Subtype: REMEHA Effenca HT 20

Summary of	REMEHA Effenca HT 20	Reg. No.	007-DO0169
Certificate Holder			
Name	Remeha		
Address		Zip	
City		Country	Netherlands
Certification Body	Kiwa Nederland B.V.		
Subtype title	REMEHA Effenca HT 20		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R290		
Mass of Refrigerant	4.45 kg		
Certification Date	21.02.2024		
Testing basis	European KEYMARK Scheme for Heat Pumps (v12)		

Model: Effenca HT 20

Configure model	
Model name	Effenca HT 20
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	20.00 kW	20.00 kW
El input	4.36 kW	6.67 kW
COP	4.60	3.00

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

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	6.06 kW	3.89 kW
Cooling capacity	20.00	20.00
EER	3.31	5.14

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	20.00 kW	20.00 kW
SEER	5.29	5.29
Pdc Tj = 35°C	20.00 kW	20.00 kW
EER Tj = 35°C	3.31	5.14
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	14.74 kW	14.74 kW
EER Tj = 30°C	4.73	6.52
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	9.47 kW	9.71 kW
EER Tj = 25°C	6.63	6.80
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	6.76 kW	7.50 kW
EER Tj = 20°C	8.14	7.10
Cdc Tj = 20 °C	0.900	0.900
Poff	0 W	0 W
PTO	166 W	200 W
PSB	166 W	166 W
PCK	0 W	0 W
Annual energy consumption Qce	2270 kWh	2201 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	197 %	151 %
Prated	20.00 kW	20.00 kW
SCOP	5.00	3.86
Tbiv	-10 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	17.52 kW	17.69 kW
COP Tj = -7°C	2.90	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	10.78 kW	10.77 kW
COP Tj = +2°C	5.04	3.85
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	6.84 kW	6.92 kW
COP Tj = +7°C	6.59	5.26
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	7.37 kW	7.18 kW

COP Tj = 12°C	8.50	7.10
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	20.00 kW	17.69 kW
COP Tj = Tbiv	2.49	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	20.00 kW	16.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.49	1.95
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	35 °C	55 °C
Poff	162 W	19 W
PTO	162 W	122 W
PSB	162 W	19 W
PCK	0 W	158 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	3.62 kW
Annual energy consumption Qhe	8265 kWh	10718 kWh

Model: Effenca HT 20 EC

Configure model	
Model name	Effenca HT 20 EC
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	20.00 kW	20.00 kW
El input	4.36 kW	6.67 kW
COP	4.60	3.00

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

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	6.06 kW	3.89 kW
Cooling capacity	20.00	20.00
EER	3.31	5.14

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	20.00 kW	20.00 kW
SEER	5.29	5.29
Pdc Tj = 35°C	20.00 kW	20.00 kW
EER Tj = 35°C	3.31	5.14
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	14.74 kW	14.74 kW
EER Tj = 30°C	4.73	6.52
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	9.47 kW	9.71 kW
EER Tj = 25°C	6.63	6.80
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	6.76 kW	7.50 kW
EER Tj = 20°C	8.14	7.10
Cdc Tj = 20 °C	0.900	0.900
Poff	0 W	0 W
PTO	166 W	200 W
PSB	166 W	166 W
PCK	0 W	0 W
Annual energy consumption Qce	2270 kWh	2201 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	197 %	151 %
Prated	20.00 kW	20.00 kW
SCOP	5.00	3.86
Tbiv	-10 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	17.52 kW	17.69 kW
COP Tj = -7°C	2.90	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	10.78 kW	10.77 kW
COP Tj = +2°C	5.04	3.85
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	6.84 kW	6.92 kW
COP Tj = +7°C	6.59	5.26
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	7.37 kW	7.18 kW

COP Tj = 12°C	8.50	7.10
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	20.00 kW	17.69 kW
COP Tj = Tbiv	2.49	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	20.00 kW	16.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.49	1.95
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	35 °C	55 °C
Poff	162 W	19 W
PTO	162 W	122 W
PSB	162 W	19 W
PCK	0 W	158 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	3.62 kW
Annual energy consumption Qhe	8265 kWh	10718 kWh

Subtype: REMEHA Effenca HT 30

Summary of	REMEHA Effenca HT 30	Reg. No.	007-DO0175
Certificate Holder			
Name	Remeha		
Address		Zip	
City		Country	Netherlands
Certification Body	Kiwa Nederland B.V.		
Subtype title	REMEHA Effenca HT 30		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R290		
Mass of Refrigerant	4.75 kg		
Certification Date	21.02.2024		
Testing basis	European KEYMARK Scheme for Heat Pumps (v12)		

Model: Effenca HT 30

Configure model	
Model name	Effenca HT 30
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	30.00 kW	30.00 kW
El input	6.52 kW	10.07 kW
COP	4.60	2.98

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

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	7.56 kW	6.98 kW
Cooling capacity	23.30	30.00
EER	3.08	4.30

