	 <p>Actuator, 24V stepless for louvre damper rotating to left or right, incl. mounting bracket</p>	CFL-MF-K	on request	on request								
	<p>Mixing/exhaust air section long (MF-L) Intake and discharge position („A”, „D” or „F”) and option (external „A” or internal „I”) are freely selectable Exception: AI and FI or DI and FI not possible due to limited space! Plan view:</p>  <table border="1"> <thead> <tr> <th>CFL</th> <th>b</th> </tr> </thead> <tbody> <tr> <td>CFL 10-MF-L</td> <td>508</td> </tr> <tr> <td>CFL 15-MF-L</td> <td>712</td> </tr> <tr> <td>CFL 22-MF-L</td> <td>915</td> </tr> </tbody> </table>	CFL	b	CFL 10-MF-L	508	CFL 15-MF-L	712	CFL 22-MF-L	915	CFL 10, CFL 15, CFL 22	on request	on request
CFL	b											
CFL 10-MF-L	508											
CFL 15-MF-L	712											
CFL 22-MF-L	915											
	 <p>Actuator, 24V stepless for louvre damper rotating to left or right, incl. mounting bracket</p>	CFL-MF-L	on request	on request								
	<p>Electric preheater bank 1 x 230V / 50Hz, single stage can be integrated into the unit as an option; electrical plug-in design Output: 1kW Output: 2kW Output: 2kW Output: 4kW</p>	CFL 10-WRG CFL 15-WRG CFL 22-WRG CFL 32-WRG	62 17 892 62 17 893 62 17 894 62 19 413	244,- 415,- 415,- 680,-								
	<p>Electric booster heater bank 1 x 230V / 50Hz, stepless (0-10V) can be integrated into the unit as an option; electrical plug-in design Output: 1kW</p>	CFL 10-WRG-E	62 17 895	244,-								
	<p>Electric heater bank extension module, stepless (0-10V) can be fitted to the unit as an option with supply air sensor incl. 1 set of mounting brackets (2 items) Dimensions: 712 x 367 x 407mm (B x H x L) Output max. 4kW Dimensions: 915 x 411 x 407mm (B x H x L) Output max. 6kW Dimensions: 966 x 495 x 407mm (B x H x L) Output max. 8kW</p>	CFL 15-WRG-E connect.side SUP right CFL 15-WRG-E connect.side SUP left CFL 22-WRG-E connect.side SUP right CFL 22-WRG-E connect.side SUP left CFL 32-WRG-E connect.side SUP right CFL 32-WRG-E connect.side SUP left	62 17 896 62 18 659 62 17 897 62 18 660 62 19 414 62 19 415	1.320,- 1.320,- 1.565,- 1.565,- 2.260,- 2.260,-								








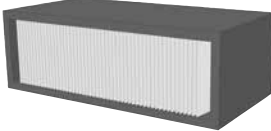

Accessories for CFL comfort flat ventilation unit

	Accessories	for products	Art. no.	€
	<p>Iphw heater extension module can be fitted to the unit as an option with supply air sensor and anti-frost thermostat incl. 1 set of mounting brackets (2 items)</p> <p>Dimensions: 508 x 367 x 407mm (B x H x L) Output max. 15kW</p> <p>Dimensions: 712 x 367 x 407mm (B x H x L) Output max. 23kW</p> <p>Dimensions: 915 x 411 x 407mm (B x H x L) Output max. 33kW</p> <p>Dimensions: 966 x 495 x 407mm (B x H x L) Output max. 48kW</p>	<p>CFL 10-WRG-PWW con.side SUP right CFL 10-WRG-PWW con.side SUP left CFL 15-WRG-PWW con.side SUP right CFL 15-WRG-PWW con.side SUP left CFL 22-WRG-PWW con.side SUP right CFL 22-WRG-PWW con.side SUP left CFL 32-WRG-PWW con.side SUP right CFL 32-WRG-PWW con.side SUP left</p>	<p>62 17 898 62 18 661 62 17 899 62 18 662 62 17 900 62 18 663 62 19 416 62 19 417</p>	<p>830,- 830,- 915,- 915,- 1.050,- 1.050,- 1.285,- 1.285,-</p>
	<p>Extension module cooling coil for ch.w. (chilled water) can be fitted to the unit as an option with filter insert facility for compact panel filter incl. 1 set of mounting brackets (2 items)</p> <p>Dimensions: 508 x 367 x 712mm (B x H x L) Output max. 6kW</p> <p>Dimensions: 712 x 367 x 712mm (B x H x L) Output max. 10kW</p> <p>Dimensions: 915 x 411 x 712mm (B x H x L) Output max. 15kW</p> <p>Dimensions: 966 x 495 x 813mm (B x H x L) Output max. 21kW</p>	<p>CFL 10 connection side SUP right CFL 10 connection side SUP left CFL 15 connection side SUP right CFL 15 connection side SUP left CFL 22 connection side SUP right CFL 22 connection side SUP left CFL 32 connection side SUP right CFL 32 connection side SUP left</p>	<p>62 18 750 62 18 753 62 18 751 62 18 754 62 18 752 62 18 755 62 19 418 62 19 419</p>	<p>1.130,- 1.130,- 1.330,- 1.330,- 1.565,- 1.565,- 1.910,- 1.910,-</p>
	<p>Extension module cooling coil for dx-coil can be fitted to the unit as an option with filter insert facility for compact panel filter incl. 1 set of mounting brackets (2 items)</p> <p>Dimensions: 508 x 367 x 712mm (B x H x L) Output max. 5kW</p> <p>Dimensions: 712 x 367 x 712mm (B x H x L) Output max. 9kW</p> <p>Dimensions: 915 x 411 x 712mm (B x H x L) Output max. 13kW</p> <p>Dimensions: 966 x 495 x 813mm (B x H x L) Output max. 18kW</p>	<p>CFL 10 connection side SUP right CFL 10 connection side SUP left CFL 15 connection side SUP right CFL 15 connection side SUP left CFL 22 connection side SUP right CFL 22 connection side SUP left CFL 32 connection side SUP right CFL 32 connection side SUP left</p>	<p>62 18 756 62 18 759 62 18 757 62 18 760 62 18 758 62 18 761 62 19 420 62 19 421</p>	<p>1.115,- 1.115,- 1.315,- 1.315,- 1.535,- 1.535,- 1.880,- 1.880,-</p>
	<p>Silencer extension module can be fitted to the unit as an option with filter insert facility for compact panel filter incl. 1 set of mounting brackets (2 items)</p> <p>Dimensions: 508 x 367 x 1017mm (B x H x L) Dimensions: 712 x 367 x 1017mm (B x H x L) Dimensions: 915 x 411 x 1017mm (B x H x L) Dimensions: 966 x 495 x 1017mm (B x H x L)</p>	<p>CFL 10 CFL 15 CFL 22 CFL 32</p>	<p>62 17 907 62 17 908 62 17 909 62 19 422</p>	<p>930,- 1.055,- 1.250,- 1.530,-</p>





Accessories for CFL comfort flat ventilation unit

Accessories		for products	Art. no.	€				
	Louvre damper , length 140mm for duct galvanised sheet steel Tightness categories to DIN EN 1751	409 x 256mm 612 x 256mm 815 x 306mm 866 x 370mm	CFL 10 CFL 15 CFL 22 CFL 32	62 17 919 62 17 920 62 17 921 62 19 423	125,- 141,- 164,- 201,-			
		Filter section with integrated attenuating function , length 215mm for compact panel filter	compact panel filter M5 409 x 247mm 612 x 247mm 815 x 291mm 866 x 361mm	CFL 10 CFL 15 CFL 22 CFL 32	62 19 093 62 19 095 62 19 097 62 19 427	750,- 775,- 860,- 1.055,-		
		compact panel filter F7 409 x 247mm 612 x 247mm 815 x 291mm 866 x 361mm	CFL 10 CFL 15 CFL 22 CFL 32	62 19 092 62 19 094 62 19 096 62 19 428	760,- 775,- 870,- 1.065,-			
		compact panel filter F9 409 x 247mm 612 x 247mm 815 x 291mm 866 x 361mm	CFL 10 CFL 15 CFL 22 CFL 32	62 19 085 62 19 086 62 19 087 62 19 429	895,- 925,- 1.030,- 1.260,-			
			HEPA filter section with integrated attenuating function , length 508mm, HEPA filter H13	408 x 250mm 612 x 250mm 815 x 295mm 866 x 359mm	CFL 10 CFL 15 CFL 22 CFL 32	62 19 842 62 19 843 62 19 844 62 19 845	1.280,- 1.450,- 1.570,- 1.615,-	
			230 V servomotor for opening/closing louvre damper , loose incl. mounting bracket		CFL	62 17 922	288,-	
				Canvas flange, 4-hole profile frame , length 130mm for connection to duct 405 x 243mm 608 x 243mm 811 x 287mm 862 x 350mm	CFL 10 CFL 15 CFL 22 CFL 32	62 17 923 62 17 924 62 17 925 62 19 424	71,- 73,- 83,- 101,-	
					Adaptor module , length 130mm for square to round connection Connection diameter 250mm, length 130mm Connection diameter 250mm, length 130mm Connection diameter 315mm, length 130mm Connection diameter 450mm, length 300mm	CFL 10 CFL 15 CFL 22 CFL 32	62 17 910 62 17 911 62 17 912 62 19 425	104,- 113,- 130,- 158,-
						Insulating frame , length 140mm for connection to duct 409 x 247mm 612 x 247mm 815 x 291mm 866 x 354mm	CFL 10 CFL 15 CFL 22 CFL 32	62 17 913 62 17 914 62 17 915 62 19 426


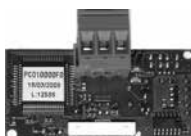
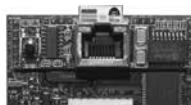
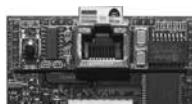









Accessories for CFL comfort flat ventilation unit

Accessories		for products	Art. no.	€
	Siphon with non-return device 1¼", suitable for intake and pressure sides, supplied loose	CFL	20 70 349	124,-
	Compact panel filter M5, depth 48mm particle filter 389 x 287mm 592 x 287mm 795 x 333mm 842 x 406mm	CFL 10-WRG CFL 15-WRG CFL 22-WRG CFL 32-WRG	16 68 944 16 68 826 16 68 954 16 69 201	79,- 81,- 96,- 118,-
	Compact panel filter F7, depth 48mm particle and pollen filter 389 x 287mm 592 x 287mm 795 x 333mm 842 x 406mm	CFL 10-WRG CFL 15-WRG CFL 22-WRG CFL 32-WRG	16 68 945 16 68 827 16 68 955 16 69 202	93,- 96,- 104,- 135,-
	Compact panel filter F9, depth 48mm particle and pollen filter 389 x 287mm 592 x 287mm 795 x 333mm 842 x 406mm	CFL 10-WRG CFL 15-WRG CFL 22-WRG CFL 32-WRG	16 68 946 16 68 837 16 68 956 16 69 204	94,- 113,- 142,- 155,-
	Compact panel filter M5, depth 96mm particle filter 389 x 287mm 592 x 287mm 795 x 333mm 842 x 406mm	CFL 10-EC-ABL CFL 15-EC-ABL CFL 22-EC-ABL CFL 32-EC-ABL	16 69 005 16 69 006 16 69 007 16 69 182	87,- 107,- 217,- 229,-
	Compact panel filter F7, depth 96mm particle and pollen filter 389 x 287mm 592 x 287mm 795 x 333mm 842 x 406mm	CFL 10-EC-ZUL CFL 15-EC-ZUL CFL 22-EC-ZUL CFL 32-EC-ZUL	16 69 008 16 69 009 16 69 010 16 69 203	111,- 113,- 229,- 248,-
	Compact panel filter F9, depth 96mm particle and pollen filter 389 x 287mm 592 x 287mm 795 x 333mm 842 x 406mm	CFL 10-EC-ZUL CFL 15-EC-ZUL CFL 22-EC-ZUL CFL 32-EC-ZUL	16 69 179 16 69 180 16 69 181 16 69 183	113,- 127,- 233,- 253,-
	HEPA filter H13, depth 292mm 393 x 200mm 597 x 200mm 800 x 250mm 851 x 314mm	CFL 10 CFL 15 CFL 22 CFL 32	 16 69 219 16 69 220 16 69 221 16 69 222	412,- 535,- 620,- 665,-

Accessories for CFL comfort flat ventilation unit Changed art. no. are marked in red.

