Subtype Heat Pump-R290 8-10-12kW series

Certificate Holder	FOXESS CO., LTD.
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ZIP	
City	Zhejiang
Country	CN
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Heat Pump-R290 8-10-12kW series
Registration number	011-1W1006
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.5 kg
Certification Date	12.03.2025
Testing basis	HP KEYMARK certification scheme rules rev. 14

Model HP1-8-E	
Model name	HP1-8-E
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	7.99 kW	7.85 kW
El input	1.61 kW	2.51 kW
COP	4.96	3.13

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	203 %	154 %
Prated	8.01 kW	8.06 kW
SCOP	5.15	3.94
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.09 kW	7.13 kW
COP Tj = -7°C	3.18	2.37
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = +2°C	4.64 kW	4.57 kW
COP Tj = +2°C	5.12	3.87
Cdh Tj = +2 °C	0.982	0.986
Pdh Tj = +7°C	5.05 kW	3.96 kW

COP Tj = +7°C	6.69	5.07
Cdh Tj = +7 °C	0.979	0.980
Pdh Tj = 12°C	4.94 kW	5.31 kW
COP Tj = 12°C	8.55	7.74
Cdh Tj = +12 °C	0.972	0.977
Pdh Tj = Tbiv	7.09 kW	7.13 kW
COP Tj = Tbiv	3.18	2.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.95 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	1.96
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	0.996
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	52 W	52 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.06 kW	0.13 kW
Annual energy consumption Qhe	3214 kWh	4229 kWh

Model HP1-10-E	
Model name	HP1-10-E
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	9.59 kW	9.69 kW
El input	1.98 kW	3.20 kW
COP	4.84	3.03

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	194 %	151 %
Prated	10.03 kW	10.01 kW
SCOP	4.93	3.85
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.88 kW	8.86 kW
COP Tj = -7°C	2.81	2.31
Cdh Tj = -7 °C	0.994	0.996
Pdh Tj = +2°C	5.52 kW	5.38 kW
COP Tj = +2°C	4.87	3.70
Cdh Tj = +2 °C	0.986	0.989
Pdh Tj = +7°C	5.12 kW	4.95 kW

COP Tj = +7°C	6.70	5.16
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	6.01 kW	5.73 kW
COP Tj = 12°C	8.40	7.58
Cdh Tj = +12 °C	0.978	0.979
Pdh Tj = Tbiv	8.88 kW	8.86 kW
COP Tj = Tbiv	2.81	2.31
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.94 kW	9.97 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.77	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	52 W	52 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.09 kW	0.04 kW
Annual energy consumption Qhe	4209 kWh	5369 kWh

Model HP1-12-E	
Model name	HP1-12-E
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	11.43 kW	11.63 kW
El input	2.60 kW	4.13 kW
COP	4.40	2.82

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	179 %	140 %
Prated	12.05 kW	12.17 kW
SCOP	4.56	3.58
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.66 kW	10.77 kW
COP Tj = -7°C	2.72	2.06
Cdh Tj = -7 °C	0.996	1.000
Pdh Tj = +2°C	6.80 kW	6.46 kW
COP Tj = +2°C	4.49	3.44
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	5.42 kW	4.28 kW

COP Tj = +7°C	5.99	4.93
Cdh Tj = +7 °C	0.982	0.982
Pdh Tj = 12°C	5.79 kW	6.13 kW
COP Tj = 12°C	8.28	7.32
Cdh Tj = +12 °C	0.977	0.981
Pdh Tj = Tbiv	10.66 kW	10.77 kW
COP Tj = Tbiv	2.72	2.06
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.75 kW	10.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.997
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	52 W	52 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.35 kW
Annual energy consumption Qhe	5459 kWh	7016 kWh

Model HP3-8-E	
Model name	HP3-8-E
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	7.99 kW	7.85 kW
El input	1.61 kW	2.51 kW
COP	4.96	3.13

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	203 %	154 %
Prated	8.01 kW	8.06 kW
SCOP	5.15	3.94
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.09 kW	7.13 kW
COP Tj = -7°C	3.18	2.37
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = +2°C	4.64 kW	4.57 kW
COP Tj = +2°C	5.12	3.87
Cdh Tj = +2 °C	0.982	0.986
Pdh Tj = +7°C	5.05 kW	3.96 kW

COP Tj = +7°C	6.69	5.07
Cdh Tj = +7 °C	0.979	0.980
Pdh Tj = 12°C	4.94 kW	5.31 kW
COP Tj = 12°C	8.55	7.74
Cdh Tj = +12 °C	0.972	0.977
Pdh Tj = Tbiv	7.09 kW	7.13 kW
COP Tj = Tbiv	3.18	2.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.95 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	1.96
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	0.996
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	52 W	52 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.06 kW	0.13 kW
Annual energy consumption Qhe	3214 kWh	4229 kWh