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	23.30 kW	30.00 kW
SEER	4.55	5.31
Pdc Tj = 35°C	23.30 kW	30.00 kW
EER Tj = 35°C	3.08	4.30
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	17.68 kW	22.11 kW
EER Tj = 30°C	4.15	5.17
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	11.37 kW	14.21 kW
EER Tj = 25°C	5.62	6.63
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	5.78 kW	7.90 kW
EER Tj = 20°C	5.80	7.20
Cdc Tj = 20 °C	0.900	0.900
Poff	20 W	300 W
PTO	166 W	166 W
PSB	0 W	0 W
PCK	0 W	0 W
Annual energy consumption Qce	3075 kWh	3390 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	204 %	155 %
Prated	30.00 kW	30.00 kW
SCOP	5.17	3.96
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	26.41 kW	26.54 kW
COP Tj = -7°C	2.97	2.17
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	16.15 kW	16.25 kW
COP Tj = +2°C	5.21	3.93
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	10.38 kW	10.39 kW
COP Tj = +7°C	7.15	5.45
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	8.17 kW	8.30 kW

COP Tj = 12°C	8.01	7.65
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	26.41 kW	26.54 kW
COP Tj = Tbiv	2.97	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	25.31 kW	25.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.96
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	35 °C	55 °C
Poff	135 W	135 W
PTO	200 W	175 W
PSB	135 W	135 W
PCK	90 W	90 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.69 kW	4.93 kW
Annual energy consumption Qhe	3390 kWh	3149 kWh

Model: Effenca HT 30 EC

Configure model	
Model name	Effenca HT 30 EC
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	n/a

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	30.00 kW	30.00 kW
El input	6.52 kW	10.07 kW
COP	4.60	2.98

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

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	7.56 kW	6.98 kW
Cooling capacity	23.30	30.00
EER	3.08	4.30

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	23.30 kW	30.00 kW
SEER	4.55	5.31
Pdc Tj = 35°C	23.30 kW	30.00 kW
EER Tj = 35°C	3.08	4.30
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	17.68 kW	22.11 kW
EER Tj = 30°C	4.15	5.17
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	11.37 kW	14.21 kW
EER Tj = 25°C	5.62	6.63
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	5.78 kW	7.90 kW
EER Tj = 20°C	5.80	7.20
Cdc Tj = 20 °C	0.900	0.900
Poff	20 W	300 W
PTO	166 W	166 W
PSB	0 W	0 W
PCK	0 W	0 W
Annual energy consumption Qce	3075 kWh	3390 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	204 %	155 %
Prated	30.00 kW	30.00 kW
SCOP	5.17	3.96
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	26.41 kW	26.54 kW
COP Tj = -7°C	2.97	2.17
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	16.15 kW	16.25 kW
COP Tj = +2°C	5.21	3.93
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	10.38 kW	10.39 kW
COP Tj = +7°C	7.15	5.45
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	8.17 kW	8.30 kW

COP Tj = 12°C	8.01	7.65
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	26.41 kW	26.54 kW
COP Tj = Tbiv	2.97	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	25.31 kW	25.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.96
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	35 °C	55 °C
Poff	135 W	135 W
PTO	200 W	175 W
PSB	135 W	135 W
PCK	90 W	90 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.69 kW	4.93 kW
Annual energy consumption Qhe	3390 kWh	3149 kWh

Subtype: REMEHA Effenca MT 20

Summary of	REMEHA Effenca MT 20	Reg. No.	007-DO0153
Certificate Holder			
Name	Remeha		
Address		Zip	
City		Country	Netherlands
Certification Body	Kiwa Nederland B.V.		
Subtype title	REMEHA Effenca MT 20		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	4.8 kg		
Certification Date	27.06.2023		
Testing basis	European KEYMARK Scheme for Heat Pumps (v11)		

Model: Effenca MT 20

Configure model	
Model name	Effenca MT 20
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	21.22 kW	15.78 kW
El input	4.84 kW	5.48 kW
COP	4.38	2.88

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

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	6.11 kW	4.31 kW
Cooling capacity	20.04	21.31
EER	3.28	4.95

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	20.04 kW	21.31 kW
SEER	5.03	7.56
Pdc Tj = 35°C	20.04 kW	21.31 kW
EER Tj = 35°C	3.28	4.95
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	15.79 kW	16.61 kW
EER Tj = 30°C	4.38	6.41
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	9.30 kW	10.22 kW
EER Tj = 25°C	5.64	9.04
Cdc Tj = 25 °C	1.000	1.000
Pdc Tj = 20°C	6.39 kW	7.75 kW
EER Tj = 20°C	7.22	11.09
Cdc Tj = 20 °C	0.900	0.900
Poff	0 W	0 W
PTO	26 W	26 W
PSB	26 W	26 W
PCK	26 W	26 W
Annual energy consumption Qce	12024 kWh	12786 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	69 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	174 %	130 %
Prated	16.80 kW	13.80 kW
SCOP	4.42	3.33
Tbiv	-5 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	14.44 kW	11.94 kW
COP Tj = -7°C	2.78	1.95
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	8.53 kW	6.97 kW
COP Tj = +2°C	4.59	3.23
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	6.37 kW	4.80 kW
COP Tj = +7°C	5.22	4.21
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	6.28 kW	6.10 kW

