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Login

Summary of	AEROTOP T32 / T32R	Reg. No.	011-1W0302		
Certificate Holder	Certificate Holder				
Name	ELCO GmbH				
Address	Hohenzollernstrasse 31	Zip	72379		
City	Hechingen	Country	Germany		
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH				
Subtype title	AEROTOP T32 / T32R				
Heat Pump Type	Outdoor Air/Water				
Refrigerant	R407c				
Mass of Refrigerant	9.2 kg				
Certification Date	04.05.2019				



CEN heat pump

Model: AEROTOP T32

Configure model		
Model name	AEROTOP T32	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x230V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	38.00 kW	37.00 kW	
El input	8.84 kW	13.70 kW	
СОР	4.30	2.70	

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	63 dB(A)	63 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	152 %	114 %
Prated	23.00 kW	23.00 kW
SCOP	3.89	2.93
Tbiv	-10 °C	-10 °C
TOL	-20 °C	-10 °C
Pdh Tj = -7°C	24.49 kW	22.95 kW
COP Tj = -7°C	2.86	2.01
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	27.51 kW	27.22 kW
COP Tj = +2°C	3.69	2.69
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	38.40 kW	37.95 kW
COP Tj = +7°C	5.17	4.19
Cdh Tj = +7 °C	1.00	1.00





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Pdh Tj = 12°C	43.63 kW	42.96 kW
COP Tj = 12°C	5.90	5.20
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	43.41 kW	21.00 kW
COP Tj = Tbiv	2.60	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	22.50 kW	21.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	57 °C	57 °C
Poff	0 W	0 W
РТО	10 W	10 W
PSB	10 W	10 W
PCK	80 W	80 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	11960 kWh	16478 kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	63 dB(A)	63 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	187 %	122 %
Prated	24.00 kW	33.00 kW
SCOP	4.74	3.13
Tbiv	2 °C	2 °C
TOL	-20 °C	-10 °C
Pdh Tj = +2°C	27.39 kW	26.90 kW
COP Tj = +2°C	3.26	2.40
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = $+7$ °C	38.20 kW	37.45 kW
$COP Tj = +7^{\circ}C$	4.74	3.26
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	43.41 kW	42.51 kW
COP Tj = 12°C	5.67	2.22
Cdh Tj = +12 °C	1.00	1.00





Pdh Tj = Tbiv	27.39 kW	43.41 kW
COP Tj = Tbiv	3.26	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	27.39 kW	43.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.26	2.40
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	57 °C	57 °C
Poff	0 W	0 W
PTO	10 W	10 W
PSB	10 W	10 W
PCK	80 W	80 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6876 kWh	13864 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	63 dB(A)	63 dB(A)	
Sound power level outdoor	67 dB(A)	67 dB(A)	

EN 14825





	Low temperature	Medium temperature
η_{s}	139 %	94 %
Prated	24.00 kW	34.00 kW
SCOP	3.54	2.44
Tbiv	-15 °C	-10 °C
TOL	-20 °C	-10 °C
Pdh $Tj = -7$ °C	24.83 kW	23.63 kW
COP Tj = -7 °C	3.08	2.33
Cdh Tj = -7 $^{\circ}$ C	1.00	1.00
Pdh Tj = $+2$ °C	27.59 kW	27.34 kW
COP Tj = +2°C	3.95	3.09
Cdh Tj = $+2$ °C	1.00	1.00
Pdh $Tj = +7$ °C	38.50 kW	38.15 kW
$COP Tj = +7^{\circ}C$	5.39	4.63
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	43.63 kW	43.18 kW
COP Tj = 12°C	5.90	5.44
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	19.30 kW	21.68 kW
COP Tj = Tbiv	2.25	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	19.30 kW	21.68 kW



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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	57 °C	57 °C
Poff	o w	o w
РТО	10 W	10 W
PSB	10 W	10 W
PCK	80 W	80 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	16470 kWh	34596 kWh
Pdh Tj = -15°C (if TOL<-20°C)	0.01	0.01
COP Tj = -15°C (if TOL $<$ -20°C)	0.01	0.01
Cdh Tj = -15 °C	0.90	0.90



Model: AEROTOP T32R

Configure model		
Model name AEROTOP T32R		
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x230V 50Hz	

