

Product datasheet: Room heater to regulation (EU) no. 811/2013 / (S.I. 2019 No. 539 / Schedule 2)

	WPL 23 E
	227758
	STIEBEL ELTRON
	A+
	A+
kW	18
kW	17
%	115
%	148
kWh/a	12656
kWh/a	9268
dB(A)	58
dB(A)	65
	For all special measures to be taken during assembly, installation or maintenance of the room heater, see the installation instructions
kW	20
kW	18
kW	16
kW	16
%	109
%	137
%	120
%	157
kWh/a	17275
kWh/a	12373
kWh/a	6955
kWh/a	5239
	kW



ENERG Y UA ENERGE (A) ENERG

STIEBEL ELTRON

WPL 23 E

























2015









 A^{+}

A

B

C

D

Ε

F

G



811/2013

Product datasheet: Composite system consisting of room heater and temperature controller to regulation (EU) no. 811/2013 / (S.I. 2019 No. 539 / Schedule 2)

		WPL 23 E
		227758
Manufacturer		STIEBEL ELTRON
Seasonal room heating efficiency in moderate climates for average temperature applications (Πs)	%	115
Temperature controller class		VII
Contribution of temperature controller to room heating energy efficiency	%	3.50
Room heating energy efficiency of composite system under moderate climatic conditions	%	119.00
Room heating energy efficiency of composite system under colder climatic conditions	%	113.00
Room heating energy efficiency of composite system under warmer climatic conditions	%	124.00
Value of differential between room heating energy efficiency under moderate climatic conditions and that under colder climatic conditions	%	6
Value of differential between room heating energy efficiency under warmer climatic conditions and that under moderate climatic conditions	%	5
Energy efficiency class for central heating in moderate climates for medium temperature applications		A+
Room heating energy efficiency class of composite system under moderate climatic conditions		A+

Required details about room heater and combi heater with heat pump to regulation (EU) no. 813/2013 & 811/2013