COP Tj = 12°C	7.76	7.04
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	13.78 kW	11.63 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.87 kW	13.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	1.74
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	58 °C	58 °C
Poff	0 W	0 W
PTO	58 W	58 W
PSB	58 W	58 W
PCK	60 W	60 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.93 kW	0.60 kW
Annual energy consumption Qhe	7847 kWh	8573 kWh

Model: Effenca MT 20 EC

Configure model	
Model name	Effenca MT 20 EC
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	n/a

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	21.22 kW	15.78 kW
El input	4.84 kW	5.48 kW
COP	4.38	2.88

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

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	6.11 kW	4.31 kW
Cooling capacity	20.04	21.31
EER	3.28	4.95

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	20.04 kW	21.31 kW
SEER	5.03	7.56
Pdc Tj = 35°C	20.04 kW	21.31 kW
EER Tj = 35°C	3.28	4.95
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	15.79 kW	16.61 kW
EER Tj = 30°C	4.38	6.41
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	9.30 kW	10.22 kW
EER Tj = 25°C	5.64	9.04
Cdc Tj = 25 °C	1.000	1.000
Pdc Tj = 20°C	6.39 kW	7.75 kW
EER Tj = 20°C	7.22	11.09
Cdc Tj = 20 °C	0.900	0.900
Poff	0 W	0 W
PTO	26 W	26 W
PSB	26 W	26 W
PCK	26 W	26 W
Annual energy consumption Qce	12024 kWh	12786 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	69 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	174 %	130 %
Prated	16.80 kW	13.80 kW
SCOP	4.42	3.33
Tbiv	-5 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	14.44 kW	11.94 kW
COP Tj = -7°C	2.78	1.95
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	8.53 kW	6.97 kW
COP Tj = +2°C	4.59	3.23
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	6.37 kW	4.80 kW
COP Tj = +7°C	5.22	4.21
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	6.28 kW	6.10 kW

COP Tj = 12°C	7.76	7.04
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	13.78 kW	11.63 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.87 kW	13.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	1.74
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	58 °C	58 °C
Poff	0 W	0 W
PTO	58 W	58 W
PSB	58 W	58 W
PCK	60 W	60 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.93 kW	0.60 kW
Annual energy consumption Qhe	7847 kWh	8573 kWh

Subtype: REMEHA Effenca MT 26

Summary of	REMEHA Effenca MT 26	Reg. No.	007-DO0157
Certificate Holder			
Name	Remeha		
Address		Zip	
City		Country	Netherlands
Certification Body	Kiwa Nederland B.V.		
Subtype title	REMEHA Effenca MT 26		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	4.8 kg		
Certification Date	27.06.2023		
Testing basis	European KEYMARK Scheme for Heat Pumps (v11)		

Model: Effenca MT 26

Configure model	
Model name	Effenca MT 26
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	27.19 kW	18.83 kW
El input	6.32 kW	6.45 kW
COP	4.30	2.92

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

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	7.74 kW	5.60 kW
Cooling capacity	24.75	26.00
EER	3.20	4.64

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	24.75 kW	26.00 kW
SEER	4.76	7.29
Pdc Tj = 35°C	24.75 kW	26.00 kW
EER Tj = 35°C	3.20	4.64
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	18.10 kW	19.70 kW
EER Tj = 30°C	4.22	6.20
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	11.83 kW	12.40 kW
EER Tj = 25°C	5.35	8.35
Cdc Tj = 25 °C	1.000	1.000
Pdc Tj = 20°C	8.26 kW	8.68 kW
EER Tj = 20°C	6.26	10.80
Cdc Tj = 20 °C	0.900	0.900
Poff	0 W	0 W
PTO	26 W	26 W
PSB	26 W	26 W
PCK	26 W	26 W
Annual energy consumption Qce	14850 kWh	15600 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	69 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	170 %	136 %
Prated	23.00 kW	17.90 kW
SCOP	4.31	3.47
Tbiv	-5 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	18.92 kW	14.77 kW
COP Tj = -7°C	2.74	2.22
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	12.96 kW	9.40 kW
COP Tj = +2°C	4.51	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	7.88 kW	6.47 kW
COP Tj = +7°C	5.40	4.35
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	7.90 kW	7.84 kW

COP Tj = 12°C	6.86	6.40
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	17.97 kW	13.89 kW
COP Tj = Tbiv	2.91	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	19.36 kW	14.01 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	1.67
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	58 °C	58 °C
Poff	0 W	0 W
PTO	58 W	58 W
PSB	58 W	58 W
PCK	60 W	60 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.64 kW	3.89 kW
Annual energy consumption Qhe	11013 kWh	10662 kWh

Model: Effenca MT 26 EC

Configure model	
Model name	Effenca MT 26 EC
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	n/a

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	27.19 kW	18.83 kW
El input	6.32 kW	6.45 kW
COP	4.30	2.92

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

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	7.74 kW	5.60 kW
Cooling capacity	24.75	26.00
EER	3.20	4.64

