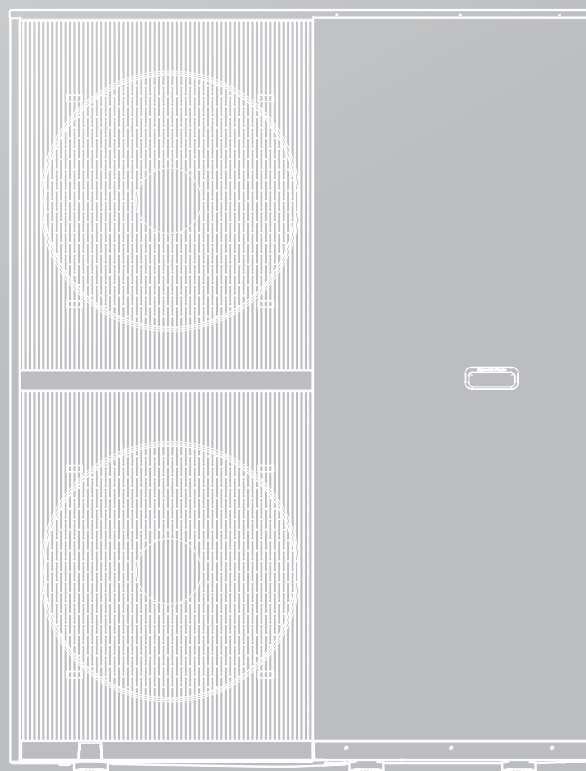


TECHNICAL DATA MANUAL

M-thermal Mono
ATW Heat Pump



IMPORTANT NOTE:

Original instructions.

Please read this manual carefully and keep it for future reference.

All the pictures in this manual are for illustrations purpose only.

Product fiche 1

Heat pump space heater		unit	KHP-MO 26 DTP	KHP-MO 30 DTP	KHP-MO 35 DTP	KHP-MO 40 DTP
Indoor unit sound power (*)		[dB(A)]	/	/	/	/
Outdoor unit sound power (*)		[dB(A)]	69	74	75	76
Capacity of the back-up heater integrated in the unit	Psup back-up heater	[kW]	0	0	0	0
off peak operation function integrated in Heat pump		Y/N	No	No	No	No
Space heating	Energy efficiency class 35 °C (Low temp. app.)	-	A+++	A+++	A+++	A++
Space heating	Energy efficiency class 55 °C (Medium temp. app.)	-	A+++	A++	A++	A++
Average climate (Design temperature= -10 °C)						
Space heating 35 °C	Prated(declared heating capacity) @-10 °C	[kW]	26	30	35	39
	Seasonal space heating efficiency(η_s)	[%]	194.9	193.8	176.3	169.7
	Annual energy consumption	[kWh]	10 856	12 600	16 131	18 665
Space heating 55 °C	Prated(declared heating capacity) @-10 °C	[kW]	26	30	35	39
	Seasonal space heating efficiency(η_s)	[%]	150.7	148.7	142.4	135.6
	Annual energy consumption	[kWh]	13 984	16 346	19 899	23 246
Part load conditions space heating average climate low temperature application						
(A) condition (-7 °C)	Pdh(declared heating capacity)	[kW]	24.41	26.39	27.79	31.37
	COPd (declared COP)	-	3.03	2.72	2.55	2.53
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(B) condition (2 °C)	Pdh(declared heating capacity)	[kW]	14.36	16.65	18.47	20.72
	COPd (declared COP)	-	4.87	4.97	4.39	4.17
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(C) condition (7 °C)	Pdh(declared heating capacity)	[kW]	9.15	10.27	12.06	12.92
	COPd (declared COP)	-	6.80	6.91	6.99	6.56
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(D) condition (12 °C)	Pdh(declared heating capacity)	[kW]	6.87	7.26	7.59	6.53
	COPd (declared COP)	-	9.23	9.66	10.89	9.22
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9

Product fiche 2

Heat pump space heater		unit	KHP-MO 26 DTP	KHP-MO 30 DTP	KHP-MO 35 DTP	KHP-MO 40 DTP
(E) Tol(temperature operating limit)	Tol (temperature operating limit)	[°C]	-10	-10	-10	-10
	Pdh (declared heating capacity)	[kW]	26.54	30.31	35.65	34.53
	COPd (declared COP)	-	2.85	2.45	2.05	1.98
	WTOL (Heating water Operation Limit)	[°C]	85	85	85	85
(F) Tbivalent temperature	Tbiv	[°C]	-7	-7	-7	-7
	Pdh (declared heating capacity)	[kW]	23.41	26.39	27.79	31.37
	COPd (declared COP)	-	3.03	2.72	2.55	2.53
Supplementary capacity at P_design	Psup (@Tdesignh:-10 °C)	[kW]	0	0	0	4.47
Part load conditions space heating average climate medium temperature application						
(A) condition (-7 °C)	Pdh (declared heating capacity)	[kW]	23.26	27.36	30.66	32.08
	COPd (declared COP)	-	2.33	2.07	1.93	1.83
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(B) condition (2 °C)	Pdh (declared heating capacity)	[kW]	13.92	16.52	19.29	19.72
	COPd (declared COP)	-	3.68	3.72	3.54	3.34
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(C) condition (7 °C)	Pdh (declared heating capacity)	[kW]	9.49	10.74	12.5	14.11
	COPd (declared COP)	-	5.51	5.55	5.47	5.25
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(D) condition (12 °C)	Pdh (declared heating capacity)	[kW]	6.60	6.49	6.51	6.18
	COPd (declared COP)	-	6.25	7.09	7.28	6.67
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(E) Tol(temperature operating limit)	Tol (temperature operating limit)	[°C]	-10	-10	-10	-10
	Pdh (declared heating capacity)	[kW]	26.14	30.02	34.53	33.78
	COPd (declared COP)	-	1.98	1.89	1.79	1.77
	WTOL (Heating water Operation Limit)	[°C]	85	85	85	85
(F) Tbivalent temperature	Tbiv	[°C]	-7	-7	-7	-7
	Pdh (declared heating capacity)	[kW]	23.26	27.36	30.66	32.08
	COPd (declared COP)	-	2.33	2.07	1.93	1.83
Supplementary capacity at P_design	Psup (@Tdesignh:-10 °C)	[kW]	0	0	0.47	5.22

