Subtype ADAPT 0312

Certificate Holder	KRONOTERM d.o.o.
Address	Trnava 5e
ZIP	3303
City	Gomilsko
Country	SI
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	ADAPT 0312
Registration number	011-1W0516
Heat Pump Type	Outdoor Air/Water
Refrigerant	R452B
Mass of Refrigerant	2.9 kg
Certification Date	18.01.2022
Testing basis	HP KEYMARK certification scheme rules rev. 9

Model ADAPT 0312-K3 HT / HK 1F	
Model name	ADAPT 0312-K3 HT / HK 1F
Application	Heating (medium temp)
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 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	6.08 kW	5.87 kW
El input	1.13 kW	1.91 kW
COP	5.45	3.08

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	44 dB(A)	42 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	194 %	139 %
Prated	8.10 kW	7.40 kW
SCOP	5.08	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.22 kW	6.37 kW
COP Tj = -7°C	3.35	2.43
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.60 kW	4.36 kW
COP Tj = +2°C	5.22	3.71
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.88 kW	2.78 kW

COP Tj = +7°C	6.13	4.45
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.77 kW	2.88 kW
COP Tj = 12°C	6.90	5.67
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.00 kW	7.40 kW
COP Tj = Tbiv	3.04	2.01
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.00 kW	7.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	2.01
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	67 °C	67 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.10 kW	0.00 kW
Annual energy consumption Qhe	3295 kWh	4192 kWh

Model ADAPT 0312-K3 HT / HK 1F + HYDRO C		
Model name	ADAPT 0312-K3 HT / HK 1F + HYDRO C	
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 ηDHW	116 %	
COP	2.74	
Heating up time	1:46 h:min	
Standby power input	68.2 W	
Reference hot water temperature	55.5 °C	
Mixed water at 40°C	260 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	5.87 kW	
El input	1.91 kW	
COP	3.08	
EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	
Sound power level outdoor	42 dB(A)	
EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	139 %	

Prated	7.40 kW
SCOP	3.65
Tbiv	-10 °C
TOL	-10 °C
Pdh Tj = -7°C	6.37 kW
COP Tj = -7°C	2.43
Cdh Tj = -7 °C	0.900
Pdh Tj = +2°C	4.36 kW
COP Tj = +2°C	3.71
Cdh Tj = +2 °C	0.900
Pdh Tj = +7°C	2.78 kW
COP Tj = +7°C	4.45
Cdh Tj = +7 °C	0.900
Pdh Tj = 12°C	2.88 kW
COP Tj = 12°C	5.67
Cdh Tj = +12 °C	0.900
Pdh Tj = Tbiv	7.41 kW
COP Tj = Tbiv	2.01
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.01
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900
WTOL	67 °C
Poff	14 W
PTO	14 W
PSB	14 W
PCK	14 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	0.00 kW
Annual energy consumption Qhe	4192 kWh

Model ADAPT 0312-K3 HT / HK 3F	
Model name	ADAPT 0312-K3 HT / HK 3F
Application	Heating (medium temp)
Units	Indoor
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 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	6.02 kW	5.87 kW
El input	1.12 kW	1.92 kW
COP	5.41	3.06

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	42 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	188 %	137 %
Prated	8.40 kW	7.80 kW
SCOP	4.93	3.57
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.30 kW	6.46 kW
COP Tj = -7°C	3.45	2.44
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.83 kW	4.48 kW
COP Tj = +2°C	4.87	3.72
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.04 kW	2.75 kW

COP Tj = +7°C	6.19	4.25
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.01 kW	2.92 kW
COP Tj = 12°C	7.19	5.36
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.05 kW	7.48 kW
COP Tj = Tbiv	3.11	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.05 kW	7.48 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.11	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	67 °C	67 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.35 kW	0.32 kW
Annual energy consumption Qhe	3520 kWh	4510 kWh

Model ADAPT 0312-K3 HT / HK 3F + HYDRO C	
Model name	ADAPT 0312-K3 HT / HK 3F + HYDRO C
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	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	115 %
COP	2.73
Heating up time	1:46 h:min
Standby power input	69.0 W
Reference hot water temperature	55.4 °C
Mixed water at 40°C	261 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	5.87 kW	
El input	1.92 kW	
COP	3.06	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	
Sound power level outdoor	42 dB(A)	

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	137 %	

Prated	7.80 kW
SCOP	3.57
Tbiv	-10 °C
TOL	-10 °C
Pdh Tj = -7°C	6.46 kW
COP Tj = -7°C	2.44
Cdh Tj = -7 °C	0.900
Pdh Tj = +2°C	4.48 kW
COP Tj = +2°C	3.72
Cdh Tj = +2 °C	0.900
Pdh Tj = +7°C	2.75 kW
COP Tj = +7°C	4.25
Cdh Tj = +7 °C	0.900
Pdh Tj = 12°C	2.92 kW
COP Tj = 12°C	5.36
Cdh Tj = +12 °C	0.900
Pdh Tj = Tbiv	7.48 kW
COP Tj = Tbiv	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.48 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900
WTOL	67 °C
Poff	14 W
PTO	14 W
PSB	14 W
PCK	14 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	0.32 kW
Annual energy consumption Qhe	4510 kWh