

Model(s):		NIBE F1145-12 (+VPB 300)							
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	14,0	kW	Seasonal space heating energy efficiency		ηs	141	%
Declared capacity for part load at outdoor temperature Tj				Declared coefficient of performance for part load at outdoor temperature Tj					
Tj = -7 °C	Pdh	10,8	kW	Tj = -7 °C		COPd	3,30	kW	
Tj = +2 °C	Pdh	11,1	kW	Tj = +2 °C		COPd	3,80	kW	
Tj = +7 °C	Pdh	11,3	kW	Tj = +7 °C		COPd	4,10	kW	
Tj = +12 °C	Pdh	11,5	kW	Tj = +12 °C		COPd	4,40	kW	
Tj = biv	Pdh	10,9	kW	Tj = biv		COPd	3,46	kW	
Tj = TOL	Pdh	10,7	kW	Tj = TOL		COPd	3,12	kW	
Tj = -15 °C (if TOL < -20 °C)	Pdh		kW	Tj = -15 °C (if TOL < -20 °C)		COPd		kW	
Bivalent temperature	Tbiv	-4,2	°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	Poff	0,002	kW	Rated heat output		Psup	3,3	kW	
Thermostat-off mode	Pto	0,018	kW						
Standby mode	Psb	0,007	kW	Type of energy input		Electric			
Crankcase heater mode	Pck	0,03	kW						
Other items									
Capacity control	fixed			Rated air flow rate, outdoors				m³/h	
Sound power level, indoors/outdoors	Lwa	45/-	dB	Rated water flow rate, indoor heat exchanger			1,15	m³/h	
Annual energy consumption	Qhe	7785	kWh	Rated brine or water flow rate, outdoor heat exchanger			2,18	m³/h	
For heat pump combination heater:									
Declared load profile		XXL		Water heating energy efficiency		ηwh	102	%	
Daily electricity consumption	Qelec	9,66	kWh	Daily fuel consumption		Qfuel		kWh	
Annual electricity consumption	AEC	2121	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 F1145-12 (+VPB 300)		
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:	14	14	kW
Annual energy consumption for space heating, average climate	6042	7785	kWh
Annual electricity consumption for water heating, average climate	2121		kWh
Seasonal space heating energy efficiency, average climate:	183	141	%
Water heating energy efficiency, average climate:	102		%
Sound power level LWA indoors	45		dB
Rated heat output, cold climate:	14	14	kW
Rated heat output, warm climate:	14	14	kW
Annual energy consumption for space heating, cold climate	6993	9049	kWh
Annual electricity consumption for water heating, cold climate	2121		kWh
Annual energy consumption for space heating, warm climate	3949	5120	kWh
Annual electricity consumption for water heating, warm climate	2121		kWh
Seasonal space heating energy efficiency, cold climate:	189	145	%
Water heating energy efficiency, cold climate:	102		%
Seasonal space heating energy efficiency, warm climate:	181	138	%
Water heating energy efficiency, warm climate:	102		%
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:	187	144	%
Seasonal space heating energy efficiency class for package, average climate:	A+++	A++	%
Seasonal space heating energy efficiency of package, cold climate:	193	148	%
Seasonal space heating energy efficiency of package, warm climate:	185	142	%