Product fiche 3

Heat pump space heater		unit	KHP-MO 26 DTP	KHP-MO 30 DTP	KHP-MO 35 DTP	KHP-MO 40 DTP
Colder climate (Design temperature = -22 °C)						
Space heating 35 °C	Prated (declared heating capacity) @ -22 °C	[kW]	25	28	34	34
	Seasonal space heating efficiency (η_s)	[%]	155.1	153.3	151.1	150.6
	Annual energy consumption	[kWh]	15 592	17 664	21 760	21 823
Space heating 55 °C	Prated (declared heating capacity) @ -22 °C	[kW]	25	28	33.5	33.5
	Seasonal space heating efficiency (η_s)	[%]	126.2	122.8	118.1	117.1
	Annual energy consumption	[kWh]	19 078	21 950	27 265	27 514
Part load conditions space heating colder climate low temperature application						
condition (-15 °C)	Pdh (declared heating capacity)	[kW]	19.54	21.33	26.02	26.69
	COPd (declared COP)	-	2.63	2.56	2.29	2.31
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(A) condition (-7 °C)	Pdh (declared heating capacity)	[kW]	14.98	15.88	18.56	19.57
	COPd (declared COP)	-	3.40	3.56	3.49	3.14
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(B) condition (2 °C)	Pdh (declared heating capacity)	[kW]	9.42	10.76	11.32	12.29
	COPd (declared COP)	-	4.55	4.57	4.62	4.82
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(C) condition (7 °C)	Pdh (declared heating capacity)	[kW]	6.49	6.07	7.57	8.24
	COPd (declared COP)	-	7.03	6.40	6.57	7.02
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(D) condition (12 °C)	Pdh (declared heating capacity)	[kW]	6.95	6.92	6.92	6.49
	COPd (declared COP)	-	7.64	7.11	7.11	8.23
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(E) Tol(temperature operating limit)	Tol (temperature operating limit)	[°C]	-22	-22	-22	-22
	Pdh (declared heating capacity)	[kW]	16.82	18.43	22.96	22.95
	COPd (declared COP)	-	2.17	2.13	1.93	1.96
	WTOL (Heating water Operation Limit)	[°C]	85	85	85	85
(F) Tbivalent temperature	Tbiv	[°C]	-15	-7	-7	-7
	Pdh (declared heating capacity)	[kW]	19.54	15.88	18.56	19.57
	COPd (declared COP)	-	2.63	3.56	3.49	3.14
Supplementary capacity at P _{design}	Psup (@Tdesignh:-22 °C)	[kW]	8.19	9.57	11.04	11.05

Product fiche 4

Heat pump space heater		unit	KHP-MO 26 DTP	KHP-MO 30 DTP	KHP-MO 35 DTP	KHP-MO 40 DTP
Part load conditions space heating colder climate medium temperature application						
condition (-15 °C)	Pdh (declared heating capacity)	[kW]	20.50	20.00	26.50	26.18
	COPd (declared COP)	-	2.09	2.07	1.90	1.83
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(A) condition (-7 °C)	Pdh (declared heating capacity)	[kW]	15.14	16.54	18.34	19.91
	COPd (declared COP)	-	2.64	2.50	2.33	2.43
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(B) condition (2 °C)	Pdh (declared heating capacity)	[kW]	9.28	10.71	11.80	11.47
	COPd (declared COP)	-	3.83	3.76	3.71	3.61
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(C) condition (7 °C)	Pdh (declared heating capacity)	[kW]	6.28	6.69	11.80	8.08
	COPd (declared COP)	-	5.14	5.52	3.71	5.29
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(D) condition (12 °C)	Pdh (declared heating capacity)	[kW]	6.63	6.84	6.84	5.96
	COPd (declared COP)	-	6.95	6.75	6.75	6.50
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(E) Tol(temperature operating limit)	Tol (temperature operating limit)	[°C]	-22	-22	-22	-22
	Pdh (declared heating capacity)	[kW]	16.61	19.95	24.34	23.19
	COPd (declared COP)	-	1.71	1.70	1.60	1.54
	WTOL (Heating water Operation Limit)	[°C]	85	85	85	85
(F) Tbivalent temperature	Tbiv	[°C]	-15	-7	-7	-7
	Pdh (declared heating capacity)	[kW]	15.14	16.54	18.34	19.91
	COPd (declared COP)	-	2.64	2.5	2.33	2.43
Supplementary capacity at P _{design}	Psup (@Tdesignh:-22°C)	[kW]	7.39	8.05	9.16	10.31
Warmer climate (Design temperature =2 °C)						
Space heating 35 °C	Prated (declared heating capacity) @ 2 °C	[kW]	26	30	35	39
	Seasonal space heating efficiency (ηs)	[%]	259.8	247.5	240.3	210.8
	Annual energy consumption	[kWh]	5 287	6 399	7 687	9 746
Space heating 55 °C	Prated (declared heating capacity) @ 2 °C	[kW]	26	30	35	39
	Seasonal space heating efficiency (ηs)	[%]	194.8	193.1	187.1	177.1
	Annual energy consumption	[kWh]	7 025	8 177	9 838	11 573

