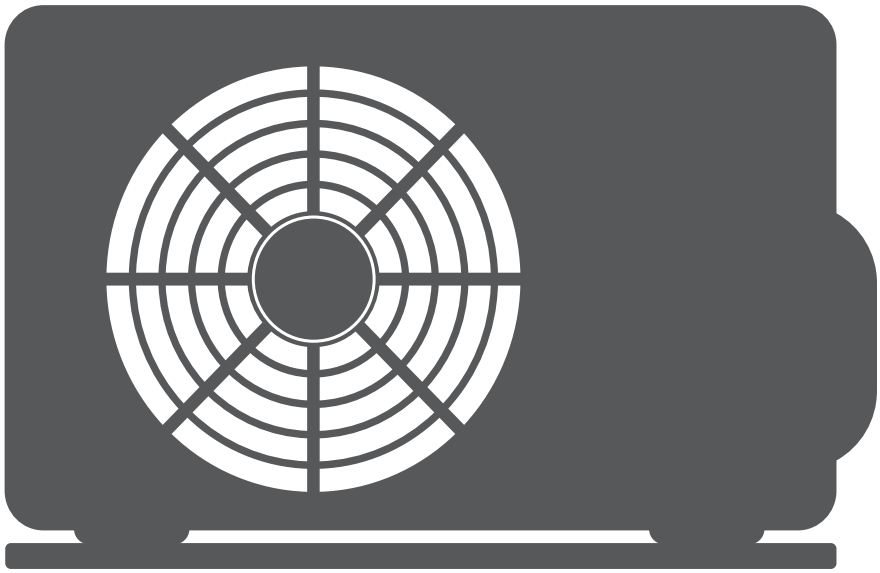
AIR CONDITIONING SYSTEMS

AIR-TO-WATER HEAT PUMP - MONOBLOCK

• PRODUCT FICHE



MODELS:

XFMH12T9

XFMH14T9

XFMH16T9

ENGLISH

Model	For low-temperature application										
	Energy efficiency class	Unit sound power	Average climate			Colder climate			Warmer climate		
			Rated heat output	Seasonal Space heating energy efficiency	For space heating annual energy consumption	Rated heat output	Seasonal Space heating energy efficiency	For space heating annual energy consumption	Rated heat output	Seasonal Space heating energy efficiency	For space heating annual energy consumption
		dB	kW	%	kWh	kW	%	kWh	kW	%	kWh
XFMH12T9	A+++	60	11.3	188	4872	10.1	151	6452	12.2	257	2507
XFMH14T9	A+++	63	13.2	184	5821	12.0	152	7658	13.9	263	2790
XFMH16T9	A+++	67	14.9	192	6326	13.7	156	8488	15.6	265	3112

Model	For medium-temperature application										
	Energy efficiency class	Unit sound power	Average climate			Colder climate			Warmer climate		
			Rated heat output	Seasonal Space heating energy efficiency	For space heating annual energy consumption	Rated heat output	Seasonal Space heating energy efficiency	For space heating annual energy consumption	Rated heat output	Seasonal Space heating energy efficiency	For space heating annual energy consumption
		dB	kW	%	kWh	kW	%	kWh	kW	%	kWh
XFMH12T9	A++	64	11.0	141	6319	9.7	110	8416	12.2	166	3845
XFMH14T9	A++	65	12.4	142	7054	10.3	113	8760	14.1	174	4258
XFMH16T9	A++	68	12.8	143	7238	11.0	114	9273	14.4	173	4367

Product fiche 1

Heat pump space heater		Model	XFMH12T9	XFMH14T9	XFMH16T9
Unit sound power (*)	Average climate low temperature application	[dB]	60	63	67
	Average climate medium temperature application	[dB]	64	65	68
Capicity of the back-up heater integrated in the unit	Psup back-up heater	[kW]	9	9	9
Space heating	Energy efficiency class 35°C (Low temp. app.)	-	A+++	A+++	A+++
	Energy efficiency class 55°C (Medium temp. app.)	-	A++	A++	A++
Average climate (Design temperature = –10°C)					
Space heating 35°C	Prated (declared heating capacity) @–10°C	[kW]	11.3	13.2	14.9
	Seasonal space heating efficiency (η)	[%]	188	184	192
	Annual energy consumption	[kWh]	4872	5821	6326
Space heating 55°C	Prated (declared heating capacity) @–10°C	[kW]	11.0	12.4	12.8
	Seasonal space heating efficiency (η)	[%]	141	142	143
	Annual energy consumption	[kWh]	6319	7054	7238
Part load conditions space heating average climate low temperature application					
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	10.00	11.60	13.20
	COPd (declared COP)	-	2.64	2.63	2.59
	Cdh(degradation coefficient)	-	1.00	1.00	1.00
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	6.10	7.10	8.00
	COPd (declared COP)	-	4.40	4.40	4.68
	Cdh(degradation coefficient)	-	0.99	0.99	0.99
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	3.90	4.60	5.20
	COPd (declared COP)	-	7.69	7.16	7.05
	Cdh(degradation coefficient)	-	0.97	0.98	0.98
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	1.70	2.00	2.30
	COPd (declared COP)	-	10.82	9.96	10.09
	Cdh(degradation coefficient)	-	0.96	0.97	0.97

