

# Electric Boilers

from Flexiheat UK



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# LEGEND

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Electric Boilers designed for heating



Electric Boilers with the production of domestic hot water via an indirect calorifier or cylinder



Electric boilers



Boilers with the option to connect in a cascade system



Weather compensated regulation / control of the boiler



Communication between the boiler and the regulator by OpenTherm+ protocol  
e.g NEST controller etc.



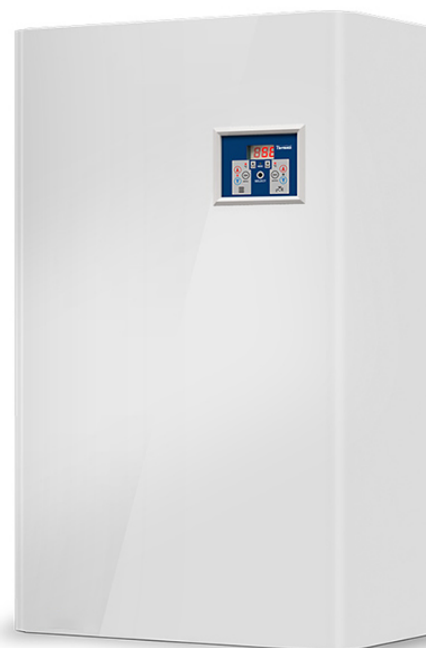
## Electric Boilers -Standard Series

### Models FHEL 8,15,23,30,38,45

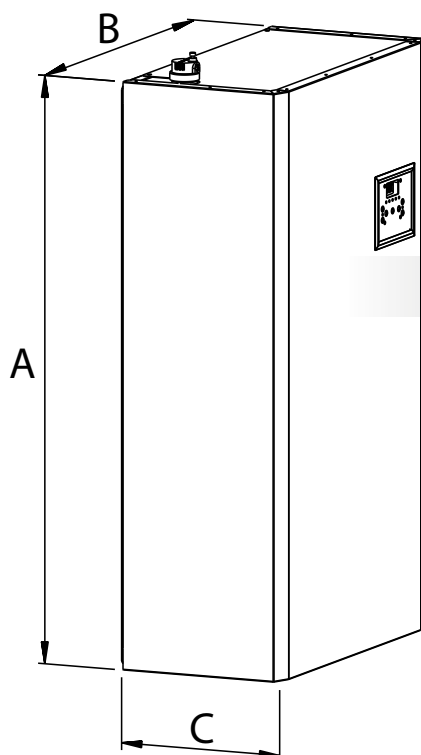
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The electric boiler operates in a hot water heating system in the same manner as gas boilers with burners. Very similar regulation. Even the regulators that are used for regulating boilers and heating are the same. An electric boiler can be used as a universal heat source in flats, small family houses and recreational buildings. It is also used as additional source for new methods of heating, such as a thermal pump or solar thermal collectors. In cool periods when the primary source does not heat the building to the thermal comfort, the electric boiler is also connected. The indisputable advantage of electric boilers is the very low cost - there is not need for expensive gas or chimney connections.

- Energy saving pump - ERP compliant
- Very quiet operation due to selected switching relays
- Fluent regulation in low steps by 2.5 kW (5 kW for the boilers from 30 kW)
- Minimum output of the boiler 2,5 kW (FHEL8, 15, 23), or 5 kW (FHEL30, 38, 45)
- Option to connect the regulator with OpenTherm+ communication i.e NEST controllers etc.
- Option of regulation according to the spatial or outdoor temperature - compensated weather regulation
- Option to produce domestic hot water via an external indirect cylinder / calorifier and 3-way valve



- Option of remote boiler control through SMS messages after fitting with the SMS module
- HDO communication - remote switching of the operation to low rate by the electricity supplier
- Option to add monitoring of the current maximum to prevent overloading of the electricity network in the building/property
- Option to connect up to 32 boilers to intelligent cascade boiler rooms in order to increase heating power