Manufacturer STIEBEL FLYRON Heat source Outside or With bootser heater Outside or With bootser Outside or With Outsi			WPL 23 E
Manufacturer STIEREL EL TROM Visit booster hoater Cornb boliew with heat pump Acade hoating output in colder climates for average temperature applications (Printed) Agriculture (Printed) Agricultur			
Heat source Combi bolier with heat pump Rated heating output in coder climates for average temperature applications (Printal) Rated heating output in coder climates for average temperature applications (Printal) Rated heating output in warmer climates for average temperature applications (Printal) Rated heating output in warmer climates for average temperature applications (Printal) 11 – 7 ° C heating output, partial load range in colder climates (Print) 12 – 7 ° C heating output, partial load range in warmer climates (Print) 13 – 7 ° C heating output, partial load range in warmer climates (Print) 14 – 7 ° C heating output, partial load range in warmer climates (Print) 15 – 7 ° C heating output, partial load range in warmer climates (Print) 15 – 7 ° C heating output, partial load range in warmer climates (Print) 15 – 7 ° C heating output, partial load range in warmer climates (Print) 15 – 7 ° C heating output, partial load range in warmer climates (Print) 15 – 7 ° C heating output, partial load range in warmer climates (Print) 15 – 7 ° C heating output, partial load range in warmer climates (Print) 15 – 7 ° C heating output, partial load range in warmer climates (Print) 16 – 7 ° C heating output, partial load range in warmer climates (Print) 16 – 7 ° C heating output, partial load range in warmer climates (Print) 17 – 7 ° C heating output, partial load range in warmer climates (Print) 18 w 16 – 15 – 17 ° C heating output, partial load range in warmer climates (Print) 19 – 10 – 10 ° C heating output, partial load range in warmer climates (Print) 19 – 10 ° C heating output, partial load range in colder climates (Print) 19 – 10 ° C heating output, partial load range in colder climates (Print) 19 – 10 ° C heating output, partial load range in warmer climates (Print) 10 ° C heating output, partial load range in warmer climates (Print) 10 ° C heating output, partial load range in warmer climates (Print) 10 ° C heating output, partial load range in warmer climates (Print) 10 ° C heating out	Manufacturer	· · · · · · · · · · · · · · · · · · ·	
Comb boler with heat pump Rated heating output, in colder climates for average temperature applications (Praised) Rated heating output in colder climates for average temperature applications (Praised) Rated heating output in warmer climates for average temperature applications (Praised) Rated heating output in warmer climates for average temperature applications (Praised) I = -7 °C heating output, partial load range in colder climates (Pdh) I = -7 °C heating output, partial load range in colder climates (Pdh) I = -7 °C heating output, partial load range in colder climates (Pdh) I = -7 °C heating output, partial load range in colder climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in colder climates (Pdh) I = -7 °C heating output, partial load range in warmer climates (Pdh) I = -7 °C heating output, partial load range in colder climates (Pdh) I = -7 °C heating output, partial load range in colder climates (Pdh) I = -7 °C heating output, partial load range in colder climates (Pdh) I = -7 °C heating output, partial			Outside air
Rated heating output in colder climates for average temperature applications (Pretado) Rated heating output in moderate climates for average temperature applications (Pretado) Rated heating output in winderate climates for average temperature applications (Pretado) Rated heating output in winderate climates for average temperature applications (Pretado) Rated heating output, partial load range in colder climates (Preth) RW 13.9 I = -7 ** Cheating output, partial load range in colder climates (Preth) RW 14.40 RW 15.9 RW	With booster heater		X
applications (Pratiad) Read heating output in moderate climates for average temperature applications (Prated) Read heating output in warmer climates for average temperature applications (Prated) Read heating output in warmer climates for average temperature applications (Prated) Read heating output, partial load range in colder climates (Pdh) Read heating output, partial load range in colder climates (Pdh) Read (Pdh)	Combi boiler with heat pump		_
