

INSTALLATION

Specification

15.4 Application areas / conversion table

Specific electrical resistance and specific electrical conductivity (see chapter "Data table").

Standard specification at 15 °C			20 °C			25 °C		
Resistance $\rho \geq$	Conductivity $\sigma \leq$		Resistance $\rho \geq$	Conductivity $\sigma \leq$		Resistance $\rho \geq$	Conductivity $\sigma \leq$	
Ωcm	mS/m	$\mu\text{S/cm}$	Ωcm	mS/m	$\mu\text{S/cm}$	Ωcm	mS/m	$\mu\text{S/cm}$
900	111	1111	800	125	1250	735	136	1361

15.5 Pressure drop

Taps/valves

Tap pressure drop at a flow rate of 10 l/min		
Mono lever mixer tap, approx.	MPa	0.04 - 0.08
Thermostatic valve, approx.	MPa	0.03 - 0.05
Hand shower, approx.	MPa	0.03 - 0.15

Sizing the pipework

When calculating the size of the pipework, an appliance pressure drop of 0.1 MPa is recommended.

15.6 Fault conditions

In the event of a fault, loads up to a maximum of 95 °C at a pressure of 1.2 MPa can occur temporarily in the installation.

15.7 Details on energy consumption

The product data complies with EU regulations relating to the Directive on the ecological design of energy related products (ErP).

		PHB 13	PHB 18	PHB 21	PHB 24
		233998	233999	234000	234001
Manufacturer		STIEBEL ELTRON	STIEBEL ELTRON	STIEBEL ELTRON	STIEBEL ELTRON
Load profile		XS	S	S	S
Energy efficiency class		A	A	A	A
Annual power consumption	kWh	469	483	483	483
Energy conversion efficiency	%	39	38	38	38
Sound power level	dB(A)	15	15	15	15
Special information on measuring efficiency		None	None	None	None

15.8 Data table

		PHB 13	PHB 18	PHB 21	PHB 24
		233998	233999	234000	234001
Electrical details					
Rated voltage	V	400	400	400	400
Rated output 400 V stage I min.	kW	4,6	6,3	7,4	8,3
Rated output 400 V stage I max.	kW	10,6	14,3	16,8	19,0
Rated output 400 V stage II min.	kW	6,8	9,2	10,8	12,2
Rated output 400 V stage II max.	kW	13,3	18,0	21,1	23,8
Rated current	A	19,5	26	31	35
Fuses	A	20	25	32	35
Phases		3/PE	3/PE	3/PE	3/PE
Frequency	Hz	50	50	50	50
Specific resistance $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25^\circ \text{C}$)	$\Omega \text{ cm}$	900	900	900	900
Specific conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25^\circ \text{C}$)	$\mu\text{S/cm}$	1111	1111	1111	1111
Versions					
IP-Rating		IP25	IP25	IP25	IP25
Heating system heat generator		Bare wire	Bare wire	Bare wire	Bare wire
Connections					
Water connection		G 1/2 A	G 1/2 A	G 1/2 A	G 1/2 A
Application limits					
Max. permissible pressure	MPa	1	1	1	1
Values					
Max. permissible inlet temperature	$^\circ\text{C}$	25	25	25	25
Pressure drop at flow rate	MPa	0,09	0,11	0,13	0,15
Flow rate for pressure drop	l/min	3,9	4,5	5,6	6,3
Flow rate limit at	l/min	4,7	5,9	7,0	7,8
DHW delivery	l/min	7,0	9,4	11,1	12,5
$\Delta\vartheta$ at DHW delivery	K	26	26	26	26
Hydraulic data					
Rated capacity	l	0,4	0,4	0,4	0,4
Dimensions					
Height	mm	485	485	485	485
Width	mm	226	226	226	226
Depth	mm	93	93	93	93
Weights					
Weight	kg	3,6	3,6	3,6	3,6

Guarantee

The guarantee conditions of our German companies do not apply to appliances acquired outside of Germany. In countries where our subsidiaries sell our products a guarantee can only be issued by those subsidiaries. Such guarantee is only granted if the subsidiary has issued its own terms of guarantee. No other guarantee will be granted.

We shall not provide any guarantee for appliances acquired in countries where we have no subsidiary to sell our products. This will not affect warranties issued by any importers.

Environment and recycling

We would ask you to help protect the environment. After use, dispose of the various materials in accordance with national regulations.