	Control systems WRS	for products	Art. no.	€
	Ventilation operating module BML <ul style="list-style-type: none"> • Room temperature-compensated temperature control • Graphic display with backlight • Simple menu navigation through plain text display • Operation using rotary knob with push-function • 4 function keys for frequently used functions (information, temperature, speed setting, fresh air proportion) • Mounted optionally in the ventilation module or in the wall holder as remote control • Only one ventilation operating module BML is needed to operate up to 7 zones • Demand-optimised boiler water temperature demand via eBus • eBus interface 	CFL-EC-ZUL	27 44 634	364,-
	Wall holder <ul style="list-style-type: none"> • Wall holder for using the ventilation operating module BML as remote control 	CFL-EC-ZUL	27 44 275	27,70
	Ventilation module LM2 <ul style="list-style-type: none"> • Ventilation module LM2 for controlling the room temperature by means of the rotation speed or the mixer control (lphw or ch.w.) • Variable motor control in conjunction with EC motor • Simple configuration of the controller by selecting predefined system diagrams • Control of a boiler (lphw) and a chiller (ch.w.) • Demand-optimised boiler water temperature demand via eBus • eBus interface with automatic energy management • Ventilation operating module BML can be clipped on • Open / Close damper control • Supply / Exhaust air unit, controllable 	CFL-EC-ZUL	27 44 604	390,-
	Wiring board Room temperature control via mixing valve control for lphw and ch.w. Control of a boiler (lphw) and a chiller (ch.w.)	CFL-EC-ZUL	on request	on request
	Outside, ceiling or room temperature sensor	CFL-WRG, CFL-EC-ZUL	27 92 021 99	28,70
	ISM 5 - LON-interface module to connect ventilation module LM2 to a building management system applying LON-standard network variables	CFL-EC-ZUL	27 45 029	1.600,-

Accessories for CFL comfort flat ventilation unit

	Control accessories	for products	Art. no.	€
	All-pole Isolator AR6, loose lockable	5,5kW CFL	27 38 376	45,-
	for increased electrical power 18,5kW CFL		27 38 382	129,-
	All-pole Isolator, in control wiring board fitted and wired	CFL 10-WRG, CFL 15-WRG, CFL 22-WRG	on request	on request
	LON Interface module for WRS-K for fitting on the controller	CFL-WRG	60 74 317	327,-
	BacNet Interface module for WRS-K for fitting on the controller	CFL-WRG	60 74 318	635,-
	Ethernet Interface module for WRS-K for fitting on the controller		60 74 404	565,-
	Modbus Interface module WRS-K for fitting on the controller	CFL-WRG	60 74 323	188,-
	KNX Interface module for WRS-K for fitting on the controller	CFL	on request	on request
	Air quality sensor Mixed gas sensor for determining the air quality; plug-in design	CFL-WRG	62 18 390	464,-
	CO₂ sensor required for CO ₂ -controlled operation, plug-in design	CFL-WRG	62 18 389	488,-
	Supply/extract air temperature sensor, duct, loose	CFL-EC-ZUL CFL-EC-ABL CFL-WRG in connection with cooler extension module	27 44 740	98,-
	Duct hygrostat, loose with wall bracket	CFL	 62 19 886	302,-
	Room hygrostat, loose	CFL	 27 44 996	124,-

Accessories for CFL comfort flat ventilation unit

	Control accessories	for products	Art. no.	€
	Remote control BMK-F wall installation	CFL-WRG NEW	27 44 751	227,-
	Touchpanel BMK-T10 Operating possibility for several CFL units front installation on site		27 45 362	2.890,-
	Mixing valve for lphw heat exchanger, loose type acc.to coil selection DN 10 KVS 0.63 DN 10 KVS 1.0 DN 10 KVS 1.6 DN 15 KVS 2.5 DN 20 KVS 4.0 DN 25 KVS 6.3 DN 25 KVS 10	CFL-WRG, CFL-EC-ZUL	27 44 988 27 44 526 27 44 101 27 44 107 27 44 102 27 44 103 27 44 104	83,- 83,- 83,- 83,- 83,- 127,- 289,-
	Screwing kit for mixing valve for lphw heat exchanger consisting of: 3 union nuts, 3 inlay nuts and 3 flat gaskets		20 71 740 20 71 741 20 71 742 20 71 743 20 71 744	30,40 47,- 21,80 26,10 28,80
	Actuator for mixing valve, loose control signal 24V DC, 0-10V	CFL-WRG CFL-EC-ZUL	27 44 100	230,-
	Analogue time switch for setback mode with 7-day program	CFL-EC-ZUL CFL-EC-ABL	27 36 251	150,-
	Variable speed controller, loose for continuous operation of one or several unit heaters with EC-motors (0 - 10V)	CFL-EC-ZUL CFL-EC-ABL	27 45 100	197,-
	Air flow control	CFL 10, 15, 22 CFL 32 NEW	62 19 879 62 19 880	520,- 520,-
	Constant pressure control	CFL 10, 15, 22 CFL 32 NEW	62 19 881 62 19 882	520,- 520,-
	Commissioning of 1 basic device Appointment necessary (at least 8 working days before actual commissioning)	Net price	00 99 797	680,-
	Commissioning of further accessorie Heating or cooling or multiple devices		on request	on request

CKL Compact comfort ventilation unit

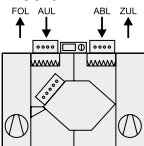
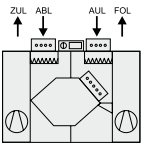
Internal unit with vertical duct connection CKL-iV	Page 132
Internal unit with horizontal duct connection CKL-iH	Page 133
External unit with horizontal duct connection CKL-A	Page 134
Device accessories CKL	Page 136
Control accessories CKL	Page 140
Special unit designs CKL	Page 141



Das Comfort-Kompakt-Lüftungsgerät von Wolf bietet ganzjährig energiesparendes und komfortables Lüften. Geeignet for Unterrichtsräume, Konferenzräume, Großraumbüros und Gaststätten, usw. Mit dem hocheffizienten Gegenstrom-Plattenwärmetauscher aus Aluminium wird der Abluft die enthaltene Wärme entzogen und an die frische Zuluft übertragen
 Gehäuse: Stahlblech gepulvert (verkehrsweiß RAL 9016), Zwischensteg (silber RAL 9006)
 CKL-iV Lüftungsgerät for Innenaufstellung mit Kanalananschluss vertikal

Rebate group:
 CKL = 28

CKL-iV

TYPE		CKL-iV-1300	CKL-iV-2200	CKL-iV-3000	CKL-iV-4400	CKL-iV-5800
Max. air volume	m ³ /h	1300 (with externally available pressure of approx. 300 Pa.)	2200 (with externally available pressure of approx. 400 Pa.)	3000 (with externally available pressure of approx. 250 Pa.)	4400 (with externally available pressure of approx. 600 Pa.)	5800 (with externally available pressure of approx. 600 Pa.)
Electrical nominal power of the two fans	kW	0,9	2,0	2,0	6,0	6,0
Mains voltage (50/60Hz)	V / AC	1 x 230	3 x 400	3 x 400	3 x 400	3 x 400
Dimensions						
Length	mm	1525	2033	2033	2237	2237
Width (incl. lock)	mm	750	750	950	1360	1665
Height (incl. damper, feet)	mm	1315	1721	1721	1745	1745
Weight	kg	250	360	450	645	725
Device properties:						
<ul style="list-style-type: none"> compact, inherently stable, height-adjustable casing high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, continuously variable via latest EC motor technology with low energy consumption High performance counter-flow plate heat exchanger made of aluminium for heat recovery with integrated bypass for summer operation Temperature control with control unit, integrated: Supply air temperature control (supply air sensor integrated) - factory setting Extract air temperature controller (extract air temperature sensor integrated) - adjustable on the control unit Room temperature control (see accessories for room temperature sensor) - adjustable on the control unit Supply air / extract air / outdoor air / icing sensors, integrated Filter pressure monitor, standard for outdoor and extract air filter Outdoor- and extract air external damper, standard easily exchangeable compact panel filter: Outdoor air filter F7 (fine dust and pollen filter) Extract air filter M5 (fine dust filter) Stainless steel condensate pans EHA/SUP standard, condensate connecting piece directed downwards CKL-iV-4400 and CKL-iV-5800 may be split widthways, control pivoting, for an easier transport 						
<ul style="list-style-type: none"> Operator side Supply air direction right  incl. control system for actuating electric booster heater bank* or LPHW reheater as well as ch.w. cooling coil or dx-coil 						
<ul style="list-style-type: none"> Operator side Supply air direction left  incl. control system for actuating electric booster heater bank* or LPHW reheater as well as ch.w. cooling coil or dx-coil 						
					on request	

* see page 136 for booster heater banks



The Comfort compact ventilation unit from Wolf offers energy-saving and comfortable ventilation all year round. Suitable for classrooms, conference rooms, open-plan offices and restaurants, etc.

Rebate group:
CKL = 28

With the high-efficiency counter-flow plate heat exchanger made of aluminium, the heat contained in the extract air is removed and transferred to the fresh supply air
Casing: sheet steel, powder-coated (traffic white RAL 9016), intermediate bar (silver RAL 9006)
CKL-iH ventilation unit for indoor installation with horizontal duct connection

CKL-iH

TYPE		CKL-iH-1300	CKL-iH-2200	CKL-iH-3000	CKL-iH-4400	CKL-iH-5800
Max. air volume	m ³ /h	1300 (with externally available pressure of approx. 300 Pa.)	2200 (with externally available pressure of approx. 400 Pa.)	3000 (with externally available pressure of approx. 250 Pa.)	4400 (with externally available pressure of approx. 600 Pa.)	5800 (with externally available pressure of approx. 600 Pa.)
Electrical nominal power of the two fans	kW	0,9	2,0	2,0	6,0	6,0
Mains voltage (50/60Hz)	V / AC	1 x 230	3 x 400	3 x 400	3 x 400	3 x 400
Dimensions						
Length	mm	1525	2033	2033	2237	2237
Width (incl. lock)	mm	750	750	950	1360	1665
Height (incl. control, feet)	mm	1305	1711	1711	1711	1711
Weight	kg	250	360	450	630	725
Device properties:						
<ul style="list-style-type: none"> compact, inherently stable, height-adjustable casing high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, continuously variable via latest EC motor technology with low energy consumption High performance counter-flow plate heat exchanger made of aluminium for heat recovery with integrated bypass for summer operation Temperature control with control unit, integrated: Supply air temperature control (supply air sensor integrated) - factory setting Extract air temperature controller (extract air temperature sensor integrated) - adjustable on the control unit Room temperature control (see accessories for room temperature sensor) - adjustable on the control unit Supply air / extract air / outdoor air / icing sensors, integrated Filter pressure monitor, standard for outdoor and extract air filter Outdoor- and extract air external damper, standard easily exchangeable compact panel filter: Outdoor air filter F7 (fine dust and pollen filter) Extract air filter M5 (fine dust filter) Stainless steel condensate pans EHA/SUP standard, condensate connecting piece directed downwards CKL-iH-4400 and CKL-iH-5800 may be split widthways, control pivoting, for an easier transport 						
<ul style="list-style-type: none"> Operator side Supply air direction right 	incl. control system for actuating electric booster heater bank* or LPHW re heater as well as ch.w. cooling coil or dx-coil					
<ul style="list-style-type: none"> Operator side Supply air direction left 	incl. control system for actuating electric booster heater bank* or LPHW re heater as well as ch.w. cooling coil or dx-coil					
					on request	

* see page 136 for booster heater banks

The Comfort compact ventilation unit from Wolf offers energy-saving and comfortable ventilation all year round.



Suitable for classrooms, conference rooms, open-plan offices and restaurants, etc. With the high-efficiency counter-flow

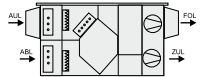
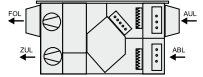
Rebate group:
CKL = 28

plate heat exchanger made of aluminium, the heat contained in the extract air is removed and transferred to the fresh supply air.

Casing: Steel sheet, powder coated (traffic white RAL 9016), Intermediate bar, roof, intake hood, discharge hood (silver RAL 9006)
CKL-A outdoor device, weatherproof with horizontal duct connection



CKL-A

TYPE		CKL-A-1300	CKL-A-2200	CKL-A-3000	CKL-A-4400	CKL-A-5800
Max. air volume	m ³ /h	1300 (with externally available pressure of approx. 280 Pa.)	2200 (with externally available pressure of approx. 380 Pa.)	3000 (with externally available pressure of approx. 230 Pa.)	4400 (with externally available pressure of approx. 600 Pa.)	5800 (with externally available pressure of approx. 600 Pa.)
Electrical nominal power of the two fans	kW	0,9	2,0	2,0	6,0	6,0
Mains voltage (50/60Hz)	V / AC	1 x 230	3 x 400	3 x 400	3 x 400	3 x 400
Dimensions						
Length	mm	1728	2237	2237	2237	2237
Length (incl. hoods)	mm	2111	2780	2780	2780	2780
Width (incl. roof)	mm	812	812	1015	1422	2237
Height	mm	1322	1728	1728	1728	1728
Height (without base frame, without roof)	mm	1017	1423	1423	1423	1423
Weight	kg	315	460	555	715	800
Device properties:						
<ul style="list-style-type: none"> compact, inherently stable casing weatherproof base frame, mounted, standard lifting lugs mounted, standard intake hood with droplet eliminator and stainless steel condensate pan mounted, standard discharge hood mounted, standard high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, continuously variable via latest EC motor technology with low energy consumption High performance counter-flow plate heat exchanger made of aluminium for heat recovery with integrated bypass for summer operation BMK air conditioning control module, enclosed loose Temperature control, integrated: <ul style="list-style-type: none"> Supply air temperature control (supply air sensor integrated) - factory setting Extract air temperature controller (extract air temperature sensor integrated) - adjustable on the control unit Room temperature control (see accessories for room temperature sensor) - adjustable on the control unit Supply air / extract air / outdoor air / icing sensors, integrated Filter pressure monitor, standard for outdoor and extract air filter Internal outdoor and extract air damper, standard easily exchangeable compact panel filter: <ul style="list-style-type: none"> Outdoor air filter F7 (fine dust and pollen filter) Extract air filter M5 (fine dust filter) Stainless steel condensate pans EHA/SUP standard, condensate connecting piece directed downwards 						
<ul style="list-style-type: none"> Operator side Supply air direction right 	incl. control system for actuating electric booster heater bank* or LPHW reheater as well as ch.w. cooling coil or dx-coil					
<ul style="list-style-type: none"> Operator side Supply air direction left 	incl. control system for actuating electric booster heater bank* or LPHW reheater as well as ch.w. cooling coil or dx-coil					
						on request

* see page 136 for booster heater banks

Possible unit design versions CKL-A/-iH

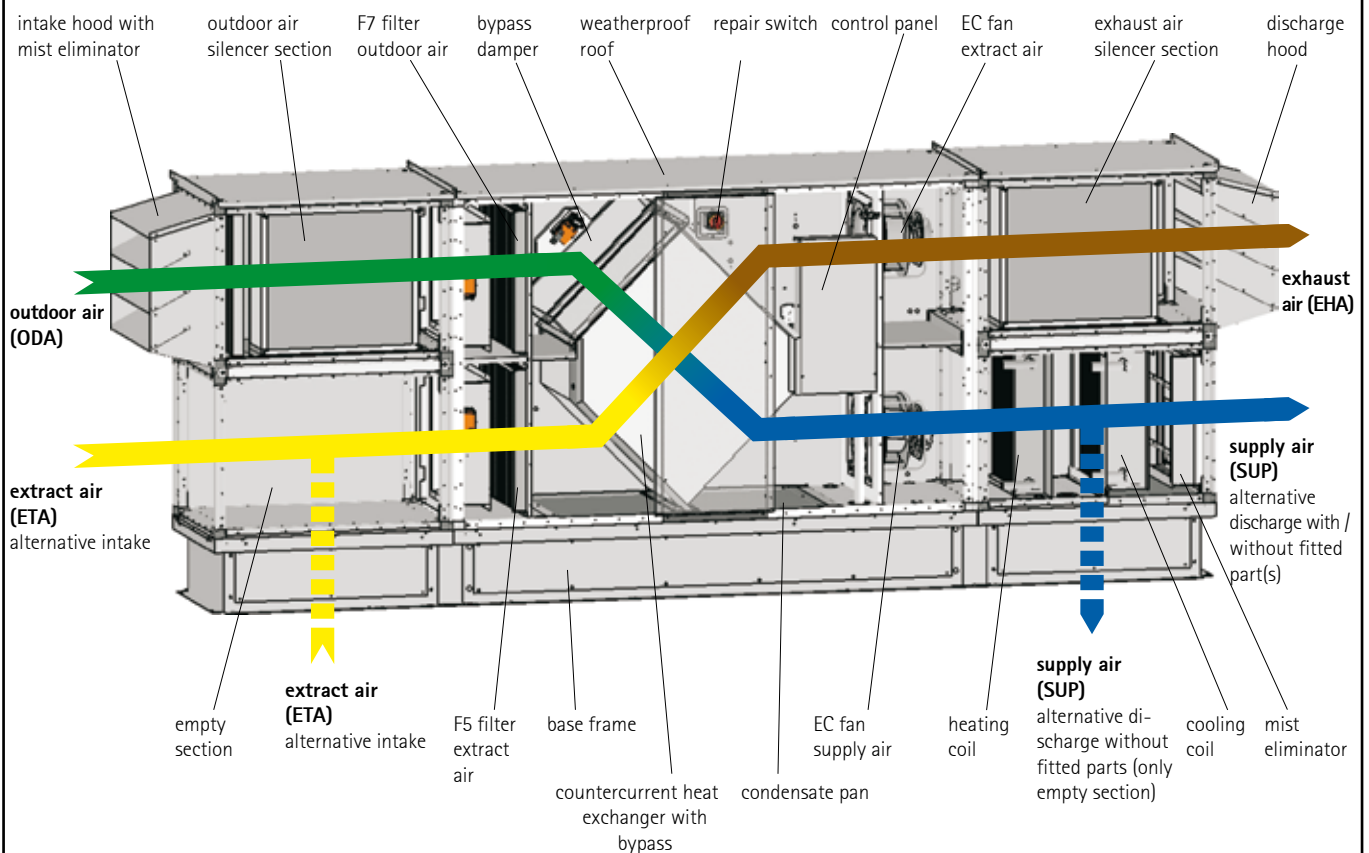
Possible unit design versions CKL-A/-iH

CKL-A/-iH

External unit, weatherproof, with optional duct connection horizontal / vertical depending on unit version and installation situation.