Product fiche 2

Heat pump space heater		Model	XFMH12T9	XFMH14T9	XFMH16T9
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[℃]	-10.00	-10.00	-10.00
	Pdh (declared heating capacity)	[kW]	11.30	13.20	14.90
	COPd (declared COP)	-	2.52	2.39	2.38
	SHIMGE (Heating water Operation Limit)	[℃]	65.00	65.00	65.00
(F) Tbivalent temperature	Tblv	[℃]	-7.00	-7.00	-7.00
	Pdh (declared heating capacity)	[kW]	10.00	11.60	13.20
	COPd (declared COP)	-	2.64	2.63	2.59
Supplementary capacity at P_design	Psup (@Tdesignh: –10°C)	[kW]	1.53	0.94	1.51
Part load conditions space heating average climate medium temperature application					
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	9.70	10.90	11.30
	COPd (declared COP)	-	2.05	2.01	2.00
	Cdh(degradation coefficient)	-	1.00	1.00	1.00
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	5.90	6.70	6.90
	COPd (declared COP)	-	3.30	3.44	3.49
	Cdh(degradation coefficient)	-	0.99	0.99	0.99
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	3.80	4.30	4.40
	COPd (declared COP)	-	5.28	5.15	5.16
	Cdh(degradation coefficient)	-	0.98	0.98	0.98
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	1.70	1.90	2.00
	COPd (declared COP)	-	8.12	7.56	7.79
	Cdh(degradation coefficient)	-	0.97	0.98	0.98
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[℃]	-10.00	-10.00	-10.00
	Pdh (declared heating capacity)	[kW]	11.00	12.40	12.80
	COPd (declared COP)	-	1.91	1.79	1.80
	SHIMGE (Heating water Operation Limit)	[℃]	65.00	65.00	65.00
(F) Tbivalent temperature	Tblv	[℃]	-7.00	-7.00	-7.00
	Pdh (declared heating capacity)	[kW]	9.70	10.90	11.30
	COPd (declared COP)	-	2.05	2.01	2.00

Product fiche 3

X-FORCE

Heat pump space heater		Model	XFMH12T9	XFMH14T9	XFMH16T9
Supplementary capacity at Pdesign	Psup (@Tdesignh: –10°C)	[kW]	1.16	1.64	1.22
Colder climate (Design temperature = –22°C)					
Space heating 35°C	Prated (declared heating capacity) @–22°C	[kW]	10.1	12.0	13.7
	Seasonal space heating efficiency (η)	[%]	151	152	156
	Annual energy consumption	[kWh]	6452	7658	8488
Space heating 55°C	Prated(declared heating capacity)@–22°C	[kW]	9.7	10.3	11.0
	Seasonal space heating efficiency (η)	[%]	111	113	116
	Annual energy consumption	[kWh]	8453	8828	9285
Part load conditions space heating colder climate low temperature application					
(A) condition (-7°C)	Pdh (declared heating capacity)@–22°C	[kW]	6.11	7.26	8.29
	COPd (declared COP)	-	3.32	3.29	3.39
	Cdh(degradation coefficient)	-	0.90	0.90	0.90
(B) condition (2°C)	Pdh (declared heating capacity)@–22°C	[kW]	3.72	4.42	5.05
	COPd (declared COP)	-	4.46	4.53	4.74
	Cdh(degradation coefficient)	-	0.90	0.90	0.90
(C) condition (7°C)	Pdh (declared heating capacity)@–22°C	[kW]	2.39	2.84	3.24
	COPd (declared COP)	-	6.04	6.16	6.57
	Cdh(degradation coefficient)	-	0.90	0.90	0.90
(D) condition (12°C)	Pdh (declared heating capacity)@–22°C	[kW]	1.06	1.26	1.44
	COPd (declared COP)	-	6.32	6.71	6.65
	Cdh(degradation coefficient)	-	0.90	0.90	0.90
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[℃]	-22.00	-22.00	-22.00
	Pdh (declared heating capacity)@–22°C	[kW]	10.10	12.00	8.86
	COPd (declared COP)	-	1.85	1.82	1.81
	WTOL (Heating w ater Operation Limit)	[℃]	51.00	51.00	51.00
(F) Tbivalent temperature	Tblv	[℃]	-15.00	-15.00	-15.00
	Pdh (declared heating capacity)@–22°C	[kW]	8.24	9.79	11.26
	COPd (declared COP)	-	2.47	2.44	2.35
Supplementary capacity at P_design	Psup (@Tdesignh: –22°C)	[kW]	3.48	4.51	4.84