Product fiche 5

Heat pump space heater		unit	KHP-MO 26 DTP	KHP-MO 30 DTP	KHP-MO 35 DTP	KHP-MO 40 DTP
Part load conditions space heating warmer climate low temperature application						
(B) condition (2 °C)	Pdh (declared heating capacity)	[kW]	26.00	30.00	33.92	33.03
	COPd (declared COP)	-	3.66	3.19	2.56	2.44
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(C) condition (7 °C)	Pdh (declared heating capacity)	[kW]	16.70	19.09	22.44	24.06
	COPd (declared COP)	-	5.78	5.44	5.42	4.60
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(D) condition (12 °C)	Pdh (declared heating capacity)	[kW]	7.67	8.99	10.36	10.40
	COPd (declared COP)	-	8.52	8.42	8.43	8.32
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(E) Tol(temperature operating limit)	Tol (temperature operating limit)	[°C]	2	2	2	2
	Pdh (declared heating capacity)	[kW]	26.13	30.21	33.92	33.03
	COPd (declared COP)	-	3.66	3.19	2.56	2.44
	WTOL (Heating water Operation Limit)	[°C]	85	85	85	85
(F) Tbivalent temperature	Tbiv	[°C]	7	7	7	7
	Pdh (declared heating capacity)	[kW]	16.70	19.09	22.44	24.06
	COPd (declared COP)	-	5.78	5.44	5.42	4.60
Supplementary capacity at P _{design}	Psup (@Tdesignh:2 °C)	[kW]	0	0	1.08	5.98
Part load conditions space heating warmer climate medium temperature application						
(B) condition (2 °C)	Pdh (declared heating capacity)	[kW]	26.00	29.76	33.06	32.88
	COPd (declared COP)	-	2.53	2.44	2.31	2.15
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(C) condition (7 °C)	Pdh (declared heating capacity)	[kW]	16.65	19.05	22.45	22.84
	COPd (declared COP)	-	4.11	4.03	3.98	3.94
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(D) condition (12 °C)	Pdh (declared heating capacity)	[kW]	7.76	9.14	10.06	10.91
	COPd (declared COP)	-	6.65	6.70	6.62	6.37
	Cdh(degradation coefficient)	-	0.9	0.9	0.9	0.9
(E) Tol(temperature operating limit)	Tol (temperature operating limit)	[°C]	2	2	2	2
	Pdh (declared heating capacity)	[kW]	26.00	29.76	33.06	32.88
	COPd (declared COP)	-	2.53	2.44	2.31	2.15
	WTOL (Heating water Operation Limit)	[°C]	85	85	85	85

Product fiche 6

Heat pump space heater		unit	KHP-MO 26 DTP	KHP-MO 30 DTP	KHP-MO 35 DTP	KHP-MO 40 DTP
(F) Tbivalent temperature	Tbiv	[°C]	7	7	7	7
	Pdh (declared heating capacity)	[kW]	16.65	19.05	22.45	22.84
	COPd (declared COP)	-	4.11	4.03	3.98	3.94
Supplementary capacity at P _{design}	Psup (@Tdesignh:2 °C)	[kW]	0	0.24	1.94	6.12
Ecodesign technical data						
Product description	Air-to-water heat pump	Y/N	Yes	Yes	Yes	Yes
	Water-to-water heat pump	Y/N	No	No	No	No
	Brine-to-water heat pump	Y/N	No	No	No	No
	Low-temperature heat pump	Y/N	No	No	No	No
	Equipped with a supplementary heater	Y/N	No	No	No	No
	Heat pump combination heater	Y/N	No	No	No	No
Air to water unit	Rated airflow (outdoor)	[m³/h]	10 500	10 500	10 500	10 500
Brine/water to water unit	Rated water/brine flow (outdoor H/E)	[m³/h]	/	/	/	/
Other	Capacity control	-	Inverter	Inverter	Inverter	Inverter
	Poff (Power consumption Off mode)	[kW]	0.014	0.014	0.014	0.014
	Pto (Power consumption Thermostat off mode)	[kW]	0.013	0.013	0.013	0.013
	Psb (Power consumption Standby mode)	[kW]	0.014	0.014	0.014	0.014
	PCK (Power crankcase heater model)	[kW]	0	0	0	0
	Qelec (Daily electricity consumption)	[kWh]	/	/	/	/
	Qfuel (Daily fuel consumption)	[kWh]	/	/	/	/
<p>Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.</p> <p>Product fiche data according to energy label directive 2010/30/EC regulation (EU) 811/2013.</p>						

Technical parameters				
Model(s):	KHP-MO 26 DTP			
Air-to-water heat pump:	YES			
Water-to-water heat pump:	NO			
Brine-to-water heat pump:	NO			
Low-temperature heat pump:	NO			
Equipped with a supplementary heater:	NO			
Heat pump combination heater:	NO			
Declared climate condition:	AVERAGE			
Parameters are declared for medium-temperature application.				
Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	26	kW	
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				
Tj = -7 °C	Pdh	23.3	kW	
Tj = 2 °C	Pdh	13.9	kW	
Tj = 7 °C	Pdh	9.5	kW	
Tj = 12 °C	Pdh	6.6	kW	
Tj = bivalent temperature	Pdh	23.3	kW	
Tj = operating limit	Pdh	26.1	kW	
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW	
Bivalent temperature	Tbiv	-7	°C	
Cycling interval capacity for heating	Pcyh	-	kW	
Degradation co-efficient (**)	Cdh	0.9	--	
Power consumption in modes other than active mode				
Off mode	Poff	0.014	kW	
Standby mode	Psb	0.013	kW	
Thermostat-off mode	Pto	0.014	kW	
Crankcase heater mode	Pck	0.000	kW	
Other items				
Capacity control	variable			
Sound power level, indoors/outdoors	LWA	-/69	dB	
Annual energy consumption	QHE	13 981	kWh	
For heat pump combination heater:				
Declared load profile	-			
Daily electricity consumption	Qelec	-	kWh	
Annual electricity consumption	AEC	-	kWh	
Contact details				
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.				

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	150.7	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.33	-
Tj = 2 °C	COPd	3.68	-
Tj = 7 °C	COPd	5.51	-
Tj = 12 °C	COPd	6.25	-
Tj = bivalent temperature	COPd	2.33	-
Tj = operating limit	COPd	1.98	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPeyc	-	-
Heating water operating limit temperature	WTOL	85	°C
Supplementary heater			
Rated heat output (**)	Psup	0	kW
Type of energy input	Electrical		
For air-to-water heat pumps: Rated air flow rate, outdoors	-	10 500	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h
Water heating energy efficiency	ηwh	-	%
Daily fuel consumption	Qfuel	-	kWh
Annual fuel consumption	AFC	-	GJ

Technical parameters				
Model(s):	KHP-MO 26 DTP			
Air-to-water heat pump:	YES			
Water-to-water heat pump:	NO			
Brine-to-water heat pump:	NO			
Low-temperature heat pump:	NO			
Equipped with a supplementary heater:	NO			
Heat pump combination heater:	NO			
Declared climate condition:	COLDER			
Parameters are declared for medium-temperature application.				
Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	25	kW	
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				
Tj = -7 °C	Pdh	15.1	kW	
Tj = 2 °C	Pdh	9.3	kW	
Tj = 7 °C	Pdh	6.3	kW	
Tj = 12 °C	Pdh	6.6	kW	
Tj = bivalent temperature	Pdh	15.1	kW	
Tj = operating limit	Pdh	16.6	kW	
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW	
Bivalent temperature	Tbiv	-15	°C	
Cycling interval capacity for heating	Pcyh	-	kW	
Degradation co-efficient (**)	Cdh	0.9	--	
Power consumption in modes other than active mode				
Off mode	Poff	0.014	kW	
Standby mode	Psb	0.013	kW	
Thermostat-off mode	Pto	0.014	kW	
Crankcase heater mode	Pck	0.000	kW	
Other items				
Capacity control	variable			
Sound power level, indoors/outdoors	LWA	-/69	dB	
Annual energy consumption	QHE	19 078	kWh	
For heat pump combination heater:				
Declared load profile	-			
Daily electricity consumption	Qelec	-	kWh	
Annual electricity consumption	AEC	-	kWh	
Contact details				
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.				

