

Model(s):		NIBE F1145-15 (+ VPB 500)							
Type of heat source/sink:		Brine-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	18,0	kW	Seasonal space heating energy efficiency		ηs	138	%
Declared capacity for part load at outdoor temperature Tj				Declared coefficient of performance for part load at outdoor temperature Tj					
Tj = -7 °C	Pdh	14,6	kW	Tj = -7 °C	COPd	3,16	kW		
Tj = +2 °C	Pdh	14,8	kW	Tj = +2 °C	COPd	3,72	kW		
Tj = +7 °C	Pdh	15,1	kW	Tj = +7 °C	COPd	4,01	kW		
Tj = +12 °C	Pdh	15,4	kW	Tj = +12 °C	COPd	4,27	kW		
Tj = biv	Pdh	14,6	kW	Tj = biv	COPd	3,27	kW		
Tj = TOL	Pdh	14,6	kW	Tj = TOL	COPd	2,96	kW		
Tj = -15 °C (if TOL < -20 °C)	Pdh		kW	Tj = -15 °C (if TOL < -20 °C)	COPd		kW		
Bivalent temperature	Tbiv	-5,1	°C	Operation limit temperature		TOL	-10	°C	
Cycling interval capacity for heating	Pcych		kW	Cycling interval efficiency		COPcyc		-	
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit		WTOL	65	°C	
Power consumption in modes other than active mode				Supplementary heater					
Off mode	P _{OFF}	0,002	kW	Rated heat output		Psup	3,4	kW	
Thermostat-off mode	P _{TO}	0,022	kW						
Standby mode	P _{SB}	0,007	kW	Type of energy input		Electric			
Crankcase heater mode	P _{CK}	0,035	kW						
Other items									
Capacity control	fixed			Rated air flow rate, outdoors				m³/h	
Sound power level, indoors/outdoors	L _{WA}	43/-	dB	Rated water flow rate, indoor heat exchanger			1,57	m³/h	
Annual energy consumption	Q _{HE}	10194	kWh	Rated brine or water flow rate, outdoor heat exchanger			2,89	m³/h	
For heat pump combination heater:									
Declared load profile		XXL		Water heating energy efficiency		η _{wh}	94	%	
Daily electricity consumption	Q _{elec}	10,39	kWh	Daily fuel consumption		Q _{fuel}		kWh	
Annual electricity consumption	AEC	2283	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:	NIBE F1145-15 (+VPB 500)		
Temperature application	35	55	°C
Declared load profile for water heating	XXL		
Seasonal space heating energy efficiency class, average climate:	A++	A++	
Water heating energy efficiency class, average climate:	A		
Rated heat output, average climate:	18	18	kW
Annual energy consumption for space heating, average climate	8134	10194	kWh
Annual electricity consumption for water heating, average climate	2283		kWh
Seasonal space heating energy efficiency, average climate:	175	138	%
Water heating energy efficiency, average climate:	94		%
Sound power level LWA indoors	43		dB
Rated heat output, cold climate:	18	18	kW
Rated heat output, warm climate:	18	18	kW
Annual energy consumption for space heating, cold climate	9454	11893	kWh
Annual electricity consumption for water heating, cold climate	2283		kWh
Annual energy consumption for space heating, warm climate	5333	6636	kWh
Annual electricity consumption for water heating, warm climate	2283		kWh
Seasonal space heating energy efficiency, cold climate:	180	141	%
Water heating energy efficiency, cold climate:	94		%
Seasonal space heating energy efficiency, warm climate:	172	137	%
Water heating energy efficiency, warm climate:	94		%
Sound power level LWA outdoors	-		dB

Data for package fiche

Controller class	VII		
Controller contribution to efficiency	3,5		%
Seasonal space heating energy efficiency of package, average climate:	178	141	%
Seasonal space heating energy efficiency class for package, average climate:	A+++	A++	%
Seasonal space heating energy efficiency of package, cold climate:	183	145	%
Seasonal space heating energy efficiency of package, warm climate:	176	140	%