Product fiche 4

X-FORCE

Heat pump space heater		Model	XFMH12T9	XFMH14T9	XFMH16T9
Part load conditions space heating colder climate medium temperature application					
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	5.87	6.23	6.66
	COPd (declared COP)	-	2.42	2.49	2.53
	Cdh(degradation coefficient)	-	0.90	0.90	0.90
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	3.57	3.79	4.05
	COPd (declared COP)	-	3.40	3.49	3.44
	Cdh(degradation coefficient)	-	0.90	0.90	0.90
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	2.30	2.44	2.61
	COPd (declared COP)	-	4.23	4.33	4.46
	Cdh(degradation coefficient)	-	0.90	0.90	0.90
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	1.02	1.08	1.16
	COPd (declared COP)	-	5.01	5.10	5.19
	Cdh(degradation coefficient)	-	0.90	0.90	0.90
(E) Tol (temperature operating limit)	Tol (temperature operating limit)		-22.0	-22.00	-22.00
	Pdh (declared heating capacity)	[kW]	9.70	10.30	11.00
	COPd (declared COP)	-	1.03	1.02	1.08
	WTOL (Heating w ater Operation Limit)	[℃]	51.00	51.00	51.00
(F) Tbivalent temperature	Tblv	[℃]	-15.00	-15.00	-15.00
	Pdh (declared heating capacity)	[kW]	7.91	8.41	8.97
	COPd (declared COP)	-	1.77	1.72	1.79
Supplementary capacity at P_design	Psup (@Tdesignh: –22°C)	[kW]	5.83	6.05	6.15
Warmer climate (Design temperature = 2°C)					
Space heating 35°C	Prated (declared heating capacity) @ 2°C	[kW]	12.2	13.9	15.6
	Seasonalspaceheating efficiency(η)	[%]	257	263	265
	Annual energy consumption	[kWh]	2507	2790	3112
Space heating 55°C	Prated (declared heating capacity) @ 2°C	[kW]	12.2	14.1	14.4
	Seasonalspaceheating efficiency(η)	[%]	166	174	173
	Annual energy consumption	[kWh]	3845	4258	4367

Product fiche 5

X-FORCE

Heat pump space heater		Model	XFMH12T9	XFMH14T9	XFMH16T9
Part load conditions space heating warmer climate low temperature application					
(B) condition (2°C)	Pdh(declared heating capacity)	[kW]	12.20	13.90	15.60
	COPd (declared COP)	-	3.62	3.48	3.85
	Cdh(degradation coefficient)	-	0.90	0.90	0.90
C) condition (7°C)	Pdh(declared heating capacity)	[kW]	7.84	8.94	10.03
	COPd (declared COP)	-	5.92	5.96	6.02
	Cdh(degradation coefficient)	-	0.90	0.90	0.90
(D) condition (12°C)	Pdh(declared heating capacity)	[kW]	3.49	3.97	4.46
	COPd (declared COP)	-	8.30	8.35	8.19
	Cdh(degradation coefficient)	-	0.90	0.90	0.90
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[℃]	2.00	2.00	2.00
	Pdh(declared heating capacity)	[kW]	12.20	13.90	15.60
	COPd (declared COP)	-	3.62	3.48	3.85
	WTOL (Heating w ater Operation Limit)	[℃]	65.00	65.00	65.00
(F) Tbivalent temperature	Tblv	[℃]	7.00	7.00	7.00
	Pdh(declared heating capacity)	[kW]	7.84	8.94	10.03
	COPd (declared COP)	-	5.92	5.96	6.02
Supplementary capacity at P_design	Psup (@Tdesignh: 2°C)	[kW]	0.64	0.44	0.33
Part load conditions space heating warmer climate medium temperature application					
(B) condition (2°C)	Pdh(declared heating capacity)	[kW]	12.20	13.80	14.40
	COPd (declared COP)	-	2.20	2.15	2.58
	Cdh(degradation coefficient)	-	0.90	0.90	0.90
(C) condition (7°C)	Pdh(declared heating capacity)	[kW]	7.84	8.87	9.26
	COPd (declared COP)	-	3.75	3.85	3.65
	Cdh(degradation coefficient)	-	0.90	0.90	0.90
(D) condition (12°C)	Pdh(declared heating capacity)	[kW]	3.49	3.94	4.11
	COPd (declared COP)	-	5.45	5.70	5.88
	Cdh(degradation coefficient)	-	0.90	0.90	0.90

Product fiche 6

Heat pump space heater		Model	XFMH12T9	XFMH14T9	XFMH16T9
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[℃]	2.00	2.00	2.00
	Pdh (declared heating capacity)	[kW]	12.20	13.80	14.40
	COPd (declared COP)	-	2.20	2.15	2.58
	WTOL (Heating water Operation Limit)	[℃]	65.00	65.00	65.00
(F) Tbivalent temperature	Tblv	[℃]	7.00	7.00	7.00
	Pdh (declared heating capacity)	[kW]	7.84	8.87	9.26
	COPd (declared COP)	-	3.75	3.85	3.65
Supplementary capacity at P_design	Psup (@Tdesignh: 2°C)	[kW]	0.7	0.7	0.29
Product description	Air-to-water heat pump	Y/N	Yes	Yes	Yes
	Water-to-water heat pump	Y/N	No	No	No
	Brine-to-water heat pump	Y/N	No	No	No
	Low -temperature heat pump	Y/N	No	No	No
	Equipped with a supplementary heater	Y/N	Yes	Yes	Yes
	Heat pump combination heater	Y/N	No	No	No
Air to w ater unit	Rated airflow	[m3/h]	4050	4650	4650
Brine/w ater to w ater unit	Rated w ater/brine flow (outdoor H/E)		/	/	/
Other	Capacity control	-	Inverter	Inverter	Inverter
	P(Power consumption Off mode)	[kW]	0.012	0.012	0.012
	P (Power consumption Thermostat off mode)	[kW]	0.018	0.018	0.018
	P(Power consumption Standby mode)	[kW]	0.012	0.012	0.012
	P(Power crankcase heater model)	[kW]	0.013	0.013	0.013
	Q(Daily electricity consumption)	[kWh]	/	/	/
	Q(Daily fuel consumption)	[kWh]	/	/	/

