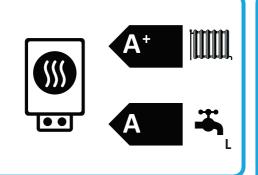




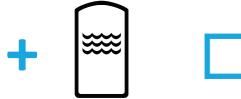
## ENERGY



NIBE F470

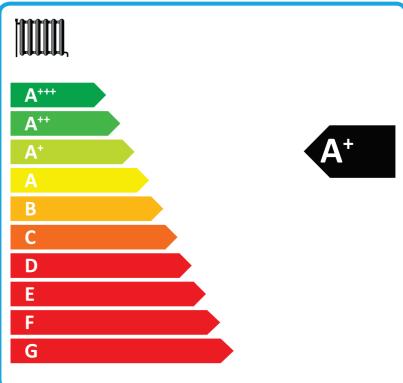


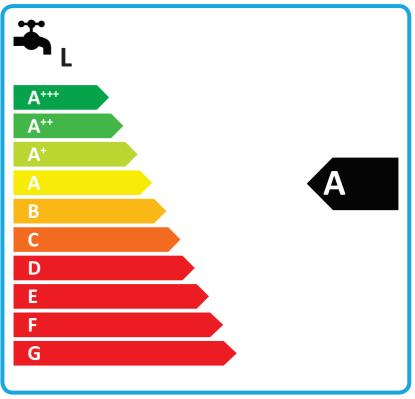












2015

Supplier's name:	NI		
Model:	F4	170	
Temperature application	35	55	°C
Declared load profile for water		L	
heating		<del>-</del>	
Seasonal space heating energy efficiency class, average climate:	<b>A</b> +	A+	
Water heating energy efficiency class, average climate:			
Rated heat output, average	3	3	kW
climate:		ŭ	NVV
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,	7	79	%
average climate:	'		70
Sound power level LWA indoors	5	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: Water heating energy efficiency,	140	116	%
warm climate:	7	%	
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:	<b>A</b> +	A+	%
Seasonal space heating energy efficiency of package, cold climate:	148	123	%
Seasonal space heating energy efficiency of package, warm climate:	143	119	%

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			



Applied standards: EN14825 and EN16147	,		vieululli	emperature (55°C)			
				Seasonal space heating energy			
Rated heat output	Prated	2,6	kW	efficiency	$\eta_{\text{s}}$	116	%
Declared capacity for part load at outdoor tem	perature Tj			Declared coefficient of performance for par	rt load at outdoo	r temperature	Tj
Tj = -7 °C	Pdh	1,7	kW	Tj = -7 °C	COPd	2,72	-
Tj = +2 °C	Pdh	1,7	kW	Tj = +2 °C	COPd	3,22	-
Tj = +7 °C	Pdh	1,7	kW	Tj = +7 °C	COPd	3,37	-
Tj = +12 °C	Pdh	1,7	kW	Tj = +12 °C	COPd	3,28	-
Tj = biv	Pdh	1,7	kW	Tj = biv	COPd	3,04	-
Tj = TOL	Pdh	1,7	kW	Tj = TOL	COPd	2,56	-
Tj = -15 °C (if TOL < -20 °C)	Pdh		kW	Tj = -15 °C (if TOL < -20 °C)	COPd		-
Bivalent temperature	T <sub>biv</sub>	-1,6	°C	Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	Pcych		kW	Cycling interval efficiency	COPcyc		-
				Heating water operating limit			
Degradation co-efficient	Cdh	0,96	<u> </u>	temperature	WTOL	58	°C
Power consumption in modes other than active	e mode			Supplementary heater			
Off mode	P <sub>OFF</sub>	0,002	kW	Rated heat output	Psup	0,9	kW
Thermostat-off mode	P <sub>TO</sub>	0,02	kW				
Standby mode	$P_{SB}$	0,015	kW	Type of energy input	Electric		
Crankcase heater mode	P <sub>CK</sub>	0	kW		•		
Other items							
Capacity control		fixed		Rated air flow rate, outdoors		150	m³/h
				Rated water flow rate, indoor heat			
Sound power level, indoors/outdoors	L <sub>WA</sub>	52/-	dB	exchanger		0,18	m³/h
				Rated brine or water flow rate,			
Annual energy consumption	$Q_{HE}$	1806	kWh	outdoor heat exchanger			m³/h
For heat pump combination heater:							
Declared load profile		L		Water heating energy efficiency	$\eta_{\text{wh}}$	79	%
Daile alaskriske assaurantias		5.02	LAA/Is	Daily five Language tion			LAAA
Daily electricity consumption	Q <sub>elec</sub>	5,92	kWh	Daily fuel consumption	Q <sub>fuel</sub>		kWh
Annual electricity consumption	AEC	1299	kWh	Annual fuel consumption	AFC		GJ
Approved by:	12						
Contact details	© NIBE E	nergy Syste	ems - Bo	x 14 - Hannabadsvägen 5 - 28521 Mar	karyd - Swed	len	