Depending on different thermodynamical (heating, cooling) and acoustical (sound) requirements, our self-developed design program offers the opportunity of an individual configuration (technical data, delivery time and price on request).






Example: Maximum view of possible unit design versions.





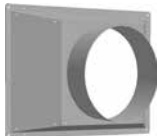


Note only for CKL-A:

Extract air intake and supply air outlet can be arranged as required, horizontally or vertically. Please note that a horizontal arrangement of the supply air outlet is only possible when there are fitted parts like heating or cooling coil and mist eliminator downstream the supply air fan. To direct the supply air outlet downwards (despite fitted parts) a supplementary empty section can be added.

Device accessories CKL

Accessories		Art. no.	€	
	Electric pre-heater bank; single stage for pre-drying filter Recommended for the optimal operation of the device			
	1000W; 1x230V/50Hz for CKL-IV/iH/A-1300	68 02 213	650,-	
	2000W; 1x230V/50Hz for CKL-IV-2200, 3000 for CKL-iH/A-2200, 3000	68 02 215 68 02 216	1.140,- 1.140,-	
	4000W; 2x230V/50Hz for CKL-IV-4400, 5800 for CKL-iH/A-4400, 5800	68 02 536 68 02 221	1.155,- 1.155,-	
plug-in electric heater bank with high limit thermostat, frost monitoring and bracket for the protection of the outdoor air filter against moisture penetration or as frost protection for the heat recovery				
	Electric booster heater bank for increasing the supply air temperature in case of low outside temperatures; built-in and wired;			
	1000W; 1x230V/50Hz for CKL-iH-1300 for CKL-IV/A-1300	68 02 230 68 02 214	710,- 710,-	
	4000W; 3x400V/50Hz for CKL-IV-2200 for CKL-iH/A-2200	68 02 217 68 02 218	910,- 910,-	
	6000W; 3x400V/50Hz for CKL-IV-3000 for CKL-iH/A-3000	68 02 219 68 02 220	1.000,- 1.000,-	
	Heat exchanger lphw (low pressure hot water) CO/AL heat exchanger with frost protection thermostat, wired			
	for CKL-IV-1300 for CKL-iH/A-1300	68 00 458 68 00 501	585,- 585,-	
	for CKL-IV-2200 for CKL-iH/A-2200	68 01 159 68 01 160	665,- 665,-	
	for CKL-IV-3000 for CKL-iH/A-3000	68 00 491 68 00 676	755,- 755,-	
	for CKL-A-4400 for CKL-IV-4400	68 01 481 68 02 644	1.035,- 1.035,-	
	for CKL-IV-5800 for CKL-A-5800	68 02 645 68 01 482	1.140,- 1.140,-	
	Note: Extension module (HCDE-section) required for CKL CKL-iH-4400, 5800!			
	Siphon with non-return valve (set = 2 items) 1 1/4", intake side, supplied loose (fitted as standard in CKL .. CKL-iH-4400, 5800)	for CKL-IV/A for CKL-iH-1300, 2200, 3000	20 71 436	272,-
	Insulating frame			
	596 x 205mm for CKL-IV-1300 (set = 4 items)	68 01 043	252,-	
	596 x 307mm for CKL-IV-2200 (set = 4 items)	68 01 145	284,-	
	799 x 307mm for CKL-IV-3000 (set = 4 items)	68 01 044	296,-	
	1222 x 358mm for CKL-IV-4400 (set = 4 items)	68 02 548	576,-	
	1527 x 358mm for CKL-IV-5800 (set = 4 items)	68 02 621	660,-	
	612 x 409mm for CKL-A-1300 (set = 2 items)	68 01 045	148,-	
	612 x 612mm for CKL-A-2200 (set = 2 items)	68 01 146	170,-	
	815 x 612mm for CKL-A-3000 (set = 2 items)	68 01 046	192,-	
	1222 x 612mm for CKL-A-4400 (set = 2 items)	68 01 485	238,-	
	1527 x 612mm for CKL-A-5800 (set = 2 items)	68 01 634	274,-	
	612 x 409mm for CKL-iH-1300 (set = 4 items)	68 01 047	296,-	
	612 x 612mm for CKL-iH-2200 (set = 4 items)	68 01 147	340,-	
	815 x 612mm for CKL-iH-3000 (set = 4 items)	68 01 048	384,-	
	1222 x 612mm for CKL-iH-4400 (set = 4 items)	68 02 554	476,-	
	1527 x 612mm for CKL-iH-5800 (set = 4 items)	68 02 555	548,-	

Device accessories CKL

	Accessories	Art. no.	€					
	Flexible connection 592 x 201mm 592 x 303mm 795 x 303mm 1218 x 354mm 1523 x 354mm 608 x 405mm 608 x 608mm 811 x 608mm 1218 x 608mm 1523 x 608mm 608 x 405mm 608 x 608mm 811 x 608mm 1218 x 608mm 1523 x 608mm	for CKL-iV-1300 (set = 4 items) for CKL-iV-2200 (set = 4 items) for CKL-iV-3000 (set = 4 items) for CKL-iV-4400 (set = 4 items) for CKL-iV-5800 (set = 4 items) for CKL-A-1300 (set = 2 items) for CKL-A-2200 (set = 2 items) for CKL-A-3000 (set = 2 items) for CKL-A-4400 (set = 2 items) for CKL-A-5800 (set = 2 items) for CKL-iH-1300 (set = 4 items) for CKL-iH-2200 (set = 4 items) for CKL-iH-3000 (set = 4 items) for CKL-iH-4400 (set = 4 items) for CKL-iH-5800 (set = 4 items)	68 00 360 68 01 153 68 00 361 68 02 567 68 02 568 68 00 362 68 01 154 68 00 363 68 01 486 68 01 635 68 00 623 68 01 155 68 00 624 68 02 556 68 02 557	252,- 284,- 296,- 432,- 484,- 126,- 144,- 148,- 230,- 260,- 252,- 288,- 296,- 460,- 520,-				
		Adaptor box rectangular to round for vertical air direction (set = 2 items) Diameter 315mm Diameter 400mm Diameter 450mm Diameter 560mm (Insulating frame obligatory)	for CKL-iV-1300 for CKL-iV-2200 for CKL-iV-3000 for CKL-iV-4400 for CKL-iV-5800	68 00 480 68 01 178 68 00 481 68 02 609 68 02 659	904,- 940,- 966,- 1.900,- 2.010,-			
			Insulating adaptor cone from rectangular to round for horizontal air direction Diameter 315mm Diameter 400mm Diameter 450mm Diameter 560mm Diameter 315mm Diameter 400mm Diameter 450mm Diameter 560mm	for CKL-A-1300 (set = 2 items) for CKL-A-2200 (set = 2 items) for CKL-A-3000 (set = 2 items) for CKL-A-4400 (set = 2 items) for CKL-A-5800 (set = 2 items) for CKL-iH-1300 (set = 4 items) for CKL-iH-2200 (set = 4 items) for CKL-iH-3000 (set = 4 items) for CKL-iH-4400 (set = 4 items) for CKL-iH-5800 (set = 4 items)	68 00 482 68 01 169 68 00 483 68 01 488 68 01 637 68 00 625 68 01 170 68 00 626 68 02 558 68 02 559	376,- 430,- 482,- 566,- 982,- 752,- 860,- 964,- 1.132,- 1.964,-		
				Silencer, length 600mm all-round insulation 90mm Diameter 315mm (Attenuation 8dB / 250Hz) Diameter 400mm (Attenuation 6dB / 250Hz) Diameter 450mm (Attenuation 6dB / 250Hz) Diameter 560mm (Attenuation 5dB / 250Hz)	for CKL-1300 for CKL-2200 for CKL-3000 for CKL-4400, 5800	21 37 865 21 37 964 21 37 866 21 37 983	405,- 435,- 464,- 555,-	
					Frost protection heating for siphon	for CKL-A	27 45 272	830,-




Device accessories CKL










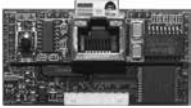
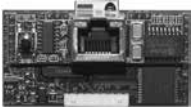

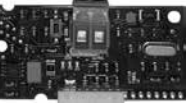
Accessories		Art. no.	€
 <p>Outdoor air silencer section horizontal air flow incl. tray and outdoor air filter F7 (L x T x H)</p> <p>1017 x 750 x 508mm 1017 x 750 x 712mm 1017 x 955 x 712mm 1017 x 1360 x 712mm 1017 x 1665 x 712mm</p>	<p>for CKL-iH/A-1300 for CKL-iH/A-2200 for CKL-iH/A-3000 for CKL-iH/A-4400 for CKL-iH/A-5800</p>	on request	on request
 <p>Extract air silencer section horizontal air flow incl. outdoor air filter F7 (L x T x H)</p> <p>1017 x 750 x 508mm 1017 x 750 x 712mm 1017 x 955 x 712mm 1017 x 1360 x 712mm 1017 x 1665 x 712mm</p>	<p>for CKL-iH/A-1300 for CKL-iH/A-2200 for CKL-iH/A-3000 for CKL-iH/A-4400 for CKL-iH/A-5800</p>	on request	on request
 <p>Supply air/Exhaust air silencer section for horizontal air flow (L x T x H)</p> <p>1017 x 750 x 508mm 1017 x 750 x 712mm 1017 x 955 x 712mm 1017 x 1360 x 712mm 1017 x 1665 x 712mm</p>	<p>for CKL-iH/A-1300 for CKL-iH/A-2200 for CKL-iH/A-3000 for CKL-iH/A-4400 for CKL-iH/A-5800</p>	on request	on request
 <p>Heating coil - Cooling coil - DE section (HCCCDE) horizontal air flow for supply air bottom (L x T x H)</p> <p>1017 x 750 x 508mm 1017 x 750 x 712mm 1017 x 955 x 712mm 1017 x 1360 x 712mm 1017 x 1665 x 712mm</p>	<p>for CKL-iH/A-1300 for CKL-iH/A-2200 for CKL-iH/A-3000 for CKL-iH/A-4400 for CKL-iH/A-5800</p>	on request	on request
 <p>Empty section for horizontal air flow (L x T x H)</p> <p>1017 x 750 x 508mm 1017 x 750 x 712mm 1017 x 955 x 712mm 1017 x 1360 x 712mm 1017 x 1665 x 712mm</p>	<p>for CKL-iH/A-1300 for CKL-iH/A-2200 for CKL-iH/A-3000 for CKL-iH/A-4400 for CKL-iH/A-5800</p>	on request	on request
 <p>Empty section for horizontal air flow bottom (L x T x H)</p> <p>1017 x 750 x 508mm 1017 x 750 x 712mm 1017 x 955 x 712mm 1017 x 1360 x 712mm 1017 x 1665 x 712mm</p>	<p>for CKL-iH/A-1300 for CKL-iH/A-2200 for CKL-iH/A-3000 for CKL-iH/A-4400 for CKL-iH/A-5800</p>	on request	on request

Device accessories CKL






Accessories		Art. no.	€
 <p>Cooling coil section for horizontal air flow only -iH- (L x T x H)</p> <p>611 x 750 x 508mm 611 x 750 x 712mm 611 x 955 x 712mm 611 x 1360 x 712mm 611 x 1665 x 712mm</p>	<p>for CKL-iH-1300 for CKL-iH-2200 for CKL-iH-3000 for CKL-iH-4400 for CKL-iH-5800</p>	on request	on request
 <p>DX-coil section for horizontal air flow only -iH- (L x T x H)</p> <p>611 x 750 x 508mm 611 x 750 x 712mm 611 x 955 x 712mm 611 x 1360 x 712mm 611 x 1665 x 712mm</p>	<p>for CKL-iH-1300 for CKL-iH-2200 for CKL-iH-3000 for CKL-iH-4400 for CKL-iH-5800</p>	on request	on request
 <p>Heating coil section for horizontal air flow only -iH- (L x T x H)</p> <p>611 x 750 x 508mm 611 x 750 x 712mm 611 x 955 x 712mm 611 x 1360 x 712mm 611 x 1665 x 712mm</p>	<p>for CKL-iH-1300 for CKL-iH-2200 for CKL-iH-3000 for CKL-iH-4400 for CKL-iH-5800</p>	on request	on request

