

Subtype S-Therm Ontario SMH5-80 100

Certificate Holder	SINCLAIR Global Group s.r.o.
Address	Purkyňova 45
ZIP	61200
City	Brno
Country	CZ
Certification Body	BRE Global Limited
Subtype title	S-Therm Ontario SMH5-80 100
Registration number	041-K037-22
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.6 kg
Certification Date	03.03.2023
Testing basis	Heat Pump Keymark Scheme Rules Rev 11

Model SMH5-80B*/SMH-80IRBC

Model name	SMH5-80B*/SMH-80IRBC
Application	Heating + DHW + low temp
Units	Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	123 %
COP	2.93
Heating up time	2:04 h:min
Standby power input	58.5 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	325 l

EN 16147 | Colder Climate

Declared load profile	XL
Efficiency η_{DHW}	101 %
COP	2.41
Heating up time	2:30 h:min
Standby power input	72.9 W
Reference hot water temperature	48.0 °C
Mixed water at 40°C	325 l

EN 16147 | Warmer Climate

Declared load profile	XL
Efficiency η_{DHW}	123 %
COP	2.93
Heating up time	2:07 h:min
Standby power input	58.6 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	325 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	8.20 kW	7.81 kW
El input	1.54 kW	2.44 kW
COP	5.32	3.20

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	64 dB(A)	68 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	177 %	145 %
Prated	8.00 kW	9.00 kW
SCOP	4.50	3.70
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.40 kW	8.30 kW
COP Tj = -7°C	3.12	2.33
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.40 kW	5.20 kW
COP Tj = +2°C	4.44	3.57
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	3.00 kW	3.30 kW
COP Tj = +7°C	5.31	4.96
Cdh Tj = +7 °C	0.950	0.970
Pdh Tj = 12°C	3.20 kW	3.00 kW
COP Tj = 12°C	7.69	6.56
Cdh Tj = +12 °C	0.940	0.960
Pdh Tj = Tbiv	7.40 kW	8.30 kW
COP Tj = Tbiv	3.12	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.80 kW	8.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.77	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.20 kW	0.30 kW
Annual energy consumption Q _{he}	3827 kWh	5206 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	165 %	125 %
Prated	9.00 kW	8.00 kW
SCOP	4.20	3.20
T _{biv}	-15 °C	-15 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	5.70 kW	5.20 kW
COP T _j = -7°C	3.45	2.83
C _{dh} T _j = -7 °C	0.990	0.990
P _{dh} T _j = +2°C	3.50 kW	2.90 kW
COP T _j = +2°C	5.16	3.73
C _{dh} T _j = +2 °C	0.970	0.980
P _{dh} T _j = +7°C	2.60 kW	2.40 kW
COP T _j = +7°C	6.69	4.44
C _{dh} T _j = +7 °C	0.950	0.960
P _{dh} T _j = 12°C	3.00 kW	3.00 kW
COP T _j = 12°C	7.53	7.10
C _{dh} T _j = +12 °C	0.950	0.960
P _{dh} T _j = T _{biv}	7.40 kW	6.70 kW
COP T _j = T _{biv}	2.70	2.09
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	6.10 kW	4.10 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	1.87	1.06
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.990	0.990
WTOL	65 °C	65 °C
P _{off}	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.90 kW	3.90 kW
Annual energy consumption Q _{he}	5303 kWh	6322 kWh
P _{dh} T _j = -15°C (if TOL	7.40	6.70
COP T _j = -15°C (if TOL	2.70	2.10
C _{dh} T _j = -15 °C	0.990	0.990

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
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η_s	257 %	190 %
Prated	9.00 kW	9.00 kW
SCOP	6.50	4.83
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.40 kW	8.60 kW
COP Tj = +2°C	3.85	2.59
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	6.10 kW	6.30 kW
COP Tj = +7°C	6.07	4.21
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	3.20 kW	3.00 kW
COP Tj = 12°C	7.83	6.32
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	9.40 kW	8.60 kW
COP Tj = Tbiv	3.85	2.59
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.40 kW	8.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.85	2.58
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1942 kWh	2372 kWh

Model SMH5-80B*-3/SMH-80IRBC-3

Model name	SMH5-80B*-3/SMH-80IRBC-3
Application	Heating + DHW + low temp
Units	Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	123 %
COP	2.93
Heating up time	2:04 h:min
Standby power input	58.5 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	325 l

EN 16147 | Colder Climate

Declared load profile	XL
Efficiency η_{DHW}	101 %
COP	2.41
Heating up time	2:30 h:min
Standby power input	72.9 W
Reference hot water temperature	48.0 °C
Mixed water at 40°C	325 l

EN 16147 | Warmer Climate

Declared load profile	XL
Efficiency η_{DHW}	123 %
COP	2.93
Heating up time	2:07 h:min
Standby power input	58.6 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	325 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	8.20 kW	7.81 kW
El input	1.62 kW	2.55 kW
COP	5.06	3.06