Technical parameters

Model(s):	XFMH12T9
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/YES
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	11.0	kW	Seasonal space heating energy efficiency	η s	141	%
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℃	Pdh	9.70	kW	Tj = -7℃	COPd	2.05	-
Tj = 2℃	Pdh	5.90	kW	Tj = 2℃	COPd	3.30	-
Tj = 7℃	Pdh	3.80	kW	Tj = 7℃	COPd	5.28	-
Tj = 12℃	Pdh	1.70	kW	Tj = 12℃	COPd	8.12	-
Tj = bivalent temperature	Pdh	9.70	kW	Tj = bivalent temperature	COPd	2.05	-
Tj = operating limit	Pdh	11.00	kW	Tj = operating limit	COPd	1.91	-
For air-to-water heat pumps: Tj = -15	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-
Bivalent temperature	T_{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P_{cych}	-	kW	Cycling interval efficiency	COP_{cyc}	-	-
Degradation co-efficient (**)	C_{dh}	0.99	–	Heating water operating limit temperature	W_{TOL}	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{off}	0.012	kW	Rated heat output (**)	P_{sup}	1.20	kW
Standby mode	P_{sb}	0.012	kW				
Thermostat-off mode	P_{to}	0.018	kW	Type of energy input	Electrical		
Crankcase heater mode	P_{ck}	0.013	kW				

Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4050	m^3/h
Sound power level, indoors/outdoors	L_{WA}	-/64	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h
Annual energy consumption	Q_{HE}	6319	kWh				

For heat pump combination heater:							
Declared load profile	-			**Water heating energyefficiency**	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):	XFMH12T9
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/YES
Heat pump combination heater:	NO
Declared climate condition:	COLDER
Parameters are declared for medium-temperature application.	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	9.7	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7℃	Pdh	5.87	kW
Tj = 2℃	Pdh	3.57	kW
Tj = 7℃	Pdh	2.30	kW
Tj = 12℃	Pdh	1.02	kW
Tj = bivalent temperature	Pdh	7.91	kW
Tj = operating limit	Pdh	9.70	kW
For air-to-water heat pumps: Tj = -15	Pdh	-	kW
Bivalent temperature	T_{biv}	-15	°C
Cycling interval capacity for heating	P_{cych}	-	kW
Degradation co-efficient (**)	C_{dh}	0.90	–
Power consumption in modes other than active mode			
Off mode	P_{off}	0.012	kW
Standby mode	P_{sb}	0.012	kW
Thermostat-off mode	P_{to}	0.018	kW
Crankcase heater mode	P_{ck}	0.013	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η s	112	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7℃	COPd	2.51	-
Tj = 2℃	COPd	3.44	-
Tj = 7℃	COPd	4.35	-
Tj = 12℃	COPd	6.22	-
Tj = bivalent temperature	COPd	1.72	-
Tj = operating limit	COPd	1.03	-
For air-to-water heat pumps: Tj = -15℃	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval efficiency	COP_{cyc}	-	-
Heating water operating limit temperature	W_{TOL}	51	°C
Supplementary heater			
Rated heat output (**)	P_{sup}	5.70	kW
Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L_{WA}	-/64	dB
Annual energy consumption	Q_{HE}	8232	kWh

For air-to-water heat pumps: Rated air flow rate, outdoors	-	4050	m^3/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h

For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	Q_{elec}	-	kWh
Annual electricity consumption	AEC	-	kWh

