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#### <u>Login</u>

Summary of	ADAPT 0312	Reg. No.	011-1W0516		
Certificate Holder					
Name	KRONOTERM d.o.o.				
Address	Trnava 5e	Trnava 5e Zip 3303			
City	Gomilsko	Country	Slovenia		
Certification Body	DIN CERTCO Gesells	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH			
Subtype title	ADAPT 0312	ADAPT 0312			
Heat Pump Type	Outdoor Air/Water	Outdoor Air/Water			
Refrigerant	R452B	R452B			
Mass of Refrigerant	2.9 kg	2.9 kg			
Certification Date	18.01.2022	18.01.2022			
Testing basis	HP KEYMARK certific	HP KEYMARK certification scheme rules rev. 9			



# Model: ADAPT 0312-K3 HT / HK 1F

Configure model		
Model name	ADAPT 0312-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

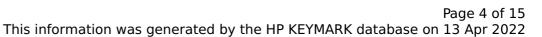
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

EN 14511-2		
	Low temperature	Medium temperature
Heat output	6.08 kW	5.87 kW
El input	1.13 kW	1.91 kW
СОР	5.45	3.08



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

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	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





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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
РТО	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

Configure model		
Model name	ADAPT 0312-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 14511-2		
	Medium temperature	
Heat output	5.87 kW	
El input	1.91 kW	
СОР	3.08	

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	
Medium temperature	
Sound power level indoor	0 dB(A)
Sound power level outdoor	42 dB(A)

EN 14825		
	Medium temperature	
$\eta_{s}$	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

### Domestic Hot Water (DHW)



EN 16147	
Declared load profile	XL
Efficiency ηDHW	116 %
СОР	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 I



# Model: ADAPT 0312-K3 HT / HK 3F

Configure model		
Model name ADAPT 0312-K3 HT / HK 3F		
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 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			
Low temperature Medium temperature			
Heat output	6.02 kW	5.87 kW	
El input	1.12 kW	1.92 kW	
СОР	5.41	3.06	



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

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	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



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

Configure model		
Model name ADAPT 0312-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	

#### **Average Climate**

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

EN 14825	
	Medium temperature
$\eta_{s}$	137 %
Prated	7.80 kW
SCOP	3.57
Tbiv	-10 °C
TOL	-10 °C
Pdh Tj = -7°C	6.46 kW





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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
РТО	14 W
PSB	14 W
РСК	14 W



This information was gen	erated by the HP KEYMARI	C database on 13 Apr 2022

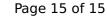
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	0.32 kW
Annual energy consumption Qhe	4510 kWh

### Heating

EN 14511-2	
Medium temperature	
Heat output	5.87 kW
El input	1.92 kW
СОР	3.06

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

Domestic Hot Water (DHW)





EN 16147	
Declared load profile	XL
Efficiency ηDHW	115 %
СОР	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 I