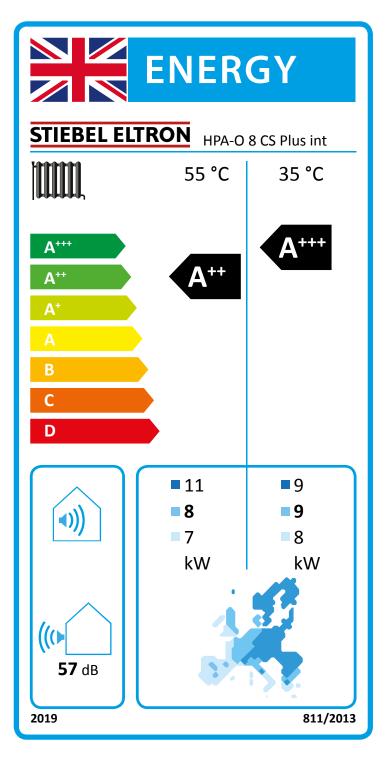


Product datasheet: Hot water storage tanks to regulation (EU) no. 812/2013 / (S.I. 2019 No. 539 / Schedule 2)

		HSBC 225 S 1
		206045
Manufacturer		STIEBEL ELTRON
Energy efficiency class		А
standing loss S	W	65
storage volume V		225



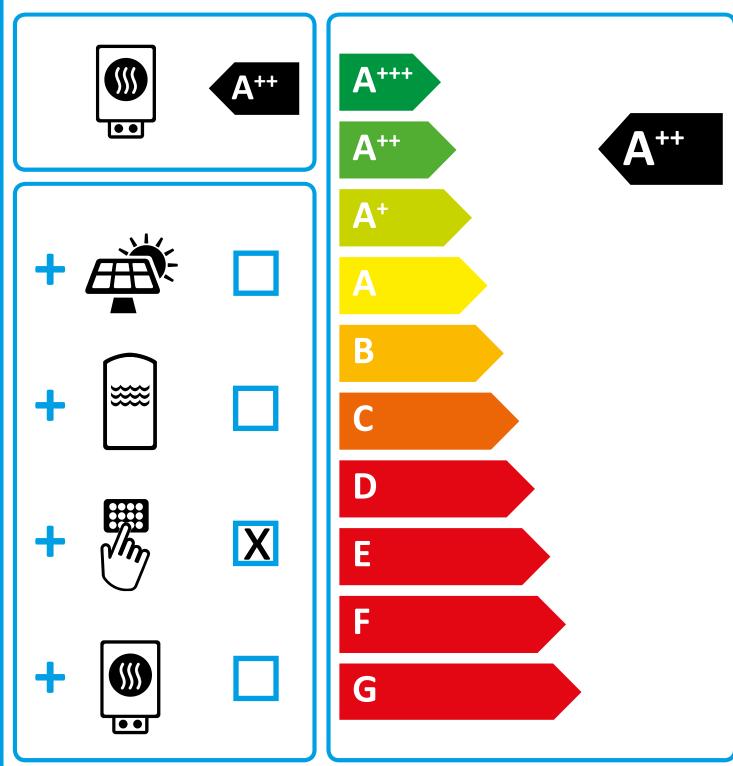
Product datasheet: Room heater to regulation (EU) no. 811/2013 / (S.I. 2019 No. 539 / Schedule 2)

