Subtype Tri-Thermal Split series 12 14 16 kW(Single Phase)

Certificate Holder	GD TCL Intelligent Heating & Ventilating Equipment Co., Ltd.
Address	No. 7 Yuanlin Road,
ZIP	
City	Guangdong
Country	CN
Certification Body	BRE Global Limited
Subtype title	Tri-Thermal Split series 12 14 16 kW(Single Phase)
Registration number	041-K051-05
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.84 kg
Certification Date	29.08.2023
Testing basis	Heat Pump Keymark Scheme Rules Rev 12

Model Indoor unit: SMKL-16D/HBp-A, Outdoor unit: THF-12D/HBpO-A	
Model name	Indoor unit: SMKL-16D/HBp-A, Outdoor unit: THF-12D/HBpO-A
Application	Heating (medium temp)
Units	Indoor, 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 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 12102-1 | Average Climate	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate	Low temperature	Medium temperature
ηs	188 %	136 %
Prated	12.00 kW	12.00 kW
SCOP	4.78	3.48
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.80 kW	10.80 kW
COP Tj = -7°C	2.92	2.12
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.00 kW	6.60 kW
COP Tj = +2°C	4.53	3.29
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.60 kW	4.40 kW
COP Tj = +7°C	6.66	4.74
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.20 kW	4.00 kW
COP Tj = 12°C	8.92	7.28
Cdh Tj = +12 °C	0.900	0.900

Pdh Tj = Tbiv	10.80 kW	10.80 kW
COP Tj = Tbiv	2.92	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.40 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.60 kW	2.00 kW
Annual energy consumption Qhe	5291 kWh	7221 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	163 %	119 %
Prated	11.00 kW	10.00 kW
SCOP	4.15	3.05
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.20 kW	6.70 kW
COP Tj = -7°C	3.51	2.58
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.20 kW	4.00 kW
COP Tj = +2°C	5.05	3.68
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.20 kW	2.90 kW
COP Tj = +7°C	6.17	4.57
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.60 kW	3.30 kW
COP Tj = 12°C	8.19	6.59
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	9.30 kW	8.60 kW
COP Tj = Tbiv	2.59	1.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.20 kW	4.70 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.21
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.80 kW	5.30 kW
Annual energy consumption Qhe	6751 kWh	8474 kWh
Pdh Tj = -15°C (if TOL	9.30	8.60
COP Tj = -15°C (if TOL	2.59	1.89
Cdh Tj = -15 °C	0.900	0.900

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	252 %	173 %
Prated	11.00 kW	12.00 kW
SCOP	6.39	4.41
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.00 kW	12.00 kW
COP Tj = +2°C	3.61	2.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	7.20 kW	8.00 kW
COP Tj = +7°C	5.65	3.75
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.70 kW	4.30 kW
COP Tj = 12°C	8.33	5.95
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.20 kW	8.00 kW
COP Tj = Tbiv	5.65	3.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.61	2.27
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C

Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2330 kWh	3752 kWh

Model Indoor unit: SMKLd-16D/3HBp-A, Outdoor unit: THF-12D/HBpO-A	
Model name	Indoor unit: SMKLd-16D/3HBp-A, Outdoor unit: THF-12D/HBpO-A
Application	Heating (medium temp)
Units	Indoor, 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 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 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	188 %	136 %
Prated	12.00 kW	12.00 kW
SCOP	4.78	3.48
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.80 kW	10.80 kW
COP Tj = -7°C	2.92	2.12
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.00 kW	6.60 kW
COP Tj = +2°C	4.53	3.29
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.60 kW	4.40 kW
COP Tj = +7°C	6.66	4.74
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.20 kW	4.00 kW
COP Tj = 12°C	8.92	7.28
Cdh Tj = +12 °C	0.900	0.900

Pdh Tj = Tbiv	10.80 kW	10.80 kW
COP Tj = Tbiv	2.92	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.40 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.60 kW	2.00 kW
Annual energy consumption Qhe	5291 kWh	7221 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	163 %	119 %
Prated	11.00 kW	10.00 kW
SCOP	4.15	3.05
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.20 kW	6.70 kW
COP Tj = -7°C	3.51	2.58
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.20 kW	4.00 kW
COP Tj = +2°C	5.05	3.68
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.20 kW	2.90 kW
COP Tj = +7°C	6.17	4.57
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.60 kW	3.30 kW
COP Tj = 12°C	8.19	6.59
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	9.30 kW	8.60 kW
COP Tj = Tbiv	2.59	1.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.20 kW	4.70 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.21
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.80 kW	5.30 kW
Annual energy consumption Qhe	6751 kWh	8474 kWh
Pdh Tj = -15°C (if TOL	9.30	8.60
COP Tj = -15°C (if TOL	2.59	1.89
Cdh Tj = -15 °C	0.900	0.900

