

Subtype S-Therm Ontario SMH-40

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 SMH-40
Registration number	041-K037-10
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	0.87 kg
Certification Date	28.02.2023
Testing basis	Heat Pump Keymark Scheme Rules Rev 11
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

**Model SMH-40IRB**

Model name	SMH-40IRB
Application	Heating + DHW
Units	Outdoor
Climate zone (for heating)	n/a
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 $\eta_{DHW}$	106 %
COP	2.53
Heating up time	2:59 h:min
Standby power input	62.2 W
Reference hot water temperature	51.7 °C
Mixed water at 40°C	379 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	2.78 kW	
El input	1.32 kW	
COP	2.11	

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	127 %	
Prated	6.00 kW	

SCOP	3.26
Tbiv	-7 °C
TOL	-10 °C
Pdh Tj = -7°C	5.22 kW
COP Tj = -7°C	2.22
Cdh Tj = -7 °C	0.97
Pdh Tj = +2°C	3.31 kW
COP Tj = +2°C	3.13
Cdh Tj = +2 °C	0.97
Pdh Tj = +7°C	2.46 kW
COP Tj = +7°C	4.19
Cdh Tj = +7 °C	0.97
Pdh Tj = 12°C	2.98 kW
COP Tj = 12°C	5.52
Cdh Tj = +12 °C	0.97
Pdh Tj = Tbiv	5.22 kW
COP Tj = Tbiv	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.78
WTOL	55 °C
Poff	18 W
PTO	18 W
PSB	18 W
PCK	0 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	1.66 kW
Annual energy consumption Qhe	3808 kWh