

# ELECTRA Comfort

Gas and electric  
heating...

## Wall-mounted electric boiler

### General description

Our company MORA-TOP, an inland manufacturer of heating equipment, introduces hereby a wall-mounted electric boiler, type ELECTRA Comfort. Its design utilises sophisticated technological components. Thanks to unique characteristics of this new boiler you can heat economically and always with high comfort. This energy saver is designed particularly for residential heating and common spaces with loss of heat up to 22,5 kW.

### Performance classes

EK05 - 4,5 kW	EK06 - 6 kW	EK08 - 7,5 kW	EK09 - 9 kW
EK12 - 12 kW	EK15 - 15 kW	EK18 - 18 kW	EK24 - 22,5 kW

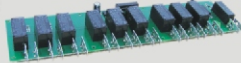
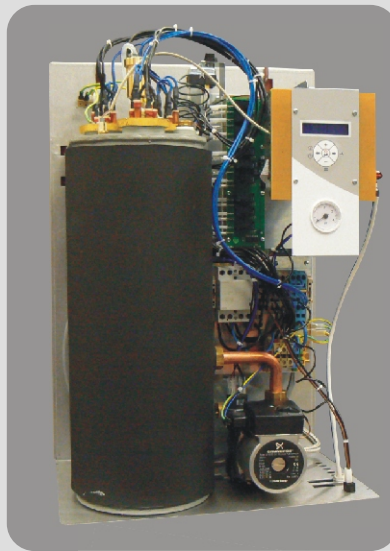


### Features

- Comfort setting and control through multifunctional LCD
- Relay module separated from control unit
- Small size
- Silent running
- Reaction dynamics of heating rods (PI regulation) energy savings
- Rotation of heating rods - prolonged service life
- Continuous power regulation as from 1,5 kW
  - switching of heating rods-gradually energy savings
- Support of equitherm regulation, incl. optional starting point
- Possible connection of DHW accumulator additionally
- Function of preferential DHW heating-Remote control of power input overload protection of main circuit breaker
- Remote control through GSM module

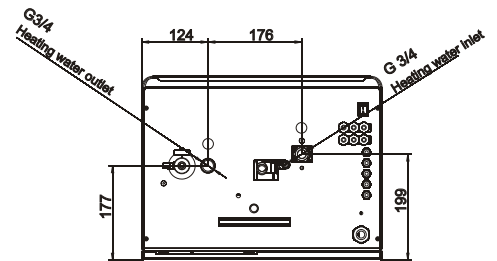
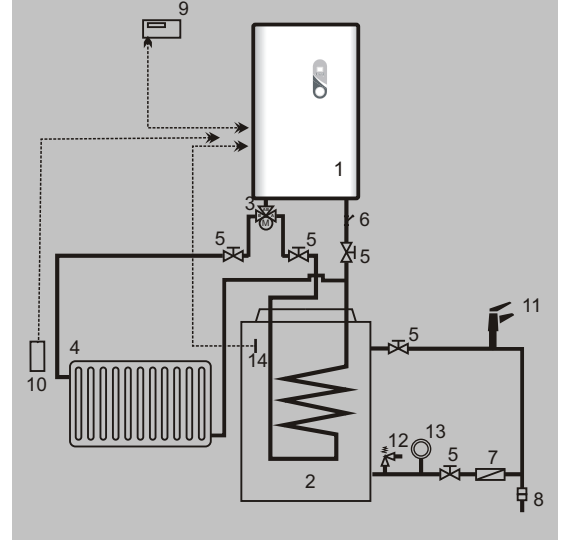
## Advantages

- Comfort setting and control through multifunctional LCD
- Small size
- Reaction dynamics of heating rods (PI regulation) energy savings
  - prevents overheating and exceeding of pre-set water temperature
  - remains fully functional even without equitherm regulation
- Rotation of heating rods - prolonged service life
- Continuous power regulation as from 1,5 kW
  - switching of heating rods gradually - energy savings
- Boiler switching system through centralized ripple control, incl. power setting
- Boiler operation according to referential room
  - connection through room sensor
- Relay module separated from control unit
  - costs saving at replacement
- All protections and unblocking functions
  - protection of pump and three-way valve (adjustable run-out period)
  - frost protection
  - tempering functions
- Soft cold start for heating system stability
- Support of equitherm regulation, incl. optional starting point
  - boiler always warmed up by outlet water in dependence on outdoor temperature (no overheating, running cost savings)
- Optional hysteresis of heating water
- Possible connection of DHW accumulator additionally
- Function of preferential DHW heating
- Remote control of power input two-stage overload protection of main circuit breaker with possibility of further utilisation in photovoltaic systems
- Silent running
- Remote control through GSM module
- 5 heating systems
  - for water heating only
  - with room thermostat only
  - with room thermostat and equitherm regulation
  - with room thermostat and DHW preparation
  - with room thermostat, equitherm regulation and DHW preparation
- Possible cascade arrangement



