

# English, Installer manual - NIBE F1155

## Information sheet

Supplier		NIBE AB
Model		F1155-6 1x230V
Model hot water heater		VPB 300
Temperature application	°C	35 / 55
Declared load profile for water heating		<b>XL</b>
Seasonal space heating energy efficiency class, average climate		<b>A++ / A++</b>
Water heating energy efficiency class, average climate		<b>A</b>
Rated heat output (P <sub>designh</sub> ), average climate	kW	6
Annual energy consumption space heating, average climate	kWh	2 188 / 2 875
Annual energy consumption water heating, average climate	kWh	1 697
Seasonal space heating energy efficiency, average climate	%	200 / 150
Water heating energy efficiency, average climate	%	99
Sound power level L <sub>WA</sub> indoors	dB	42
Rated heat output (P <sub>designh</sub> ), cold climate	kW	6
Rated heat output (P <sub>designh</sub> ), warm climate	kW	6
Annual energy consumption space heating, cold climate	kWh	2 481 / 3 287
Annual energy consumption water heating, cold climate	kWh	1 697
Annual energy consumption space heating, warm climate	kWh	1 408 / 1 852
Annual energy consumption water heating, warm climate	kWh	1 697
Seasonal space heating energy efficiency, cold climate	%	211 / 157
Water heating energy efficiency, cold climate	%	99
Seasonal space heating energy efficiency, warm climate	%	201 / 151
Water heating energy efficiency, warm climate	%	99
Sound power level L <sub>WA</sub> outdoors	dB	-

Supplier		NIBE AB
Model		F1155-6 3x230V
Model hot water heater		VPB 300
Temperature application	°C	35 / 55
Declared load profile for water heating		<b>XL</b>
Seasonal space heating energy efficiency class, average climate		<b>A++ / A++</b>
Water heating energy efficiency class, average climate		<b>A</b>
Rated heat output (P <sub>designh</sub> ), average climate	kW	6
Annual energy consumption space heating, average climate	kWh	2 188 / 2 875
Annual energy consumption water heating, average climate	kWh	1 697
Seasonal space heating energy efficiency, average climate	%	200 / 150
Water heating energy efficiency, average climate	%	99
Sound power level L <sub>WA</sub> indoors	dB	42
Rated heat output (P <sub>designh</sub> ), cold climate	kW	6
Rated heat output (P <sub>designh</sub> ), warm climate	kW	6
Annual energy consumption space heating, cold climate	kWh	2 481 / 3 287
Annual energy consumption water heating, cold climate	kWh	1 697
Annual energy consumption space heating, warm climate	kWh	1 408 / 1 852
Annual energy consumption water heating, warm climate	kWh	1 697
Seasonal space heating energy efficiency, cold climate	%	211 / 157
Water heating energy efficiency, cold climate	%	99
Seasonal space heating energy efficiency, warm climate	%	201 / 151
Water heating energy efficiency, warm climate	%	99
Sound power level L <sub>WA</sub> outdoors	dB	-

Supplier		NIBE AB	
Model		F1155-6 3x400V	F1155-16 3x400V
Model hot water heater		VPB 300	VPB 300
Temperature application	°C	35 / 55	35 / 55
Declared load profile for water heating		<b>XL</b>	<b>XXL</b>
Seasonal space heating energy efficiency class, average climate		<b>A++ / A++</b>	<b>A++ / A++</b>
Water heating energy efficiency class, average climate		<b>A</b>	<b>A</b>
Rated heat output (P <sub>designh</sub> ), average climate	kW	6	16
Annual energy consumption space heating, average climate	kWh	2 188 / 2 875	6 373 / 8 167
Annual energy consumption water heating, average climate	kWh	1 697	2 048
Seasonal space heating energy efficiency, average climate	%	200 / 150	199 / 154
Water heating energy efficiency, average climate	%	99	105
Sound power level L <sub>WA</sub> indoors	dB	42	42
Rated heat output (P <sub>designh</sub> ), cold climate	kW	6	16
Rated heat output (P <sub>designh</sub> ), warm climate	kW	6	16
Annual energy consumption space heating, cold climate	kWh	2 481 / 3 287	7 218 / 9 434
Annual energy consumption water heating, cold climate	kWh	1 697	2 048
Annual energy consumption space heating, warm climate	kWh	1 408 / 1 852	4 169 / 5 386
Annual energy consumption water heating, warm climate	kWh	1 697	2 048
Seasonal space heating energy efficiency, cold climate	%	211 / 157	211 / 159
Water heating energy efficiency, cold climate	%	99	105
Seasonal space heating energy efficiency, warm climate	%	201 / 151	197 / 151
Water heating energy efficiency, warm climate	%	99	105
Sound power level L <sub>WA</sub> outdoors	dB	-	-