Control accessories CKL

Accessories		Art. no.	€
	Air quality sensor Mixed gas sensor for determining the air quality; plug-in design	68 00 484	464,-
	CO₂ sensor required for CO ₂ -controlled operation, plug-in design	68 00 485	488,-
	Outside or room temperature sensor	27 92 021 99	28,70
	Outside or room temperature sensor, loose with wall bracket	NEW 62 19 886	302,-
	Room hygrostat, loose	NEW 27 44 996	124,-
	Remote control BMK-F wall installation	for CKL-iV 27 44 751	227,-
	LON Interface module for WRS-K for fitting on the controller	60 74 317	327,-
	BacNet Interface module for WRS-K for fitting on the controller	60 74 318	635,-
	Ethernet Interface module for WRS-K for fitting on the controller	60 74 404	565,-
	Modbus Interface module for WRS-K for fitting on the controller	60 74 323	188,-
	KNX Interface module for WRS-K for fitting on the controller	on request	on request

Special unit design options CKL

Control systems		for products	Art. no.	€
	Touchpanel BMK-T10 Operating possibility for several CKL units front installation on site		27 45 362	2.890,-
	Air flow control	for CKL-1300, 2200, 3000 for CKL-4400, 5800	68 00 486 68 00 487	520,- 520,-
	Constant pressure control	for CKL-1300, 2200, 3000 for CKL-4400, 5800	68 00 488 68 00 489	520,- 520,-
Accessories			Art. no.	€
	Compact panel filter M5 , depth 48mm particle filter			
	592 x 287mm 592 x 592mm 592 x 404mm 592 x 592mm 592 x 592mm (2 items) 592 x 287mm (1 items)	for CKL-1300 for CKL-2200 for CKL-3000 (set = 2 items) for CKL-4400 (set = 2 items) for CKL-5800 (set = 3 items)	16 68 826 16 69 012 68 01 312 68 01 489 68 01 643	81,- 105,- 187,- 210,- 291,-
	Compact panel filter F7 , depth 48mm particle and pollen filter			
	592 x 287mm 592 x 592mm 592 x 404mm 592 x 592mm 592 x 592mm (2 items) 592 x 287mm (1 items)	for CKL-1300 for CKL-2200 for CKL-3000 (set = 2 items) for CKL-4400 (set = 2 items) for CKL-5800 (set = 3 items)	16 68 827 16 68 998 68 01 313 68 01 490 68 01 644	96,- 115,- 212,- 230,- 326,-
Commissioning of 1 basic device Appointment necessary (at least 8 working days before actual commissioning)		Net price	00 99 798	645,-
Commissioning of further accessories Heating or cooling or multiple devices			on request	on request

Das neue Comfort-Schwimmbadgerät CKL-Pool

Hält die Feuchte dort, wo sie sein soll **NEW**



Die Vorteile im Überblick

- Innengerät, speziell für die Be- und Entlüftung sowie die Entfeuchtung von kleinen geschlossenen Schwimmhallen konzipiert
- Luftmenge: 1.500-3.000 m³/h
- Hocheffiziente Wärmerückgewinnungssysteme und mögliche Wärmepumpenfunktion (je nach Betriebsart)
- Als Freiläufer ausgeführte, stufenlos regelbare EC-Ventilatoren
- Die außen und innen beschichteten Geräte sind, wie generell bei der Comfort-Klasse, intern anschlussfertig verrohrt und verdrahtet und erlauben somit eine einfache und schnelle Inbetriebnahme
- Werkseitig montierte und integrierte Regelung

Für weitere Informationen wenden Sie sich ganz einfach an Ihren zuständigen Wolf-Verkaufsberater.

CRL Comfort rotary heat exchanger ventilation unit

Comfort rotary heat exchanger ventilation unit	CRL-iD	Page 144
	CRL-iH	Page 146
	CRL-A	Page 148
	CRL-iDH	Page 150
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Device accessories CKL		Page 152
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Control CRL		Page 156
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Special unit design		Page 157



Comfort rotary heat exchanger ventilation unit for energy-saving and comfortable ventilation.

High efficiency rotary heat wheel heat exchanger of aluminium

Casing: sheet steel, powder-coated (traffic white RAL 9016),

Access door rotary heat exchanger (silver RAL 9006)

CRL-iD ventilation unit for indoor installation with vertical/horizontal duct connection
 heat recovery up to 90% and humidity recovery up to over 90%

CRL-iD

TYPE		CRL-iD-4800	CRL-iD-6200	CRL-iD-9000
Max. air volume	m ³ /h	4800 (with externally available pressure of approx. 450 Pa.)	6200 (with externally available pressure of approx. 680 Pa.)	9000 (with externally available pressure of approx. 800 Pa.)
Max electrical nominal power of the two fans	kW	3,4	6,0	10,8
max. current consumption of both fans	A	5,2	9,2	17
Mains voltage (50/60Hz)	V	3 x 400	3 x 400	3 x 400
Dimensions				
Length	mm	1728	1932	2136
Width (incl. lock)	mm	1360	1665	2070
Height (incl. control, feet)	mm	1722	1722	1925
Weight	kg	590 (180 + 230 + 180)	715 (220 + 275 + 220)	845 (275 + 295 + 275)
Condensation rotor		on request		
Enthalpy rotor				
Sorption rotor				

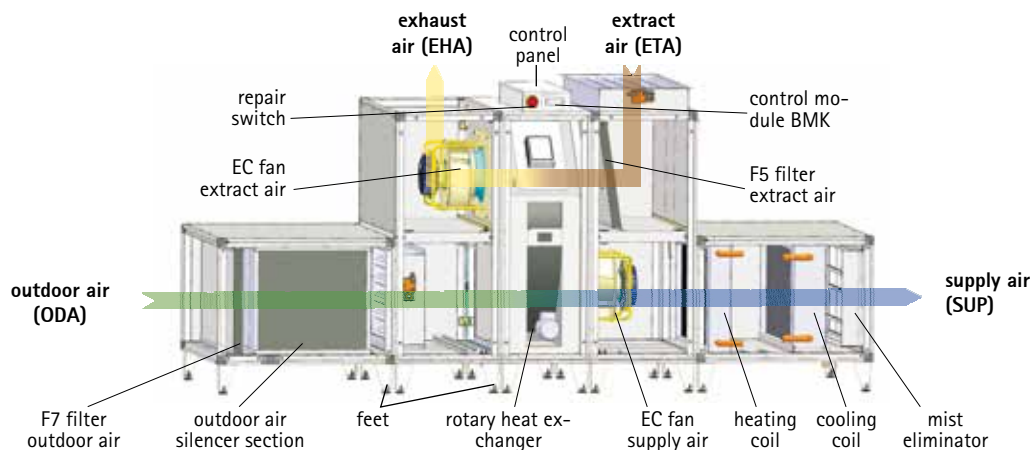
Device properties:

- Optional access side in supply air direction right or left
- compact, inherently stable, height-adjustable casing
- high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, continuously variable via latest EC motor technology with low energy consumption
- High efficiency rotary heat wheel heat exchanger of aluminium for heat recovery, furnished with new Wolf sealing system providing leakage rates below 2%. Optionally equipped with condensation rotor, enthalpy rotor or sorption rotor
- Temperature control with control unit, integrated:
 - Supply air temperature control (supply air sensor integrated) - factory setting
 - Extract air temperature controller (extract air temperature sensor integrated) - adjustable on the control unit
 - Room temperature control (see accessories for room temperature sensor) - adjustable on the control unit
- Control system for actuating electric booster heater bank or LPHW reheater as well as ch.w. cooling coil or dx-coil *
- Supply air / extract air / outdoor air sensors, integrated
- Filter pressure monitor, standard for outdoor and extract air filter
- External and internal outdoor air and extract air damper, standard
- easily exchangeable compact panel filter
 - Outdoor air filter F7 (fine dust and pollen filter)
 - Extract air filter M5 (fine dust filter)
- Compact three-part casing construction for optimized bringing-in splitting

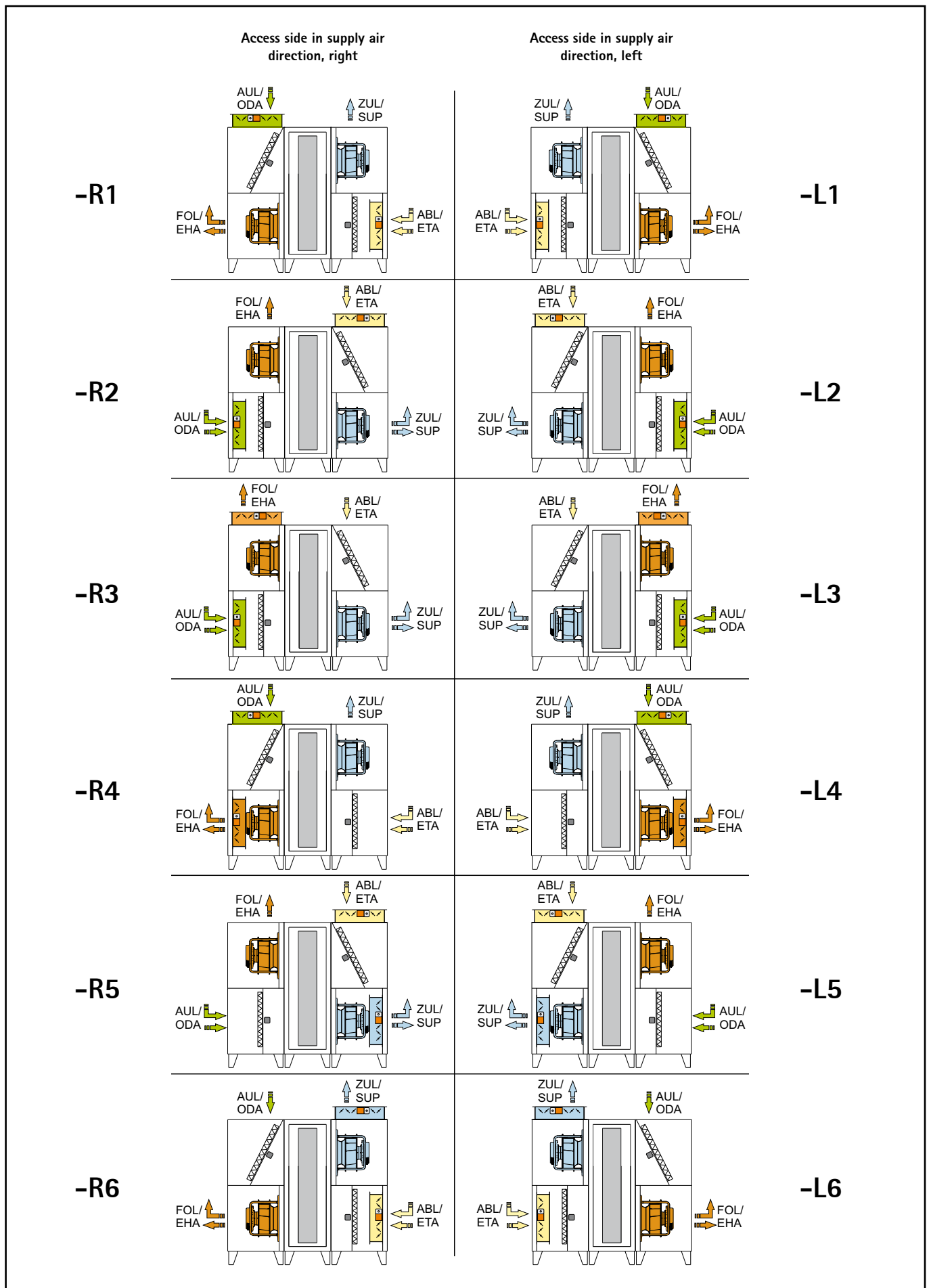
* see page 152 for booster heater banks, see page 154 for ch.w. cooling coil and dx-coil

Depending on different thermodynamical (heating, cooling) and acoustical (soand) requirements, our self-developped CRL design program offers the opportunity of an individual configuration (technical data, delivery time and price on request).

Sample: CRL with fitted silencer and heating coil - cooling coil, DE sections



possible unit design versions CRL-iD





Comfort rotary heat exchanger ventilation unit for energy-saving and comfortable ventilation.

High efficiency rotary heat wheel heat exchanger of aluminium

Casing: sheet steel, powder-coated (traffic white RAL 9016),

Access door rotary heat exchanger (silver RAL 9006)

CRL-iH ventilation unit for indoor installation with horizontal duct connection
 heat recovery up to 90% and humidity recovery up to over 90%

CRL-iH

TYPE		CRL-iH-4800	CRL-iH-6200	CRL-iH-9000
Max. air volume	m ³ /h	4800 (with externally available pressure of approx. 450 Pa.)	6200 (with externally available pressure of approx. 680 Pa.)	9000 (with externally available pressure of approx. 800 Pa.)
Max electrical nominal power of the two fans	kW	3,4	6,0	10,8
max. current consumption of both fans	A	5,2	9,2	17
Mains voltage (50/60Hz)	V	3 x 400	3 x 400	3 x 400
Dimensions				
Length	mm	1728	1932	2136
Width (incl. lock)	mm	1360	1665	2070
Height (incl. control, feet)	mm	1716	1716	1919
Weight	kg	590 (180 + 230 + 180)	715 (220 + 275 + 220)	845 (275 + 295 + 275)
Condensation rotor	€	on request		
Enthalpy rotor	€			
Sorption rotor	€			

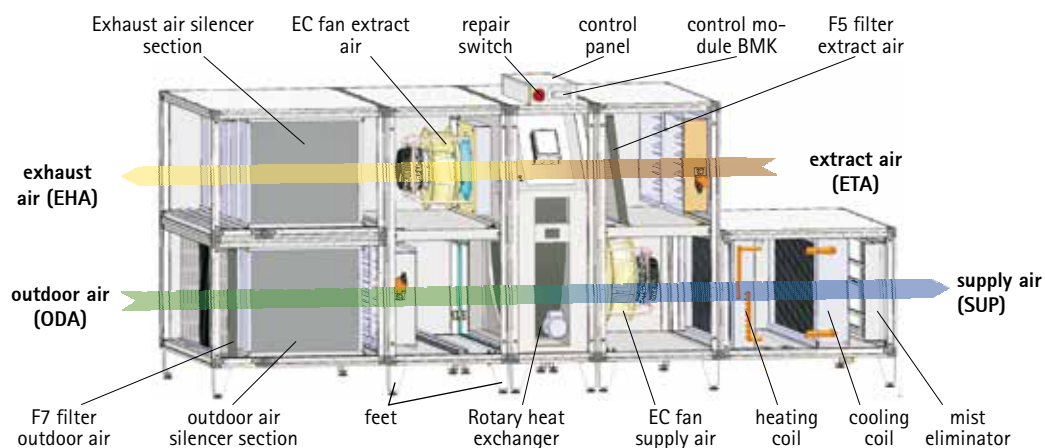
Device properties:

