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Summary of	ADAPT 0416	Reg. No.	011-1W0517	
Certificate Holder				
Name	KRONOTERM d.o.o.			
Address	Trnava 5e	Zip	3303	
City	Gomilsko	Country	Slovenia	
Certification Body	DIN CERTCO Gesells	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	ADAPT 0416	ADAPT 0416		
Heat Pump Type	Outdoor Air/Water	Outdoor Air/Water		
Refrigerant	R452B	R452B		
Mass of Refrigerant	4.2 kg	4.2 kg		
Certification Date	18.01.2022	18.01.2022		
Testing basis	HP KEYMARK certific	HP KEYMARK certification scheme rules rev. 9		



Model: ADAPT 0416-K3 HT / HK 1F

Configure model		
Model name	ADAPT 0416-K3 HT / HK 1F	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 1x230V 50Hz		

Heating

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure passe	
Defrost test	passed
Starting and operating test passed	

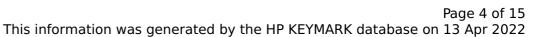
EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.48 kW	7.78 kW
El input	1.54 kW	2.44 kW
СОР	5.60	3.20





EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	46 dB(A)	46 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	197 %	144 %
Prated	11.10 kW	10.40 kW
SCOP	5.12	3.75
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.02 kW	9.23 kW
COP Tj = -7°C	3.30	2.41
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.29 kW	6.03 kW
COP Tj = +2°C	5.16	3.83
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.11 kW	3.72 kW
COP Tj = +7°C	6.51	4.47
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.93 kW	3.94 kW





Time initiation was genera		· · · · · · · · · · · · · · · · · · ·
COP Tj = 12°C	7.43	5.62
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.12 kW	10.61 kW
COP Tj = Tbiv	2.99	1.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.12 kW	10.61 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.99	1.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	67 °C	67 °C
Poff	15 W	15 W
РТО	14 W	14 W
PSB	15 W	15 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4475 kWh	5734 kWh

Model: ADAPT 0416-K3 HT / HK 1F + HYDRO C

Configure model		
Model name	ADAPT 0416-K3 HT / HK 1F + HYDRO C	
Application	Heating + DHW	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional) n/a		

General Data		
Power supply 1x230V 50Hz		

Heating

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure passed	
Defrost test	passed
Starting and operating test	passed

EN 14511-2	
Medium temperature	
Heat output	7.78 kW
El input	2.44 kW
СОР	3.20



EN 12102-1	
Medium temperature	
Sound power level indoor	0 dB(A)
Sound power level outdoor	46 dB(A)

EN 14825		
	Medium temperature	
η_{s}	144 %	
Prated	10.40 kW	
SCOP	3.75	
Tbiv	-10 °C	
TOL	-10 °C	
Pdh Tj = -7°C	9.23 kW	
COP Tj = -7°C	2.41	
Cdh Tj = -7 °C	0.900	
Pdh Tj = $+2$ °C	6.03 kW	
COP Tj = +2°C	3.83	
Cdh Tj = +2 °C	0.900	
Pdh Tj = +7°C	3.72 kW	
COP Tj = +7°C	4.47	
Cdh Tj = +7 °C	0.900	





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Pdh Tj = 12°C	3.94 kW
COP Tj = 12°C	5.62
Cdh Tj = +12 °C	0.900
Pdh Tj = Tbiv	10.61 kW
COP Tj = Tbiv	1.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.61 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900
WTOL	67 °C
Poff	15 W
PTO	14 W
PSB	15 W
PCK	14 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	0.00 kW
Annual energy consumption Qhe	5734 kWh

Domestic Hot Water (DHW)



EN 16147	
Declared load profile	XL
Efficiency ηDHW	127 %
СОР	3.02
Heating up time	1:24 h:min
Standby power input	54.4 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	236 I

Model: ADAPT 0416-K3 HT / HK 3F

Configure model		
Model name	ADAPT 0416-K3 HT / HK 3F	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

Heating

EN 14511-2		
Low temperature Medium temperature		Medium temperature
Heat output	8.50 kW	7.81 kW
El input	1.53 kW	2.40 kW
СОР	5.55	3.26

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	46 dB(A)	46 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	201 %	142 %
Prated	11.00 kW	10.30 kW
SCOP	5.21	3.67
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.78 kW	9.07 kW
COP Tj = -7°C	3.39	2.46
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.22 kW	5.82 kW
COP Tj = +2°C	5.17	3.71
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.90 kW	3.57 kW
COP Tj = +7°C	6.65	4.50
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.91 kW	3.73 kW



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COP Tj = 12°C	7.71	5.29
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.99 kW	10.29 kW
COP Tj = Tbiv	3.11	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.99 kW	10.29 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	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	12 W	12 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.01 kW	0.01 kW
Annual energy consumption Qhe	4365 kWh	5801 kWh

Model: ADAPT 0416-K3 HT / HK 3F + HYDRO C

Configure model		
Model name ADAPT 0416-K3 HT / HK 3F + HYDRO C		
Application	Heating + DHW	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility Yes		
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2		
	Medium temperature	
Heat output	7.81 kW	
El input	2.40 kW	
СОР	3.26	

EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	





EN 14825

	Medium temperature
η_{s}	142 %
Prated	10.30 kW
SCOP	3.67
Tbiv	-10 °C
TOL	-10 °C
Pdh Tj = -7° C	9.07 kW
COP Tj = -7°C	2.46
Cdh Tj = -7 °C	0.900
Pdh Tj = +2°C	5.82 kW
COP Tj = +2°C	3.71
Cdh Tj = +2 °C	0.900
Pdh Tj = $+7^{\circ}$ C	3.57 kW
$COPTj = +7^{\circ}C$	4.50
Cdh Tj = +7 °C	0.900
Pdh Tj = 12°C	3.73 kW
COP Tj = 12°C	5.29
Cdh Tj = +12 °C	0.900
Pdh Tj = Tbiv	10.29 kW
COP Tj = Tbiv	2.04

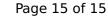




Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.29 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900
WTOL	67 °C
Poff	12 W
PTO	12 W
PSB	12 W
PCK	12 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	0.01 kW
Annual energy consumption Qhe	5801 kWh

EN 12102-1		
	Medium temperature	
Sound power level indoor	0 dB(A)	
Sound power level outdoor	46 dB(A)	

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	131 %	
СОР	3.12	
Heating up time	1:24 h:min	
Standby power input	51.2 W	
Reference hot water temperature	52.2 °C	
Mixed water at 40°C	238	