## Data for energy efficiency of the package

Model		F1155-6 1x230V
Model hot water heater		VPB 300
Temperature application	°C	35 / 55
Controller, class		VI
Controller, contribution to efficiency	%	4
Seasonal space heating energy efficiency of the package, average climate	%	204 / 154
Seasonal space heating energy efficiency class of the package, average climate		<b>A+++</b>
Seasonal space heating energy efficiency of the package, cold climate	%	215 / 161
Seasonal space heating energy efficiency of the package, warm climate	%	205 / 155

Model		F1155-6 3x230V
Model hot water heater		VPB 300
Temperature application	°C	35 / 55
Controller, class		VI
Controller, contribution to efficiency	%	4
Seasonal space heating energy efficiency of the package, average climate	%	204 / 154
Seasonal space heating energy efficiency class of the package, average climate		<b>A+++</b>
Seasonal space heating energy efficiency of the package, cold climate	%	215 / 161
Seasonal space heating energy efficiency of the package, warm climate	%	205 / 155

Model		F1155-6 3x400V	F1155-16 3x400V
Model hot water heater		VPB 300	VPB 300
Temperature application	°C	35 / 55	35 / 55
Controller, class		VI	
Controller, contribution to efficiency	%	4	
Seasonal space heating energy efficiency of the package, average climate	%	204 / 154	203 / 158
Seasonal space heating energy efficiency class of the package, average climate		<b>A+++</b>	<b>A+++</b>
Seasonal space heating energy efficiency of the package, cold climate	%	215 / 161	215 / 163
Seasonal space heating energy efficiency of the package, warm climate	%	205 / 155	201 / 155

The reported efficiency of the package also takes the controller into account. If an external supplementary boiler or solar heating is added to the package, the overall efficiency of the package should be recalculated.

# Technical documentation

Model		F1155-6 1x230V					
Model hot water heater		VPB 300					
Type of heat pump	<input type="checkbox"/> Air-water <input type="checkbox"/> Exhaust-water <input checked="" type="checkbox"/> Brine-water <input type="checkbox"/> Water-water						
Low-temperature heat pump	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
Integrated immersion heater for additional heat	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
Heat pump combination heater	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
Climate	<input checked="" type="checkbox"/> Average <input type="checkbox"/> Cold <input type="checkbox"/> Warm						
Temperature application	<input checked="" type="checkbox"/> Average (55 °C) <input type="checkbox"/> Low (35 °C)						
Applied standards	EN-14825 & EN-16147						
<b>Rated heat output</b>	Prated	5,5	kW	<b>Seasonal space heating energy efficiency</b>	$\eta_s$	150	%
<i>Declared capacity for space heating at part load and at outdoor temperature <math>T_j</math></i>				<i>Declared coefficient of performance for space heating at part load and at outdoor temperature <math>T_j</math></i>			
$T_j = -7\text{ °C}$	Pdh	5,0	kW	$T_j = -7\text{ °C}$	COPd	3,06	kW
$T_j = +2\text{ °C}$	Pdh	3,0	kW	$T_j = +2\text{ °C}$	COPd	3,97	kW
$T_j = +7\text{ °C}$	Pdh	2,0	kW	$T_j = +7\text{ °C}$	COPd	4,63	kW
$T_j = +12\text{ °C}$	Pdh	1,2	kW	$T_j = +12\text{ °C}$	COPd	4,86	kW
$T_j = \text{biv}$	Pdh	5,4	kW	$T_j = \text{biv}$	COPd	2,84	kW
$T_j = \text{TOL}$	Pdh	5,4	kW	$T_j = \text{TOL}$	COPd	2,84	kW
$T_j = -15\text{ °C}$ (if TOL < -20 °C)	Pdh		kW	$T_j = -15\text{ °C}$ (if TOL < -20 °C)	COPd		kW
Bivalent temperature	$T_{\text{biv}}$	-10	°C	Min. outdoor air temperature	TOL	-10	°C
Cycling interval capacity	P <sub>cy</sub>		kW	Cycling interval efficiency	COP <sub>cy</sub>		-
Degradation coefficient	Cdh	0,99	-	Max supply temperature	WTOL	65	°C
<i>Power consumption in modes other than active mode</i>				<i>Additional heat</i>			
Off mode	P <sub>OFF</sub>	0,002	kW	Rated heat output	P <sub>sup</sub>	0,1	kW
Thermostat-off mode	P <sub>TO</sub>	0,007	kW				
Standby mode	P <sub>SB</sub>	0,007	kW	Type of energy input	Electric		
Crankcase heater mode	P <sub>CK</sub>	0,009	kW				
<i>Other items</i>							
Capacity control	Variable			Rated airflow (air-water)			m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	42 / -	dB	Nominal heating medium flow			m <sup>3</sup> /h
Annual energy consumption	Q <sub>HE</sub>	2 875	kWh	Brine flow brine-water or water-water heat pumps		0,68	m <sup>3</sup> /h
<i>For heat pump combination heater</i>							
<b>Declared load profile for water heating</b>	XL			<b>Water heating energy efficiency</b>	$\eta_{\text{wh}}$	99	%
Daily energy consumption	Q <sub>elec</sub>	7,73	kWh	Daily fuel consumption	Q <sub>fuel</sub>		kWh
Annual energy consumption	AEC	1 697	kWh	Annual fuel consumption	AFC		GJ