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	24.75 kW	26.00 kW
SEER	4.76	7.29
Pdc Tj = 35°C	24.75 kW	26.00 kW
EER Tj = 35°C	3.20	4.64
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	18.10 kW	19.70 kW
EER Tj = 30°C	4.22	6.20
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	11.83 kW	12.40 kW
EER Tj = 25°C	5.35	8.35
Cdc Tj = 25 °C	1.000	1.000
Pdc Tj = 20°C	8.26 kW	8.68 kW
EER Tj = 20°C	6.26	10.80
Cdc Tj = 20 °C	0.900	0.900
Poff	0 W	0 W
PTO	26 W	26 W
PSB	26 W	26 W
PCK	26 W	26 W
Annual energy consumption Qce	14850 kWh	15600 kWh

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level outdoor	69 dB(A)	65 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	170 %	136 %
Prated	23.00 kW	17.90 kW
SCOP	4.31	3.47
Tbiv	-5 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	18.92 kW	14.77 kW
COP Tj = -7°C	2.74	2.22
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	12.96 kW	9.40 kW
COP Tj = +2°C	4.51	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	7.88 kW	6.47 kW
COP Tj = +7°C	5.40	4.35
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	7.90 kW	7.84 kW

COP Tj = 12°C	6.86	6.40
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	17.97 kW	13.89 kW
COP Tj = Tbiv	2.91	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	19.36 kW	14.01 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	1.67
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	58 °C	58 °C
Poff	0 W	0 W
PTO	58 W	58 W
PSB	58 W	58 W
PCK	60 W	60 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.64 kW	3.89 kW
Annual energy consumption Qhe	11013 kWh	10662 kWh

Subtype: REMEHA Effenca MT 33

Summary of	REMEHA Effenca MT 33	Reg. No.	007-DO0161
Certificate Holder			
Name	Remeha		
Address		Zip	
City		Country	Netherlands
Certification Body	Kiwa Nederland B.V.		
Subtype title	REMEHA Effenca MT 33		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	5.6 kg		
Certification Date	27.06.2023		
Testing basis	European KEYMARK Scheme for Heat Pumps (v11)		

Model: Effenca MT 33

Configure model	
Model name	Effenca MT 33
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	33.36 kW	24.12 kW
El input	7.57 kW	8.04 kW
COP	4.40	3.00

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

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	8.28 kW	6.90 kW
Cooling capacity	26.50	29.00
EER	3.20	4.20

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	26.50 kW	29.00 kW
SEER	5.10	6.57
Pdc Tj = 35°C	26.50 kW	29.00 kW
EER Tj = 35°C	3.20	4.20
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	19.00 kW	23.13 kW
EER Tj = 30°C	4.24	5.50
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	12.00 kW	14.04 kW
EER Tj = 25°C	6.00	7.30
Cdc Tj = 25 °C	1.000	1.000
Pdc Tj = 20°C	8.50 kW	10.20 kW
EER Tj = 20°C	7.00	10.20
Cdc Tj = 20 °C	0.900	0.900
Poff	0 W	0 W
PTO	28 W	28 W
PSB	28 W	28 W
PCK	28 W	28 W
Annual energy consumption Qce	15900 kWh	17400 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	190 %	140 %
Prated	23.20 kW	18.80 kW
SCOP	4.83	3.58
Tbiv	-5 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	20.08 kW	16.11 kW
COP Tj = -7°C	2.86	2.18
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	12.38 kW	11.04 kW
COP Tj = +2°C	5.15	3.75
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	8.82 kW	8.50 kW
COP Tj = +7°C	5.94	4.56
Cdh Tj = +7 °C	1.000	0.900
Pdh Tj = 12°C	10.71 kW	10.56 kW

COP Tj = 12°C	8.56	6.85
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	19.77 kW	15.51 kW
COP Tj = Tbiv	3.13	2.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	22.27 kW	17.33 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.51	1.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	60 °C	60 °C
Poff	0 W	0 W
PTO	58 W	58 W
PSB	58 W	58 W
PCK	60 W	60 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.93 kW	1.47 kW
Annual energy consumption Qhe	9919 kWh	10864 kWh

Model: Effenca MT 33 EC

Configure model	
Model name	Effenca MT 33 EC
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	n/a

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	33.36 kW	24.12 kW
El input	7.57 kW	8.04 kW
COP	4.40	3.00

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

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	8.28 kW	6.90 kW
Cooling capacity	26.50	29.00
EER	3.20	4.20

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	26.50 kW	29.00 kW
SEER	5.10	6.57
Pdc Tj = 35°C	26.50 kW	29.00 kW
EER Tj = 35°C	3.20	4.20
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	19.00 kW	23.13 kW
EER Tj = 30°C	4.24	5.50
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	12.00 kW	14.04 kW
EER Tj = 25°C	6.00	7.30
Cdc Tj = 25 °C	1.000	1.000
Pdc Tj = 20°C	8.50 kW	10.20 kW
EER Tj = 20°C	7.00	10.20
Cdc Tj = 20 °C	0.900	0.900
Poff	0 W	0 W
PTO	28 W	28 W
PSB	28 W	28 W
PCK	28 W	28 W
Annual energy consumption Qce	15900 kWh	17400 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	190 %	140 %
Prated	23.20 kW	18.80 kW
SCOP	4.83	3.58
Tbiv	-5 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	20.08 kW	16.11 kW
COP Tj = -7°C	2.86	2.18
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	12.38 kW	11.04 kW
COP Tj = +2°C	5.15	3.75
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	8.82 kW	8.50 kW
COP Tj = +7°C	5.94	4.56
Cdh Tj = +7 °C	1.000	0.900
Pdh Tj = 12°C	10.71 kW	10.56 kW