		HPA-O 8 CS Plus int
Manufacturer		239171 STIEBEL ELTRON
Energy efficiency class for central heating in moderate climates for medium temperature applications		A++
Energy efficiency class for central heating in moderate climates for low temperature applications		A+++
Rated heating output in moderate climates for average temperature applications (Prated)	kW	8
Rated heating output in moderate climates for low temperature applications (Prated)	kW	9
Seasonal room heating efficiency in moderate climates for average temperature applications ($\ensuremath{\Pi}\xspace{s}\xspace{s}$	%	125
Seasonal room heating efficiency in moderate climates for low temperature applications ($\ensuremath{\Pi}$ s)	%	177
Annual energy consumption in moderate climates for average temperature applications (QHE)	kWh/a	4865
Annual energy consumption in moderate climates for low temperature applications (QHE)	kWh/a	4218
Sound power level external	dB(A)	57
Special measures		For all special measures to be taken during assembly, installation or maintenance of the room heater, see the installation instructions
Rated heating output in colder climates for average temperature applications (Prated)	kW	11
Rated heating output in colder climates for low temperature applications (Prated)	kW	9
Rated heating output in warmer climates for average temperature applications (Prated)	kW	7
Rated heating output in warmer climates for low temperature applications $(\ensuremath{\underline{P}}\xspace{rest}\mathsf{rest$	kW	8
Seasonal room heating efficiency in colder climates for average temperature applications ($\ensuremath{\Pi s}$)	%	103
Seasonal room heating efficiency in colder climates for low temperature applications ($\eta s)$	%	147
Seasonal room heating efficiency in warmer climates for average temperature applications ($\ensuremath{\Pi}$ s)	%	153
Seasonal room heating efficiency in warmer climates for low temperature applications ($\ensuremath{\Pi}\xspaces)$	%	215
Annual energy consumption in colder climates for average temperature applications (QHE)	kWh/a	10193
Annual energy consumption in colder climates for low temperature applications (QHE)	kWh/a	5722
Annual energy consumption in warmer climates for average temperature applications (QHE)	kWh/a	2048
Annual energy consumption in warmer climates for low temperature applications (QHE)	kWh/a	1867



STIEBEL ELTRON

HPA-O 8 CS Plus int



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

		HPA-O 8 CS Plus int
		239171
Manufacturer		STIEBEL ELTRON
Seasonal room heating efficiency in moderate climates for average temperature applications ($\ensuremath{\Pi s}$)	%	125
Temperature controller class		VI
Contribution of temperature controller to room heating energy efficiency	%	4
Room heating energy efficiency of composite system under moderate climatic conditions	%	129
Room heating energy efficiency of composite system under colder climatic conditions	%	107
Room heating energy efficiency of composite system under warmer climatic conditions	%	163
Value of differential between room heating energy efficiency under moderate climatic conditions and that under colder climatic conditions	%	22
Value of differential between room heating energy efficiency under warmer climatic conditions and that under moderate climatic conditions	%	34
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