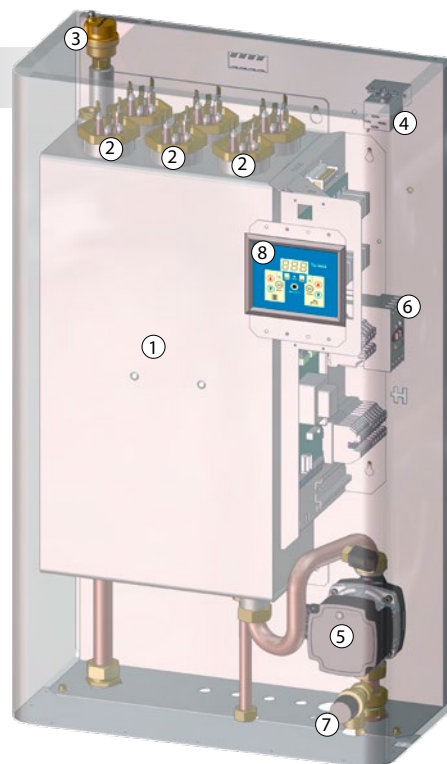
#### DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL					
	FHEL8	FHEL15	FHEL23	FHEL30	FHEL38	FHEL45
A	820	820	820	805	805	805
B	475	475	475	475	475	475
C	238	238	238	238	238	238

## Electric Boilers- standard series

### SET OF BOILER

- 1 - Boiler exchanger
- 2 - Heating body
- 3 - Automatic de-aerating valve
- 4 - Emergency thermostat
- 5 - Energy saving pump
- 6 - Safety switch contactor
- 7 - Safety valve
- 8 - Control display



Technical data	Unit	FHEL8	FHEL15	FHEL23	FHEL30	FHEL38	FHEL45
Nominal heat output	kW	7.5	15.0	22.5	30.0	37.5	45.0
Minimum regulation level of the output	W	2500	2500	2500	2500/5000	2500/5000	2500/5000
Rated current (single-phase connection)	A	11 (33)	22 (66)	33	44	55	66
Level of electric coverage	IP	40	40	40	40	40	40
Supply voltage / frequency	V/Hz	3 x 400/230 + N + PE/50 ~			3 x 400 + N + PE/50 ~		
Maximum rated current	A	3 x 12 (1 x 36)	3 x 24 (1 x 72)	3 x 36	3 x 48	3 x 60	3 x 72
Main circuit breaker for electric installation	A	16 (40)	25 (80)	40	50	63	80
Rated current of the control circuit breaker	A	1.25	1.25	1.25	1.25	1.25	1.25
Electric service life of relay	-	1.10 <sup>5</sup> cycles (16 A, 250 V/50 Hz)					
Mechanical service life of relay	-	10.10 <sup>6</sup> cycles					
Input - output for heating water	-	3/4" male			1" male		
Min. - maximum working overpressure of heating system	bar	0.5 – 3.0	0.5 – 3.0	0.5 – 3.0	0.5 – 3.0	0.5 – 3.0	0.5 – 3.0
Maximum temperature of heating water	°C	80	80	80	80	80	80
Water volume of the boiler	l	14.5	14.5	14.5	28.0	28.0	28.0
Efficiency at the rated power	%	99.5	99.5	99.5	99.5	99.5	99.5
Volume of expansion tank	l	7	7	7	site based (location outside the boiler)		
Dimensions: height/width/depth	mm	820/475/238			805/475/238		
Weight of the boiler without water	kg	37	38	39	43	44	45
Class of seasonal energy efficiency of heating	-	D	D	D	D	D	D
Order number	-	FH1601.1	FH1602.1	FH1603.1	FH1604.1	FH1605.1	FH1606.1



## Electric Boilers- with touch display

### Models FHEL 5, 9, 14

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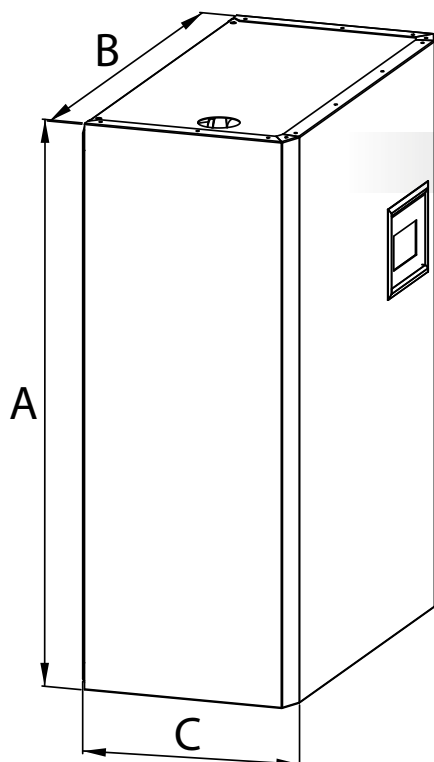
These electric boilers are characterized by simple servicing. FHEL 5, 9 and 14 electric boilers are fitted as standard with a touch display. This control is very user-friendly, the parameters are displayed verbally and various language versions can be selected. Due to the low minimum performance and the modulation option, these boilers are recommended for low energy houses.