COP Tj = 12°C	8.56	6.85
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	19.77 kW	15.51 kW
COP Tj = Tbiv	3.13	2.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	22.27 kW	17.33 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.51	1.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	60 °C	60 °C
Poff	0 W	0 W
PTO	58 W	58 W
PSB	58 W	58 W
PCK	60 W	60 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.93 kW	1.47 kW
Annual energy consumption Qhe	9919 kWh	10864 kWh

Subtype: REMEHA Effenca MT 40

Summary of	REMEHA Effenca MT 40	Reg. No.	007-DO0165
Certificate Holder			
Name	Remeha		
Address		Zip	
City		Country	Netherlands
Certification Body	Kiwa Nederland B.V.		
Subtype title	REMEHA Effenca MT 40		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	5.6 kg		
Certification Date	27.06.2023		
Testing basis	European KEYMARK Scheme for Heat Pumps (v11)		

Model: Effenca MT 40

Configure model	
Model name	Effenca MT 40
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	40.20 kW	29.00 kW
El input	9.50 kW	9.67 kW
COP	4.30	3.00

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

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	9.75 kW	8.84 kW
Cooling capacity	30.60	37.70
EER	3.10	4.26

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	30.60 kW	37.70 kW
SEER	5.18	6.61
Pdc Tj = 35°C	30.60 kW	37.70 kW
EER Tj = 35°C	3.10	4.26
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	22.20 kW	27.70 kW
EER Tj = 30°C	4.37	5.51
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	14.20 kW	16.85 kW
EER Tj = 25°C	5.85	7.17
Cdc Tj = 25 °C	1.000	1.000
Pdc Tj = 20°C	8.82 kW	9.44 kW
EER Tj = 20°C	7.43	9.67
Cdc Tj = 20 °C	0.900	0.900
Poff	0 W	0 W
PTO	58 W	58 W
PSB	58 W	58 W
PCK	60 W	60 W
Annual energy consumption Qce	18360 kWh	22620 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	189 %	142 %
Prated	30.00 kW	23.70 kW
SCOP	4.80	3.61
Tbiv	-5 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	26.20 kW	20.50 kW
COP Tj = -7°C	2.75	2.15
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	16.59 kW	12.52 kW
COP Tj = +2°C	5.00	3.77
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	10.34 kW	8.39 kW
COP Tj = +7°C	6.28	4.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	10.40 kW	9.77 kW

COP Tj = 12°C	8.34	6.85
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	24.20 kW	18.73 kW
COP Tj = Tbiv	2.99	2.32
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	29.12 kW	22.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.46	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	60 °C	60 °C
Poff	0 W	0 W
PTO	58 W	58 W
PSB	58 W	58 W
PCK	60 W	60 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.88 kW	0.90 kW
Annual energy consumption Qhe	13545 kWh	13692 kWh

Model: Effenca MT 40 EC

Configure model	
Model name	Effenca MT 40 EC
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	n/a

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	40.20 kW	29.00 kW
El input	9.50 kW	9.67 kW
COP	4.30	3.00

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

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	9.75 kW	8.84 kW
Cooling capacity	30.60	37.70
EER	3.10	4.26

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	30.60 kW	37.70 kW
SEER	5.18	6.61
Pdc Tj = 35°C	30.60 kW	37.70 kW
EER Tj = 35°C	3.10	4.26
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	22.20 kW	27.70 kW
EER Tj = 30°C	4.37	5.51
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	14.20 kW	16.85 kW
EER Tj = 25°C	5.85	7.17
Cdc Tj = 25 °C	1.000	1.000
Pdc Tj = 20°C	8.82 kW	9.44 kW
EER Tj = 20°C	7.43	9.67
Cdc Tj = 20 °C	0.900	0.900
Poff	0 W	0 W
PTO	58 W	58 W
PSB	58 W	58 W
PCK	60 W	60 W
Annual energy consumption Qce	18360 kWh	22620 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	189 %	142 %
Prated	30.00 kW	23.70 kW
SCOP	4.80	3.61
Tbiv	-5 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	26.20 kW	20.50 kW
COP Tj = -7°C	2.75	2.15
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	16.59 kW	12.52 kW
COP Tj = +2°C	5.00	3.77
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	10.34 kW	8.39 kW
COP Tj = +7°C	6.28	4.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	10.40 kW	9.77 kW

COP Tj = 12°C	8.34	6.85
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	24.20 kW	18.73 kW
COP Tj = Tbiv	2.99	2.32
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	29.12 kW	22.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.46	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	60 °C	60 °C
Poff	0 W	0 W
PTO	58 W	58 W
PSB	58 W	58 W
PCK	60 W	60 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.88 kW	0.90 kW
Annual energy consumption Qhe	13545 kWh	13692 kWh