- Optional access side in supply air direction right or left
- compact, inherently stable, height-adjustable casing
- high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, continuously variable via latest EC motor technology with low energy consumption
- High efficiency rotary heat wheel heat exchanger of aluminium for heat recovery, furnished with new Wolf sealing system providing leakage rates below 2%. Optionally equipped with condensation rotor, enthalpy rotor or sorption rotor
- Temperature control with control unit, integrated:
 Supply air temperature control (supply air sensor integrated) - factory setting
 Extract air temperature controller (extract air temperature sensor integrated) - adjustable on the control unit
 Room temperature control (see accessories for room temperature sensor) - adjustable on the control unit
- Control system for actuating electric booster heater bank or LPHW reheater as well as ch.w. cooling coil or dx-coil *
- Supply air / extract air / outdoor air sensors, integrated
- Filter pressure monitor, standard for outdoor and extract air filter
- Internal outdoor air and extract air damper, standard
- easily exchangeable compact panel filter
 Outdoor air filter F7 (fine dust and pollen filter)
 Extract air filter M5 (fine dust filter)
- Compact three-part casing construction for optimized bringing-in splitting

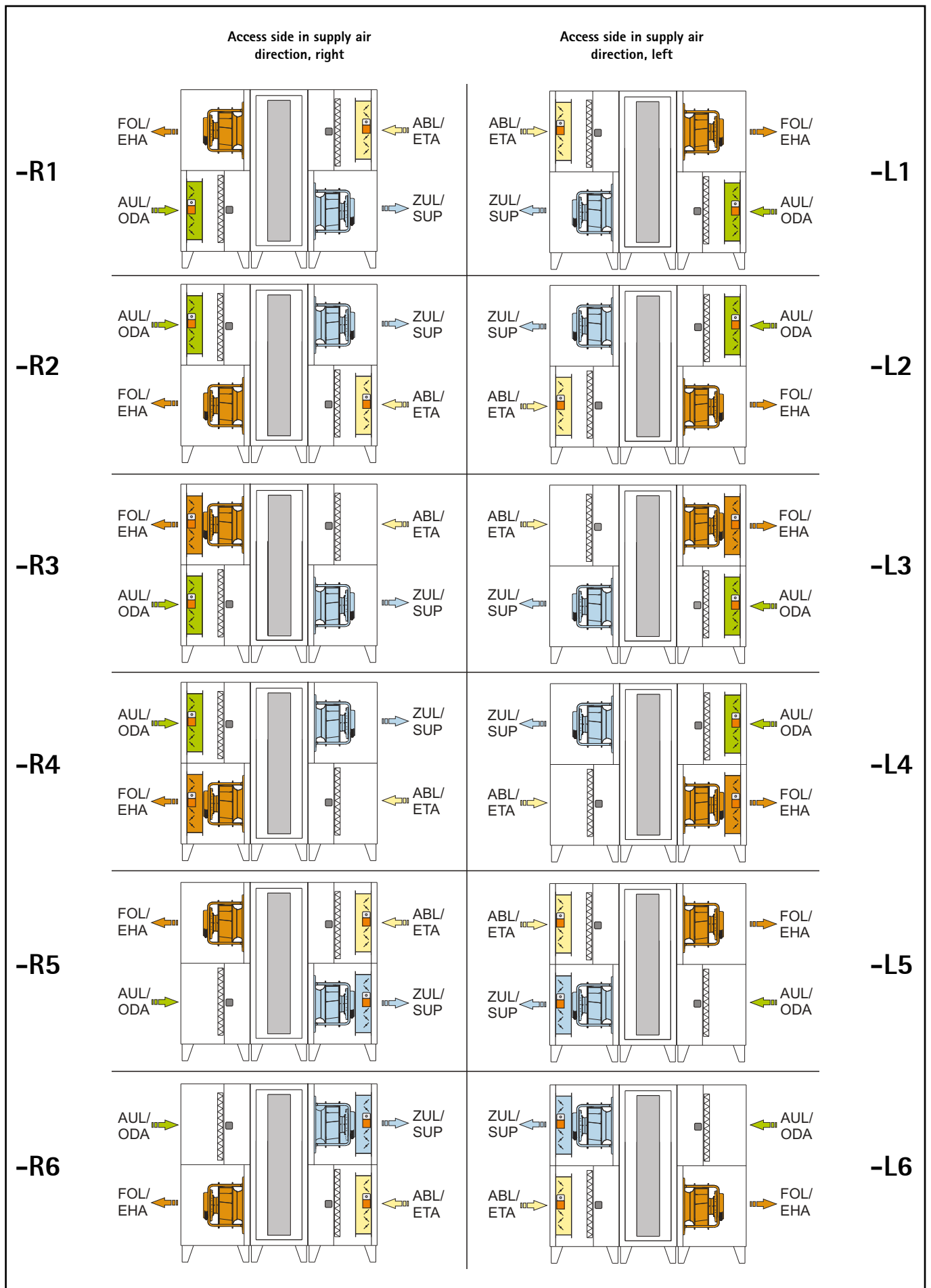
* see page 152 for booster heater banks, see page 154 for ch.w. cooling coil and dx-coil

Depending on different thermodynamical (heating, cooling) and acoustical (soand) requirements, our self-developped CRL design program offers the opportunity of an individual configuration (technical data, delivery time and price on request).

Sample: CRL with fitted silencer and heating coil - cooling coil, DE sections



possible unit design versions CRL-iH





Comfort rotary heat exchanger ventilation unit for energy-saving and comfortable ventilation.

High efficiency rotary heat wheel heat exchanger of aluminium

Casing: sheet steel, powder-coated (traffic white RAL 9016),

Access door rotary heat exchanger (silver RAL 9006)

CRL-A ventilation unit for indoor installation with horizontal duct connection
 heat recovery up to 90% and humidity recovery up to over 90%

CRL-A

TYPE		CRL-A-4800	CRL-A-6200	CRL-A-9000
Max. air volume	m ³ /h	4800 (with externally available pressure of approx. 450 Pa.)	6200 (with externally available pressure of approx. 680 Pa.)	9000 (with externally available pressure of approx. 1000 Pa.)
Max electrical nominal power of the two fans	kW	3,4	6,0	11,0
max. current consumption of both fans	A	5,2	9,2	17
Mains voltage (50/60Hz)	V	3 x 400	3 x 400	3 x 400
Dimensions				
Length	mm	1728	1932	2136
Width (incl. lock)	mm	1422	1726	2134
Height (incl. control, feet)	mm	1864	1864	2067
Weight	kg	660	800	960
Condensation rotor	€	on request		
Enthalpy rotor	€			
Sorption rotor	€			

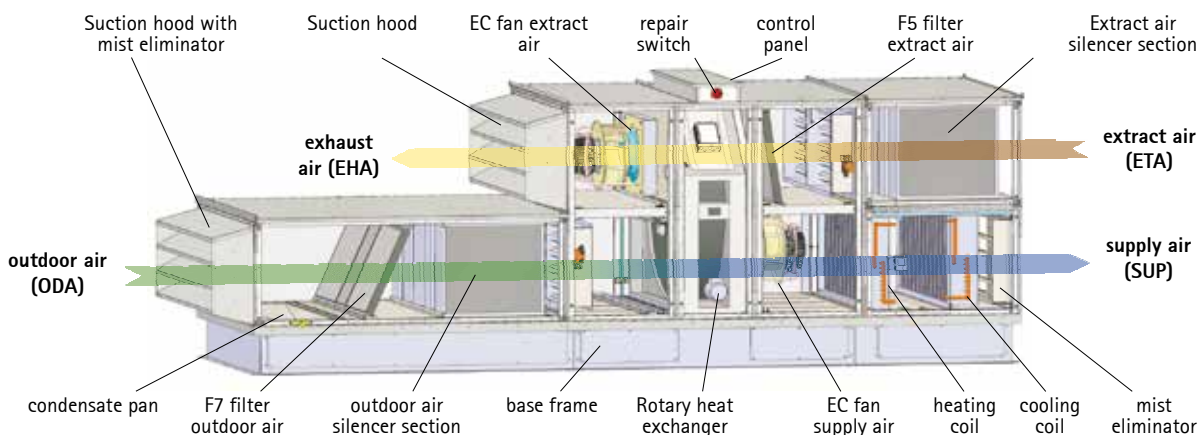
Device properties:

- Optional access side in supply air direction right or left
- compact, inherently stable casing
- weatherproof base frame, mounted, standard
- lifting lugs mounted, standard
- high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, continuously variable via latest EC motor technology with low energy consumption
- High efficiency rotary heat wheel heat exchanger of aluminium for heat recovery, furnished with new Wolf sealing system providing leakage rates below 2%. Optionally equipped with condensation rotor, enthalpy rotor or sorption rotor
- BMK air conditioning control module, enclosed loose
- Temperaturregelung integriert:
 Supply air temperature control (supply air sensor integrated) - factory setting
 Extract air temperature controller (extract air temperature sensor integrated) - adjustable on the control unit
 Room temperature control (see accessories for room temperature sensor) - adjustable on the control unit
- Control system for actuating electric booster heater bank or LPHW reheater as well as ch.w. cooling coil or dx-coil *
- Supply air / extract air / outdoor air sensors, integrated
- Filter pressure monitor, standard for outdoor and extract air filter
- Internal outdoor air and extract air damper, standard
- easily exchangeable compact panel filter
 Outdoor air filter F7 (fine dust and pollen filter)
 Extract air filter M5 (fine dust filter)

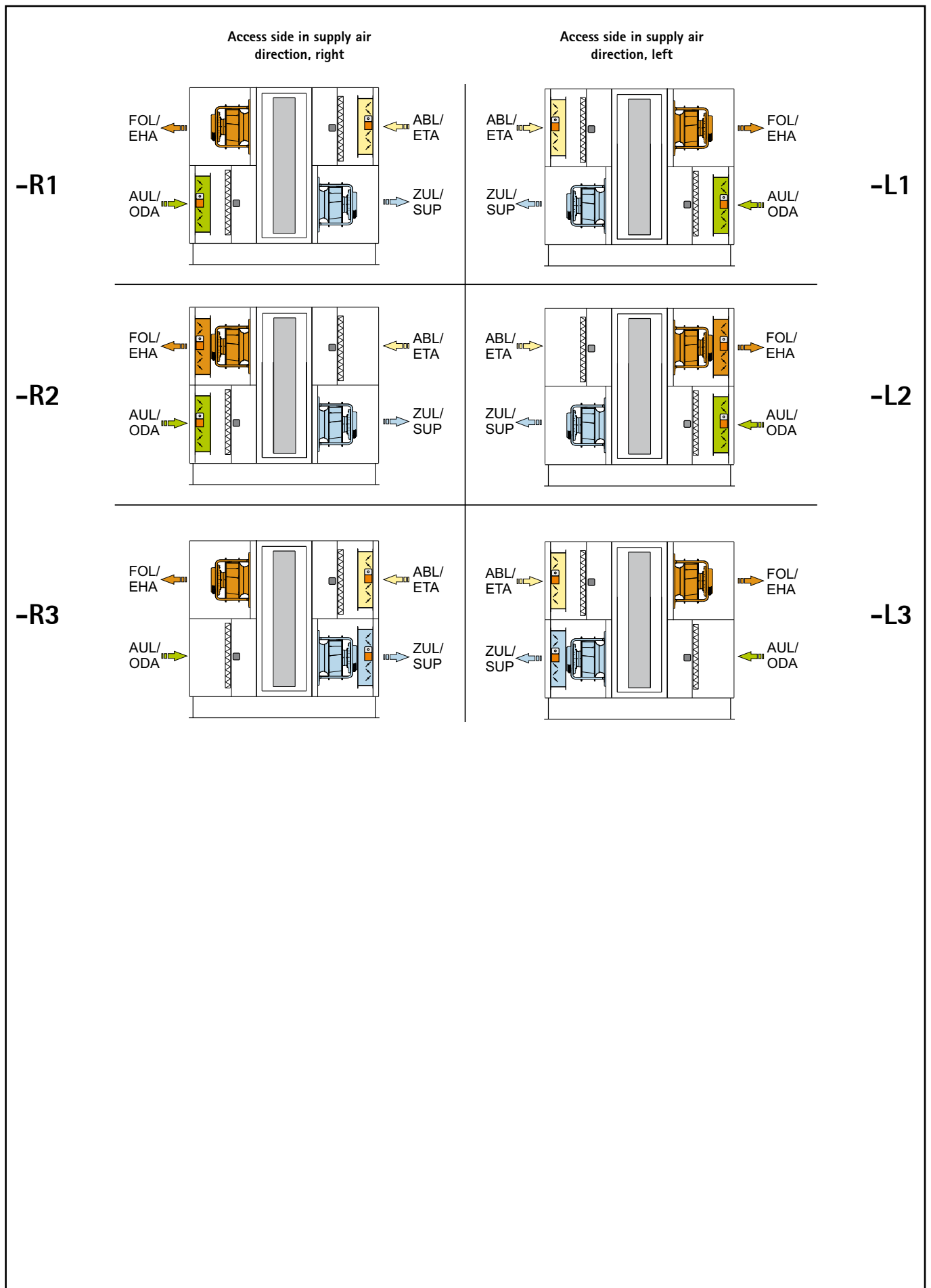
* see page 152 for booster heater banks, see page 154 for ch.w. cooling coil and dx-coil

Depending on different thermodynamical (heating, cooling) and acoustical (soand) requirements, our self-developped CRL design program offers the opportunity of an individual configuration (technical data, delivery time and price on request).