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	126.2	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.64	-
Tj = 2 °C	COPd	3.83	-
Tj = 7 °C	COPd	5.14	-
Tj = 12 °C	COPd	6.95	-
Tj = bivalent temperature	COPd	2.64	-
Tj = operating limit	COPd	1.71	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	85	°C
Supplementary heater			
Rated heat output (**)	Psup	7.39	kW
Type of energy input	-		
For air-to-water heat pumps: Rated air flow rate, outdoors	-	10 500	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

Technical parameters				
Model(s):	KHP-MO 26 DTP			
Air-to-water heat pump:	YES			
Water-to-water heat pump:	NO			
Brine-to-water heat pump:	NO			
Low-temperature heat pump:	NO			
Equipped with a supplementary heater:	NO			
Heat pump combination heater:	NO			
Declared climate condition:	WARMER			
Parameters are declared for medium-temperature application.				
Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	26	kW	
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				
Tj = -7 °C	Pdh	26.0	kW	
Tj = 2 °C	Pdh	16.7	kW	
Tj = 7 °C	Pdh	7.8	kW	
Tj = 12 °C	Pdh	16.7	kW	
Tj = bivalent temperature	Pdh	16.7	kW	
Tj = operating limit	Pdh	26.0	kW	
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW	
Bivalent temperature	Tbiv	7	°C	
Cycling interval capacity for heating	Pcyh	-	kW	
Degradation co-efficient (**)	Cdh	0.9	--	
Power consumption in modes other than active mode				
Off mode	Poff	0.014	kW	
Standby mode	Psb	0.013	kW	
Thermostat-off mode	Pto	0.014	kW	
Crankcase heater mode	Pck	0.000	kW	
Other items				
Capacity control	variable			
Sound power level, indoors/outdoors	LWA	-/69	dB	
Annual energy consumption	QHE	7 025	kWh	
For heat pump combination heater:				
Declared load profile	-			
Daily electricity consumption	Qelec	-	kWh	
Annual electricity consumption	AEC	-	kWh	
Contact details				
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.				

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	194.8	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	2.53	-
Tj = 7 °C	COPd	4.11	-
Tj = 12 °C	COPd	6.65	-
Tj = bivalent temperature	COPd	4.11	-
Tj = operating limit	COPd	2.53	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COPeyc	-	-
Heating water operating limit temperature	WTOL	85	°C
Supplementary heater			
Rated heat output (**)	Psup	0	kW
Type of energy input	-		
For air-to-water heat pumps: Rated air flow rate, outdoors	-	10 500	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

Technical parameters				
Model(s):	KHP-MO 30 DTP			
Air-to-water heat pump:	YES			
Water-to-water heat pump:	NO			
Brine-to-water heat pump:	NO			
Low-temperature heat pump:	NO			
Equipped with a supplementary heater:	NO			
Heat pump combination heater:	NO			
Declared climate condition:	AVERAGE			
Parameters are declared for medium-temperature application.				
Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	30	kW	
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				
Tj = -7 °C	Pdh	27.5	kW	
Tj = 2 °C	Pdh	16.6	kW	
Tj = 7 °C	Pdh	10.8	kW	
Tj = 12 °C	Pdh	6.5	kW	
Tj = bivalent temperature	Pdh	27.5	kW	
Tj = operating limit	Pdh	30.1	kW	
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW	
Bivalent temperature	Tbiv	-7	°C	
Cycling interval capacity for heating	Pcyh	-	kW	
Degradation co-efficient (**)	Cdh	0.9	--	
Power consumption in modes other than active mode				
Off mode	Poff	0.014	kW	
Standby mode	Psb	0.013	kW	
Thermostat-off mode	Pto	0.014	kW	
Crankcase heater mode	Pck	0.000	kW	
Other items				
Capacity control	variable			
Sound power level, indoors/outdoors	LWA	-74	dB	
Annual energy consumption	QHE	16 346	kWh	
For heat pump combination heater:				
Declared load profile	-			
Daily electricity consumption	Qelec	-	kWh	
Annual electricity consumption	AEC	-	kWh	
Contact details				
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.				

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	148.7	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.06	-
Tj = 2 °C	COPd	3.70	-
Tj = 7 °C	COPd	5.51	-
Tj = 12 °C	COPd	7.00	-
Tj = bivalent temperature	COPd	2.06	-
Tj = operating limit	COPd	1.88	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPeyc	-	-
Heating water operating limit temperature	WTOL	85	°C
Supplementary heater			
Rated heat output (**)	Psup	0	kW
Type of energy input	Electrical		
For air-to-water heat pumps: Rated air flow rate, outdoors	-	10 500	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h
Water heating energy efficiency	ηwh	-	%
Daily fuel consumption	Qfuel	-	kWh
Annual fuel consumption	AFC	-	GJ

Technical parameters							
Model(s):	KHP-MO 30 DTP						
Air-to-water heat pump:	YES						
Water-to-water heat pump:	NO						
Brine-to-water heat pump:	NO						
Low-temperature heat pump:	NO						
Equipped with a supplementary heater:	NO						
Heat pump combination heater:	NO						
Declared climate condition:	COLDER						
Parameters are declared for medium-temperature application.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	28	kW	Seasonal space heating energy efficiency	ηs	122.8	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	16.5	kW	Tj = -7 °C	COPd	2.50	-
Tj = 2 °C	Pdh	10.7	kW	Tj = 2 °C	COPd	3.76	-
Tj = 7 °C	Pdh	6.7	kW	Tj = 7 °C	COPd	5.52	-
Tj = 12 °C	Pdh	6.8	kW	Tj = 12 °C	COPd	6.75	-
Tj = bivalent temperature	Pdh	16.5	kW	Tj = bivalent temperature	COPd	2.50	-
Tj = operating limit	Pdh	19.9	kW	Tj = operating limit	COPd	1.70	-
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient (**)	Cdh	0.9	--	Heating water operating limit temperature	WTOL	85	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	Poff	0.014	kW	Rated heat output (**)	Psup	8.05	kW
Standby mode	Psb	0.013	kW	Type of energy input	-		
Thermostat-off mode	Pto	0.014	kW				
Crankcase heater mode	Pck	0.000	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	10 500	m³/h
Sound power level, indoors/outdoors	LWA	-74	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h
Annual energy consumption	QHE	21 950	kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	ηlwh	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qfuel	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
Contact details							
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.							