Subtype: Tensio 12 16 C TR

Summary of	Tensio 12 16 C TR	Reg. No.	041-K025-03
Certificate Holder			
Name	Remeha		
Address		Zip	
City		Country	Netherlands
Certification Body	BRE Global Limited		
Subtype title	Tensio 12 16 C TR		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	1.84 kg		
Certification Date	19.05.2022		
Testing basis	Heat Pump Keymark Scheme Rules Rev 09		

Model: Mono 2 AWHP 12TR

Configure model	
Model name	Mono 2 AWHP 12TR
Application	Heating (medium temp)
Units	Outdoor
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	12.10 kW	11.90 kW
El input	2.44 kW	3.90 kW
COP	4.95	3.05

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

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	256 %	174 %
Prated	11.11 kW	12.51 kW
SCOP	6.53	4.42
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.11 kW	12.08 kW
COP Tj = +2°C	3.59	2.31
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	7.14 kW	8.04 kW
COP Tj = +7°C	5.87	3.86
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.56 kW	3.75 kW
COP Tj = 12°C	7.94	5.70
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.14 kW	8.04 kW

COP Tj = Tbiv	5.87	3.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.11 kW	12.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.59	2.31
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.44 kW
Annual energy consumption Qhe	2296 kWh	3780 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	160 %	118 %

Prated	11.38 kW	10.32 kW
SCOP	4.08	3.02
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.05 kW	6.63 kW
COP Tj = -7°C	3.48	2.63
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	4.68 kW	4.07 kW
COP Tj = +2°C	4.96	3.60
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.14 kW	2.78 kW
COP Tj = +7°C	6.10	4.54
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.57 kW	3.33 kW
COP Tj = 12°C	7.87	6.25
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	9.28 kW	8.42 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.01 kW	4.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.98	1.13
WTOL	65 °C	65 °C

Poff	14 W	14 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.37 kW	6.12 kW
Annual energy consumption Qhe	6871 kWh	8420 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.28	8.42
COP Tj = -15°C (if TOL<-20°C)	2.59	1.84
Cdh Tj = -15 °C	0.90	0.90

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	189 %	135 %
Prated	12.00 kW	11.58 kW
SCOP	4.81	3.45

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.61 kW	10.25 kW
COP Tj = -7°C	2.88	2.01
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	6.69 kW	6.52 kW
COP Tj = +2°C	4.65	3.44
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.44 kW	4.36 kW
COP Tj = +7°C	6.62	4.59
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.74 kW	3.30 kW
COP Tj = 12°C	8.47	6.05
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	10.61 kW	10.25 kW
COP Tj = Tbiv	2.88	2.01
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.75 kW	9.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.77	1.79
WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	30 W	30 W

PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.26 kW	2.50 kW
Annual energy consumption Qhe	5153 kWh	6928 kWh

Model: Mono 2 AWHP 16TR

Configure model	
Model name	Mono 2 AWHP 16TR
Application	Heating (medium temp)
Units	Outdoor
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	15.90 kW	16.00 kW
El input	3.53 kW	5.61 kW
COP	4.50	2.85

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

Warmer Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	248 %	176 %
Prated	13.09 kW	14.17 kW
SCOP	6.33	4.47
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	13.09 kW	13.38 kW
COP Tj = +2°C	3.35	2.29
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	8.42 kW	9.11 kW
COP Tj = +7°C	5.36	3.89
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.88 kW	4.06 kW
COP Tj = 12°C	8.11	5.86
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.42 kW	9.11 kW

COP Tj = Tbiv	5.36	3.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.09 kW	13.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.35	2.29
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.79 kW
Annual energy consumption Qhe	2786 kWh	4236 kWh

Colder Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	158 %	122 %

Prated	13.76 kW	11.79 kW
SCOP	4.02	3.12
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.31 kW	7.64 kW
COP Tj = -7°C	3.37	2.65
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.27 kW	4.43 kW
COP Tj = +2°C	4.86	3.79
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.62 kW	2.98 kW
COP Tj = +7°C	6.49	4.81
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.35 kW	3.43 kW
COP Tj = 12°C	7.40	6.29
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	11.22 kW	9.62 kW
COP Tj = Tbiv	2.43	1.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.89 kW	5.22 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.23
WTOL	65 °C	65 °C

Poff	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.87 kW	6.57 kW
Annual energy consumption Qhe	8431 kWh	9310 kWh
Pdh Tj = -15°C (if TOL<-20°C)	11.22	9.62
COP Tj = -15°C (if TOL<-20°C)	2.43	1.86
Cdh Tj = -15 °C	0.90	0.90

Average Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	182 %	133 %
Prated	15.21 kW	13.02 kW
SCOP	4.62	3.41

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.45 kW	11.52 kW
COP Tj = -7°C	2.72	1.99
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	8.57 kW	7.18 kW
COP Tj = +2°C	4.41	3.34
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.70 kW	4.68 kW
COP Tj = +7°C	6.56	4.61
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.78 kW	3.32 kW
COP Tj = 12°C	8.51	6.07
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	13.45 kW	11.52 kW
COP Tj = Tbiv	2.72	1.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.52 kW	10.33 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.48	1.80
WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	30 W	30 W

PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.68 kW	2.67 kW
Annual energy consumption Qhe	6805 kWh	7896 kWh