applications (Prained) Agriculture of the properties of the proper		kW	20
applications (Prated) 1 = -7 ** Cheating output, partial load range in colder climates (Pdh) 31,9 1 = -7 ** Cheating output, partial load range under moderate climatic conditions (Pdh) 2 = 7 ** Cheating output, partial load range in colder climates (Pdh) 3 = 7 ** Cheating output, partial load range in colder climates (Pdh) 3 = 7 ** Cheating output, partial load range in colder climates (Pdh) 3 = 2 ** Cheating output, partial load range under moderate climatic conditions (Pdh) 3 = 2 ** Cheating output, partial load range under moderate climatic conditions (Pdh) 3 = 2 ** Cheating output, partial load range in colder climates (Pdh) 4		kW	18
Ti = -7 °C heating output, partial load range in warmer climates (Pdh) kW 14.6 Ti = -2 °C heating output, partial load range in warmer climates (Pdh) kW 15.8 Ti = -2 °C heating output, partial load range in colder climates (Pdh) kW 15.8 Ti = -2 °C heating output, partial load range in colder climates (Pdh) kW 15.8 Ti = -2 °C heating output, partial load range in colder climates (Pdh) kW 15.9 Ti = -2 °C heating output, partial load range in warmer climates (Pdh) kW 16.5 Ti = -2 °C heating output, partial load range in colder climates (Pdh) kW 16.5 Ti = -2 °C heating output, partial load range in colder climates (Pdh) kW 16.5 Ti = -3 °C heating output, partial load range in warmer climates (Pdh) kW 16.2 Ti = -3 °C heating output, partial load range in warmer climates (Pdh) kW 16.2 Ti = -3 °C heating output, partial load range in warmer climates (Pdh) kW 16.2 Ti = -3 °C heating output, partial load range in warmer climates (Pdh) kW 17.6 Ti = -4 °C heating output, partial load range under moderate climatic conditions (Pdh) kW 17.0 Ti = -4 °C heating output, partial load range in warmer climates (Pdh) kW 17.0 Ti = -4 °C heating output, partial load range in warmer climates (Pdh) kW 16.2 Ti = -4 °C heating output, partial load range in warmer climates (Pdh) kW 16.2 Ti = -4 °C heating output, partial load range in warmer climates (Pdh) kW 16.2 Ti = -4 °C heating output, partial load range in warmer climates (Pdh) kW 16.2 Ti = -4 °C heating output, partial load range in warmer climates (Pdh) kW 16.2 Ti = -4 °C heating output, partial load range in warmer climates (Pdh) kW 16.2 Ti = -4 °C heating output, partial load range in warmer climates (Pdh) kW 16.2 Ti = -4 °C heating output, partial load range in warmer climates (Pdh) kW 16.2 Ti = -4 °C		kW	16
conditions (Pdh) New 14.6 Ti = 2 °C heating output, partial load range in warmer climates (Pdh) kW 15.8 Ti = 2 °C heating output, partial load range in colder climates (Pdh) kW 15.90 conditions (Pdh) kW 15.90 Ti = 2 °C heating output, partial load range in warmer climates (Pdh) kW 15.90 Ti = 2 °C heating output, partial load range in warmer climates (Pdh) kW 16.90 Ti = 2 °C heating output, partial load range in warmer climates (Pdh) kW 16.50 Ti = 7 °C heating output, partial load range in warmer climates (Pdh) kW 16.50 Ti = 7 °C heating output, partial load range in warmer climates (Pdh) kW 16.20 Ti = 7 °C heating output, partial load range in warmer climates (Pdh) kW 16.20 Ti = 1 °C heating output, partial load range in warmer climates (Pdh) kW 16.20 Ti = 12 °C heating output, partial load range in warmer climates (Pdh) kW 17.60 Ti = 12 °C heating output, partial load range in warmer climates (Pdh) kW 17.60 Ti = 12 °C heating output, partial load range in warmer climates (Pdh) kW 17.60 Ti = 12 °C heating output, partial load range in warmer climates (Pdh) kW 16.20 Ti = dual mode temperature in colder climates (Pdh) kW 16.20 Ti = dual mode temperature in warmer climates (Pdh) kW 16.20 Ti = dual mode temperature in warmer climates (Pdh) kW 16.20 Ti = operating temperature limit in colder climates (Pdh) kW 16.20 Ti = operating temperature limit in colder climates (Pdh) kW 16.20 Ti = operating temperature limit in warmer climates (Pdh) kW 16.20 Ti = operating temperature limit in warmer climates (Pdh) kW 16.20 Ti = operating temperature limit in warmer climates (Pdh) kW 16.20 Ti = operating temperature limit in warmer climates (Pdh) kW 16.20 Ti = operating temperature limit in warmer climates (Pdh) kW 16.20 Ti = operating temperature limit in warmer climates (Pdh) kW 16.20 Ti = operating temperature limit in warmer climates (Pdh) kW 16.20 Ti = operating temperature limit in warmer	Tj = -7 °C heating output, partial load range in colder climates (Pdh)	kW	13.9