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	64 dB(A)	68 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	176 %	135 %
Prated	8.00 kW	9.00 kW
SCOP	4.48	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.40 kW	7.80 kW
COP Tj = -7°C	3.12	2.14
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.20 kW	5.00 kW
COP Tj = +2°C	4.17	3.36
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.84 kW	3.30 kW
COP Tj = +7°C	5.92	4.53
Cdh Tj = +7 °C	0.950	0.970
Pdh Tj = 12°C	3.20 kW	3.00 kW
COP Tj = 12°C	7.18	5.44
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	7.40 kW	7.80 kW
COP Tj = Tbiv	3.12	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.00 kW	8.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.40 kW
Annual energy consumption Q _{he}	3882 kWh	5261 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	142 %	120 %
Prated	9.00 kW	8.00 kW
SCOP	3.63	3.08
T _{biv}	-15 °C	-15 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	5.40 kW	5.10 kW
COP T _j = -7°C	2.75	2.75
C _{dh} T _j = -7 °C	0.990	0.990
P _{dh} T _j = +2°C	3.20 kW	3.00 kW
COP T _j = +2°C	4.52	3.40
C _{dh} T _j = +2 °C	0.980	0.970
P _{dh} T _j = +7°C	2.60 kW	3.20 kW
COP T _j = +7°C	5.63	4.61
C _{dh} T _j = +7 °C	0.940	0.960
P _{dh} T _j = 12°C	3.20 kW	3.00 kW
COP T _j = 12°C	7.01	5.79
C _{dh} T _j = +12 °C	0.950	0.950
P _{dh} T _j = T _{biv}	7.20 kW	6.80 kW
COP T _j = T _{biv}	2.63	2.20
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	6.10 kW	4.40 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	1.87	1.22
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.990	0.990
WTOL	65 °C	65 °C
P _{off}	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.90 kW	3.60 kW
Annual energy consumption Q _{he}	5935 kWh	6706 kWh
P _{dh} T _j = -15°C (if TOL	7.20	6.80
COP T _j = -15°C (if TOL	2.63	2.20
C _{dh} T _j = -15 °C	0.990	0.990

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
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η_s	226 %	168 %
Prated	9.00 kW	9.00 kW
SCOP	5.73	4.28
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.60 kW	8.90 kW
COP Tj = +2°C	2.93	2.12
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.40 kW	6.30 kW
COP Tj = +7°C	5.40	3.99
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	3.00 kW	3.00 kW
COP Tj = 12°C	7.04	5.29
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	8.60 kW	8.90 kW
COP Tj = Tbiv	2.93	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.60 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.93	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2001 kWh	2751 kWh

Model SMH5-100B*/SMH-100IRBC2

Model name	SMH5-100B*/SMH-100IRBC2
Application	Heating + DHW + low temp
Units	Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	123 %
COP	2.93
Heating up time	2:04 h:min
Standby power input	58.5 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	325 l

EN 16147 | Colder Climate

Declared load profile	XL
Efficiency η_{DHW}	101 %
COP	2.41
Heating up time	2:30 h:min
Standby power input	72.9 W
Reference hot water temperature	48.0 °C
Mixed water at 40°C	325 l

EN 16147 | Warmer Climate

Declared load profile	XL
Efficiency η_{DHW}	123 %
COP	2.93
Heating up time	2:07 h:min
Standby power input	58.6 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	325 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.20 kW	10.30 kW
El input	2.02 kW	3.30 kW
COP	5.05	3.12

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	64 dB(A)	68 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	176 %	135 %
Prated	9.00 kW	10.00 kW
SCOP	4.48	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.00 kW	9.00 kW
COP Tj = -7°C	2.90	2.18
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.60 kW	5.20 kW
COP Tj = +2°C	4.41	3.44
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.80 kW	3.60 kW
COP Tj = +7°C	5.89	4.39
Cdh Tj = +7 °C	0.950	0.970
Pdh Tj = 12°C	3.20 kW	2.90 kW
COP Tj = 12°C	6.97	5.19
Cdh Tj = +12 °C	0.940	0.960
Pdh Tj = Tbiv	8.00 kW	9.00 kW
COP Tj = Tbiv	2.90	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.50 kW	9.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.50 kW	0.50 kW
Annual energy consumption Q _{he}	4163 kWh	6076 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	152 %	119 %
Prated	10.00 kW	9.00 kW
SCOP	3.88	3.05
T _{biv}	-15 °C	-15 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	6.10 kW	5.50 kW
COP T _j = -7°C	3.23	2.77
C _{dh} T _j = -7 °C	0.990	0.990
P _{dh} T _j = +2°C	3.40 kW	3.10 kW
COP T _j = +2°C	4.72	3.48
C _{dh} T _j = +2 °C	0.970	0.980
P _{dh} T _j = +7°C	2.70 kW	3.00 kW
COP T _j = +7°C	5.59	4.17
C _{dh} T _j = +7 °C	0.950	0.960
P _{dh} T _j = 12°C	3.20 kW	3.10 kW
COP T _j = 12°C	6.85	5.42
C _{dh} T _j = +12 °C	0.950	0.960
P _{dh} T _j = T _{biv}	8.00 kW	7.50 kW
COP T _j = T _{biv}	2.50	2.10
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	6.00 kW	5.20 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	1.86	1.22
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.990	0.990
WTOL	65 °C	65 °C
P _{off}	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	3.80 kW
Annual energy consumption Q _{he}	6262 kWh	7415 kWh
P _{dh} T _j = -15°C (if TOL	8.00	7.50
COP T _j = -15°C (if TOL	2.50	2.10
C _{dh} T _j = -15 °C	0.990	0.990