Subtype: Tensio 4 6 C MR

Summary of	Tensio 4 6 C MR	Reg. No.	041-K025-01
Certificate Holder			
Name	Remeha		
Address		Zip	
City		Country	Netherlands
Certification Body	BRE Global Limited		
Subtype title	Tensio 4 6 C MR		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	1.5 kg		
Certification Date	19.05.2022		
Testing basis	Heat Pump Keymark Scheme Rules Rev 09		

Model: Mono 2 AWHP 4MR

Configure model	
Model name	Mono 2 AWHP 4MR
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.20 kW	4.40 kW
El input	0.82 kW	1.49 kW
COP	5.10	2.95

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

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	254 %	162 %
Prated	5.54 kW	5.02 kW
SCOP	6.52	4.14
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.35 kW	4.84 kW
COP Tj = +2°C	3.94	2.51
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.56 kW	3.23 kW
COP Tj = +7°C	5.92	3.68
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.64 kW	1.47 kW
COP Tj = 12°C	7.91	5.15
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	3.56 kW	3.23 kW

COP Tj = Tbiv	5.92	3.68
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.35 kW	4.84 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.94	2.51
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.19 kW	0.18 kW
Annual energy consumption Qhe	1152 kWh	1621 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	159 %	102 %
Prated	4.57 kW	3.37 kW

SCOP	4.06	2.63
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.76 kW	2.14 kW
COP Tj = -7°C	3.49	2.32
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	1.77 kW	1.28 kW
COP Tj = +2°C	4.95	2.99
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.17 kW	1.01 kW
COP Tj = +7°C	5.53	3.86
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.43 kW	1.36 kW
COP Tj = 12°C	7.67	6.28
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	3.72 kW	2.75 kW
COP Tj = Tbiv	2.57	1.74
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	1.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.02
WTOL	65 °C	65 °C
Poff	14 W	14 W

PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.76 kW	1.73 kW
Annual energy consumption Qhe	2770 kWh	3159 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.72	2.75
COP Tj = -15°C (if TOL<-20°C)	2.57	1.74
Cdh Tj = -15 °C	0.90	0.90

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	191 %	130 %
Prated	5.52 kW	4.40 kW
SCOP	4.85	3.31
Tbiv	-7 °C	-7 °C

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.88 kW	3.89 kW
COP Tj = -7°C	3.19	2.17
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.06 kW	2.38 kW
COP Tj = +2°C	4.78	3.30
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.93 kW	2.95 kW
COP Tj = +7°C	6.13	4.41
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.48 kW	1.32 kW
COP Tj = 12°C	8.05	5.66
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	4.88 kW	3.89 kW
COP Tj = Tbiv	3.19	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.42 kW	3.42 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.91
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.11 kW	0.98 kW
Annual energy consumption Qhe	2351 kWh	2744 kWh

Model: Mono 2 AWHP 6MR

Configure model	
Model name	Mono 2 AWHP 6MR
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	6.35 kW	6.00 kW
El input	1.28 kW	2.03 kW
COP	4.95	2.95

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

Warmer Climate

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	258 %	165 %
Prated	6.12 kW	5.15 kW
SCOP	6.63	4.19
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.94 kW	5.03 kW
COP Tj = +2°C	3.91	2.48
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.93 kW	3.31 kW
COP Tj = +7°C	5.89	3.67
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.80 kW	1.60 kW
COP Tj = 12°C	8.20	5.29
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	3.93 kW	3.31 kW

COP Tj = Tbiv	5.89	3.67
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.94 kW	5.03 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.91	2.48
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.18 kW	0.12 kW
Annual energy consumption Qhe	1251 kWh	1640 kWh

Colder Climate

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	165 %	111 %
Prated	5.63 kW	4.26 kW

SCOP	4.21	2.85
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.42 kW	2.70 kW
COP Tj = -7°C	3.59	2.46
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.06 kW	1.61 kW
COP Tj = +2°C	5.21	3.36
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.47 kW	1.02 kW
COP Tj = +7°C	6.24	3.94
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.44 kW	1.37 kW
COP Tj = 12°C	7.66	6.35
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	4.60 kW	3.48 kW
COP Tj = Tbiv	2.53	1.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.48 kW	2.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.96	1.13
WTOL	65 °C	65 °C
Poff	20 W	20 W

PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.15 kW	2.16 kW
Annual energy consumption Qhe	3301 kWh	3681 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.60	3.48
COP Tj = -15°C (if TOL<-20°C)	2.53	1.86
Cdh Tj = -15 °C	0.90	0.90

Average Climate

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	195 %	138 %
Prated	6.82 kW	5.70 kW
SCOP	4.95	3.52
Tbiv	-7 °C	-7 °C

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.03 kW	5.05 kW
COP Tj = -7°C	3.09	2.17
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.88 kW	3.12 kW
COP Tj = +2°C	4.85	3.51
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.40 kW	2.09 kW
COP Tj = +7°C	6.63	4.54
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.39 kW	1.28 kW
COP Tj = 12°C	7.83	5.59
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.03 kW	5.05 kW
COP Tj = Tbiv	3.09	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.36 kW	4.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	1.91
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.45 kW	1.18 kW
Annual energy consumption Qhe	2846 kWh	3345 kWh