Heating

EN 14511-2		
Low temperature Medium temperature		
Heat output	38.00 kW	37.00 kW
El input	8.84 kW	13.70 kW
СОР	4.30	2.70

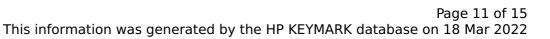
EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	63 dB(A)	63 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	156 %	116 %
Prated	23.00 kW	23.00 kW
SCOP	3.98	2.99
Tbiv	-10 °C	-10 °C
TOL	-20 °C	-10 °C
Pdh Tj = -7°C	24.49 kW	22.95 kW
COP Tj = -7°C	2.86	2.01
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	27.51 kW	27.22 kW
$COP Tj = +2^{\circ}C$	3.69	2.69
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	38.40 kW	37.95 kW
COP Tj = +7°C	5.17	4.19
Cdh Tj = +7 °C	1.00	1.00



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	CEN heat pump
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Pdh Tj = 12°C	43.63 kW	42.96 kW
COP Tj = 12°C	5.90	5.20
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	43.41 kW	21.00 kW
COP Tj = Tbiv	2.60	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	22.50 kW	21.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	57 °C	57 °C
Poff	o w	0 W
РТО	10 W	10 W
PSB	10 W	10 W
PCK	80 W	80 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	11666 kWh	16185 kWh

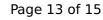
Warmer Climate





EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	63 dB(A)	63 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825			
Low temperature Medium temperature			
η_{s}	197 %	126 %	
Prated	24.00 kW	33.00 kW	
SCOP	5.00	3.21	
Tbiv	2 °C	2 °C	
TOL	-20 °C	-10 °C	
Pdh Tj = +2°C	27.39 kW	26.90 kW	
COP Tj = +2°C	3.26	2.40	
Cdh Tj = +2 °C	1.00	1.00	
Pdh Tj = +7°C	38.20 kW	37.45 kW	
COP Tj = +7°C	4.74	3.26	
Cdh Tj = +7 °C	1.00	1.00	
Pdh Tj = 12°C	43.41 kW	42.51 kW	
COP Tj = 12°C	5.67	2.22	
Cdh Tj = +12 °C	1.00	1.00	



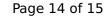


Pdh Tj = Tbiv	27.39 kW	26.90 kW
COP Tj = Tbiv	3.26	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	27.39 kW	26.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.26	2.40
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	57 °C	57 °C
Poff	0 W	0 W
РТО	10 W	10 W
PSB	10 W	10 W
PCK	80 W	80 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6523 kWh	13511 kWh

Colder Climate

EN 12102-1				
	Low temperature	Medium temperature		
Sound power level indoor	63 dB(A)	63 dB(A)		
Sound power level outdoor	68 dB(A)	68 dB(A)		

EN 14825





_	Low temperature	Medium temperature
η_{s}	140 %	95 %
Prated	24.00 kW	34.00 kW
SCOP	3.58	2.45
Tbiv	-15 °C	-10 °C
TOL	-20 °C	-10 °C
Pdh Tj = -7°C	24.83 kW	23.63 kW
COP Tj = -7°C	3.08	2.33
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = $+2$ °C	27.59 kW	27.34 kW
$COP Tj = +2^{\circ}C$	3.95	3.09
Cdh Tj = $+2$ °C	1.00	1.00
Pdh Tj = $+7^{\circ}$ C	38.50 kW	38.15 kW
$COP Tj = +7^{\circ}C$	5.39	4.63
Cdh Tj = $+7$ °C	1.00	1.00
Pdh Tj = 12°C	43.63 kW	43.18 kW
COP Tj = 12°C	5.90	5.44
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	19.30 kW	21.68 kW
COP Tj = Tbiv	2.25	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	19.30 kW	21.68 kW



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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	57 °C	57 °C
Poff	o w	0 W
РТО	10 W	10 W
PSB	10 W	10 W
PCK	80 W	80 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	16294 kWh	34419 kWh
Pdh Tj = -15°C (if TOL<-20°C)	0.01	0.01
COP Tj = -15°C (if TOL $<$ -20°C)	0.01	0.01
Cdh Tj = -15 °C	0.90	0.90