Technical parameters				
Model(s):	KHP-MO 30 DTP			
Air-to-water heat pump:	YES			
Water-to-water heat pump:	NO			
Brine-to-water heat pump:	NO			
Low-temperature heat pump:	NO			
Equipped with a supplementary heater:	NO			
Heat pump combination heater:	NO			
Declared climate condition:	WARMER			
Parameters are declared for medium-temperature application.				
Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	30	kW	
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				
Tj = -7 °C	Pdh	-	kW	
Tj = 2 °C	Pdh	29.8	kW	
Tj = 7 °C	Pdh	19.1	kW	
Tj = 12 °C	Pdh	9.1	kW	
Tj = bivalent temperature	Pdh	19.1	kW	
Tj = operating limit	Pdh	29.8	kW	
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW	
Bivalent temperature	Tbiv	7	°C	
Cycling interval capacity for heating	Pcyh	-	kW	
Degradation co-efficient (**)	Cdh	0.9	--	
Power consumption in modes other than active mode				
Off mode	Poff	0.014	kW	
Standby mode	Psb	0.013	kW	
Thermostat-off mode	Pto	0.014	kW	
Crankcase heater mode	Pck	0.000	kW	
Other items				
Capacity control	variable			
Sound power level, indoors/outdoors	LWA	-74	dB	
Annual energy consumption	QHE	8 177	kWh	
For heat pump combination heater:				
Declared load profile	-			
Daily electricity consumption	Qelec	-	kWh	
Annual electricity consumption	AEC	-	kWh	
Contact details				
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.				

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	193.1	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	2.44	-
Tj = 7 °C	COPd	4.03	-
Tj = 12 °C	COPd	6.70	-
Tj = bivalent temperature	COPd	4.03	-
Tj = operating limit	COPd	2.44	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COPeyc	-	-
Heating water operating limit temperature	WTOL	85	°C
Supplementary heater			
Rated heat output (**)	Psup	0.24	kW
Type of energy input	-		
For air-to-water heat pumps: Rated air flow rate, outdoors	-	10 500	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

Technical parameters									
Model(s):		KHP-MO 35 DTP							
Air-to-water heat pump:		YES							
Water-to-water heat pump:		NO							
Brine-to-water heat pump:		NO							
Low-temperature heat pump:		NO							
Equipped with a supplementary heater:		NO							
Heat pump combination heater:		NO							
Declared climate condition:		AVERAGE							
Parameters are declared for medium-temperature application.									
Item		Symbol	Value	Unit	Item		Symbol	Value	Unit
Rated heat output (*)		Prated	35	kW	Seasonal space heating energy efficiency		ηs	142.4	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj					Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj				
Tj = -7 °C		Pdh	30.8	kW	Tj = -7 °C		COPd	1.92	-
Tj = 2 °C		Pdh	19.4	kW	Tj = 2 °C		COPd	3.51	-
Tj = 7 °C		Pdh	12.5	kW	Tj = 7 °C		COPd	5.43	-
Tj = 12 °C		Pdh	5.0	kW	Tj = 12 °C		COPd	7.18	-
Tj = bivalent temperature		Pdh	6.5	kW	Tj = bivalent temperature		COPd	1.92	-
Tj = operating limit		Pdh	30.8	kW	Tj = operating limit		COPd	1.79	-
For air-to-water heat pumps: Tj = -15 °C		Pdh	-	kW	For air-to-water heat pumps: Tj = -15 °C		COPd	-	-
Bivalent temperature		Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature		TOL	-10	°C
Cycling interval capacity for heating		Pcych	-	kW	Cycling interval efficiency		COPcyc	-	-
Degradation co-efficient (**)		Cdh	0.9	--	Heating water operating limit temperature		WTOL	85	°C
Power consumption in modes other than active mode					Supplementary heater				
Off mode		Poff	0.014	kW	Rated heat output (**)		Psup	0.47	kW
Standby mode		Psb	0.013	kW	Type of energy input		Electrical		
Thermostat-off mode		Pto	0.014	kW					
Crankcase heater mode		Pck	0.000	kW					
Other items									
Capacity control		variable			For air-to-water heat pumps: Rated air flow rate, outdoors		-	10 500	m³/h
Sound power level, indoors/outdoors		LWA	-75	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger		-	-	m³/h
Annual energy consumption		QHE	19 899	kWh					
For heat pump combination heater:									
Declared load profile		-			Water heating energy efficiency		ηlwh	-	%
Daily electricity consumption		Qelec	-	kWh	Daily fuel consumption		Qfuel	-	kWh
Annual electricity consumption		AEC	-	kWh	Annual fuel consumption		AFC	-	GJ
Contact details									
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).									
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.									

