

## Subtype S-Therm Ontario Split 40 60

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 Split 40 60
Registration number	041-K037-17
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1 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 GSH-40IRB/GSH-40ERB

Model name	GSH-40IRB/GSH-40ERB
Application	Heating + DHW
Units	Indoor, 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 $\eta_{DHW}$	122 %
COP	2.92
Heating up time	3.14 h:min
Standby power input	52.3 W
Reference hot water temperature	51.7 °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	3.60 kW	
El input	1.31 kW	
COP	2.75	

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	
Sound power level outdoor	62 dB(A)	

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	128 %	

Prated	5.00 kW
SCOP	3.27
Tbiv	-7 °C
TOL	-10 °C
Pdh Tj = -7°C	4.02 kW
COP Tj = -7°C	2.03
Cdh Tj = -7 °C	0.99
Pdh Tj = +2°C	2.64 kW
COP Tj = +2°C	3.27
Cdh Tj = +2 °C	0.97
Pdh Tj = +7°C	2.33 kW
COP Tj = +7°C	4.30
Cdh Tj = +7 °C	0.95
Pdh Tj = 12°C	2.78 kW
COP Tj = 12°C	6.00
Cdh Tj = +12 °C	0.95
Pdh Tj = Tbiv	4.02 kW
COP Tj = Tbiv	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.38
WTOL	60 °C
Poff	25 W
PTO	25 W
PSB	25 W
PCK	25 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	1.20 kW
Annual energy consumption Qhe	3152 kWh

Model GSH-60IRB/GSH-60ERB		
Model name	GSH-60IRB/GSH-60ERB	
Application	Heating + DHW	
Units	Indoor, 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 $\eta_{DHW}$	122 %	
COP	2.92	
Heating up time	3.14 h:min	
Standby power input	52.3 W	
Reference hot water temperature	51.7 °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	5.61 kW	
El input	1.93 kW	
COP	2.90	
EN 12102-1   Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	
Sound power level outdoor	62 dB(A)	
EN 14825   Average Climate		
	Low temperature	Medium temperature
$\eta_s$	127 %	

Prated	5.00 kW
SCOP	3.27
Tbiv	-7 °C
TOL	-10 °C
Pdh Tj = -7°C	4.02 kW
COP Tj = -7°C	2.03
Cdh Tj = -7 °C	0.99
Pdh Tj = +2°C	2.64 kW
COP Tj = +2°C	3.27
Cdh Tj = +2 °C	0.97
Pdh Tj = +7°C	2.40 kW
COP Tj = +7°C	4.20
Cdh Tj = +7 °C	0.96
Pdh Tj = 12°C	2.78 kW
COP Tj = 12°C	6.00
Cdh Tj = +12 °C	0.95
Pdh Tj = Tbiv	4.02 kW
COP Tj = Tbiv	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.38
WTOL	60 °C
Poff	25 W
PTO	25 W
PSB	25 W
PCK	25 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	1.20 kW
Annual energy consumption Qhe	3169 kWh