Sample: CRL with fitted silencer and heating coil - cooling coil, DE sections



possible unit design versions CRL-A





Comfort rotary heat exchanger ventilation unit for energy-saving and comfortable ventilation.
 High efficiency rotary heat wheel heat exchanger of aluminium
 Casing: sheet steel, powder-coated (traffic white RAL 9016),
 Access door rotary heat exchanger (silver RAL 9006)
 CRL-iDH ventilation unit for indoor installation with horizontal/vertical/horizontal duct connection
 heat recovery up to 90% and humidity recovery up to over 90%

CRL-iDH NEW

TYPE		CRL-iDH-4800	CRL-iDH-6200	CRL-iDH-9000
Max. air volume	m ³ /h	4800 (with externally available pressure of approx. 450 Pa.)	6200 (with externally available pressure of approx. 680 Pa.)	9000 (with externally available pressure of approx. 1000 Pa.)
Max electrical nominal power of the two fans	kW	3,4	6,0	11,0
max. current consumption of both fans	A	5,2	9,2	17
Mains voltage (50/60Hz)	V	3 x 400	3 x 400	3 x 400
Dimensions				
Length	mm	1728	1932	2136
Width (incl. lock)	mm	1360	1665	2070
Height (incl. control, feet)	mm	1722	1722	1925
Weight	kg	590	715	845
Condensation rotor	€	on request		
Enthalpy rotor	€			
Sorption rotor	€			

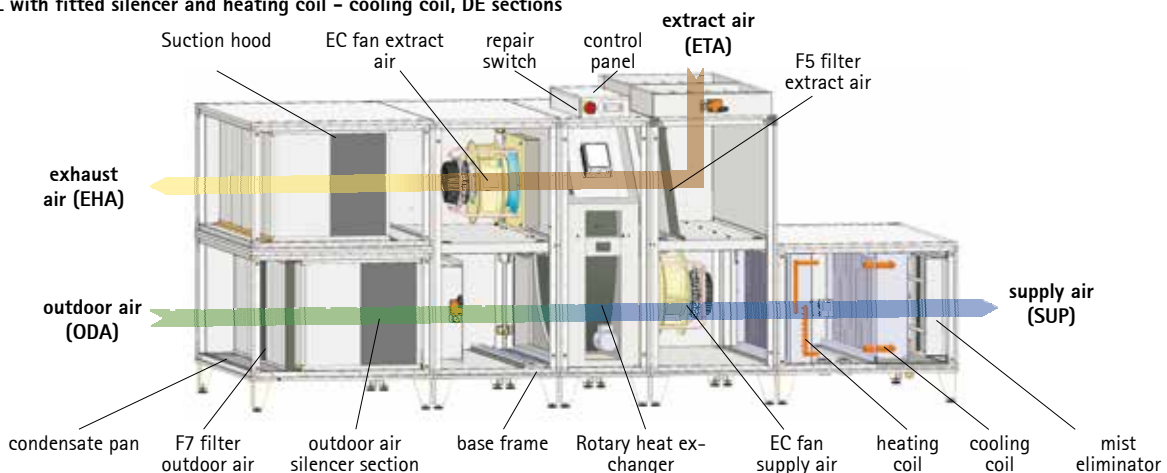
Device properties:

- Optional access side in supply air direction right or left
- compact, inherently stable, height-adjustable casing
- high-efficiency, one-sided sucking, high-performance radial
- fans for supply and extract air, continuously variable via latest
- EC motor technology with low energy consumption
- High efficiency rotary heat wheel heat exchanger of aluminium for heat recovery, furnished with new Wolf sealing system providing leakage rates below 2%.
Optionally equipped with condensation rotor, enthalpy rotor or sorption rotor
- Temperature control with control unit, integrated:
Supply air temperature control (supply air sensor integrated) - factory setting
Extract air temperature controller (extract air temperature sensor integrated) - adjustable on the control unit
Room temperature control (see accessories for room temperature sensor) - adjustable on the control unit
- Control system for actuating electric booster heater bank or LPHW reheater as well as ch.w. cooling coil or dx-coil *
- Supply air / extract air / outdoor air sensors, integrated
- Filter pressure monitor, standard for outdoor and extract air filter
- External and internal outdoor and extract air damper, standard
- easily exchangeable compact panel filter
Outdoor air filter F7 (fine dust and pollen filter)
Extract air filter M5 (fine dust filter)
- Compact three-part casing construction for optimized bringing-in splitting

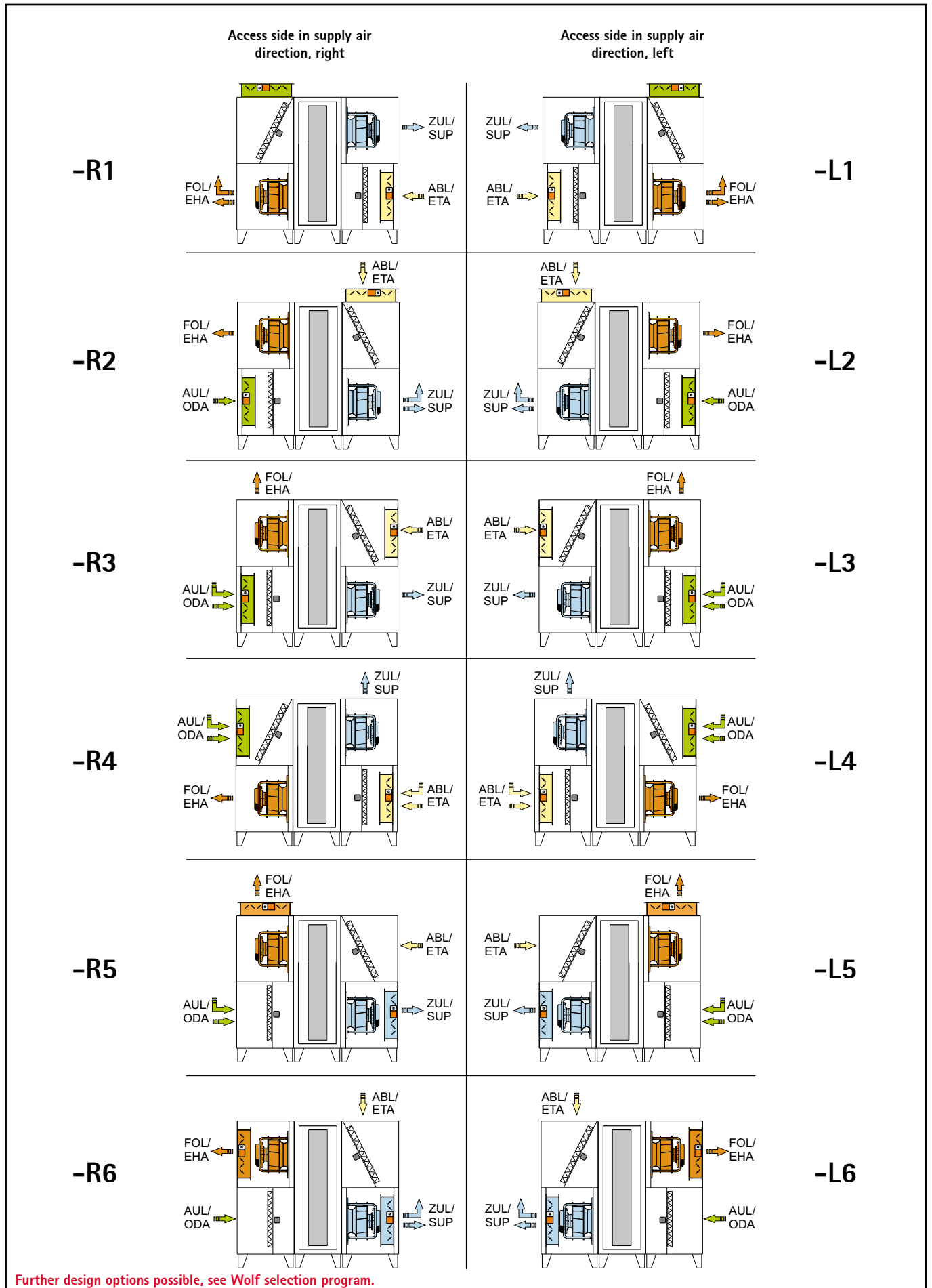
* see page 152 for booster heater banks, see page 154 for ch.w. cooling coil and dx-coil

Depending on different thermodynamical (heating, cooling) and acoustical (soand) requirements, our self-developed CRL design program offers the opportunity of an individual configuration (technical data, delivery time and price on request).

Sample: CRL with fitted silencer and heating coil - cooling coil, DE sections

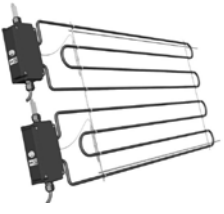

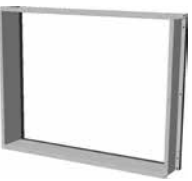



possible unit design versions CRL-iDH

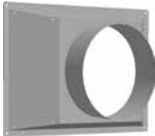






Further design options possible, see Wolf selection program.

Device accessories CRL

Accessories			Art. no.	€	
	Electric pre-heater bank; single stage for pre-drying filter recommended for an optimized unit operation				
	4000W; 2x230V/50Hz	ODA vertical air direction	for CRL-iD/iDH-4800	68 03 123	1.155,-
		ODA horizontal air direction	for CRL-iD/iH/A/iDH-4800	68 02 221	1.155,-
	6000W; 3x400V/50Hz	ODA vertical air direction	for CRL-iD/iDH-6200	68 03 124	1.210,-
		ODA horizontal air direction	for CRL-iD/iH/A/iDH-6200	68 02 940	1.210,-
		ODA horizontal air direction	für SD-Teil CRL-iD/iH/A	68 03 829	1.390,-
	8000W; 3x400V/50Hz	ODA vertical air direction	for CRL-iD/iDH-9000	68 03 125	1.570,-
		ODA horizontal air direction	for CRL-iD/iH/A/iDH-9000	68 02 941	1.570,-
		ODA horizontal air direction	für SD-Teil CRL-iD/iH/A	68 03 685	1.765,-
	plug-in electric heater bank with high limit thermostat, frost monitoring and bracket for the protection of the outdoor air filter against moisture penetration or as frost protection for the heat recovery				
	Heat exchanger lphw (low pressure hot water), horizontal air flow for supply air bottom CO/AL heat exchanger with frost protection thermostat, wired,				
		for CRL-4800	68 03 126	1.040,-	
		for CRL-6200	68 03 127	1.140,-	
		for CRL-9000	68 03 128	1.500,-	
	Insulating frame				
	1222 x 510mm and 1222 x 612mm 1527 x 612mm 1934 x 714mm	for CRL-iD-4800 (set = 4 items)	68 03 122	476,-	
		for CRL-iD-6200 (set = 4 items)	68 02 555	548,-	
		for CRL-iD-9000 (set = 4 items)	68 02 885	836,-	
	1222 x 612mm 1527 x 612mm 1934 x 714mm	for CRL-iH-4800 (set = 4 items)	68 02 554	476,-	
		for CRL-iH-6200 (set = 4 items)	68 02 555	548,-	
		for CRL-iH-9000 (set = 4 items)	68 02 885	836,-	
	1222 x 612mm 1527 x 612mm 1934 x 714mm	for CRL-A-4800 (set = 2 items)	68 01 485	238,-	
		for CRL-A-6200 (set = 2 items)	68 01 634	274,-	
		for CRL-A-9000 (set = 2 items)	68 03 374	418,-	
	1222 x 510mm and 1222 x 612mm 1527 x 612mm 1934 x 714mm	for CRL-iDH-4800 (set = 4 items)	68 04 147	476,-	
		for CRL-iDH-6200 (set = 4 items)	68 02 555	548,-	
		for CRL-iDH-9000 (set = 4 items)	68 02 885	836,-	
		Flexible connection			
1218 x 506mm and 1218 x 608mm 1523 x 608mm 1930 x 710mm		for CRL-iD-4800 (set = 4 items)	68 03 130	460,-	
		for CRL-iD-6200 (set = 4 items)	68 02 557	520,-	
		for CRL-iD-9000 (set = 4 items)	68 03 131	576,-	
1218 x 608mm 1523 x 608mm 1930 x 710mm		for CRL-iH-4800 (set = 4 items)	68 02 556	460,-	
		for CRL-iH-6200 (set = 4 items)	68 02 557	520,-	
		for CRL-iH-9000 (set = 4 items)	68 03 131	576,-	
1218 x 608mm 1523 x 608mm 1930 x 710mm		for CRL-A-4800 (set = 2 items)	68 01 486	230,-	
		for CRL-A-6200 (set = 2 items)	68 01 635	260,-	
		for CRL-A-9000 (set = 2 items)	68 03 377	288,-	
1218 x 506mm and 1218 x 608mm 1523 x 608mm 1930 x 710mm		for CRL-iDH-4800 (set = 4 items)	68 04 148	460,-	
		for CRL-iDH-6200 (set = 4 items)	68 02 557	520,-	
	for CRL-iDH-9000 (set = 4 items)	68 03 131	576,-		

Device accessories CRL

Accessories		Art. no.	€
	Insulating adaptor cone from rectangular to round Diameter 560mm for CRL-iD-4800 (set = 4 items) for CRL-iD-6200 (set = 4 items)	68 03 134 68 02 559	1.132,- 1.964,-
	Diameter 560mm for CRL-iH-4800 (set = 4 items) for CRL-iH-6200 (set = 4 items)	68 02 558 68 02 559	1.132,- 1.964,-
	Diameter 560mm for CRL-A-4800 (set = 2 items) for CRL-A-6200 (set = 2 items)	68 01 488 68 01 637	566,- 982,-
	Diameter 560mm for CRL-iDH-4800 (set = 4 items) for CRL-iDH-6200 (set = 4 items)	68 04 149 68 02 559	1.132,- 1.964,-
	Silencer, length 600mm all-round insulation 90mm Diameter 560mm (Attenuation 5dB / 250Hz) for CRL-4800/6200	21 37 983	555,-
Control accessories		Art. no.	€
	Mixing valve for lphw heat exchanger, loose type acc.to coil selection		
	DN 10 KVS 0.63	27 44 988	83,-
	DN 10 KVS 1.0	27 44 526	83,-
	DN 10 KVS 1.6	27 44 101	83,-
	DN 15 KVS 2.5	27 44 107	83,-
	DN 20 KVS 4.0	27 44 102	83,-
DN 25 KVS 6.3	27 44 103	127,-	
	Actuator for mixing valve, loose control signal 24V DC, 0-10V	27 44 100	230,-
	Screwing kit for mixing valve for lphw heat exchanger consisting of: 3 union nuts, 3 inlay nuts and 3 flat gaskets		
	1/2" DN 10 KVS 0.63	20 71 740	30,40
	DN 10 KVS 1.0		
	DN 10 KVS 1.6		
	3/4" DN 15 KVS 2.5	20 71 741	47,-
1" DN 20 KVS 4.0	20 71 742	21,80	
1 1/4" DN 25 KVS 6.3	20 71 743	26,10	




Device accessories CRL










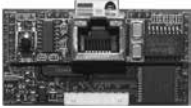
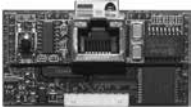