Water heating energyefficiency	η_{wh}	-	%
Daily fuel consumption	Q_{fuel}	-	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):	XFMH12T9
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/YES
Heat pump combination heater:	NO
Declared climate condition:	WARMER
Parameters are declared for medium-temperature application.	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.2	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7℃	Pdh	-	kW
Tj = 2℃	Pdh	11.20	kW
Tj = 7℃	Pdh	7.20	kW
Tj = 12℃	Pdh	3.20	kW
Tj = bivalent temperature	Pdh	7.81	kW
Tj = operating limit	Pdh	12.20	kW
For air-to-water heat pumps: Tj = -15	Pdh	-	kW
Bivalent temperature	T_{biv}	7	°C
Cycling interval capacity for heating	P_{cych}	-	kW
Degradation co-efficient (**)	Cdh	0.90	–
Power consumption in modes other than active mode			
Off mode	P_{off}	0.012	kW
Standby mode	P_{sb}	0.012	kW
Thermostat-off mode	P_{to}	0.018	kW
Crankcase heater mode	P_{ck}	0.013	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η s	172	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7℃	COPd	-	-
Tj = 2℃	COPd	2.14	-
Tj = 7℃	COPd	3.68	-
Tj = 12℃	COPd	5.44	-
Tj = bivalent temperature	COPd	3.62	-
Tj = operating limit	COPd	2.14	-
For air-to-water heat pumps: Tj = -15℃	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COP_{cyc}	-	-
Heating water operating limit temperature	W_{TOL}	65	°C
Supplementary heater			
Rated heat output (**)	P_{sup}	0.50	kW
Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L_{WA}	-/64	dB
Annual energy consumption	Q_{HE}	3415	kWh

For air-to-water heat pumps: Rated air flow rate, outdoors	-	2650	m^3/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h

For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	Q_{elec}	-	kWh
Annual electricity consumption	AEC	-	kWh

Water heating energyefficiency	η wh	-	%
Daily fuel consumption	Q_{fuel}	-	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):	XFMH14T9
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/YES
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	12.4	kW	Seasonal space heating energy efficiency	η s	142	%
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℃	Pdh	10.90	kW	Tj = -7℃	COPd	2.01	-
Tj = 2℃	Pdh	6.70	kW	Tj = 2℃	COPd	3.44	-
Tj = 7℃	Pdh	4.30	kW	Tj = 7℃	COPd	5.15	-
Tj = 12℃	Pdh	1.90	kW	Tj = 12℃	COPd	7.56	-
Tj = bivalent temperature	Pdh	10.90	kW	Tj = bivalent temperature	COPd	2.01	-
Tj = operating limit	Pdh	12.40	kW	Tj = operating limit	COPd	1.79	-
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-
Bivalent temperature	T_{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P_{cych}	-	kW	Cycling interval efficiency	COP_{cyc}	-	-
Degradation co-efficient (**)	C_{dh}	0.99	–	Heating water operating limit temperature	W_{TOL}	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{off}	0.012	kW	Rated heat output (**)	P_{sup}	1.70	kW
Standby mode	P_{sb}	0.012	kW				
Thermostat-off mode	P_{to}	0.018	kW	Type of energy input	Electrical		
Crankcase heater mode	P_{ck}	0.013	kW				

Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	m^3/h
Sound power level, indoors/outdoors	L_{WA}	-/65	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h
Annual energy consumption	Q_{HE}	7054	kWh				

For heat pump combination heater:							
Declared load profile	-			**Water heating energyefficiency**	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):	XFMH14T9
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/YES
Heat pump combination heater:	NO
Declared climate condition:	COLDER
Parameters are declared for medium-temperature application.	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.3	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7℃	Pdh	6.23	kW
Tj = 2℃	Pdh	3.79	kW
Tj = 7℃	Pdh	2.44	kW
Tj = 12℃	Pdh	1.08	kW
Tj = bivalent temperature	Pdh	8.40	kW
Tj = operating limit	Pdh	10.30	kW
For air-to-water heat pumps: Tj = -15	Pdh	-	kW
Bivalent temperature	T_{biv}	-15	°C
Cycling interval capacity for heating	P_{cych}	-	kW
Degradation co-efficient (**)	C_{dh}	0.90	–
Power consumption in modes other than active mode			
Off mode	P_{off}	0.012	kW
Standby mode	P_{sb}	0.012	kW
Thermostat-off mode	P_{to}	0.018	kW
Crankcase heater mode	P_{ck}	0.013	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η s	115	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7℃	COPd	2.60	-
Tj = 2℃	COPd	3.55	-
Tj = 7℃	COPd	4.60	-
Tj = 12℃	COPd	6.31	-
Tj = bivalent temperature	COPd	1.73	-
Tj = operating limit	COPd	1.03	-
For air-to-water heat pumps: Tj = -15℃	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval efficiency	COP_{cyc}	-	-
Heating water operating limit temperature	W_{TOL}	51	°C
Supplementary heater			
Rated heat output (**)	P_{sup}	6.30	kW
Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L_{WA}	-/65	dB
Annual energy consumption	Q_{HE}	8609	kWh

For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	m^3/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h

For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	Q_{elec}	-	kWh
Annual electricity consumption	AEC	-	kWh