Technical parameters									
Model(s):		KHP-MO 35 DTP							
Air-to-water heat pump:		YES							
Water-to-water heat pump:		NO							
Brine-to-water heat pump:		NO							
Low-temperature heat pump:		NO							
Equipped with a supplementary heater:		NO							
Heat pump combination heater:		NO							
Declared climate condition:		COLDER							
Parameters are declared for medium-temperature application.									
Item		Symbol	Value	Unit	Item		Symbol	Value	Unit
Rated heat output (*)		Prated	33.5	kW	Seasonal space heating energy efficiency		ηs	118.1	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj					Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj				
Tj = -7 °C		Pdh	18.3	kW	Tj = -7 °C		COPd	2.33	-
Tj = 2 °C		Pdh	11.8	kW	Tj = 2 °C		COPd	3.71	-
Tj = 7 °C		Pdh	8.2	kW	Tj = 7 °C		COPd	5.49	-
Tj = 12 °C		Pdh	6.8	kW	Tj = 12 °C		COPd	6.75	-
Tj = bivalent temperature		Pdh	18.3	kW	Tj = bivalent temperature		COPd	2.33	-
Tj = operating limit		Pdh	24.3	kW	Tj = operating limit		COPd	1.60	-
For air-to-water heat pumps: Tj = -15 °C		Pdh	-	kW	For air-to-water heat pumps: Tj = -15 °C		COPd	-	-
Bivalent temperature		Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature		TOL	-22	°C
Cycling interval capacity for heating		Pcych	-	kW	Cycling interval efficiency		COPcyc	-	-
Degradation co-efficient (**)		Cdh	0.9	--	Heating water operating limit temperature		WTOL	85	°C
Power consumption in modes other than active mode					Supplementary heater				
Off mode		Poff	0.014	kW	Rated heat output (**)		Psup	9.16	kW
Standby mode		Psb	0.013	kW	Type of energy input		-		
Thermostat-off mode		Pto	0.014	kW					
Crankcase heater mode		Pck	0.000	kW					
Other items									
Capacity control		variable			For air-to-water heat pumps: Rated air flow rate, outdoors		-	10 500	m³/h
Sound power level, indoors/outdoors		LWA	-75	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger		-	-	m³/h
Annual energy consumption		QHE	27 265	kWh					
For heat pump combination heater:									
Declared load profile		-			Water heating energy efficiency		ηlwh	-	%
Daily electricity consumption		Qelec	-	kWh	Daily fuel consumption		Qfuel	-	kWh
Annual electricity consumption		AEC	-	kWh	Annual fuel consumption		AFC	-	GJ
Contact details									
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.									

Technical parameters				
Model(s):	KHP-MO 35 DTP			
Air-to-water heat pump:	YES			
Water-to-water heat pump:	NO			
Brine-to-water heat pump:	NO			
Low-temperature heat pump:	NO			
Equipped with a supplementary heater:	NO			
Heat pump combination heater:	NO			
Declared climate condition:	WARMER			
Parameters are declared for medium-temperature application.				
Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	35	kW	
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				
Tj = -7 °C	Pdh	-	kW	
Tj = 2 °C	Pdh	33.1	kW	
Tj = 7 °C	Pdh	22.4	kW	
Tj = 12 °C	Pdh	10.2	kW	
Tj = bivalent temperature	Pdh	22.4	kW	
Tj = operating limit	Pdh	33.1	kW	
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW	
Bivalent temperature	Tbiv	7	°C	
Cycling interval capacity for heating	Pcyh	-	kW	
Degradation co-efficient (**)	Cdh	0.9	--	
Power consumption in modes other than active mode				
Off mode	Poff	0.014	kW	
Standby mode	Psb	0.013	kW	
Thermostat-off mode	Pto	0.014	kW	
Crankcase heater mode	Pck	0.000	kW	
Other items				
Capacity control	variable			
Sound power level, indoors/outdoors	LWA	-75	dB	
Annual energy consumption	QHE	9 838	kWh	
For heat pump combination heater:				
Declared load profile	-			
Daily electricity consumption	Qelec	-	kWh	
Annual electricity consumption	AEC	-	kWh	
Contact details				
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.				

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	187.1	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	2.31	-
Tj = 7 °C	COPd	3.98	-
Tj = 12 °C	COPd	6.62	-
Tj = bivalent temperature	COPd	3.98	-
Tj = operating limit	COPd	2.31	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COPeyc	-	-
Heating water operating limit temperature	WTOL	85	°C
Supplementary heater			
Rated heat output (**)	Psup	1.94	kW
Type of energy input	-		
For air-to-water heat pumps: Rated air flow rate, outdoors	-	10 500	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

Technical parameters							
Model(s):	KHP-MO 40 DTP						
Air-to-water heat pump:	YES						
Water-to-water heat pump:	NO						
Brine-to-water heat pump:	NO						
Low-temperature heat pump:	NO						
Equipped with a supplementary heater:	NO						
Heat pump combination heater:	NO						
Declared climate condition:	AVERAGE						
Parameters are declared for medium-temperature application.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	39	kW	Seasonal space heating energy efficiency	η_s	135.6	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	32.1	kW	Tj = -7 °C	COPd	1.83	-
Tj = 2 °C	Pdh	19.7	kW	Tj = 2 °C	COPd	3.34	-
Tj = 7 °C	Pdh	14.1	kW	Tj = 7 °C	COPd	5.25	-
Tj = 12 °C	Pdh	6.2	kW	Tj = 12 °C	COPd	6.67	-
Tj = bivalent temperature	Pdh	32.1	kW	Tj = bivalent temperature	COPd	1.83	-
Tj = operating limit	Pdh	33.8	kW	Tj = operating limit	COPd	1.77	-
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P _{cyc}	-	kW	Cycling interval efficiency	COP _{cyc}	-	-
Degradation co-efficient (**)	Cdh	0.9	--	Heating water operating limit temperature	WTOL	85	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{off}	0.014	kW	Rated heat output (**)	P _{sup}	5.22	kW
Standby mode	P _{sb}	0.013	kW				
Thermostat-off mode	P _{to}	0.014	kW	Type of energy input	-		
Crankcase heater mode	P _{ck}	0.000	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	10 500	m³/h
Sound power level, indoors/outdoors	L _{WA}	-76	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h
Annual energy consumption	Q _{HE}	23 246	kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
Contact details							
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).							
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.							