- Energy saving pump-ERP compliant
- Very quiet operation due to selected switching relays
- The simple and intuitive control is due to the easy-arranged touch display
- Fluent regulation in low steps by 500 W (FHEL5), by 1000 W (FHEL9), 1500 W (FHEL14)
- Minimum output of the boiler 500 W (FHEL5), 1000 W (FHEL9), 1500 W (FHEL14)
- Option to connect the regulator with OpenTherm+ communication i.e NEST controllers etc.
- Option of regulation according to the spatial or outdoor temperature weather compendated regulation)
- Option to produce domestic hot water via an external indirect cylinder / calorifier and 3-way valve
- Option of remote boiler control through SMS messages



after fitting with the SMS module

- HDO communication - remote switching of the operation to low rate tariff by the electricity supplier
- Option to add monitoring of the current maximum to prevent overloading of the electricity network in the building
- Recommended for low-energy and passive houses (low minimum power)



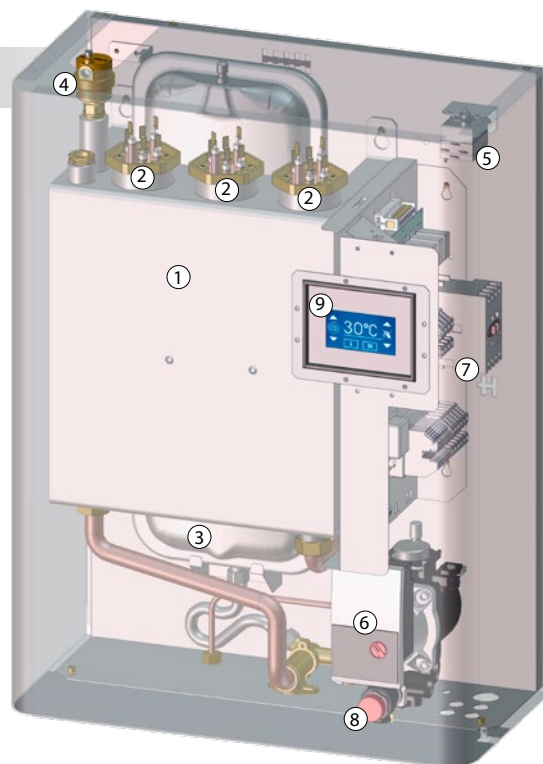
#### DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL		
	FHEL5	FHEL9	FHEL14
A	638	638	638
B	475	475	475
C	238	238	238

## Electric Boilers - with touch display

### SET OF BOILER

- 1 - Boiler exchanger
- 2 - Heating body
- 3 - Expansion heating vessel
- 4 - Automatic de-aerating valve
- 5 - Emergency thermostat
- 6 - Energy saving pump
- 7 - Safety switch contactor
- 8 - Safety valve
- 9 - Control touch display



Technical data	Unit	FHEL5	FHEL9	FHEL14
Nominal heat output	kW	4.5	9.0	13.5
Minimum regulation level of the output	W	500	1000	1500
Rated current (single-phase connection)	A	7 (21)	13 (39)	20 (60)
Level of electric coverage	IP	40	40	40
Supply voltage / frequency	V/Hz	3 x 400/230 + N + PE/50 ~		
Maximum rated current	A	3 x 8 (1 x 24)	3 x 14 (1 x 42)	3 x 21 (1 x 63)
Main circuit breaker for electric installation	A	10 (25)	16 (50)	25 (80)
Rated current of the control circuit breaker	A	1.25	1.25	1.25
Electric service life of relay	-	1.10 <sup>5</sup> cycles (16 A, 250 V/50 Hz)		
Mechanical service life of relay	-	10.10 <sup>6</sup> cycles	10.10 <sup>6</sup> cycles	10.10 <sup>6</sup> cycles
Input - output for heating water	-	3/4" male	3/4" male	3/4" male
Min. - maximum working overpressure of heating system	bar	0.5 – 3.0	0.5 – 3.0	0.5 – 3.0
Maximum temperature of heating water	°C	80	80	80
Water volume of the boiler	l	6.0	6.0	6.0
Efficiency at the rated power	%	99.5	99.5	99.5
Volume of expansion tank	l	7	7	7
Dimensions: height/width/depth	mm	638/475/238	638/475/238	638/475/238
Weight of the boiler without water	kg	27	27	27
Class of seasonal energy efficiency of heating	-	D	D	D
Part number	-	FH1607.1	FH1608.1	FH1609.1