

## Subtype S-Therm Ontario SMH-140

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-140
Registration number	041-K037-15
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	2.2 kg
Certification Date	28.02.2023
Testing basis	Heat Pump Keymark Scheme Rules Rev 11

## Model SMH-140IRB2

Model name	SMH-140IRB2
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 $\eta_{DHW}$	110 %
COP	2.62
Heating up time	1:52 h:min
Standby power input	62.6 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	372 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	13.50 kW	
El input	5.19 kW	
COP	2.60	

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	70 dB(A)	

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	127 %	
Prated	11.00 kW	
SCOP	3.25	

Tbiv	-7 °C
TOL	-10 °C
Pdh Tj = -7°C	10.34 kW
COP Tj = -7°C	2.13
Cdh Tj = -7 °C	0.98
Pdh Tj = +2°C	6.00 kW
COP Tj = +2°C	3.15
Cdh Tj = +2 °C	0.98
Pdh Tj = +7°C	5.76 kW
COP Tj = +7°C	4.24
Cdh Tj = +7 °C	0.98
Pdh Tj = 12°C	6.36 kW
COP Tj = 12°C	5.06
Cdh Tj = +12 °C	0.98
Pdh Tj = Tbiv	10.34 kW
COP Tj = Tbiv	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.41 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	0.59 kW
Annual energy consumption Qhe	6993 kWh

## Model SMH-140IRB2-3

Model name	SMH-140IRB2-3
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	3x400V 50Hz
Off-peak product	n/a

## Outdoor Air/Water

### EN 16147 | Average Climate

Declared load profile	XL
Efficiency $\eta_{DHW}$	110 %
COP	2.62
Heating up time	1:52 h:min
Standby power input	62.6 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	372 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	13.50 kW	
El input	5.19 kW	
COP	2.60	

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	70 dB(A)	

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	127 %	
Prated	11.00 kW	
SCOP	3.25	

Tbiv	-7 °C
TOL	-10 °C
Pdh Tj = -7°C	10.34 kW
COP Tj = -7°C	2.13
Cdh Tj = -7 °C	0.98
Pdh Tj = +2°C	6.00 kW
COP Tj = +2°C	3.15
Cdh Tj = +2 °C	0.98
Pdh Tj = +7°C	5.76 kW
COP Tj = +7°C	4.24
Cdh Tj = +7 °C	0.98
Pdh Tj = 12°C	6.36 kW
COP Tj = 12°C	5.06
Cdh Tj = +12 °C	0.98
Pdh Tj = Tbiv	10.34 kW
COP Tj = Tbiv	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.41 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	0.59 kW
Annual energy consumption Qhe	6993 kWh