

Model(s):		F470							
Type of heat source/sink:		Exhaust air-to-water							
Low-temperature heat pump:		No							
Equipped with supplementary heater:		Yes							
Heat pump combination heater:		Yes							
Climate condition:		Average							
Temperature application:		Medium temperature (55 °C)							
Applied standards: EN14825 and EN16147									
Rated heat output		Prated	2,6	kW	Seasonal space heating energy efficiency		ηs	116	%
Declared capacity for part load at outdoor temperature Tj					Declared coefficient of performance for part load at outdoor temperature Tj				
Tj = -7 °C	Pdh	1,7	kW	Tj = -7 °C	COPd	2,72	kW		
Tj = +2 °C	Pdh	1,7	kW	Tj = +2 °C	COPd	3,22	kW		
Tj = +7 °C	Pdh	1,7	kW	Tj = +7 °C	COPd	3,37	kW		
Tj = +12 °C	Pdh	1,7	kW	Tj = +12 °C	COPd	3,28	kW		
Tj = biv	Pdh	1,7	kW	Tj = biv	COPd	3,04	kW		
Tj = TOL	Pdh	1,7	kW	Tj = TOL	COPd	2,56	kW		
Tj = -15 °C (if TOL < -20 °C)	Pdh		kW	Tj = -15 °C (if TOL < -20 °C)	COPd		kW		
Bivalent temperature	Tbiv	-1,6	°C	Operation limit temperature	TOL	-10	°C		
Cycling interval capacity for heating	Pcyc		kW	Cycling interval efficiency	COPcyc		-		
Degradation co-efficient	Cdh	0,96	-	Heating water operating limit temperature	WTOL	58	°C		
Power consumption in modes other than active mode					Supplementary heater				
Off mode	P _{OFF}	0,002	kW	Rated heat output	P _{sup}	0,9	kW		
Thermostat-off mode	P _{TO}	0,02	kW						
Standby mode	P _{SB}	0,015	kW	Type of energy input	Electric				
Crankcase heater mode	P _{CK}	0	kW						
Other items									
Capacity control	fixed			Rated air flow rate, outdoors		150	m³/h		
Sound power level, indoors/outdoors	L _{WA}	52/-	dB	Rated water flow rate, indoor heat exchanger		0,18	m³/h		
Annual energy consumption	Q _{HE}	1806	kWh	Rated brine or water flow rate, outdoor heat exchanger			m³/h		
For heat pump combination heater:									
Declared load profile		L		Water heating energy efficiency		η _{wh}	79	%	
Daily electricity consumption	Q _{elec}	5,92	kWh	Daily fuel consumption	Q _{fuel}		kWh		
Annual electricity consumption	AEC	1299	kWh	Annual fuel consumption	AFC		GJ		
Approved by:									
Contact details		© NIBE Energy Systems - Box 14 - Hannabadsvägen 5 - 28521 Markaryd - Sweden							

Supplier's name:	NIBE		
Model:	F470		
Temperature application	35	55	°C
Declared load profile for water heating	L		
Seasonal space heating energy efficiency class, average climate:	A+	A+	
Water heating energy efficiency class, average climate:	A		
Rated heat output, average climate:	3	3	kW
Annual energy consumption for space heating, average climate	1505	1806	kWh
Annual electricity consumption for water heating, average climate	1299		kWh
Seasonal space heating energy efficiency, average climate:	140	116	%
Water heating energy efficiency, average climate:	79		%
Sound power level LWA indoors	52		dB
Rated heat output, cold climate:	3	3	kW
Rated heat output, warm climate:	3	3	kW
Annual energy consumption for space heating, cold climate	1737	2091	kWh
Annual electricity consumption for water heating, cold climate	1299		kWh
Annual energy consumption for space heating, warm climate	973	1168	kWh
Annual electricity consumption for water heating, warm climate	1299		kWh
Seasonal space heating energy efficiency, cold climate:	145	120	%
Water heating energy efficiency, cold climate:	79		%
Seasonal space heating energy efficiency, warm climate:	140	116	%
Water heating energy efficiency, warm climate:	79		%
Sound power level LWA outdoors	-		dB

Data for package fiche

Controller class	VII		
Controler contribution to efficiency	3,5		%
Seasonal space heating energy efficiency of package, average climate:	143	119	%
Seasonal space heating energy efficiency class for package, average climate:	A+	A+	%
Seasonal space heating energy efficiency of package, cold climate:	148	123	%
Seasonal space heating energy efficiency of package, warm climate:	143	119	%