Water heating energyefficiency	η_{wh}	-	%
Daily fuel consumption	Q_{fuel}	-	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):	XFMH14T9
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/YES
Heat pump combination heater:	NO
Declared climate condition:	WARMER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.1	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7℃	Pdh	-	kW
Tj = 2℃	Pdh	14.10	kW
Tj = 7℃	Pdh	9.06	kW
Tj = 12℃	Pdh	4.03	kW
Tj = bivalent temperature	Pdh	9.06	kW
Tj = operating limit	Pdh	14.10	kW
For air-to-water heat pumps: Tj = -15	Pdh	-	kW
Bivalent temperature	T_{biv}	7	°C
Cycling interval capacity for heating	P_{cych}	-	kW
Degradation co-efficient (**)	C_{dh}	0.90	–
Power consumption in modes other than active mode			
Off mode	P_{off}	0.012	kW
Standby mode	P_{sb}	0.012	kW
Thermostat-off mode	P_{to}	0.018	kW
Crankcase heater mode	P_{ck}	0.013	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η s	174	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7℃	COPd	-	-
Tj = 2℃	COPd	2.20	-
Tj = 7℃	COPd	4.05	-
Tj = 12℃	COPd	5.75	-
Tj = bivalent temperature	COPd	4.05	-
Tj = operating limit	COPd	2.20	-
For air-to-water heat pumps: Tj = -15℃	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COP_{cyc}	-	-
Heating water operating limit temperature	W_{TOL}	65	°C
Supplementary heater			
Rated heat output (**)	P_{sup}	0.25	kW
Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L_{WA}	-/65	dB
Annual energy consumption	Q_{HE}	4258	kWh

For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	m^3/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h

For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	Q_{elec}	-	kWh
Annual electricity consumption	AEC	-	kWh

Water heating energyefficiency	η_{wh}	-	%
Daily fuel consumption	Q_{fuel}	-	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):	XFMH16T9
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/YES
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	12.8	kW	Seasonal space heating energy efficiency	η s	143	%
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℃	Pdh	11.30	kW	Tj = -7℃	COPd	2.00	-
Tj = 2℃	Pdh	6.90	kW	Tj = 2℃	COPd	3.49	-
Tj = 7℃	Pdh	4.40	kW	Tj = 7℃	COPd	5.16	-
Tj = 12℃	Pdh	2.00	kW	Tj = 12℃	COPd	7.79	-
Tj = bivalent temperature	Pdh	11.30	kW	Tj = bivalent temperature	COPd	2.00	-
Tj = operating limit	Pdh	12.80	kW	Tj = operating limit	COPd	1.80	-
For air-to-water heat pumps: Tj = -15	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-
Bivalent temperature	T_{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P_{cych}	-	kW	Cycling interval efficiency	COP_{cyc}	-	-
Degradation co-efficient (**)	Cdh	0.99	–	Heating water operating limit temperature	W_{TOL}	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{off}	0.012	kW	Rated heat output (**)	P_{sup}	1.30	kW
Standby mode	P_{sb}	0.012	kW				
Thermostat-off mode	P_{to}	0.018	kW	Type of energy input	Electrical		
Crankcase heater mode	P_{ck}	0.013	kW				

Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	m^3/h
Sound power level, indoors/outdoors	L_{WA}	-/68	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h
Annual energy consumption	Q_{HE}	7238	kWh				

For heat pump combination heater:							
Declared load profile	-			**Water heating energyefficiency**	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):	XFMH16T9
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/YES
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	11.0	kW	Seasonal space heating energy efficiency	η s	112	%
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℃	Pdh	6.66	kW	Tj = -7℃	COPd	2.51	-
Tj = 2℃	Pdh	4.05	kW	Tj = 2℃	COPd	3.64	-
Tj = 7℃	Pdh	2.61	kW	Tj = 7℃	COPd	4.66	-
Tj = 12℃	Pdh	1.16	kW	Tj = 12℃	COPd	6.16	-
Tj = bivalent temperature	Pdh	8.97	kW	Tj = bivalent temperature	COPd	1.77	-
Tj = operating limit	Pdh	11.00	kW	Tj = operating limit	COPd	1.13	-
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-
Bivalent temperature	T_{biv}	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P_{cych}	-	kW	Cycling interval efficiency	COP_{cyc}	-	-
Degradation co-efficient (**)	C_{dh}	0.90	—	Heating water operating limit temperature	W_{TOL}	51	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{off}	0.012	kW	Rated heat output (**)	P_{sup}	6.55	kW
Standby mode	P_{sb}	0.012	kW				
Thermostat-off mode	P_{to}	0.018	kW	Type of energy input	Electrical		
Crankcase heater mode	P_{ck}	0.013	kW				

Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	m^3/h
Sound power level, indoors/outdoors	L_{WA}	-/68	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h
Annual energy consumption	Q_{HE}	9388	kWh				

For heat pump combination heater:							
Declared load profile	-			**Water heating energyefficiency**	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):	XFMH16T9
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/YES
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	14.4	kW	Seasonal space heating energy efficiency	η s	171	%
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℃	Pdh	-	kW	Tj = -7℃	COPd	-	-
Tj = 2℃	Pdh	14.40	kW	Tj = 2℃	COPd	2.14	-
Tj = 7℃	Pdh	9.26	kW	Tj = 7℃	COPd	3.58	-
Tj = 12℃	Pdh	4.11	kW	Tj = 12℃	COPd	5.66	-
Tj = bivalent temperature	Pdh	9.14	kW	Tj = bivalent temperature	COPd	3.55	-
Tj = operating limit	Pdh	14.40	kW	Tj = operating limit	COPd	2.14	-
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-
Bivalent temperature	T_{biv}	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P_{cych}	-	kW	Cycling interval efficiency	COP_{cyc}	-	-
Degradation co-efficient (**)	Cdh	0.90	–	Heating water operating limit temperature	W_{TOL}	62	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{off}	0.012	kW	Rated heat output (**)	P_{sup}	0.65	kW
Standby mode	P_{sb}	0.012	kW				
Thermostat-off mode	P_{to}	0.018	kW	Type of energy input	Electrical		
Crankcase heater mode	P_{ck}	0.013	kW				

Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	m^3/h
Sound power level, indoors/outdoors	L_{WA}	-/68	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h
Annual energy consumption	Q_{HE}	4644	kWh				

For heat pump combination heater:							
Declared load profile	-			**Water heating energyefficiency**	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.