Technical parameters																																																																																																																																															
Model(s):		KHP-MO 40 DTP																																																																																																																																													
Air-to-water heat pump:		YES																																																																																																																																													
Water-to-water heat pump:		NO																																																																																																																																													
Brine-to-water heat pump:		NO																																																																																																																																													
Low-temperature heat pump:		NO																																																																																																																																													
Equipped with a supplementary heater:		NO																																																																																																																																													
Heat pump combination heater:		NO																																																																																																																																													
Declared climate condition:		COLDER																																																																																																																																													
Parameters are declared for medium-temperature application.																																																																																																																																															
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Technical parameters							
Model(s):	KHP-MO 40 DTP						
Air-to-water heat pump:	YES						
Water-to-water heat pump:	NO						
Brine-to-water heat pump:	NO						
Low-temperature heat pump:	NO						
Equipped with a supplementary heater:	NO						
Heat pump combination heater:	NO						
Declared climate condition:	WARMER						
Parameters are declared for medium-temperature application.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	39	kW	Seasonal space heating energy efficiency	ηs	177.1	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	-	kW	Tj = -7 °C	COPd	-	-
Tj = 2 °C	Pdh	32.9	kW	Tj = 2 °C	COPd	2.15	-
Tj = 7 °C	Pdh	22.8	kW	Tj = 7 °C	COPd	3.94	-
Tj = 12 °C	Pdh	10.9	kW	Tj = 12 °C	COPd	6.37	-
Tj = bivalent temperature	Pdh	22.8	kW	Tj = bivalent temperature	COPd	3.94	-
Tj = operating limit	Pdh	32.9	kW	Tj = operating limit	COPd	2.15	-
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	Pcyc	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient (**)	Cdh	0.9	--	Heating water operating limit temperature	WTOL	85	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	Poff	0.014	kW	Rated heat output (**)	Psup	6.12	kW
Standby mode	Psb	0.013	kW				
Thermostat-off mode	Pto	0.014	kW	Type of energy input	-		
Crankcase heater mode	Pck	0.000	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	10 500	m³/h
Sound power level, indoors/outdoors	LWA	-76	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h
Annual energy consumption	QHE	11 573	kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qclec	-	kWh	Daily fuel consumption	Qfuel	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
Contact details							
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.							

Information requirements for comfort chillers

Model(s):				KHP-MO 26 DTP				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	26	kW		Seasonal space cooling energy efficiency	η _{s,c}	205.3	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35 °C	P _{dc}	26.0	kW		T _j =+35 °C	EER _d	3.10	-
T _j =+30 °C	P _{dc}	19.5	kW		T _j =+30 °C	EER _d	4.19	-
T _j =+25 °C	P _{dc}	12.2	kW		T _j =+25 °C	EER _d	5.85	-
T _j =+20 °C	P _{dc}	5.7	kW		T _j =+20 °C	EER _d	7.92	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.017	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	10 500	m³/h
Sound power level, indoors / outdoors	L _{WA}	-/69	dB		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV					
GWP of the refrigerant	-	3	kg CO ₂ eq (100years)					
Standard rating conditions used		Low temperature application						
Contact details								
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

Information requirements for comfort chillers

Model(s):				KHP-MO 26 DTP				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	26	kW		Seasonal space cooling energy efficiency	η _{s,c}	283.7	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35 °C	P _{dc}	26.0	kW		T _j =+35 °C	EER _d	4.65	-
T _j =+30 °C	P _{dc}	19.5	kW		T _j =+30 °C	EER _d	6.09	-
T _j =+25 °C	P _{dc}	12.4	kW		T _j =+25 °C	EER _d	8.02	-
T _j =+20 °C	P _{dc}	6.4	kW		T _j =+20 °C	EER _d	10.52	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.017	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	10 500	m³/h
Sound power level, indoors / outdoors	L _{WA}	-/69	dB		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV					
GWP of the refrigerant	-	3	kg CO ₂ eq (100years)					
Standard rating conditions used		Medium temperature application						
Contact details								
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

Information requirements for comfort chillers

Model(s):				KHP-MO 30 DTP				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	30	kW		Seasonal space cooling energy efficiency	η _{s,c}	196.8	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35 °C	P _{dc}	29.9	kW		T _j =+35 °C	EER _d	2.88	-
T _j =+30 °C	P _{dc}	22.3	kW		T _j =+30 °C	EER _d	3.97	-
T _j =+25 °C	P _{dc}	14.3	kW		T _j =+25 °C	EER _d	5.38	-
T _j =+20 °C	P _{dc}	6.7	kW		T _j =+20 °C	EER _d	8.56	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.017	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	10 500	m³/h
Sound power level, indoors / outdoors	L _{WA}	-74	dB		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV					
GWP of the refrigerant	-	3	kg CO ₂ eq (100years)					
Standard rating conditions used		Low temperature application						
Contact details								
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

Information requirements for comfort chillers

Model(s):				KHP-MO 30 DTP				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	30	kW		Seasonal space cooling energy efficiency	η _{s,c}	268.9	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35 °C	P _{dc}	30.3	kW		T _j =+35 °C	EER _d	4.28	-
T _j =+30 °C	P _{dc}	22.4	kW		T _j =+30 °C	EER _d	5.51	-
T _j =+25 °C	P _{dc}	14.4	kW		T _j =+25 °C	EER _d	7.40	-
T _j =+20 °C	P _{dc}	6.4	kW		T _j =+20 °C	EER _d	11.27	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.017	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	10 500	m³/h
Sound power level, indoors / outdoors	L _{WA}	-74	dB		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV					
GWP of the refrigerant	-	3	kg CO ₂ eq (100years)					
Standard rating conditions used		Medium temperature application						
Contact details								
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

Information requirements for comfort chillers

Model(s):				KHP-MO 35 DTP				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	32	kW		Seasonal space cooling energy efficiency	η _{s,c}	190.0	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35 °C	P _{dc}	31.6	kW		T _j =+35 °C	EER _d	2.64	-
T _j =+30 °C	P _{dc}	23.4	kW		T _j =+30 °C	EER _d	3.93	-
T _j =+25 °C	P _{dc}	14.9	kW		T _j =+25 °C	EER _d	5.39	-
T _j =+20 °C	P _{dc}	6.4	kW		T _j =+20 °C	EER _d	7.69	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.017	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	10 500	m³/h
Sound power level, indoors / outdoors	L _{WA}	-/75	dB					
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
GWP of the refrigerant	-	3	kg CO ₂ eq (100years)					
Standard rating conditions used		Low temperature application						
Contact details								
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

Information requirements for comfort chillers

Model(s):				KHP-MO 35 DTP				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	35	kW		Seasonal space cooling energy efficiency	η _{s,c}	254.2	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35 °C	P _{dc}	35.1	kW		T _j =+35 °C	EER _d	3.84	-
T _j =+30 °C	P _{dc}	26.3	kW		T _j =+30 °C	EER _d	5.37	-
T _j =+25 °C	P _{dc}	16.7	kW		T _j =+25 °C	EER _d	70.4	-
T _j =+20 °C	P _{dc}	7.4	kW		T _j =+20 °C	EER _d	10.61	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.017	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	10 500	m³/h
Sound power level, indoors / outdoors	L _{WA}	-/75	dB					
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
GWP of the refrigerant	-	3	kg CO ₂ eq (100years)					
Standard rating conditions used		Medium temperature application						
Contact details								
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