Model HP3-10-E	
Model name	HP3-10-E
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	9.59 kW	9.69 kW
El input	1.98 kW	3.20 kW
COP	4.84	3.03

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	194 %	151 %
Prated	10.03 kW	10.01 kW
SCOP	4.93	3.85
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.88 kW	8.86 kW
COP Tj = -7°C	2.81	2.31
Cdh Tj = -7 °C	0.994	0.996
Pdh Tj = +2°C	5.52 kW	5.38 kW
COP Tj = +2°C	4.87	3.70
Cdh Tj = +2 °C	0.986	0.989
Pdh Tj = +7°C	5.12 kW	4.95 kW

COP Tj = +7°C	6.70	5.16
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	6.01 kW	5.73 kW
COP Tj = 12°C	8.40	7.58
Cdh Tj = +12 °C	0.978	0.979
Pdh Tj = Tbiv	8.88 kW	8.86 kW
COP Tj = Tbiv	2.81	2.31
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.94 kW	9.97 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.77	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	52 W	52 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.09 kW	0.04 kW
Annual energy consumption Qhe	4209 kWh	5369 kWh

Model HP3-12-E

Model name	HP3-12-E
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	11.43 kW	11.63 kW
El input	2.60 kW	4.13 kW
COP	4.40	2.82

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	179 %	140 %
Prated	12.05 kW	12.17 kW
SCOP	4.56	3.58
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.66 kW	10.77 kW
COP Tj = -7°C	2.72	2.06
Cdh Tj = -7 °C	0.996	1.000
Pdh Tj = +2°C	6.80 kW	6.46 kW
COP Tj = +2°C	4.49	3.44
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	5.42 kW	4.28 kW

COP Tj = +7°C	5.99	4.93
Cdh Tj = +7 °C	0.982	0.982
Pdh Tj = 12°C	5.79 kW	6.13 kW
COP Tj = 12°C	8.28	7.32
Cdh Tj = +12 °C	0.977	0.981
Pdh Tj = Tbiv	10.66 kW	10.77 kW
COP Tj = Tbiv	2.72	2.06
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.75 kW	10.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.997
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	52 W	52 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.35 kW
Annual energy consumption Qhe	5459 kWh	7016 kWh

Model HP1-8P-E	
Model name	HP1-8P-E
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.02 kW	7.87 kW
El input	1.69 kW	2.52 kW
COP	4.75	3.12

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	206 %	156 %
Prated	8.00 kW	8.05 kW
SCOP	5.23	3.97
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.07 kW	7.12 kW
COP Tj = -7°C	3.19	2.37
Cdh Tj = -7 °C	0.993	0.994
Pdh Tj = +2°C	4.63 kW	4.57 kW
COP Tj = +2°C	5.20	3.90
Cdh Tj = +2 °C	0.982	0.986
Pdh Tj = +7°C	5.05 kW	3.97 kW

COP Tj = +7°C	6.85	5.14
Cdh Tj = +7 °C	0.978	0.979
Pdh Tj = 12°C	4.93 kW	5.31 kW
COP Tj = 12°C	8.89	7.88
Cdh Tj = +12 °C	0.971	0.976
Pdh Tj = Tbiv	7.07 kW	7.12 kW
COP Tj = Tbiv	3.19	2.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.94 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.75	1.95
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	0.996
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	52 W	52 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.06 kW	0.12 kW
Annual energy consumption Qhe	3159 kWh	4190 kWh

Model HP1-10P-E	
Model name	HP1-10P-E
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	9.55 kW	9.71 kW
El input	2.06 kW	3.23 kW
COP	4.64	3.01

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	198 %	153 %
Prated	10.02 kW	10.01 kW
SCOP	5.04	3.90
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.86 kW	8.86 kW
COP Tj = -7°C	2.92	2.22
Cdh Tj = -7 °C	0.994	0.996
Pdh Tj = +2°C	5.40 kW	5.48 kW
COP Tj = +2°C	4.96	3.82
Cdh Tj = +2 °C	0.985	0.989
Pdh Tj = +7°C	5.01 kW	4.87 kW

COP Tj = +7°C	6.93	5.22
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	5.87 kW	5.71 kW
COP Tj = 12°C	8.56	7.77
Cdh Tj = +12 °C	0.976	0.978
Pdh Tj = Tbiv	8.86 kW	8.86 kW
COP Tj = Tbiv	2.92	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.87 kW	9.96 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.45	1.93
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.997
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	52 W	52 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.15 kW	0.05 kW
Annual energy consumption Qhe	4109 kWh	5304 kWh