Information requirements

Model(s):	XFMH12T9
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	$P_{rated,c}$	11.6	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	219.0	%
Declared cooling capacity for part load at given outdoor temperature Tj				Declared energy efficiency ratio for part load at given outdoor temperature Tj			
Tj=+35℃	P_{dc}	11.60	kW	Tj=+35℃	EER_d	2.84	-
Tj=+30℃	P_{dc}	8.54	kW	Tj=+30℃	EER_d	4.13	-
Tj=+25℃	P_{dc}	5.49	kW	Tj=+25℃	EER_d	6.38	-
Tj=+20℃	P_{dc}	2.44	kW	Tj=+20℃	EER_d	9.40	-
Degradationco-efficient for chillers(*)	C_{dc}	0.99	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.012	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.018	kW	Standby mode	P_{SB}	0.012	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	4050	m^3/h
Soundpowerlevel, indoors /outdoors	L_{WA}	-/64	dB				
Emissions of nitrogen oxides(ifapplicable)	NO_x	-	mg/kWh input GCV	For water / brine-to-water chillers:Ratedbrineor water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	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.

Information requirements

Model(s):	XFMH12T9
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	$P_{rated,c}$	11.9	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	328.6	%
Declared cooling capacity for part load at given outdoor temperature Tj				Declared energy efficiency ratio for part load at given outdoor temperature Tj			
Tj=+35℃	P_{dc}	11.9	kW	Tj=+35℃	EER_d	4.55	-
Tj=+30℃	P_{dc}	8.77	kW	Tj=+30℃	EER_d	6.43	-
Tj=+25℃	P_{dc}	5.64	kW	Tj=+25℃	EER_d	10.30	-
Tj=+20℃	P_{dc}	2.51	kW	Tj=+20℃	EER_d	11.61	-
Degradationco-efficient for chillers(*)	C_{dc}	0.99	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.012	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.018	kW	Standby mode	P_{SB}	0.012	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	4050	m^3/h
Soundpowerlevel, indoors /outdoors	L_{WA}	-/64	dB				
Emissions of nitrogen oxides(ifapplicable)	NO_x	-	mg/kWh input GCV	For water / brine-to-water chillers:Ratedbrineor water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	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.

Information requirements

Model(s):	XFMH14T9
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	$P_{rated,c}$	14.3	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	214.4	%
Declared cooling capacity for part load at given outdoor temperature Tj				Declared energy efficiency ratio for part load at given outdoor temperature Tj			
Tj=+35℃	P_{dc}	14.30	kW	Tj=+35℃	EER_d	2.59	-
Tj=+30℃	P_{dc}	10.53	kW	Tj=+30℃	EER_d	4.35	-
Tj=+25℃	P_{dc}	6.77	kW	Tj=+25℃	EER_d	6.03	-
Tj=+20℃	P_{dc}	3.01	kW	Tj=+20℃	EER_d	8.99	-
Degradationco-efficient for chillers(*)	C_{dc}	0.99	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.012	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.012	kW	Standby mode	P_{SB}	0.010	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	4650	m^3/h
Soundpowerlevel, indoors /outdoors	L_{WA}	-/65	dB				
Emissions of nitrogen oxides(ifapplicable)	NO_x	-	mg/kWh input GCV	For water / brine-to-water chillers:Ratedbrineor water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	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.

Information requirements

Model(s):	XFMH14T9
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	$P_{rated,c}$	14.1	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	330.2	%
Declared cooling capacity for part load at given outdoor temperature Tj				Declared energy efficiency ratio for part load at given outdoor temperature Tj			
Tj=+35℃	P_{dc}	14.10	kW	Tj=+35℃	EER_d	4.15	-
Tj=+30℃	P_{dc}	10.39	kW	Tj=+30℃	EER_d	6.04	-
Tj=+25℃	P_{dc}	6.68	kW	Tj=+25℃	EER_d	10.18	-
Tj=+20℃	P_{dc}	2.97	kW	Tj=+20℃	EER_d	13.72	-
Degradationco-efficient for chillers(*)	C_{dc}	0.99	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.012	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.018	kW	Standby mode	P_{SB}	0.012	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	4650	m^3/h
Soundpowerlevel, indoors /outdoors	L_{WA}	-/65	dB				
Emissions of nitrogen oxides(ifapplicable)	NO_x	-	mg/kWh input GCV	For water / brine-to-water chillers:Ratedbrineor water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	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.