## Layout diagram

- 1 - Boiler
- 2 - Water boiler
- 3 - Powered three-way valve
- 4 - Heating system
- 5 - Check valve
- 6 - Filter
- 7 - Closing flap
- 8 - DHW treatment
- 9 - Room thermostat in referential room
- 10 - Temperature sensor
- 11 - Draw point
- 12 - DHW safety valve
- 13 - Expansion tank
- 14 - Water boiler thermostat

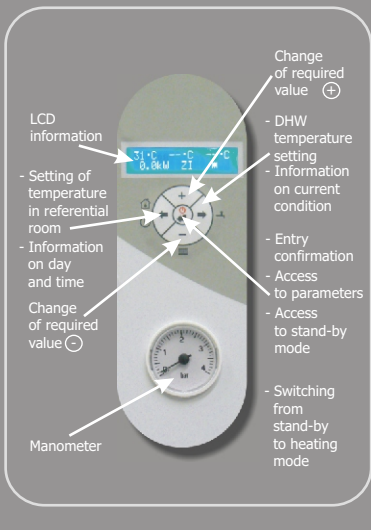


## Control board with display

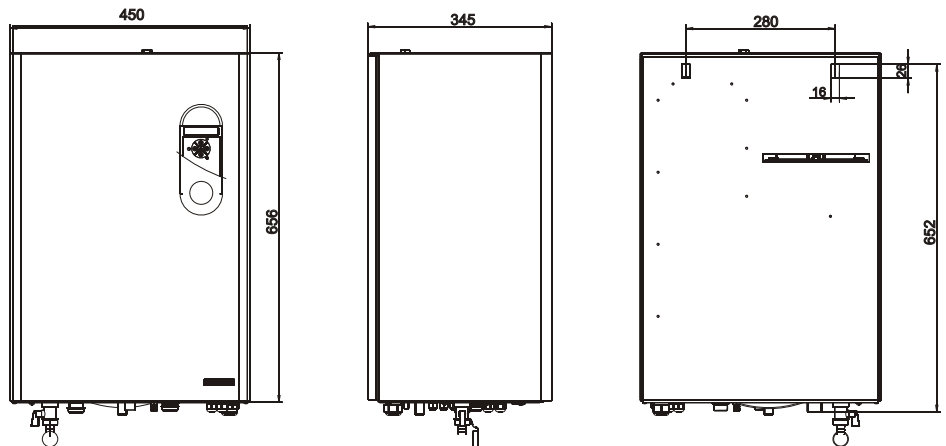
All information and data are putted on multifunctional LCD communicating in Czech.

Displayed information and data:

- Current heating water temperature
- Current boiler power in kW
- Current temperature in referential room (only in case of room sensor installation)
- Current DHW temperature in accumulator (only in case of DHW module and sensor installation)
- Pump operation
- Current boiler mode (DHW or home heating)
- Current GSM mode (only in case of GSM module installation)
- Current boiler mode:
  - ZI - winter - DHW and home heating
  - LE - summer - DHW heating only



## Dimensions



## Technical parameters

ELECTRA COMFORT		Unit	05	06	08	09	12	15	18	24
Heat rate	KW		4,5	6	7,5	9	12	15	18	22,5
Output modulation			1,5	2	2,5	1,5	2	2,5	2	2,5
Rated current	A		3x7,5/1x21	3x10/1x28	3x12/1x36	3x14	3x19	3x24	3x28	3x36
Degree of protection	IP		40							
Electric network			3x230V+N+PE/50 Hz							
Electric network			1x230V+N+PE/50 Hz							
Max. rated current	A		3x7,5/1x21	3x10/1x28	3x12/1x36	3x14	3x19	3x24	3x28	3x36
Main circuit breaker	A		3x10/1x25	3x16/1x32	3x16/1x40	3x16	3x20	3x25	3x32	3x40
Rated current of control fuse	A		0,315							
Relay service life			250 000 cycles, 16 A, 250 V							
Heating water inlet/outlet			G 3/4 male threading							
Min. operating overpressure in heating system	bar		0,4							
Max. operating overpressure in heating system	bar		3							
Max. temperature of heating water	°C		80							
Usable boiler capacity	l		10,6							
Efficiency at rated power	%		99							
Expansion tank capacity	l		8							
Number of boilers in cascade arrangement			According to cascade regulator type							
Boiler weight	kg		36,5	36,5	36,5	38	38	38	39,5	39,5
Dimensions (height/width/depth)	mm		656/450/345							