Model HP1-12P-E	
Model name	HP1-12P-E
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	11.49 kW	11.67 kW
El input	2.75 kW	4.16 kW
COP	4.18	2.81

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	182 %	142 %
Prated	12.02 kW	12.15 kW
SCOP	4.62	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.64 kW	10.75 kW
COP Tj = -7°C	2.72	2.06
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.79 kW	6.46 kW
COP Tj = +2°C	4.54	3.47
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	5.42 kW	4.29 kW

COP Tj = +7°C	6.13	5.03
Cdh Tj = +7 °C	0.982	0.981
Pdh Tj = 12°C	5.78 kW	6.12 kW
COP Tj = 12°C	8.64	7.50
Cdh Tj = +12 °C	0.976	0.980
Pdh Tj = Tbiv	10.64 kW	10.75 kW
COP Tj = Tbiv	2.72	2.06
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.73 kW	10.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.34	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.997
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	52 W	52 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.29 kW	1.34 kW
Annual energy consumption Qhe	5379 kWh	6939 kWh

Model HP3-8P-E	
Model name	HP3-8P-E
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.02 kW	7.87 kW
El input	1.69 kW	2.52 kW
COP	4.75	3.12

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	206 %	156 %
Prated	8.00 kW	8.05 kW
SCOP	5.23	3.97
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.07 kW	7.12 kW
COP Tj = -7°C	3.19	2.37
Cdh Tj = -7 °C	0.993	0.994
Pdh Tj = +2°C	4.63 kW	4.57 kW
COP Tj = +2°C	5.20	3.90
Cdh Tj = +2 °C	0.982	0.986
Pdh Tj = +7°C	5.05 kW	3.97 kW

COP Tj = +7°C	6.85	5.14
Cdh Tj = +7 °C	0.978	0.979
Pdh Tj = 12°C	4.93 kW	5.31 kW
COP Tj = 12°C	8.89	7.88
Cdh Tj = +12 °C	0.971	0.976
Pdh Tj = Tbiv	7.07 kW	7.12 kW
COP Tj = Tbiv	3.19	2.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.94 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.75	1.95
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	0.996
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	52 W	52 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.06 kW	0.12 kW
Annual energy consumption Qhe	3159 kWh	4190 kWh

Model HP3-10P-E		
Model name	HP3-10P-E	
Application	Heating (medium temp)	
Units	Outdoor	
Climate zone (for heating)	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	
Any additional heat sources	n/a	
General data		
Power supply	3x400V 50Hz	
Off-peak product	n/a	
Outdoor Air/Water		
EN 14511-4 | Heating		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	
EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	9.55 kW	9.71 kW
El input	2.06 kW	3.23 kW
COP	4.64	3.01
EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)
EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	198 %	153 %
Prated	10.02 kW	10.01 kW
SCOP	5.04	3.90
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.86 kW	8.86 kW
COP Tj = -7°C	2.92	2.22
Cdh Tj = -7 °C	0.994	0.996
Pdh Tj = +2°C	5.40 kW	5.48 kW
COP Tj = +2°C	4.96	3.82
Cdh Tj = +2 °C	0.985	0.989
Pdh Tj = +7°C	5.01 kW	4.87 kW

COP Tj = +7°C	6.93	5.22
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	5.87 kW	5.71 kW
COP Tj = 12°C	8.56	7.77
Cdh Tj = +12 °C	0.976	0.978
Pdh Tj = Tbiv	8.86 kW	8.86 kW
COP Tj = Tbiv	2.92	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.87 kW	9.96 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.45	1.93
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.997
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	52 W	52 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.15 kW	0.05 kW
Annual energy consumption Qhe	4109 kWh	5304 kWh

Model HP3-12P-E	
Model name	HP3-12P-E
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	11.49 kW	11.67 kW
El input	2.75 kW	4.16 kW
COP	4.18	2.81

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	182 %	142 %
Prated	12.02 kW	12.15 kW
SCOP	4.62	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.64 kW	10.75 kW
COP Tj = -7°C	2.72	2.06
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.79 kW	6.46 kW
COP Tj = +2°C	4.54	3.47
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	5.42 kW	4.29 kW

COP Tj = +7°C	6.13	5.03
Cdh Tj = +7 °C	0.982	0.981
Pdh Tj = 12°C	5.78 kW	6.12 kW
COP Tj = 12°C	8.64	7.50
Cdh Tj = +12 °C	0.976	0.980
Pdh Tj = Tbiv	10.64 kW	10.75 kW
COP Tj = Tbiv	2.72	2.06
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.73 kW	10.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.34	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.997
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	52 W	52 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.29 kW	1.34 kW
Annual energy consumption Qhe	5379 kWh	6939 kWh