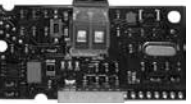
Accessories		Art. no.	€
	<p>Outdoor air silencer section horizontal air flow incl. tray and outdoor air filter F7 (L x T x H)</p> <p>1017 x 1360 x 712mm 1017 x 1665 x 712mm 1322 x 2070 x 814mm</p>	<p>for CRL-4800 for CRL-6200 for CRL-9000</p>	<p>on request on request</p>
	<p>Extract air silencer section horizontal air flow incl. outdoor air filter F7 (L x T x H)</p> <p>1017 x 1360 x 712mm 1017 x 1665 x 712mm 1322 x 2070 x 814mm</p>	<p>for CRL-4800 for CRL-6200 for CRL-9000</p>	<p>on request on request</p>
	<p>Supply air/Exhaust air silencer section for horizontal air flow (L x T x H)</p> <p>1017 x 1360 x 712mm 1017 x 1665 x 712mm 1017 x 2070 x 814mm</p>	<p>for CRL-4800 for CRL-6200 for CRL-9000</p>	<p>on request on request</p>
	<p>Heating coil - Cooling coil - DE section (HCCCDE) horizontal air flow for supply air bottom (L x T x H)</p> <p>1017 x 1360 x 712mm 1017 x 1665 x 712mm 1017 x 2070 x 814mm</p>	<p>for CRL-4800 for CRL-6200 for CRL-9000</p>	<p>on request on request</p>
	<p>Empty section for horizontal air flow (L x T x H)</p> <p>1017 x 1360 x 712mm 1017 x 1665 x 712mm 1017 x 2070 x 814mm 1322 x 2070 x 814mm</p>	<p>for CRL-4800 for CRL-6200 for CRL-9000 for CRL-9000</p>	<p>on request on request</p>
	<p>Empty section for horizontal air flow bottom (L x T x H)</p> <p>1017 x 1360 x 712mm 1017 x 1665 x 712mm 1017 x 2070 x 814mm 1322 x 2070 x 814mm</p>	<p>for CRL-4800 for CRL-6200 for CRL-9000 for CRL-9000</p>	<p>on request on request</p>

Device accessories CRL





Accessories		Art. no.	€
 <p>Cooling coil section for horizontal air flow (L x T x H)</p> <p>611 x 1322 x 712mm 611 x 1627 x 712mm 611 x 2070 x 814mm</p>	<p>for CRL-iD/iH/iDH-4800 for CRL-iD/iH/iDH-6200 for CRL-iD/iH/iDH-9000</p>	on request	on request
 <p>DX-coil section for horizontal air flow (L x T x H)</p> <p>611 x 1322 x 712mm 611 x 1627 x 712mm 611 x 2070 x 814mm</p>	<p>for CRL-iD/iH/iDH-4800 for CRL-iD/iH/iDH-6200 for CRL-iD/iH/iDH-9000</p>	on request	on request
 <p>Heating coil section for horizontal air flow (L x T x H)</p> <p>305 x 1322 x 712mm 305 x 1627 x 712mm 305 x 2070 x 814mm</p>	<p>for CRL-iD/iH/iDH-4800 for CRL-iD/iH/iDH-6200 for CRL-iD/iH/iDH-9000</p>	on request	on request

Control accessories CRL

Accessories		Art. no.	€
	Air quality sensor Mixed gas sensor for determining the air quality; plug-in design	68 00 484	464,-
	CO₂ sensor required for CO ₂ -controlled operation, plug-in design	68 00 485	488,-
	Outside or room temperature sensor	27 92 021 99	28,70
	Outside or room temperature sensor, loose with wall bracket	NEW 62 19 886	302,-
	Room hygrostat, loose	27 44 996	124,-
	Remote control BMK-F wall installation	for CKL-iV 27 44 751	227,-
	LON Interface module for WRS-K for fitting on the controller	60 74 317	327,-
	BacNet Interface module for WRS-K for fitting on the controller	60 74 318	635,-
	Ethernet Interface module for WRS-K for fitting on the controller	60 74 404	565,-
	Modbus Interface module for WRS-K for fitting on the controller	60 74 323	188,-
	KNX Interface module for WRS-K for fitting on the controller	on request	on request

Special unit design options CRL

	Regelung	for products	Art. no.	€
	Touchpanel BMK-T10 Operating possibility for several CKL units front installation on site		27 45 362	2.890,-
	Air flow control	for CRL-4800, 6200, 9000	68 00 487	520,-
Constant pressure control	for CRL-4800, 6200, 9000	68 00 489	520,-	
	Accessories		Art. no.	€
	Compact panel filter M5, depth 48mm particle filter 592 x 592mm 592 x 592mm (2 items) 592 x 287mm (1 items) 592 x 490mm (3 items) 592 x 287mm (3 items)	for CRL-4800 (set = 2 items) for CRL-6200 (set = 3 items) for CRL-9000 (set = 6 items)	68 01 489 68 01 643 68 03 120	210,- 291,- 530,-
	Compact panel filter F7, depth 48mm particle and pollen filter 592 x 592mm 592 x 592mm (2 items) 592 x 287mm (1 items) 592 x 490mm (3 items) 592 x 287mm (3 items)	for CRL-4800 (set = 2 items) for CRL-6200 (set = 3 items) for CRL-9000 (set = 6 items)	68 01 490 68 01 644 68 03 121	230,- 326,- 603,-
Commissioning of 1 basic device Appointment necessary (at least 8 working days before actual commissioning) Commissioning of further accessories Heating or cooling or multiple devices	Net price	00 99 745	645,- on request on request	

Comfort-Kompaktlüftungsgeräte CKL / CRL

Hinstellen, anschließen, fertig



Article number assignment WOLF - GTIN (EAN) in numerical sequence



WOLF	GTIN (EAN) 4045013...	Page	WOLF	GTIN (EAN) 4045013...	Page	WOLF	GTIN (EAN) 4045013...	Page	WOLF	GTIN (EAN) 4045013...	Page
99745	...143760	157	1669202	...231429	127	2136538	...005037	89	2136833	...012721	88
99746	...216204	114	1669203	...231436	127	2136539	...005020	89	2136834	...012714	88
99748	...283176	114	1669204	...231443	127	2136540	...005013	89	2136835	...012707	88
99797	...224773	130	1669219	...254367	127	2136541	...005006	89	2136836	...012691	88
99798	...224780	141	1669220	...254374	127	2136668	...013490	90	2136837	...012684	88
99799	...224797	120	1669221	...254381	127	2136678	...013391	90	2136838	...012677	88
1668492	...002920	115	1669222	...254398	127	2136682	...013353	89	2136839	...012660	88
1668493	...002913	115	1669236	...270589	114	2136683	...013346	89	2136840	...012653	88
1668494	...002906	115	1669246	...279230	101	2136684	...013339	89	2136841	...012646	88
1668495	...002890	115	1669247	...279247	101	2136685	...013322	89	2136842	...012639	88
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International Conditions of Sale for Customers not Resident in Germany (as of 01/11)

I. Application of the International Conditions of Sale

1. These International Conditions of Sale apply to all customers of Wolf GmbH - hereinafter referred to as Wolf - whose relevant place of business is not in Germany. For customers whose place of business is in Germany, the General Conditions of Sale of Wolf apply, which will be forwarded on request. In each case, the relevant place of business is the one which concludes the contract in its own name.
2. These International Conditions of Sale apply to the present and all subsequent contracts whose preponderant object is the supply of goods to the customer. Additional obligations assumed by Wolf do not affect the application of these International Conditions of Sale.
3. Conflicting or differing terms of business of the customer do not bind Wolf, even if Wolf does not explicitly object or even if Wolf renders performance or accepts the customer's performance without reservation irrespective of conflicting or differing terms of business of the customer. The provisions of this paragraph equally apply insofar as the terms of business of the customer, irrespective of the contents of these International Conditions of Sale, deviate from legal provisions.

II. Formation of the Contract of Sale

1. The customer is under an obligation to give written notice to Wolf prior to the formation of a contract if the goods ordered are to be fit not only for normal use or will be used in circumstances which are unusual or which present a particular risk to health, safety or the environment, or which require more demanding use.
2. Orders of the customer are to be put in writing. If the customer's order deviates from the proposal or the tender submitted by Wolf, the customer will emphasize the differences as such.
3. All orders, in particular also those received by employees of Wolf, will only have effect if followed by a written acknowledgement of the order by Wolf. The delivery in fact of the goods ordered, any other conduct of Wolf or silence does not allow the customer to assume the formation of the contract of sale. Wolf can dispatch such written acknowledgement of the order up to and including 14 calendar days after the customer's order has been received by Wolf. Until this time, the customer's order is irrevocable.
4. The written acknowledgement of the order has been received in time, if it is received by the customer within 14 calendar days after its date of printing. The customer will inform Wolf without delay, if the written acknowledgement of the order is received delayed.
5. The written acknowledgement of the order by Wolf determines the entire contents of the contract and effects a conclusion of the contract even if - except for the purchase price and the quantity to be delivered - the written acknowledgement deviates in any other way, especially with respect to the exclusive application of these International Conditions of Sale, from the declarations of the customer. Particular wishes of the customer, namely warranties or guarantees with respect to the goods or the performance of the contract therefore require express written confirmation in every case. Regardless of the nature and extent of the deviations, the contract will only fail to come into existence if the customer objects to the deviations in writing and the objection is received by Wolf within a short time, at the latest seven calendar days after receipt of the written acknowledgement of the order by the customer.
6. Wolf's employees, commercial agents or other sales intermediaries are not authorized to dispense with the requirement for written acknowledgement of the order or to make promises which differ from its content or guarantees. Changes to the concluded contract likewise require written confirmation by Wolf.

III. Obligations of Wolf

1. Subject to an exemption according to section VII.-1. b) Wolf must deliver the goods specified in the written acknowledgement of the order. Wolf is not obliged to perform obligations not stated in the written acknowledgement of the order or in these International Conditions of Sale, in particular Wolf is under no obligation to deliver accessories not listed explicitly, to install additional safety devices, to carry out assemblies, to render planning-services or to advise the customer.
2. Third parties not involved in the conclusion of the contract, in particular the customer's clients, are not entitled to request delivery to be made to them. The customer's responsibility to take delivery continues to exist even if he assigns claims to third parties.
3. Wolf undertakes to deliver goods of average kind and quality taking account of the tolerances customary in trade as in kind, quantity, quality and packaging. If the goods cannot be delivered in the condition as offered at the time of the formation of the contract because technical improvements to goods of series production were made, Wolf is entitled to deliver the goods with the technical improvements. Wolf is entitled to make part deliveries.
4. If further specification is required in relation to the goods to be delivered, Wolf will carry this out having regard to its own and the identifiable and legitimate interests of the customer. A request to the customer to specify the goods, or to participate in the specification, is not required. Wolf does not undertake to inform the customer of the specification it has made or to give the customer the option of a differing specification.
5. Wolf undertakes to place the goods at disposal for collection by the customer at the agreed time of delivery at the place of delivery indicated in the written acknowledgement of the order or by way of precaution at its premises in Mainburg/Germany. Previous separation or marking of the goods or notification to the customer of the goods being placed at disposal is not required. However, Wolf is entitled to initiate the shipment of the goods at the customer's risk and expense in order to obtain the document in proof of tax-free-delivery.
6. Agreed delivery time periods or delivery dates are subject to the customer's procuring any required documents, releases, permits, approvals, licences or any other authorizations or consents in sufficient time, opening letters of credit and making down-payments as agreed and performing all other obligations incumbent upon him properly and in good time. Moreover, agreed delivery time-periods begin on the date of the written acknowledgement of the order by Wolf. Wolf is entitled to deliver earlier than at the agreed delivery time.
7. Without prejudice to its continuing legal rights, Wolf is entitled to fulfil its obligations after the delivery time agreed upon, if it informs the customer of exceeding the delivery time limit and of the time period for late performance. The customer can object to late performance within a reasonable time period, if the late performance is unreasonable. An objection is only effective, if it is received by Wolf before commencing late performance. Wolf will reimburse necessary additional expenditure, proven and incurred by the customer

as a result of exceeding the delivery time to the extent that Wolf is liable for this under the provisions laid down in section VII.

8. Risk as to price and performance even of goods not being clearly identifiable to the contract and without being necessary a notice given by Wolf, passes to the customer at the latest as soon as loading of the goods has begun or as soon as the customer does not take delivery in accordance with the contract or title of the goods has passed to the customer. The loading of the goods is part of the customer's obligations. The agreement of INCOTERMS in Group F or Group C or of clauses such as „delivery free.....“ or such like merely involves a variation of the provisions as to transportation costs; besides, the provisions laid down in these International Conditions of Sale including those referring to the passing of risk continue to apply.
9. Wolf is not obliged to obtain any licences, authorizations, certificates, formalities or other documents necessary for the export, transit or import. However, Wolf renders at the customer's request, risk and expense every assistance in obtaining the documents that the customer has required in writing.
10. Including where INCOTERMS in Group F are agreed, Wolf is in particular not obliged to arrange for shipment of the goods, to insure the goods, to procure certificates or documents not expressly agreed, to procure customs clearance, to bear levies, duties and charges accruing outside Mainburg/Germany, to comply with weight and measuring systems, packaging, labelling or marking requirements applicable outside Mainburg/Germany, to inform the customer of the delivery or to take back packaging material from the customer. Irrespective of any legal provision, the customer shall at its own cost take care of renewed utilization, material recycling or otherwise prescribed waste-disposal. The foregoing provision applies irrespective of whether the packaging material is invoiced separately or not to the customer.
11. Without prejudice to its continuing legal rights, Wolf is entitled to suspend the performance of its obligations so long as, in the opinion of Wolf, there are grounds for concern that the customer will wholly or partly fail to fulfil its obligations in accordance with the contract. In particular, the right to suspend arises if the customer insufficiently performs its obligations to enable payment to Wolf or a third party or pays late. Wolf is not required to continue with performance of its obligations, if an assurance given by the customer to avoid the suspension does not provide adequate security or could be challenged pursuant to an applicable law.
12. Except as provided in section III.-7., Wolf is only obliged to inform the customer of delay or non-performance as soon as these are certain.