I] = 2 ° C heating output, partial load range under moderate climatic conditions (Pdh) kW 15.90 I] = 2 ° C heating output, partial load range in warmer climates (Pdh) kW 16.90 I] = 2 ° C heating output, partial load range in warmer climates (Pdh) kW 16.55 I] = 7 ° C heating output, partial load range in colder climates (Pdh) kW 16.50 I] = 7 ° C heating output, partial load range under moderate climatic conditions (Pdh) kW 16.40 I] = 17 ° C heating output, partial load range in warmer climates (Pdh) kW 16.20 I] = 12 ° C heating output, partial load range in warmer climates (Pdh) kW 17.60 I] = 12 ° C heating output, partial load range in warmer climates (Pdh) kW 17.60 I] = 12 ° C heating output, partial load range in warmer climates (Pdh) kW 17.60 I] = 12 ° C heating output, partial load range in warmer climates (Pdh) kW 17.00 I] = 12 ° C heating output, partial load range in warmer climates (Pdh) kW 17.00 I] = 12 ° C heating output, partial load range in warmer climates (Pdh) kW 18.00 I] = 12 ° C heating output, partial load range in warmer climates (Pdh) kW 18.00 I] = 12 ° C heating output, part		kW	14.40
Tj = 2° C heating output, partial load range under moderate climatic conditions (Pdh) kW 15.90 Tj = 2° C heating output, partial load range in warmer climates (Pdh) kW 16.5 Tj = 7° C heating output, partial load range in colder climates (Pdh) kW 16.40 15 = 7° C heating output, partial load range under moderate climatic conditions (Pdh) kW 16.40 15 = 7° C heating output, partial load range in warmer climates (Pdh) kW 16.20 15 = 12° C heating output, partial load range in warmer climates (Pdh) kW 17.60 15 = 12° C heating output, partial load range in warmer climates (Pdh) kW 17.10 16 = 12° C heating output, partial load range under moderate climatic conditions (Pdh) kW 16.2 1 = dual mode temperature in conder climates (Pdh) kW 16.2 1 = dual mode temperature in under moderate climatic conditions (Pdh) kW 13.4 1 = dual mode temperature in warmer climates (Pdh) kW 14.60 1 = operating temperature in warmer climates (Pdh) kW 16. 1 = operating temperature in in in colder climates (Pdh) kW 12. 1 = operating temperature in in in colder climates (Pdh) kW 12. 1 = operating temperature in in in colder climates (Pdh) kW 14. 1 = operating temperature in init in oder moderate climates (Pdh) kW	Tj = -7 °C heating output, partial load range in warmer climates (Pdh)	kW	14.6
conditions (Poth)	Tj = 2 °C heating output, partial load range in colder climates (Pdh)	kW	15.8
Ij = 7° C heating output, partial load range in colder climates (Pdh) kW 16.65 Ij = 7° C heating output, partial load range in warmer climates (Pdh) kW 16.40 Ij = 7° C heating output, partial load range in warmer climates (Pdh) kW 16.2 Ij = 12° C heating output, partial load range in colder climates (Pdh) kW 17.6 Ij = 12° C heating output, partial load range in colder climates (Pdh) kW 17.10 Ij = 12° C heating output, partial load range in warmer climates (Pdh) kW 17.10 Ij = 12° C heating output, partial load range in warmer climates (Pdh) kW 16.2 Ij = 12° C heating output, partial load range in warmer climates (Pdh) kW 16.2 Ij = dual mode temperature in colder climates (Pdh) kW 13.4 Ij = dual mode temperature in moderate climates (Pdh) kW 14.60 Ij = operating temperature limit in colder climates (Pdh) kW 12.4 Ij = operating temperature limit in warmer climates (Pdh) kW 14.20 Ij = operating temperature limit in warmer climates (Pdh) kW 14.20 Ij = operating temperature limit in warmer climates (Pdh) kW 14.00 Dual mode temperatu	, , , , , ,	kW	15.90
