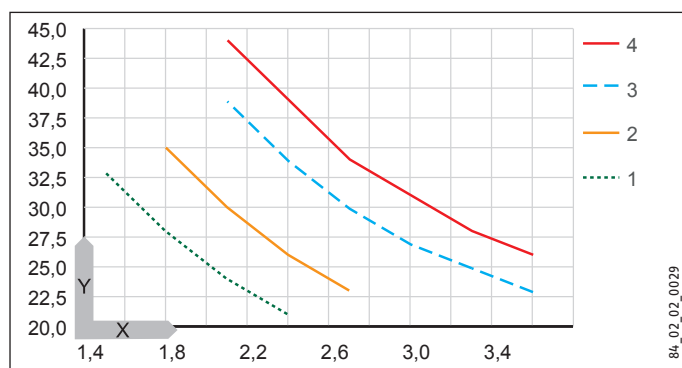


INSTALLATION Specification

15.3 Increasing the temperature

At 230 V / 400 V, the following water temperature increases occur:



- X Flow rate in l/min
- Y Temperature increase in K
- 1 3.5 kW - 230 V
- 2 4.4 kW - 230 V
- 3 5.7 kW - 230 V
- 4 6.5 kW - 400 V

Example DEM 3 with 3.5 kW

Flow rate	l/min	2.0
Increasing the temperature	K	25
Cold water supply temperature	°C	12
Maximum possible outlet temperature	°C	37



Note

An outlet temperature of 50 °C can be achieved with the lowest possible flow rate and the following cold water inlet temperatures:

- DEM 3 > 17 °C
- DEM 4 > 18 °C
- DEM 6 > 13 °C
- DEM 7 > 8 °C

15.4 Application areas

For the specific electrical resistance and specific electrical conductivity, see "Data table".

Standard specification at 15 °C			20 °C			25 °C		
Spec. resistance $\rho \geq$	Spec. conductivity $\sigma \leq$		Spec. resistance $\rho \geq$	Spec. conductivity $\sigma \leq$		Spec. resistance $\rho \geq$	Spec. 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
1000	100	1000	890	112	1124	815	123	1227
1100	91	909	970	103	1031	895	112	1117
1200	83	833	1070	93	935	985	102	1015
1300	77	769	1175	85	851	1072	93	933

INSTALLATION

Specification

15.5 Data table

		DEM 3				DEM 4				DEM 6				DEM 7		
		231001				231002				231215				232769		
Electrical data																
Rated voltage	V	200	220	230	240	200	220	230	240	200	220	230	240	380	400	415
Rated output	kW	2.7	3.2	3.5	3.8	3.3	4.0	4.4	4.8	4.3	5.2	5.7	6.2	5.9	6.5	7.0
Rated current	A	13.3	14.5	15.2	15.8	16.7	18.2	19.1	20.0	21.6	23.6	24.7	25.8	15.5	16.3	16.9
Fuse/MCB rating	A	16	16	16	16	20	20	20	20	25	25	25	32	16	20	20
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/-	50/-	50/-
Phases		1/N/PE				1/N/PE				1/N/PE				2/PE		
Specific resistance $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25^\circ\text{C}$)	$\Omega \text{ cm}$	1000				1000				1000				1000		
Specific conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25^\circ\text{C}$)	$\mu\text{S/cm}$	1000				1000				1000				1000		
Specific resistance $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 50^\circ\text{C}$)	$\Omega \text{ cm}$	1300				1300				1300				13000		
Specific conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 50^\circ\text{C}$)	$\mu\text{S/cm}$	770				770				770				770		
Max. mains impedance at 50 Hz	Ω	0.182	0.166	0.158	0.152	0.137	0.125	0.119	0.114	0.091	0.083	0.079	0.076			
Max. mains impedance at 60 Hz	Ω	0.278	0.254	0.242	0.232	0.209	0.191	0.182	0.174	0.139	0.127	0.121	0.116			
Max. mains impedance at 380 V / 50 Hz	Ω													0.236		
Max. mains impedance at 380 V / 60 Hz	Ω													0.336		
Max. mains impedance at 400 V / 50 Hz	Ω													0.225		
Max. mains impedance at 415 V / 50 Hz	Ω													0.217		

INSTALLATION Specification

		DEM 3	DEM 4	DEM 6	DEM 7
Connections					
Water connection		G 3/8 A	G 3/8 A	G 3/8 A	G 3/8 A
Application limits					
Max. permissible pressure	MPa	1	1	1	1
Max. inlet temperature for reheat- ing	°C	50	50	50	50
Values					
Max. permissible inlet temperature	°C	60	60	60	60
Temperature setting range, DHW	°C	30-50	30-50	30-50	30-50
On	l/min	>1.5	>1.8	>2.2	>2.2
Pressure drop at flow rate	MPa	0.05	0.06	0.07	0.07
Flow rate for pressure drop	l/min	1.5	1.8	2.2	2.2
Flow rate limit at	l/min	2.3	2.8	3.2	3.2
DHW primary pump	l/min	2.0	2.5	3.2	3.7
$\Delta\theta$ if presented	K	25	25	25	25
Hydraulic data					
Nominal capacity	l	0.1	0.1	0.1	0.1
Versions					
Oversink installation		X	X	X	X
Undersink installation		X	X	X	X
Open vented type		X	X	X	X
Sealed unvented type		X	X	X	X
IP rating		IP25	IP25	IP25	IP25
Safety category		1	1	1	1
Insulating block		Plastic	Plastic	Plastic	Plastic
Heating system		Bare wire	Bare wire	Bare wire	Bare wire
Cap and back panel		Plastic	Plastic	Plastic	Plastic
Colour		White	White	White	White

INSTALLATION Specification

		DEM 3	DEM 4	DEM 6	DEM 7
Dimensions					
Height	mm	143	143	143	143
Width	mm	190	190	190	190
Depth	mm	82	82	82	82
Weights					
Weight	kg	1.5	1.5	1.5	1.5