Information requirements for comfort chillers

Model(s):				KHP-MO 40 DTP				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	32	kW		Seasonal space cooling energy efficiency	η _{s,c}	190.0	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35 °C	P _{dc}	31.6	kW		T _j =+35 °C	EER _d	2.64	-
T _j =+30 °C	P _{dc}	23.4	kW		T _j =+30 °C	EER _d	3.93	-
T _j =+25 °C	P _{dc}	14.9	kW		T _j =+25 °C	EER _d	5.39	-
T _j =+20 °C	P _{dc}	6.4	kW		T _j =+20 °C	EER _d	7.69	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.017	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	10 500	m³/h
Sound power level, indoors / outdoors	L _{WA}	-76	dB					
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
GWP of the refrigerant	-	3	kg CO ₂ eq (100years)					
Standard rating conditions used		Medium temperature application						
Contact details								
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

Information requirements for comfort chillers

Model(s):				KHP-MO 40 DTP				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	39	kW		Seasonal space cooling energy efficiency	η _{s,c}	245.8	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35 °C	P _{dc}	37.8	kW		T _j =+35 °C	EER _d	3.84	-
T _j =+30 °C	P _{dc}	28.8	kW		T _j =+30 °C	EER _d	5.15	-
T _j =+25 °C	P _{dc}	18.4	kW		T _j =+25 °C	EER _d	7.28	-
T _j =+20 °C	P _{dc}	8.3	kW		T _j =+20 °C	EER _d	9.31	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.017	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	10 500	m³/h
Sound power level, indoors / outdoors	L _{WA}	-/76	dB					
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
GWP of the refrigerant	-	3	kg CO ₂ eq (100years)					
Standard rating conditions used		Medium temperature application						
Contact details								
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

Condition(℃)	Model(s):	Capacity /W	Power input /W	COP
Ambient Temperature: 7/6 Water temperature: 30/35	KHP-MO 26 DTP	26 000	5 450	4.77
	KHP-MO 30 DTP	30 000	6 670	4.50
	KHP-MO 35 DTP	35 000	8 400	4.17
	KHP-MO 40 DTP	39 000	9 750	4.00
Ambient Temperature: 7/6 Water temperature: 40/45	KHP-MO 26 DTP	26 000	6 820	3.81
	KHP-MO 30 DTP	30 000	8 260	3.63
	KHP-MO 35 DTP	35 000	10 050	3.48
	KHP-MO 40 DTP	39 000	11 900	3.28
Ambient Temperature: 7/6 Water temperature: 47/55	KHP-MO 26 DTP	26 000	7 850	3.31
	KHP-MO 30 DTP	30 000	9 570	3.13
	KHP-MO 35 DTP	35 000	11 750	2.98
	KHP-MO 40 DTP	39 000	14 000	2.79
Ambient Temperature: 7/6 Water temperature: 55/65	KHP-MO 26 DTP	26 000	9 860	2.64
	KHP-MO 30 DTP	30 000	11 850	2.53
	KHP-MO 35 DTP	35 000	14 600	2.40
	KHP-MO 40 DTP	35 000	14 600	2.40
Ambient Temperature: 2/1 Water temperature: 30/35	KHP-MO 26 DTP	23 500	6 350	3.70
	KHP-MO 30 DTP	26 800	7 620	3.52
	KHP-MO 35 DTP	30 400	9 520	3.19
	KHP-MO 40 DTP	30 400	9 520	3.19
Ambient Temperature: 2/1 Water temperature: 40/45	KHP-MO 26 DTP	22 600	7 180	3.15
	KHP-MO 30 DTP	26 100	8 380	3.11
	KHP-MO 35 DTP	30 000	11 200	2.68
	KHP-MO 40 DTP	30 000	11 200	2.68
Ambient Temperature: 2/1 Water temperature: 47/55	KHP-MO 26 DTP	21 950	8 100	2.71
	KHP-MO 30 DTP	25 350	9 650	2.63
	KHP-MO 35 DTP	29 600	12 060	2.45
	KHP-MO 40 DTP	29 600	12 060	2.45
Ambient Temperature: -7/-8 Water temperature: 30/35	KHP-MO 26 DTP	21 000	6 930	3.03
	KHP-MO 30 DTP	24 000	8 380	2.86
	KHP-MO 35 DTP	28 200	11 100	2.54
	KHP-MO 40 DTP	28 200	11 100	2.54
Ambient Temperature: -7/-8 Water temperature: 30/35	KHP-MO 26 DTP	21 000	6 930	3.03
	KHP-MO 30 DTP	24 000	8 380	2.86
	KHP-MO 35 DTP	28 200	11 100	2.54
	KHP-MO 40 DTP	28 200	11 100	2.54
Ambient Temperature: -7/-8 Water temperature: 40/45	KHP-MO 26 DTP	20 100	7 530	2.67
	KHP-MO 30 DTP	23 100	9 590	2.41
	KHP-MO 35 DTP	26 900	12 000	2.24
	KHP-MO 40 DTP	26 900	12 000	2.24

Condition(℃)	Model(s):	Capacity /W	Power input /W	COP
Ambient Temperature: -7/-8 Water temperature: 47/55	KHP-MO 26 DTP	18 800	8 710	2.30
	KHP-MO 30 DTP	21 300	9 600	2.22
	KHP-MO 35 DTP	24 800	11 900	2.08
	KHP-MO 40 DTP	24 800	11 900	2.08
Ambient Temperature: 35/24 Water temperature: 23/18	KHP-MO 26 DTP	26 000	5 600	4.64
	KHP-MO 30 DTP	30 000	6 800	4.41
	KHP-MO 35 DTP	35 000	8 500	4.12
	KHP-MO 40 DTP	39 000	9 850	3.96
Ambient Temperature: 35/24 Water temperature: 12/7	KHP-MO 26 DTP	26 000	8 400	3.10
	KHP-MO 30 DTP	30 000	10 700	2.80
	KHP-MO 35 DTP	32 000	11 980	2.67
	KHP-MO 40 DTP	32 000	11 980	2.67

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