Tj - 7° Chaating output, partial load range under moderate climatic conditions (Pch) kW 16.20 Tj - 7° Chaating output, partial load range in warmer climates (Pch) kW 17.6 Tj - 12° Cheating output, partial load range under moderate climates (Pch) kW 17.10 Tj - 12° Cheating output, partial load range under moderate climatic conditions (Pch) kW 17.10 Tj - 12° Cheating output, partial load range under moderate climatic conditions (Pch) kW 16.2 Tj - dual mode temperature in colder climates (Pch) kW 13.4 Tj - dual mode temperature under moderate climatic conditions (Pdh) kW 14.60 Tj - operating temperature in under moderate climatic conditions (Pdh) kW 16 Tj - operating temperature in under moderate climatic conditions (Pdh) kW 14.20 Tj - operating temperature in under moderate climatic conditions (Pdh) kW 14.20 Tj - operating temperature in in warmer climates (Pdh) kW 14.20 Tj - operating temperature in moderate climates (Pdh) kW 14.20 Tj - operating temperature in moderate climates (Pdh) kW 14.00 Dual mode temperature in moderate climates (Pdh) kW 14.00 Dual mode temperature in moderate climates (Pdh) kW 14.00 Dual mode temperature in moderate climates (Pdh) kW 15.00 <td></td> <td>kW</td> <td>16</td>		kW	16
conditions (Pdh) 13	Tj = 7 °C heating output, partial load range in colder climates (Pdh)	kW	16.5
I j = 12 ° C heating output, partial load range in colder climates (Pdh) kW 17.6 I j = 12 ° C heating output, partial load range under moderate climatic conditions (Pdh) kW 17.10 I j = dual mode temperature in colder climates (Pdh) kW 16.2 I j = dual mode temperature in colder climates (Pdh) kW 13.4 I j = dual mode temperature in colder climates (Pdh) kW 14.60 I j = dual mode temperature in warmer climates (Pdh) kW 14.60 I j = operating temperature limit in colder climates (Pdh) kW 16.2 I j = operating temperature limit in varmer climates (Pdh) kW 12.4 I j = operating temperature limit in warmer climates (Pdh) kW 12.4 I j = operating temperature limit in warmer climates (Pdh) kW 14.20 Di = operating temperature limit in warmer climates (Pdh) kW 14.00 Dual mode temperature in colder climates (Pdh) kW 14.00 Dual mode temperature in colder climates (Tbiv) °C -1.0 Dual mode temperature in moderate climates (Tbiv) °C -2 Dual mode temperature in moderate climates (Tbiv) °C -2 Seasonal room heating efficiency in moderate climates (Tbiv) °C -2 Seasonal room heating efficiency in moderate climates (Tbiv) °C -2		kW	16.40
Tj. = 12 °C heating output, partial load range under moderate climatic conditions (Pdh) kW 17.10 Tj. = 12 °C heating output, partial load range in warmer climates (Pdh) kW 16.2 Tj. = dual mode temperature in colder climates (Pdh) kW 13.4 Tj. = dual mode temperature in warmer climates (Pdh) kW 14.60 Tj. = dual mode temperature in warmer climates (Pdh) kW 16.6 Tj. = operating temperature limit in colder climates (Pdh) kW 12.4 Tj. = operating temperature limit in colder climates (Pdh) kW 12.4 Tj. = operating temperature limit in under moderate climates (Pdh) kW 14.20 Tj. = operating temperature limit in warmer climates (Pdh) kW 14.20 Tj. = operating temperature limit in warmer climates (Pdh) kW 14.00 For air/water heat pumps:Tj. = 15 °C (if TOL < -20 °C) (Pdh)	Tj = 7 °C heating output, partial load range in warmer climates (Pdh)	kW	16.2
Conditions (Pch) Tj = 12 °C heating output, partial load range in warmer climates (Pdh) KW	Tj = 12 °C heating output, partial load range in colder climates (Pdh)	kW	17.6
$\begin{array}{c} T] = \text{dual mode temperature in colder climates (Pdh)} & \text{kW} & 13.4 \\ T] = \text{dual mode temperature under moderate climatic conditions (Pdh)} & \text{kW} & 14.60 \\ T] = \text{dual mode temperature in warmer climates (Pdh)} & \text{kW} & 16.60 \\ T] = \text{operating temperature limit in colder climates (Pdh)} & \text{kW} & 12.4 \\ T] = \text{operating temperature limit in colder climates (Pdh)} & \text{kW} & 14.20 \\ T] = \text{operating temperature limit in der moderate climatic conditions (Pdh)} & \text{kW} & 14.20 \\ T] = \text{operating temperature limit in warmer climates (Pdh)} & \text{kW} & 14.20 \\ T] = \text{operating temperature limit in warmer climates (Pdh)} & \text{kW} & 14.20 \\ T] = \text{operating temperature limit in warmer climates (Pdh)} & \text{kW} & 14.00 \\ Dual mode temperature in colder climates (Tbiv)} & {}^{\circ}\text{C} & -10 \\ Dual mode temperature in moderate climates (Tbiv)} & {}^{\circ}\text{C} & -2 \\ Seasonal room heating efficiency in colder climates (Tbiv)} & {}^{\circ}\text{C} & -2 \\ Seasonal room heating efficiency in moderate climates for average} & 109 \\ temperature applications (Tls) & 15 \\ Seasonal room heating efficiency