

Subtype: BRÖTJE MONO AWHP 11

Summary of	BRÖTJE MONO AWHP 11	Reg. No.	037-0047-20
Certificate Holder			
Name	BDR THERMEA FR (BRÖTJE)		
Address	57 rue de la Gare	Zip	67580
City	Mertzwiller	Country	France
Certification Body	SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise)		
Subtype title	BRÖTJE MONO AWHP 11		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	3.3 kg		
Certification Date	02.06.2020		
Testing basis	HP Keymark scheme rules rev. no. 7		



Model: MONO AWHP 11 MR

Configure model		
Model name	MONO AWHP 11 MR	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	11.20 kW
El input	2.47 kW	4.15 kW
СОР	4.54	2.70

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



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level outdoor	60 dB(A)	60 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	174 %	135 %
Prated	10.00 kW	10.00 kW
SCOP	4.41	3.44
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.90 kW	9.00 kW
COP Tj = -7°C	3.17	1.99
Cdh Tj = -7 °C	0.995	0.997
Pdh Tj = +2°C	5.40 kW	5.70 kW
COP Tj = +2°C	4.23	3.30
Cdh Tj = +2 °C	0.988	0.991
Pdh Tj = +7°C	3.60 kW	4.70 kW
$COPTj = +7^{\circ}C$	5.33	4.86
Cdh Tj = +7 °C	0.978	0.984
Pdh Tj = 12°C	4.30 kW	4.10 kW



COP Tj = 12°C	7.66	6.35
Cdh Tj = +12 °C	0.973	0.977
Pdh Tj = Tbiv	8.90 kW	9.00 kW
COP Tj = Tbiv	3.17	1.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.35 kW	8.42 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	1.87
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970	0.970
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.65 kW	1.58 kW
Annual energy consumption Qhe	4681 kWh	5998 kWh



Model: MONO AWHP 11 TR

Configure model		
Model name	MONO AWHP 11 TR	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	11.20 kW
El input	2.47 kW	4.15 kW
СОР	4.54	2.70

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Shatting on the heat transfer medium now	passeu
Complete power supply failure	passed
Defrost test	passed



EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	173 %	134 %
Prated	10.00 kW	10.00 kW
SCOP	4.40	3.44
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.90 kW	9.00 kW
COP Tj = -7°C	3.17	1.99
Cdh Tj = -7 °C	0.992	0.995
Pdh Tj = +2°C	5.40 kW	5.70 kW
COP Tj = +2°C	4.23	3.29
Cdh Tj = +2 °C	0.983	0.987
Pdh Tj = +7°C	3.60 kW	4.70 kW
COP Tj = +7°C	5.31	4.88
Cdh Tj = +7 °C	0.968	0.977
Pdh Tj = 12°C	4.30 kW	4.10 kW



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COP Tj = 12°C	7.66	6.35
Cdh Tj = +12 °C	0.961	0.966
Pdh Tj = Tbiv	8.90 kW	9.00 kW
COP Tj = Tbiv	3.17	1.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.35 kW	8.42 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	1.87
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950	0.960
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.65 kW	1.58 kW
Annual energy consumption Qhe	4693 kWh	6012 kWh



Subtype: BRÖTJE MONO AWHP 6-8

Summary of	BRÖTJE MONO AWHP 6-8	Reg. No.	037-0046-20
Certificate Holder			
Name	BDR THERMEA FR (BRÖTJE)		
Address	57 rue de la Gare	Zip	67580
City	Mertzwiller	Country	France
Certification Body	SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise)		
Subtype title	BRÖTJE MONO AWHP 6-8		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	2.4 kg		
Certification Date	02.06.2020		
Testing basis	HP Keymark scheme rules rev. no. 7		



Model: MONO AWHP 6 MR

Configure model		
Model name	MONO AWHP 6 MR	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	6.00 kW	6.00 kW
El input	1.24 kW	2.09 kW
СОР	4.83	2.87

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	188 %	132 %
Prated	6.00 kW	6.00 kW
SCOP	4.77	3.37
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.30 kW	5.30 kW
COP Tj = -7°C	3.18	2.09
Cdh Tj = -7 °C	0.991	0.994
Pdh Tj = +2°C	3.20 kW	3.20 kW
COP Tj = +2°C	4.52	3.22
Cdh Tj = +2 °C	0.979	0.985
Pdh Tj = +7°C	3.20 kW	2.90 kW
COP Tj = +7°C	6.55	4.62
Cdh Tj = +7 °C	0.969	0.976
Pdh Tj = 12°C	2.90 kW	2.70 kW



COP Tj = 12°C	8.16	6.09
Cdh Tj = +12 °C	0.958	0.966
Pdh Tj = Tbiv	5.30 kW	5.30 kW
COP Tj = Tbiv	3.18	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.88 kW	4.88 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950	0.960
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.12 kW	1.12 kW
Annual energy consumption Qhe	2598 kWh	3674 kWh



Model: MONO AWHP 8 MR

Configure model		
Model name	MONO AWHP 8 MR	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	9.00 kW	9.00 kW
El input	2.00 kW	3.24 kW
СОР	4.51	2.78

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Shatting on the heat transfer medium now	passeu
Complete power supply failure	passed
Defrost test	passed



EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	175 %	139 %
Prated	8.50 kW	8.50 kW
SCOP	4.44	3.56
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.50 kW	7.50 kW
COP Tj = -7°C	2.21	1.96
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = $+2$ °C	4.60 kW	4.60 kW
COP Tj = +2°C	4.53	3.50
Cdh Tj = +2 °C	0.985	0.989
Pdh Tj = +7°C	3.40 kW	2.90 kW
COP Tj = +7°C	6.28	4.90
Cdh Tj = +7 °C	0.972	0.975
Pdh Tj = 12°C	3.20 kW	2.90 kW



COP Tj = 12°C	8.48	6.80
Cdh Tj = +12 °C	0.960	0.965
Pdh Tj = Tbiv	7.50 kW	7.50 kW
COP Tj = Tbiv	2.21	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.65 kW	6.65 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.00	1.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950	0.960
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.85 kW	1.85 kW
Annual energy consumption Qhe	3952 kWh	4933 kWh



Model: MONO AWHP 8 TR

Configure model		
Model name MONO AWHP 8 TR		
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	9.00 kW	9.00 kW
El input	2.00 kW	3.24 kW
СОР	4.51	2.78

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Shatting on the heat transfer medium now	passeu
Complete power supply failure	passed
Defrost test	passed



EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	174 %	139 %
Prated	8.50 kW	8.50 kW
SCOP	4.43	3.55
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.50 kW	7.50 kW
COP Tj = -7°C	2.21	1.96
Cdh Tj = -7 °C	0.994	0.994
Pdh Tj = +2°C	4.60 kW	4.60 kW
COP Tj = +2°C	4.53	3.50
Cdh Tj = +2 °C	0.978	0.983
Pdh Tj = +7°C	3.40 kW	2.90 kW
COP Tj = +7°C	6.28	4.90
Cdh Tj = +7 °C	0.959	0.963
Pdh Tj = 12°C	3.20 kW	2.90 kW



COP Tj = 12°C	8.48	6.80
Cdh Tj = +12 °C	0.942	0.948
Pdh Tj = Tbiv	7.50 kW	7.50 kW
COP Tj = Tbiv	2.21	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.65 kW	6.65 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.99	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.930	0.940
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.85 kW	1.85 kW
Annual energy consumption Qhe	3962 kWh	4941 kWh