		HPA-O 8 CS Plus int
		239171
Manufacturer		STIEBEL ELTRON
Heat source		Outside air
With booster heater		
Combi boiler with heat pump		
Rated heating output in colder climates for average temperature applications (Prated)	kW	11
Rated heating output in moderate climates for average temperature applications (Prated)	kW	8
Rated heating output in warmer climates for average temperature applications (Prated)	kW	7
Tj = -7 °C heating output, partial load range in colder climates (Pdh)	kW	6.6
Tj = -7 °C heating output, partial load range under moderate climatic conditions (Pdh)	kW	5.1
Tj = 2 °C heating output, partial load range in colder climates (Pdh)	kW	4.0
Tj = 2 °C heating output, partial load range under moderate climatic conditions (Pdh)	kW	4.1
Tj = 2 °C heating output, partial load range in warmer climates (Pdh)	kW	6.0
Tj = 7 °C heating output, partial load range in colder climates (Pdh)	kW	2.7
Tj = 7 °C heating output, partial load range under moderate climatic conditions (Pdh)	kW	2.6
Tj = 7 °C heating output, partial load range in warmer climates (Pdh)	kW	3.9
Tj = 12 °C heating output, partial load range in colder climates (Pdh)	kW	3.4
Tj = 12 °C heating output, partial load range under moderate climatic conditions (Pdh)	kW	3.3
Tj = 12 °C heating output, partial load range in warmer climates (Pdh)	kW	3.3
Tj = dual mode temperature in colder climates (Pdh)	kW	6.6
Tj = dual mode temperature under moderate climatic conditions (Pdh)	kW	6.1
Tj = dual mode temperature in warmer climates (Pdh)	kW	6.0
Tj = operating temperature limit in colder climates (Pdh)	kW	1.8
T_j = operating temperature limit under moderate climatic conditions (Pdh)	kW	5.1
Tj = operating temperature limit in warmer climates (Pdh)	kW	6.7
For air/water heat pumps:Tj = -15 °C (if TOL< -20 °C) (Pdh)	kW	0.0
Dual mode temperature in colder climates (Tbiv)	<u> </u>	-7
Dual mode temperature in moderate climates (Tbiv)	<u>0°</u>	-5
Dual mode temperature in warmer climates (Tbiv)	<u>_</u>	2
Seasonal room heating efficiency in colder climates for average temperature applications ($\ensuremath{\Pi}$ s)	%	103
Seasonal room heating efficiency in moderate climates for average temperature applications (\ensuremath{N} s)	%	125
Seasonal room heating efficiency in warmer climates for average temperature applications ($\ensuremath{\Pi s}\xspace)$	%	153
Tj = -7 °C COP, partial load range in colder climates (COPd)		2.40
Tj = -7 °C COP, partial load range under moderate climatic conditions (COPd)		2.00
Tj = 2 °C COP, partial load range in colder climates (COPd)		3.60
Tj = 2 °C COP, partial load range under moderate climatic conditions (COPd)		3.30
Tj = 2 °C COP, partial load range in warmer climates (COPd)		2.20
Tj = 7 °C COP, partial load range in colder climates (COPd)		5.00
Tj = 7 °C COP, partial load range under moderate climatic conditions (COPd)		4.60
Tj = 7 °C COP, partial load range in warmer climates (COPd)		3.50
Tj = 12 °C COP, partial load range in colder climates (COPd)		6.20
Tj = 12 °C COP, partial load range under moderate climatic conditions (COPd)		6
Tj = 12 °C COP, partial load range in warmer climates (COPd)	· · · · · ·	5.70
Tj = dual mode temperature in colder climates (COPd)	· · · · · ·	2.40
T_j = dual mode temperature under moderate climatic conditions (COPd)		2.30
Tj = dual mode temperature in warmer climates (COPd)		2.20

Tj = operating temperature limit in colder climates (COPd)		1.40
Tj = operating temperature limit under moderate climatic conditions (COPd)		2.00
Tj = operating temperature limit in warmer climates (COPd)		2.20
For air/water heat pumps:Tj= -15°C (if TOL< -20 °C) (COPd)		0.00
Operating temperature limit in colder climates (TOL)	°C	-15
Operating temperature limit in moderate climates (TOL)	°C	-5
Operating temperature limit in warmer climates (TOL)	°C	2
Heating water operating temperature limit in colder climates (WTOL)	°C	60
Heating water operating temperature limit (WTOL)	°C	60
Heating water operating temperature limit in warmer climates (WTOL)	°C	60
Power consumption, OFF state (Poff)	W	17
Power consumption, thermostat OFF state (PTO)	W	30
Standby power consumption (PSB)	W	17
Power consumption, operating state, with crankcase heating (PCK)	W	5
Booster heater heating output in colder climates (Psup)	kW	11.0
Booster heater heating output in moderate climate (Psup)	kW	8.0
Booster heater heating output in warmer climates (Psup)	kW	0.0
Type of energy supply, booster heater		electric
Power control		variable
Sound power level external	dB(A)	57
Annual energy consumption in colder climates for average temperature applications (QHE)	kWh/a	10193
Annual energy consumption in moderate climates for average temperature applications (QHE)	kWh/a	4865
Annual energy consumption in warmer climates for average temperature applications (QHE)	kWh/a	2048
Flow rate, heat source side	m³/h	2200
Special measures		For all special measures to be taken during assembly, installation or maintenance of the room heater, see the installation instructions