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
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η_s	223 %	169 %
Prated	10.00 kW	10.00 kW
SCOP	5.65	4.30
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.60 kW	10.10 kW
COP Tj = +2°C	3.47	2.55
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.90 kW	6.50 kW
COP Tj = +7°C	5.45	3.90
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	3.00 kW	2.90 kW
COP Tj = 12°C	6.55	5.19
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	9.60 kW	10.10 kW
COP Tj = Tbiv	3.47	2.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.60 kW	10.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.47	2.55
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2266 kWh	3157 kWh

Model SMH5-100B*-3/SMH-100IRBC2-3

Model name	SMH5-100B*-3/SMH-100IRBC2-3
Application	Heating + DHW + low temp
Units	Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	123 %
COP	2.93
Heating up time	2:04 h:min
Standby power input	58.5 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	325 l

EN 16147 | Colder Climate

Declared load profile	XL
Efficiency η_{DHW}	101 %
COP	2.41
Heating up time	2:30 h:min
Standby power input	72.9 W
Reference hot water temperature	48.0 °C
Mixed water at 40°C	325 l

EN 16147 | Warmer Climate

Declared load profile	XL
Efficiency η_{DHW}	123 %
COP	2.93
Heating up time	2:07 h:min
Standby power input	58.6 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	325 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.20 kW	10.30 kW
El input	2.06 kW	3.38 kW
COP	4.95	3.05

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	64 dB(A)	68 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	189 %	140 %
Prated	9.00 kW	10.00 kW
SCOP	4.80	3.58
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.30 kW	9.00 kW
COP Tj = -7°C	3.15	2.45
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.60 kW	5.20 kW
COP Tj = +2°C	4.32	3.44
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	3.30 kW	3.50 kW
COP Tj = +7°C	7.46	4.63
Cdh Tj = +7 °C	0.950	0.970
Pdh Tj = 12°C	3.20 kW	2.90 kW
COP Tj = 12°C	7.44	5.21
Cdh Tj = +12 °C	0.940	0.960
Pdh Tj = Tbiv	8.30 kW	9.00 kW
COP Tj = Tbiv	3.15	2.45
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.30 kW	9.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.70 kW	0.40 kW
Annual energy consumption Q _{he}	4069 kWh	5907 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	150 %	124 %
Prated	10.00 kW	9.00 kW
SCOP	3.83	3.18
T _{biv}	-15 °C	-15 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	5.70 kW	5.80 kW
COP T _j = -7°C	2.95	2.95
C _{dh} T _j = -7 °C	0.990	0.990
P _{dh} T _j = +2°C	3.40 kW	3.50 kW
COP T _j = +2°C	4.71	3.50
C _{dh} T _j = +2 °C	0.970	0.980
P _{dh} T _j = +7°C	2.80 kW	2.70 kW
COP T _j = +7°C	6.23	4.83
C _{dh} T _j = +7 °C	0.950	0.960
P _{dh} T _j = 12°C	3.20 kW	3.40 kW
COP T _j = 12°C	6.85	6.08
C _{dh} T _j = +12 °C	0.950	0.960
P _{dh} T _j = T _{biv}	7.80 kW	7.60 kW
COP T _j = T _{biv}	2.73	2.20
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	6.00 kW	4.10 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	1.86	1.06
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.990	0.990
WTOL	65 °C	65 °C
P _{off}	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.90 kW
Annual energy consumption Q _{he}	6194 kWh	7206 kWh
P _{dh} T _j = -15°C (if TOL	7.80	7.60
COP T _j = -15°C (if TOL	2.73	2.20
C _{dh} T _j = -15 °C	0.990	0.990

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
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η_s	223 %	165 %
Prated	10.00 kW	10.00 kW
SCOP	5.65	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.10 kW	10.10 kW
COP Tj = +2°C	3.70	2.55
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	6.00 kW	6.00 kW
COP Tj = +7°C	5.63	3.63
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	3.00 kW	3.30 kW
COP Tj = 12°C	6.22	5.30
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	10.10 kW	10.10 kW
COP Tj = Tbiv	3.70	2.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.10 kW	10.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.70	2.55
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2399 kWh	3236 kWh