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Login

Summary of	AEROTOP S09.2	Reg. No.	011-1W0392		
Certificate Holder	Certificate Holder				
Name	ELCO GmbH				
Address	Hohenzollernstrasse 31	Zip	72379		
City	Hechingen	Country	Germany		
Certification Body	DIN CERTCO Gesellschaft für Konfor	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH			
Subtype title	AEROTOP S09.2				
Heat Pump Type	Outdoor Air/Water				
Refrigerant	R410A				
Mass of Refrigerant	4 kg				
Certification Date	28.07.2020				



Model: AEROTOP S09.2

Configure model			
Model name	AEROTOP S09.2		
Application	Heating (medium temp)		
Units	Indoor		
Climate Zone	Colder Climate + Warmer Climate		
Reversibility	Yes		
Cooling mode application (optional)	n/a		

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	6.75 kW	7.25 kW		
El input	1.34 kW	3.23 kW		
СОР	5.05	2.24		

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

Average Climate



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	45 dB(A)	45 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
η_{s}	196 %	134 %	
Prated	9.91 kW	8.20 kW	
SCOP	4.99	3.42	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.77 kW	7.25 kW	
COP Tj = -7°C	3.18	2.24	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	5.59 kW	4.60 kW	
COP Tj = +2°C	4.99	3.13	
Cdh Tj = +2 °C	0.98	0.98	
Pdh Tj = +7°C	3.58 kW	3.07 kW	
COP Tj = +7°C	6.28	4.95	
Cdh Tj = +7 °C	0.94	0.94	
Pdh Tj = 12°C	3.03 kW	3.00 kW	

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COP Tj = 12°C	7.77	6.00
Cdh Tj = +12 °C	0.93	0.93
Pdh Tj = Tbiv	8.77 kW	7.25 kW
COP Tj = Tbiv	3.18	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.47 kW	9.03 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.80
WTOL	63 °C	63 °C
Poff	35 W	35 W
РТО	36 W	36 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.44 kW	0.00 kW
Annual energy consumption Qhe	4108 kWh	4948 kWh

Warmer Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	45 dB(A)	45 dB(A)	

EN 14825		
	Low temperature	Medium temperature





		with ductabase on 10 Mar 2
η_{s}	230 %	172 %
Prated	9.05 kW	9.78 kW
SCOP	5.81	4.38
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = $+2$ °C	9.05 kW	9.78 kW
$COP Tj = +2^{\circ}C$	3.79	2.68
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	6.75 kW	6.34 kW
$COP Tj = +7^{\circ}C$	5.04	3.89
Cdh Tj = +7 °C	0.94	0.94
Pdh Tj = 12°C	3.01 kW	2.94 kW
COP Tj = 12°C	7.34	5.35
Cdh Tj = +12 °C	0.93	0.93
Pdh Tj = Tbiv	9.05 kW	9.78 kW
COP Tj = Tbiv	3.79	2.68
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	9.05 kW	9.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.79	2.68
WTOL	63 °C	63 °C
Poff	35 W	35 W





РТО	36 W	36 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2081 kWh	2983 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	151 %	117 %
Prated	10.69 kW	10.02 kW
SCOP	3.84	3.01
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	6.83 kW	6.40 kW
COP Tj = -7°C	3.12	2.44





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Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.25 kW	3.79 kW
COP Tj = +2°C	5.38	4.21
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = $+7^{\circ}$ C	2.62 kW	2.58 kW
$COP Tj = +7^{\circ}C$	6.24	4.96
Cdh Tj = +7 °C	0.94	0.94
Pdh Tj = 12°C	3.03 kW	3.03 kW
COP Tj = 12°C	7.77	6.45
Cdh Tj = +12 °C	0.93	0.93
Pdh Tj = Tbiv	6.83 kW	6.40 kW
COP Tj = Tbiv	3.12	2.44
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.91 kW	6.54 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.02	1.33
WTOL	63 °C	63 °C
Poff	35 W	35 W
РТО	36 W	36 W
PSB	15 W	15 W
РСК	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.78 kW	3.48 kW



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Annual energy consumption Qhe	7241 kWh	8667 kWh
Pdh Tj = -15°C (if TOL<-20°C)		
COP Tj = -15°C (if TOL $<$ -20°C)		
Cdh Tj = -15 °C		



Model: AEROTOP S09.2_2-parts

Configure model		
Model name	AEROTOP S09.2_2-parts	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	6.75 kW	7.25 kW	
El input	1.34 kW	3.23 kW	
СОР	5.05	2.24	

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

Average Climate



EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	45 dB(A)	45 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	196 %	134 %
Prated	9.91 kW	8.20 kW
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COP Tj = -7°C	3.18	2.24
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COP Tj = +2°C	4.99	3.13
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COP Tj = +7°C	6.28	4.95
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.44 kW	0.00 kW
Annual energy consumption Qhe	4108 kWh	4948 kWh

Warmer Climate

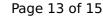
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EN 14825		
	Low temperature	Medium temperature





		TMARK database on 10 Ma
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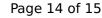
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Pdh Tj = $+2$ °C	4.25 kW	3.79 kW
COP Tj = +2°C	5.38	4.21
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.62 kW	2.58 kW
$COP Tj = +7^{\circ}C$	6.24	4.96
Cdh Tj = +7 °C	0.94	0.94
Pdh Tj = 12°C	3.03 kW	3.03 kW
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