Subtype: Tensio 8 10 C MR

Summary of	Tensio 8 10 C MR	Reg. No.	041-K025-02
Certificate Holder			
Name	Remeha		
Address		Zip	
City		Country	Netherlands
Certification Body	BRE Global Limited		
Subtype title	Tensio 8 10 C MR		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	1.65 kg		
Certification Date	19.05.2022		
Testing basis	Heat Pump Keymark Scheme Rules Rev 09		

Model: Mono 2 AWHP 8MR

Configure model	
Model name	Mono 2 AWHP 8MR
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	8.40 kW	7.50 kW
El input	1.63 kW	2.36 kW
COP	5.15	3.18

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

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	273 %	177 %
Prated	8.12 kW	8.37 kW
SCOP	6.99	4.50
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.57 kW	7.55 kW
COP Tj = +2°C	3.98	2.59
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.22 kW	5.38 kW
COP Tj = +7°C	6.26	4.01
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.45 kW	2.32 kW
COP Tj = 12°C	9.02	5.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.22 kW	5.38 kW

COP Tj = Tbiv	6.26	4.01
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	7.55 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.98	2.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.82 kW
Annual energy consumption Qhe	1569 kWh	2485 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	170 %	112 %

Prated	6.98 kW	5.78 kW
SCOP	4.32	2.88
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.46 kW	3.86 kW
COP Tj = -7°C	3.66	2.48
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.70 kW	2.21 kW
COP Tj = +2°C	5.20	3.35
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.66 kW	1.44 kW
COP Tj = +7°C	6.53	4.11
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.66 kW	1.47 kW
COP Tj = 12°C	7.96	5.92
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.69 kW	4.71 kW
COP Tj = Tbiv	2.83	1.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.06 kW	2.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.95	1.22
WTOL	65 °C	65 °C

Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.91 kW	2.99 kW
Annual energy consumption Qhe	3978 kWh	4950 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.69	4.71
COP Tj = -15°C (if TOL<-20°C)	2.83	1.90
Cdh Tj = -15 °C	0.90	0.90

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	205 %	132 %
Prated	8.12 kW	6.60 kW
SCOP	5.21	3.36

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.19 kW	5.84 kW
COP Tj = -7°C	3.35	2.16
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	4.65 kW	3.76 kW
COP Tj = +2°C	5.09	3.30
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.90 kW	2.43 kW
COP Tj = +7°C	6.82	4.34
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.63 kW	1.40 kW
COP Tj = 12°C	8.35	5.33
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.19 kW	5.84 kW
COP Tj = Tbiv	3.35	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.45 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	1.84
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W

PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.68 kW	1.69 kW
Annual energy consumption Qhe	3223 kWh	4056 kWh

Model: Mono 2 AWHP 10MR

Configure model	
Model name	Mono 2 AWHP 10MR
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	10.00 kW	9.50 kW
El input	2.02 kW	3.06 kW
COP	4.95	3.10

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

Warmer Climate

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	279 %	180 %
Prated	8.58 kW	8.63 kW
SCOP	7.12	4.58
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.44 kW	8.06 kW
COP Tj = +2°C	3.84	2.59
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.52 kW	5.55 kW
COP Tj = +7°C	6.18	4.10
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	2.62 kW	2.53 kW
COP Tj = 12°C	9.04	5.82
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.52 kW	5.55 kW

COP Tj = Tbiv	6.18	4.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.44 kW	8.16 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.84	2.61
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.14 kW	0.48 kW
Annual energy consumption Qhe	1628 kWh	2516 kWh

Colder Climate

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	170 %	116 %
Prated	7.75 kW	6.71 kW

SCOP	4.32	2.99
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.83 kW	4.27 kW
COP Tj = -7°C	3.60	2.54
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.94 kW	2.57 kW
COP Tj = +2°C	5.26	3.51
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.92 kW	1.66 kW
COP Tj = +7°C	7.08	4.37
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.66 kW	1.48 kW
COP Tj = 12°C	7.96	5.96
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.32 kW	5.48 kW
COP Tj = Tbiv	2.64	2.00
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.63 kW	2.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.22
WTOL	65 °C	65 °C
Poff	14 W	14 W

PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.13 kW	3.91 kW
Annual energy consumption Qhe	4424 kWh	5540 kWh
Pdh Tj = -15°C (if TOL<-20°C)	6.32	5.48
COP Tj = -15°C (if TOL<-20°C)	2.64	2.00
Cdh Tj = -15 °C	0.90	0.90

Average Climate

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	205 %	137 %
Prated	9.17 kW	7.67 kW
SCOP	5.19	3.49
Tbiv	-7 °C	-7 °C

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.11 kW	6.78 kW
COP Tj = -7°C	3.23	2.24
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.18 kW	4.29 kW
COP Tj = +2°C	5.01	3.42
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.32 kW	2.77 kW
COP Tj = +7°C	7.08	4.52
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.65 kW	1.58 kW
COP Tj = 12°C	8.58	5.68
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	8.11 kW	6.78 kW
COP Tj = Tbiv	3.23	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.40 kW	5.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	1.83
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.76 kW	2.28 kW
Annual energy consumption Qhe	3647 kWh	4539 kWh