Information requirements

Model(s):	XFMH16T9
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	$P_{rated,c}$	16.0	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	212.2	%
Declared cooling capacity for part load at given outdoor temperature Tj				Declared energy efficiency ratio for part load at given outdoor temperature Tj			
Tj=+35℃	P_{dc}	15.98	kW	Tj=+35℃	EER_d	2.70	-
Tj=+30℃	P_{dc}	12.93	kW	Tj=+30℃	EER_d	3.96	-
Tj=+25℃	P_{dc}	7.66	kW	Tj=+25℃	EER_d	6.12	-
Tj=+20℃	P_{dc}	5.45	kW	Tj=+20℃	EER_d	9.22	-
Degradationco-efficient for chillers(*)	C_{dc}	0.99	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.012	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.018	kW	Standby mode	P_{SB}	0.012	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	4650	m^3/h
Soundpowerlevel, indoors /outdoors	L_{WA}		dB				
Emissions of nitrogen oxides(ifapplicable)	NO_x	-	mg/kWh input GCV	For water / brine-to-water chillers:Ratedbrineor water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	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.

Information requirements

Model(s):	XFMH16T9
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	$P_{rated,c}$	15.7	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	327.5	%
Declared cooling capacity for part load at given outdoor temperature Tj				Declared energy efficiency ratio for part load at given outdoor temperature Tj			
Tj=+35℃	P_{dc}	15.70	kW	Tj=+35℃	EER_d	4.11	-
Tj=+30℃	P_{dc}	11.57	kW	Tj=+30℃	EER_d	6.38	-
Tj=+25℃	P_{dc}	7.44	kW	Tj=+25℃	EER_d	9.66	-
Tj=+20℃	P_{dc}	3.31	kW	Tj=+20℃	EER_d	13.23	-
Degradationco-efficient for chillers(*)	C_{dc}	0.99	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.012	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.018	kW	Standby mode	P_{SB}	0.012	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	4650	m^3/h
Soundpowerlevel, indoors /outdoors	L_{WA}	-/68	dB				
Emissions of nitrogen oxides(ifapplicable)	NO_x	-	mg/kWh input GCV	For water / brine-to-water chillers:Ratedbrineor water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	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.

Condition (ºC)	Model	Capacity (kW)	Power input (kW)	EER/COP
Ambient Temperature: 35/24 Water Temperature: 12/7	XFMH12T9	11.46	4.04	2.84
	XFMH14T9	13.71	5.29	2.59
	XFMH16T9	16.01	5.93	2.70
Ambient Temperature: 35/24 Water Temperature: 23/18	XFMH12T9	11.96	2.63	4.55
	XFMH14T9	13.89	3.35	4.15
	XFMH16T9	16.20	3.94	4.11
Ambient Temperature: 7/6 Water Temperature: 30/35	XFMH12T9	12.05	2.64	4.57
	XFMH14T9	14.03	2.99	4.70
	XFMH16T9	15.81	3.53	4.48
Ambient Temperature: 2/1 Water Temperature: 30/35	XFMH12T9	9.28	2.54	3.65
	XFMH14T9	11.48	3.34	3.44
	XFMH16T9	13.72	3.90	3.52
Ambient Temperature: -7/-8 Water Temperature: 30/35	XFMH12T9	10.11	3.52	2.87
	XFMH14T9	12.15	4.62	2.63
	XFMH16T9	13.35	5.04	2.65
Ambient Temperature: 7/6 Water Temperature: 40/45	XFMH12T9	12.06	3.36	3.59
	XFMH14T9	14.09	3.95	3.57
	XFMH16T9	16.04	4.64	3.46
Ambient Temperature: 2/1 Water Temperature: 40/45	XFMH12T9	10.88	3.80	2.86
	XFMH14T9	11.91	4.30	2.77
	XFMH16T9	13.02	4.63	2.81
Ambient Temperature: -7/-8 Water Temperature: 40/45	XFMH12T9	10.11	4.55	2.22
	XFMH14T9	11.86	5.44	2.18
	XFMH16T9	12.92	6.04	2.14
Ambient Temperature: 7/6 Water Temperature: 47/55	XFMH12T9	12.20	4.15	2.94
	XFMH14T9	14.21	5.08	2.80
	XFMH16T9	16.24	5.76	2.82
Ambient Temperature: 2/1 Water Temperature: 47/55	XFMH12T9	11.23	4.57	2.46
	XFMH14T9	12.78	5.44	2.35
	XFMH16T9	13.43	5.89	2.28
Ambient Temperature: -7/-8 Water Temperature: 47/55	XFMH12T9	9.87	4.84	2.04
	XFMH14T9	11.12	5.48	2.03
	XFMH16T9	12.44	6.07	2.05

NOTE

AIR CONDITIONING SYSTEMS

AIR-TO-WATER HEAT PUMP - MONOBLOCK

V:1.0.112022

Please check the applicable models, F-GAS and manufacturer information
from the “Owner’s Manual - Product Fiche” in the packaging of the outdoor unit. (European Union products only).

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