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	252 %	173 %
Prated	11.00 kW	12.00 kW
SCOP	6.39	4.41
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.00 kW	12.00 kW
COP Tj = +2°C	3.61	2.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	7.20 kW	8.00 kW
COP Tj = +7°C	5.65	3.75
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.70 kW	4.30 kW
COP Tj = 12°C	8.33	5.95
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.20 kW	8.00 kW
COP Tj = Tbiv	5.65	3.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.61	2.27
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C

Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2330 kWh	3752 kWh

Model Indoor unit: SMKL-16D/HBp-A, Outdoor unit: THF-14D/HBpO-A	
Model name	Indoor unit: SMKL-16D/HBp-A, Outdoor unit: THF-14D/HBpO-A
Application	Heating (medium temp)
Units	Indoor, 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 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 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	182 %	135 %
Prated	14.00 kW	12.00 kW
SCOP	4.63	3.46
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.40 kW	11.00 kW
COP Tj = -7°C	2.80	2.10
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.50 kW	7.00 kW
COP Tj = +2°C	4.39	3.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.20 kW	4.50 kW
COP Tj = +7°C	6.54	4.79
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.60 kW	4.10 kW
COP Tj = 12°C	8.59	7.25
Cdh Tj = +12 °C	0.900	0.900

Pdh Tj = Tbiv	12.40 kW	11.00 kW
COP Tj = Tbiv	2.80	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.90 kW	10.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.51	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.10 kW	1.70 kW
Annual energy consumption Qhe	6237 kWh	7410 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	156 %	117 %
Prated	13.00 kW	11.00 kW
SCOP	3.99	3.01
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.30 kW	7.20 kW
COP Tj = -7°C	3.35	2.56
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.70 kW	4.30 kW
COP Tj = +2°C	4.72	3.62
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.40 kW	3.10 kW
COP Tj = +7°C	6.11	4.77
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.80 kW	3.60 kW
COP Tj = 12°C	8.00	6.40
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.70 kW	8.90 kW
COP Tj = Tbiv	2.61	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.90 kW	4.40 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.10	1.16
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.10 kW	6.60 kW
Annual energy consumption Qhe	8088 kWh	8975 kWh
Pdh Tj = -15°C (if TOL	10.70	8.90
COP Tj = -15°C (if TOL	2.61	1.83
Cdh Tj = -15 °C	0.900	0.900

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	248 %	170 %
Prated	12.00 kW	14.00 kW
SCOP	6.28	4.33
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.00 kW	13.10 kW
COP Tj = +2°C	3.40	2.24
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	8.00 kW	9.00 kW
COP Tj = +7°C	5.61	3.61
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.20 kW	4.10 kW
COP Tj = 12°C	7.94	5.93
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.00 kW	9.00 kW
COP Tj = Tbiv	5.61	3.61
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	13.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.40	2.24
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C

Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.90 kW
Annual energy consumption Qhe	2638 kWh	4325 kWh

Model Indoor unit: SMKLd-16D/3HBp-A, Outdoor unit: THF-14D/HBpO-A	
Model name	Indoor unit: SMKLd-16D/3HBp-A, Outdoor unit: THF-14D/HBpO-A
Application	Heating (medium temp)
Units	Indoor, 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 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 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	182 %	135 %
Prated	14.00 kW	12.00 kW
SCOP	4.63	3.46
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.40 kW	11.00 kW
COP Tj = -7°C	2.80	2.10
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.50 kW	7.00 kW
COP Tj = +2°C	4.39	3.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.20 kW	4.50 kW
COP Tj = +7°C	6.54	4.79
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.60 kW	4.10 kW
COP Tj = 12°C	8.59	7.25
Cdh Tj = +12 °C	0.900	0.900

Pdh Tj = Tbiv	12.40 kW	11.00 kW
COP Tj = Tbiv	2.80	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.90 kW	10.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.51	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.10 kW	1.70 kW
Annual energy consumption Qhe	6237 kWh	7410 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	156 %	117 %
Prated	13.00 kW	11.00 kW
SCOP	3.99	3.01
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.30 kW	7.20 kW
COP Tj = -7°C	3.35	2.56
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.70 kW	4.30 kW
COP Tj = +2°C	4.72	3.62
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.40 kW	3.10 kW
COP Tj = +7°C	6.11	4.77
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.80 kW	3.60 kW
COP Tj = 12°C	8.00	6.40
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.70 kW	8.90 kW
COP Tj = Tbiv	2.61	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.90 kW	4.40 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.10	1.16
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.10 kW	6.60 kW
Annual energy consumption Qhe	8088 kWh	8975 kWh
Pdh Tj = -15°C (if TOL	10.70	8.90
COP Tj = -15°C (if TOL	2.61	1.83
Cdh Tj = -15 °C	0.900	0.900

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	248 %	170 %
Prated	12.00 kW	14.00 kW
SCOP	6.28	4.33
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.00 kW	13.10 kW
COP Tj = +2°C	3.40	2.24
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	8.00 kW	9.00 kW
COP Tj = +7°C	5.61	3.61
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.20 kW	4.10 kW
COP Tj = 12°C	7.94	5.93
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.00 kW	9.00 kW
COP Tj = Tbiv	5.61	3.61
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	13.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.40	2.24
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C

Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.90 kW
Annual energy consumption Qhe	2638 kWh	4325 kWh

Model Indoor unit: SMKLd-16D/3HBp-A, Outdoor unit: THF-16D/HBpO-A	
Model name	Indoor unit: SMKLd-16D/3HBp-A, Outdoor unit: THF-16D/HBpO-A
Application	Heating (medium temp)
Units	Indoor, 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 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 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	179 %	136 %
Prated	15.00 kW	13.00 kW
SCOP	4.56	3.48
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.40 kW	11.60 kW
COP Tj = -7°C	2.67	2.05
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	8.00 kW	7.30 kW
COP Tj = +2°C	4.33	3.31
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.40 kW	4.80 kW
COP Tj = +7°C	6.48	4.82
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.60 kW	4.00 kW
COP Tj = 12°C	8.96	7.35
Cdh Tj = +12 °C	0.900	0.900

Pdh Tj = Tbiv	13.40 kW	11.60 kW
COP Tj = Tbiv	2.67	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.40 kW	11.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.46	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.60 kW	1.80 kW
Annual energy consumption Qhe	6874 kWh	7752 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	155 %	120 %
Prated	14.00 kW	12.00 kW
SCOP	3.96	3.09
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	9.10 kW	7.70 kW
COP Tj = -7°C	3.29	2.61
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.00 kW	4.50 kW
COP Tj = +2°C	4.86	3.79
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.20 kW	3.20 kW
COP Tj = +7°C	6.51	4.87
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.70 kW	3.70 kW
COP Tj = 12°C	7.59	6.39
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.30 kW	9.60 kW
COP Tj = Tbiv	2.28	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.80 kW	5.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.89	1.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.20 kW	6.90 kW
Annual energy consumption Qhe	8631 kWh	9390 kWh
Pdh Tj = -15°C (if TOL	11.30	9.60
COP Tj = -15°C (if TOL	2.28	1.84
Cdh Tj = -15 °C	0.900	0.900

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	239 %	170 %
Prated	13.00 kW	14.00 kW
SCOP	6.06	4.34
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	13.00 kW	13.30 kW
COP Tj = +2°C	3.33	2.31
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	8.60 kW	9.00 kW
COP Tj = +7°C	5.20	3.68
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.80 kW	4.10 kW
COP Tj = 12°C	7.95	5.80
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.60 kW	9.00 kW
COP Tj = Tbiv	5.20	3.68
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.30 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.33	2.31
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C

Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.70 kW
Annual energy consumption Qhe	2934 kWh	4327 kWh

Model Indoor unit: SMKL-16D/HBp-A, Outdoor unit: THF-16D/HBpO-A	
Model name	Indoor unit: SMKL-16D/HBp-A, Outdoor unit: THF-16D/HBpO-A
Application	Heating (medium temp)
Units	Indoor, 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 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 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	179 %	136 %
Prated	15.00 kW	13.00 kW
SCOP	4.56	3.48
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.40 kW	11.60 kW
COP Tj = -7°C	2.67	2.05
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	8.00 kW	7.30 kW
COP Tj = +2°C	4.33	3.31
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.40 kW	4.80 kW
COP Tj = +7°C	6.48	4.82
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.60 kW	4.00 kW
COP Tj = 12°C	8.96	7.35
Cdh Tj = +12 °C	0.900	0.900

Pdh Tj = Tbiv	13.40 kW	11.60 kW
COP Tj = Tbiv	2.67	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.40 kW	11.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.46	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.60 kW	1.80 kW
Annual energy consumption Qhe	6874 kWh	7752 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	155 %	120 %
Prated	14.00 kW	12.00 kW
SCOP	3.96	3.09
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	9.10 kW	7.70 kW
COP Tj = -7°C	3.29	2.61
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.00 kW	4.50 kW
COP Tj = +2°C	4.86	3.79
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.20 kW	3.20 kW
COP Tj = +7°C	6.51	4.87
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.70 kW	3.70 kW
COP Tj = 12°C	7.59	6.39
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.30 kW	9.60 kW
COP Tj = Tbiv	2.28	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.80 kW	5.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.89	1.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.20 kW	6.90 kW
Annual energy consumption Qhe	8631 kWh	9390 kWh
Pdh Tj = -15°C (if TOL	11.30	9.60
COP Tj = -15°C (if TOL	2.28	1.84
Cdh Tj = -15 °C	0.900	0.900

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	239 %	170 %
Prated	13.00 kW	14.00 kW
SCOP	6.06	4.34
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	13.00 kW	13.30 kW
COP Tj = +2°C	3.33	2.31
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	8.60 kW	9.00 kW
COP Tj = +7°C	5.20	3.68
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.80 kW	4.10 kW
COP Tj = 12°C	7.95	5.80
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.60 kW	9.00 kW
COP Tj = Tbiv	5.20	3.68
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.30 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.33	2.31
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C

Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.70 kW
Annual energy consumption Qhe	2934 kWh	4327 kWh