in warmer climates for average} & 120 \\ temperature applications (Tls) & 25 \\ T] = -7 {}^{\circ}\text{C COP}$, partial load range in colder climates (COPd) & 2.58 \\ T] = -7 {}^{\circ}\text{C COP}, partial load range under moderate climatic conditions (COPd) & 2.22 \\ T] = 2 {}^{\circ}\text{C COP}, partial load range in warmer climates (COPd) & 2.22 \\ T] = 2 {}^{\circ}\text{C COP}, partial load range in warmer climates (COPd) & 3.06 \\ T] = 7 {}^{\circ}\text{C COP}, partial load range in older roderate climatic conditions (COPd) & 3.57 \\ T] = 7 {}^{\circ}\text{C COP}, partial load range in warmer climates (COPd) & 3.57 \\ T] = 7 {}^{\circ}\text{C COP}, partial load range in older climates (COPd) & 3.57 \\ T] = 7 {}^{\circ}\text{C COP}, partial load range in warmer climates (COPd) & 3.59 \\ T] = 7 {}^{\circ}\text{C COP}, partial load range in colder climates (COPd) & 3.50 \\ T] = 12 {}^{\circ}\text{C COP}, partial load range in colder climates (COPd) & 3.53 \\ T] = 7 {}^{\circ}\text{C COP}, partial		kW	17.10
Tj = dual mode temperature under moderate climatic conditions (Pdh) kW 14.60 Tj = dual mode temperature in warmer climates (Pdh) kW 16 Tj = operating temperature limit in colder climates (Pdh) kW 12.4 Tj = operating temperature limit in under moderate climatic conditions (Pdh) kW 14.20 Tj = operating temperature limit in warmer climates (Pdh) kW 14.20 Tj = operating temperature limit in warmer climates (Pdh) kW 14.00 Dual mode temperature in colder climates (Tbiv) °C -15 Dual mode temperature in moderate climates (Tbiv) °C -5 Dual mode temperature in warmer climates (Tbiv) °C -2 Seasonal room heating efficiency in colder climates for average temperature applications (Ts) % 109 Seasonal room heating efficiency in moderate climates for average temperature applications (Ts) % 120 Seasonal room heating efficiency in warmer climates for average temperature applications (Ts) % 120 Tj = -7 °C COP, partial load range in colder climates (COPd) 2.58 12 Tj = -7 °C COP, partial load range in warmer climates (COPd) 2.25 12 2 °C COP, partial load range in warmer climates (COPd) 3.26 Tj	Tj = 12 °C heating output, partial load range in warmer climates (Pdh)	kW	16.2
Tj = dual mode temperature in warmer climates (Pdh) kW 16 Tj = operating temperature limit in colder climates (Pdh) kW 12.4 Tj = operating temperature limit in colder climates (Pdh) kW 14.20 Tj = operating temperature limit in warmer climates (Pdh) kW 16 For air/water heat pumps: Tj = ·15 °C (if ToL< - 20 °C) (Pdh)	Tj = dual mode temperature in colder climates (Pdh)	kW	13.4
$ \begin{array}{c} T_{j} = \text{operating temperature limit in colder climates (Pdh)} & \text{kW} & 12.4 \\ T_{j} = \text{operating temperature limit in warmer climates (conditions (Pdh)} & \text{kW} & 14.20 \\ T_{j} = \text{operating temperature limit in warmer climates (Pdh)} & \text{kW} & 14.20 \\ T_{j} = \text{operating temperature limit in warmer climates (Pdh)} & \text{kW} & 14.00 \\ T_{j} = \text{operating temperature in colder climates (Pdh)} & \text{kW} & 14.00 \\ T_{j} = \text{operating temperature in colder climates (Tbiv)} & ^{\circ}\text{C} & -10 \\ T_{j} = \text{operating temperature in colder climates (Tbiv)} & ^{\circ}\text{C} & -5 \\ T_{j} = \text{operating temperature in moderate climates (Tbiv)} & ^{\circ}\text{C} & -2 \\ T_{j} = \text{operating temperature in moderate climates (Tbiv)} & ^{\circ}\text{C} & -2 \\ T_{j} = \text{operating temperature in warmer climates (Tbiv)} & ^{\circ}\text{C} & -2 \\ T_{j} = \text{operating temperature in warmer climates (Tbiv)} & ^{\circ}\text{C} & -2 \\ T_{j} = \text{operating temperature in warmer climates (Tbiv)} & ^{\circ}\text{C} & -2 \\ T_{j} = \text{operating temperature in warmer climates (Tbiv)} & ^{\circ}\text{C} & -2 \\ T_{j} = \text{operating temperature in warmer climates (Tbiv)} & ^{\circ}\text{C} & -2 \\ T_{j} = \text{operating temperature in warmer climates for average} & \text{operating efficiency in moderate climates for average} & \text{operating efficiency in warmer climates for average} & \text{operating efficiency in warmer climates for average} & \text{operating efficiency in warmer climates (COPd)} & 2.58 \\ T_{j} = -7 ^{\circ}\text{C COP, partial load range in colder climates (COPd)} & 2.58 \\ T_{j} = -7 ^{\circ}\text{C