IV. Price, Payment and Acceptance of the Goods

1. Irrespective of continuing obligations of the customer to guarantee or to enable payment, the customer undertakes to pay the agreed price in the currency specified in the written acknowledgement of the order transferring it without deduction and free of expenses and costs to the financial institution designated by Wolf. To the extent that a price has not been agreed, the contract has nevertheless been validly concluded; in such a case the price which is at the agreed time of delivery Wolf's usual price will apply. Wolf's employees, commercial agents or other sales intermediaries are not authorized to accept payments.
2. The payment to be made by the customer is in any event due for payment at the time specified in the written acknowledgement of the order. The due time for payment arises without any further pre-condition and, in particular, does not depend on whether the customer has already taken delivery of the goods and/or the documents and/or has had an opportunity to examine the goods. The periods granted for payment will cease to apply and outstanding accounts will be due for immediate payment, if insolvency proceedings relating to the assets of the customer are applied for, if the customer without providing a justifiable reason does not meet fundamental obligations due towards Wolf or towards third parties or if the customer has provided not accurate information regarding his credit standing.
3. The customer warrants that all legal requirements for delivery free of German value added tax will be fulfilled. To the extent that Wolf does not receive the document in proof of tax-free-export-delivery or Wolf is called upon to pay value added tax as a result of the terms of delivery or of circumstances allocable to the customer, the customer will indemnify Wolf in all and every respect without prejudice to any continuing claim by Wolf. The indemnity is granted by the customer waiving any further requirements or other defences, in particular waiving the defence of limitation or prescription and also includes the reimbursement of the expenses incurred by Wolf.
4. Regardless of currency and regardless of the jurisdiction of any court, Wolf is entitled at its own discretion to set off incoming payments against claims existing against the customer by virtue of its own or assigned rights at the time of payment.
5. Any rights of the customer to set-off against claims of Wolf are excluded, except where the corresponding claim of the customer is in the same currency, is founded in the customer's own right and has either been finally judicially determined or is undisputed or acknowledged by Wolf in writing.
6. Any rights of the customer to suspend payment and to raise defences are excluded, except where despite written warning Wolf has committed a fundamental breach of its obligations arising out of the same contractual relationship, and has not offered any adequate assurance.
7. The customer undertakes to take delivery of the goods at the delivery time without taking any additional period of time and at the place of delivery indicated in the written acknowledgement of the order or by way of precaution at the premises of Wolf in Mainburg/Germany. The customer is only entitled to refuse to take delivery if it exercises - in accordance with the rules in section VI.-1. - its rights to avoid the contract.

V. Delivery of non-conforming Goods or Goods with Defective Title

1. Delivery does not conform with the contract if, taking into account the terms in section III., at the time the risk passes the packaging, quantity, quality or the description of the goods is significantly different to the specifications laid down in the written acknowledgement of the order, or in the absence of agreed specifications, the goods are not fit for the purpose which is usual in Mainburg/Germany. Irrespective of the legal requirements applicable in Mainburg/Germany, the delivery conforms with the contract, to the extent that the legal requirements applicable at the place of business of the customer do not impede the usual use of the goods. Second-hand goods are delivered without any liability for their conformity.

International Conditions of Sale for Customers not Resident in Germany (as of 01/11)

- To the extent that the written acknowledgement of the order does not contain an explicit statement to the contrary, Wolf is in particular not liable for the goods being fit for the purpose to which the customer intends to put them or for possessing the qualities of a sample or a model or for their compliance with the legal requirements existing outside of Mainburg/Germany, for instance in the customer's country. Wolf also shall not be liable for any non-conformity with the contract occurring after the time the risk has passed. To the extent that the customer, either himself or through third parties, initiates the removal of non-conformities without the prior consent of Wolf, Wolf will be released from its liability.
- The customer must examine the goods as required by law and in so doing check every single delivery in every respect for any discoverable or typical lack of conformity with the contract.
- The goods delivered have a deficiency in title if they are not free from enforceable rights or claims of third parties at the time risk passes. Without prejudice to further legal requirements, third parties rights or claims founded on industrial or other intellectual property constitute a deficiency in title only to the extent that the rights are registered and made public in Germany. Irrespective of the legal requirements applicable in Germany, the goods are not with defective title, to the extent that the legal requirements applicable at the place of business of the customer do not impede the usual use of the goods.
- The customer shall give notice as required by law to Wolf of any lack of conformity with the contract or of any deficiency in title, and in any event directly and in writing. Wolf's employees, commercial agents or other sales intermediaries are not authorised to accept notices or to make any statements concerning lack of conformity with the contract or of title and its consequences.
- Following due notice according to section V.-5., the customer can rely on the remedies provided for by these International Conditions of Sale. The customer has no other rights or claims whatsoever. The customer's claims for a deficiency in title will be time-barred according to the same rules as the claims for delivery of non-conforming goods. In the event of notice not having been properly given, the customer may only rely on remedies if Wolf has fraudulently concealed the lack of conformity with the contract or the deficiency in title. Statements by Wolf as to the lack of conformity with the contract or as to the deficiency in title are for the purpose of explaining the factual position only, but do not entail any waiver by Wolf of the requirement of proper notice.
- In accordance with the terms of the UN Sales Convention, the customer is entitled to demand delivery of substitute goods or repair or to reduce the purchase price. Further claims for performance are not available to the customer. Irrespective of the customer's remedies, Wolf is always entitled in accordance with the provision in section III.-7. to repair goods which do not conform with the contract or to supply substitute goods.

VI. Termination of contract

- Without prejudice to compliance with the respective applicable legal requirements, the customer is only entitled to declare the contract avoided after he has threatened Wolf with avoidance of the contract in writing and an additional period of time of reasonable length for performance fixed in writing has expired to no avail. If the customer claims delivery of substitute goods, repair or other performance, he is bound for a reasonable period of time to the chosen remedy, without being able to exercise the right of declaring the contract avoided. In any event, the customer must give notice of avoidance of the contract within a reasonable time in writing and to Wolf directly.
- Without prejudice to its continuing legal rights, Wolf is entitled to avoid the contract in whole or in part without compensation if the customer objects the application of these International Conditions of Sale, if the written acknowledgement of the order is received by the customer more than 14 calendar days after its date of printing, if insolvency proceedings relating to the assets of the customer are applied for or commenced, if the customer without providing a justifiable reason does not meet fundamental obligations due towards Wolf or towards third parties, if the customer has provided not accurate information regarding his credit standing, if Wolf through no fault of its own does not receive supplies properly or on time, or if for other reasons Wolf can not be expected to fulfil its obligations by means which taking into consideration its own interests and that of the customer as far as ascertainable and legitimate at the time of formation of the contract, are unreasonable in particular in relation to the agreed counterperformance.

VII. Damages

- Apart from liability for damage to natural persons, Wolf is only obliged to pay damages pursuant to this contract or extra contractually if the following provisions in a) to f) are fulfilled:
 - The customer is required in the first instance to rely on other remedies and can only claim damages in the event of a continuing deficiency. The customer cannot claim damages as an alternative to other remedies.
 - Wolf is not liable for the conduct of suppliers or subcontractors or for damages to which the customer has contributed. Wolf is also not liable for impediments which occur, as a consequence of natural or political events, acts of state, industrial disputes, sabotage, accidents, biological, physical or chemical processes or similar circumstances and which cannot be controlled by Wolf with reasonable means. Besides, Wolf is only liable if it negligently breaches fundamental or deliberately or in circumstances amounting to gross negligence breaches other obligations owed to the Customer.
 - In the event of liability Wolf will compensate within the limits of lit. d) the proven loss of the customer to the extent that it was unavoidable for the customer and foreseeable to Wolf, at the time of the formation of the contract with respect to the occurrence of the loss and its amount. The customer must advise Wolf in writing before formation of the contract of particular risks, atypical possibilities for damages and unusual amounts of loss. Moreover, the customer is required to mitigate his loss as soon as a breach of contract is or ought to be known.
 - Wolf is not liable for loss of profit, non-pecuniary losses or other indirect damages. Besides, the amount of damages for late delivery is limited to 0,5 % for each full week of delay, up to a maximum of 5 %, and for other breaches of obligations is limited up to 200 % of the respective delivery value. However, this subparagraph does not apply in case of gross negligence by the executive bodies or the management.
 - For the limitation of time, the general regulations of the German Civil Code are valid. To the extent that the claim is not time-barred earlier, a six-month preclusive limitation

of time for bringing an action for damages applies, starting with the rejection of the claim for damages.

- The foregoing provisions relating to Wolf's liability also apply to the personal liability of Wolf's employees, servants, members of staff, representatives and those employed by Wolf in the performance of its obligations.
- Irrespective of continuing legal or contractual claims of Wolf and subject to the customer providing proof that damages have not occurred at all or clearly do not reach this extent, the customer is obliged towards Wolf to pay liquidated damages as follows without Wolf having to provide proof of the amount:
 - In the event of delay in payment the customer will pay the costs of judicial and extra-judicial means and proceedings, usual and accruing within the country and abroad, as well as interest at the rate applicable in Mainburg/Germany for unsecured short-term loans in the agreed currency.
 - In the case of the customer not taking delivery on the due date or not at all, Wolf is entitled to claim damages in the amount of 15 % of the respective delivery value.

VIII. Other Provisions

- Title of the goods which have been delivered remains with Wolf until settlement of all claims by Wolf existing against the customer. The allocation of risk as to price and performance in section III.-8. is not affected by the reservation of title.
- Without prejudice to Wolf's continuing claims, the customer will indemnify Wolf without limit against all claims of third parties which are brought against Wolf on the grounds of product liability or similar provisions, to the extent that the liability is based on circumstances which - such as, for example, the presentation of the product - were caused after risk passed, by the customer or other third parties without express written consent of Wolf. In particular, the indemnification also includes compensation for expenses incurred by Wolf and is granted by the customer waiving further conditions or other objections, in particular without requiring compliance with control and recall obligations, and waiving any defence of limitation.
- In relation to pictures, drawings, calculations and other documents as well as computer-software, Wolf reserves all proprietary rights, copyrights, other industrial property rights as well as know-how rights.
- All communications, declarations, notices etc. are to be drawn up exclusively in the German or English language. Communications by means of fax or e-mail fulfil the requirement of being in writing.

IX. General Basis of Contracts

- The place of performance and payment for all obligations arising from the legal relationship between Wolf and the customer is Mainburg/Germany. In particular, this provision also applies if Wolf assumes the costs of money remittance, renders performance for the customer somewhere else or payment is to be made in exchange for documents or goods or in the case of restitution of performances already rendered. The agreement of INCOTERMS in Group F or Group C or agreements as to how costs are to be borne do not entail any change of the above rule as to place of performance. Wolf is entitled to require payment also at the place of business of the customer.
- The United Nations Convention of 11 April 1980 on Contracts for the International Sale of Goods (UN Sales Convention / CISG) in the English version as well as the usage in force in Mainburg/Germany govern the legal relationship with the customer. The UN Sales Convention applies, above and beyond its own area of application, and regardless of reservations adopted by other states, to all contracts to which these International Conditions of Sale are to be applied according to the provisions of section I. Where standard terms of business are used, the INCOTERMS® 2010 of the International Chamber of Commerce apply taking into account the provisions stipulated in these International Conditions of Sale.
- The formation of contract, including agreements as to jurisdiction and the inclusion of these International Conditions of Sale, and the rights and obligations of the parties, also including precontractual and collateral obligations, as well as the interpretation are exclusively governed by the UN Sales Convention together with these International Conditions of Sale. Outside the application of the UN Sales Convention, the contractual and non-contractual legal relationship between the parties is governed by the non-uniform German law, namely by the BGB/HGB (German Civil and Commercial Code).
- All contractual and extra-contractual disputes arising out of or in connection with contracts to which these International Conditions of Sale apply, shall be finally settled by arbitration according to the Rules of the German Institution for Arbitration (DIS) without recourse to the ordinary courts of law. The tribunal shall consist of three arbitrators. The place of the arbitration shall be Munich, the languages to be used in the arbitral proceedings shall be German and English. In individual cases, however, Wolf is entitled also to bring an action before the national Courts at the customer's place of business, or other national Courts having jurisdiction according to domestic or foreign law.
- If provisions of these International Conditions of Sale should be or become partly or wholly void, the remaining arrangements will besides continue to apply. The parties are bound to replace the void arrangement by a legally valid arrangement, which comes as close as possible to the commercial meaning and purpose of the void arrangement.

DATANORM – Ventilation systems Match Code List Dated: 01.03.2016

	Rebate group	Product group
Unit heaters	Rebate:	
TLHK-EC / TLHK TopWing Unit heaters	20	LH
TLH-EC / TLH TopWing Unit heaters	20	LH
TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing Unit heaters	20	LH
Air heater basic device with CU/AL, galvanised steel heater bank, or electric heater bank	20	LH
Unit heater without heat exchanger	20	LH
Electrical accessories for unit heaters	20	LH
Ceiling unit heater	20	LH
Warm air curtain units	Rebate:	
TL-2	24	TL
Accessories for warm air curtain unit TL-2	24	TL
Ceiling fans	Rebate:	
LD 15	20	LD
Warm air heaters	Rebate:	
Warm air heaters basic unit	21	WS
Accessories for warm air heaters	21	WS
Warm air heater drives, control panels and electrical accessories	21	WS
Smoke extract fans	Rebate:	
ER	25	ER
Accessories for smoke extract fans ER	25	ER
Roof extract fans	Rebate:	
Basic unit DV-2	26	DV
Accessories for DV-2	26	DV
Comfort ventilation systems	Rebate:	
Comfort home ventilation system CWL / Accessories	22	CWL
Comfort large area ventilation unit CGL / Accessories	23	CGL
Comfort flat ventilation unit CFL / Accessories	29	CFL
Compact comfort ventilation unit CKL / Accessories	28	CKL
Comfort rotary heat exchanger ventilation unit CRL / Accessories	28	CRL

Your conditions

Unit heaters

Warm air curtain units

Ceiling fans

Warm air heaters

Smoke extract fans

Roof extract fans

Comfort home ventilation system

Comfort large area ventilation unit

Comfort flat ventilation unit

Compact comfort ventilation unit

Comfort rotary heat exchanger ventilation unit CRL



Energiesparen und Klimaschutz serienmäßig

Neuester Stand in Sachen Öl-Brennwerttechnik Öl-Brennwertgerät TOB/TOB-TS





Our only production site is in the town of Mainburg in Hallertau, Bavaria. Wolf relies on its strengths, and believes in the value of a German location. The company wants to continue its „Made in Germany“ future here too.



Von Profis. Für Qualität.

The „craftsman's brand“ logo is applied by manufacturers of plumbing and heating products which, working together with the authorised specialist firm, offer greater safety, benefit and quality when acquiring or modernising a heating system.



Part no. 4800719

Wolf GmbH, PO Box 1380, D-84048 Mainburg,
Tel.: +49 87 51 / 74-0, Fax: +49 87 51 / 74-1600, Internet: www.wolf-heiztechnik.de