COP, partial load range in warmer climates (COPd)} & 2.22 \\ T_{j} = 2 ^{\circ}\text{C COP, partial load range in warmer climates (COPd)} & 3.00 \\ T_{j} = 2 ^{\circ}\text{C COP, partial load range in warmer climates (COPd)} & 3.00 \\ T_{j} = 7 ^{\circ}\text{C COP, partial load range in warmer climates (COPd)} & 3.00 \\ T_{j} = 7 ^{\circ}\text{C COP, partial load range in warmer climates (COPd)} & 3.00 \\ T_{j} = 12 ^{\circ}\text{C COP, partial load range in warmer climates (COPd)} & 3.00 \\ T_{j} = 12 ^{\circ}C COP, partial load range in warmer climates $	Tj = dual mode temperature under moderate climatic conditions (Pdh)	kW	14.60
$ \begin{array}{c} T] = \operatorname{operating} \ \operatorname{temperature} \ \operatorname{limit} \ \operatorname{under} \ \operatorname{moderate} \ \operatorname{climatic} \ \operatorname{conditions} \ (Pdh) \\ T] = \operatorname{operating} \ \operatorname{temperature} \ \operatorname{limit} \ \operatorname{in} \ \operatorname{warmer} \ \operatorname{climates} \ (Pdh) \\ T] = \operatorname{operating} \ \operatorname{temperature} \ \operatorname{limit} \ \operatorname{in} \ \operatorname{warmer} \ \operatorname{climates} \ (Pdh) \\ T] = \operatorname{operating} \ \operatorname{temperature} \ \operatorname{limit} \ \operatorname{in} \ \operatorname{warmer} \ \operatorname{climates} \ (Pdh) \\ T] = \operatorname{operating} \ \operatorname{temperature} \ \operatorname{limit} \ \operatorname{in} \ \operatorname{warmer} \ \operatorname{climates} \ (Pdh) \\ T] = \operatorname{operating} \ \operatorname{temperature} \ \operatorname{limit} \ \operatorname{warmer} \ \operatorname{climates} \ (Tbiv) \\ T] = \operatorname{operating} \ operati$	Tj = dual mode temperature in warmer climates (Pdh)	kW	16
Tj = operating temperature limit in warmer climates (Pdh) kW 16 For air/water heat pumps: Tj = -15 °C (if TOL< -20 °C) (Pdh)	Tj = operating temperature limit in colder climates (Pdh)	kW	12.4
For air/water heat pumps:Tj = -15 °C (if TOL< -20 °C) (Pdh) kW 14.00 Dual mode temperature in colder climates (Tbiv) °C -10 Dual mode temperature in moderate climates (Tbiv) °C -5 Dual mode temperature in moderate climates (Tbiv) °C -20 °C (20 °C) Seasonal room heating efficiency in colder climates for average temperature applications (Ns) remperature applications (Ns) 8 Seasonal room heating efficiency in moderate climates for average temperature applications (Ns) 8 Seasonal room heating efficiency in moderate climates for average temperature applications (Ns) 8 Seasonal room heating efficiency in warmer climates for average temperature applications (Ns) 8 Seasonal room heating efficiency in warmer climates for average temperature applications (Ns) 8 Seasonal room heating efficiency in warmer climates for average temperature applications (Ns) 8 Seasonal room heating efficiency in warmer climates (COPd) 9 Tj = -7 °C COP, partial load range in colder climates (COPd) 9 Tj = -7 °C COP, partial load range under moderate climatic conditions (COPd) 9 Tj = 2 °C COP, partial load range in colder climates (COPd) 9 Tj = 2 °C COP, partial load range in warmer climates (COPd) 9 Tj = 2 °C COP, partial load range in colder climates (COPd) 9 Tj = 7 °C COP, partial load range in colder climates (COPd) 9 Tj = 7 °C COP, partial load range in warmer climates (COPd) 9 Tj = 7 °C COP, partial load range in warmer climates (COPd) 9 Tj = 7 °C COP, partial load range in warmer climates (COPd) 9 Tj = 7 °C COP, partial load range in warmer climates (COPd) 9 Tj = 12 °C COP, partial load range in warmer climates (COPd) 9 Tj = 12 °C COP, partial load range in warmer climates (COPd) 9 Tj = 12 °C COP, partial load range in warmer climates (COPd) 9 Tj = 12 °C COP, partial load range in warmer climates (COPd) 9 Tj = 12 °C COP, partial load range in warmer climates (COPd) 9 Tj = 12 °C COP, partial load range in warmer climates (COPd) 9 Tj = 12 °C COP, partial load range in warmer climates (COPd) 9 Tj = 12 °C COP, part	Tj = operating temperature limit under moderate climatic conditions (Pdh)	kW	14.20
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	· · ·		3.79
Tj = dual mode temperature in colder climates (COPd)	Tj = 12 °C COP, partial load range in warmer climates (COPd)		3.52
	Tj = dual mode temperature in colder climates (COPd)		2.4

Tj = dual mode temperature under moderate climatic conditions (COPd)		2.48
Tj = dual mode temperature in warmer climates (COPd)	•	2.57
Tj = operating temperature limit in colder climates (COPd)		1.81
Tj = operating temperature limit under moderate climatic conditions (COPd)		2.12
Tj = operating temperature limit in warmer climates (COPd)	•	2.57
For air/water heat pumps:Tj= -15°C (if TOL< -20 °C) (COPd)		1.84
Heating water operating temperature limit (WTOL)	°C	60
Power consumption, OFF state (Poff)	W	7.000
Power consumption, thermostat OFF state (PTO)	W	7
Standby power consumption (PSB)	W	7.000
Power consumption, operating state, with crankcase heating (PCK)	W	62.000
Booster heater heating output (PSUB)	kW	3.960
Type of energy supply, booster heater		electric
Power control	•	Fixed
Sound power level external	dB(A)	65
Sound power level internal	dB(A)	58
Annual energy consumption in colder climates for average temperature applications (QHE)	kWh/a	17275
Annual energy consumption in moderate climates for average temperature applications (QHE)	kWh/a	12656
Annual energy consumption in warmer climates for average temperature applications (QHE)	kWh/a	6955
Flow rate, heat source side	m³/h	3500
Special measures		For all special measures to be taken during assembly, installation or maintenance of the room heater, see the installation instructions