<b>Model</b>		<b>F1155-6 3x230V</b>					
<b>Model hot water heater</b>		<b>VPB 300</b>					
Type of heat pump	<input type="checkbox"/> Air-water <input type="checkbox"/> Exhaust-water <input checked="" type="checkbox"/> Brine-water <input type="checkbox"/> Water-water						
Low-temperature heat pump	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
Integrated immersion heater for additional heat	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
Heat pump combination heater	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
Climate	<input checked="" type="checkbox"/> Average <input type="checkbox"/> Cold <input type="checkbox"/> Warm						
Temperature application	<input checked="" type="checkbox"/> Average (55 °C) <input type="checkbox"/> Low (35 °C)						
Applied standards	EN-14825 & EN-16147						
<b>Rated heat output</b>	Prated	5,5	kW	<b>Seasonal space heating energy efficiency</b>	$\eta_s$	150	%
<i>Declared capacity for space heating at part load and at outdoor temperature <math>T_j</math></i>				<i>Declared coefficient of performance for space heating at part load and at outdoor temperature <math>T_j</math></i>			
$T_j = -7\text{ °C}$	Pdh	5,0	kW	$T_j = -7\text{ °C}$	COPd	3,06	kW
$T_j = +2\text{ °C}$	Pdh	3,0	kW	$T_j = +2\text{ °C}$	COPd	3,97	kW
$T_j = +7\text{ °C}$	Pdh	2,0	kW	$T_j = +7\text{ °C}$	COPd	4,63	kW
$T_j = +12\text{ °C}$	Pdh	1,2	kW	$T_j = +12\text{ °C}$	COPd	4,86	kW
$T_j = \text{biv}$	Pdh	5,4	kW	$T_j = \text{biv}$	COPd	2,84	kW
$T_j = \text{TOL}$	Pdh	5,4	kW	$T_j = \text{TOL}$	COPd	2,84	kW
$T_j = -15\text{ °C}$ (if TOL < -20 °C)	Pdh		kW	$T_j = -15\text{ °C}$ (if TOL < -20 °C)	COPd		kW
Bivalent temperature	$T_{\text{biv}}$	-10	°C	Min. outdoor air temperature	TOL	-10	°C
Cycling interval capacity	P <sub>ych</sub>		kW	Cycling interval efficiency	COP <sub>yc</sub>		-
Degradation coefficient	Cdh	0,99	-	Max supply temperature	WTOL	65	°C
<i>Power consumption in modes other than active mode</i>				<i>Additional heat</i>			
Off mode	P <sub>OFF</sub>	0,002	kW	Rated heat output	P <sub>sup</sub>	0,1	kW
Thermostat-off mode	P <sub>TO</sub>	0,007	kW	Type of energy input Electric			
Standby mode	P <sub>SB</sub>	0,007	kW				
Crankcase heater mode	P <sub>CK</sub>	0,009	kW				
<i>Other items</i>							
Capacity control	Variable			Rated airflow (air-water)			m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	42 / -	dB	Nominal heating medium flow			m <sup>3</sup> /h
Annual energy consumption	Q <sub>HE</sub>	2 875	kWh	Brine flow brine-water or water-water heat pumps		0,68	m <sup>3</sup> /h
<i>For heat pump combination heater</i>							
<b>Declared load profile for water heating</b>	XL			<b>Water heating energy efficiency</b>	$\eta_{\text{wh}}$	99	%
Daily energy consumption	Q <sub>elec</sub>	7,73	kWh	Daily fuel consumption	Q <sub>fuel</sub>		kWh
Annual energy consumption	AEC	1 697	kWh	Annual fuel consumption	AFC		GJ

<b>Model</b>		<b>F1155-6 3x400V</b>					
<b>Model hot water heater</b>		<b>VPB 300</b>					
Type of heat pump	<input type="checkbox"/> Air-water <input type="checkbox"/> Exhaust-water <input checked="" type="checkbox"/> Brine-water <input type="checkbox"/> Water-water						
Low-temperature heat pump	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
Integrated immersion heater for additional heat	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
Heat pump combination heater	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
Climate	<input checked="" type="checkbox"/> Average <input type="checkbox"/> Cold <input type="checkbox"/> Warm						
Temperature application	<input checked="" type="checkbox"/> Average (55 °C) <input type="checkbox"/> Low (35 °C)						
Applied standards	EN-14825 & EN-16147						
<b>Rated heat output</b>	Prated	5,5	kW	<b>Seasonal space heating energy efficiency</b>	$\eta_s$	150	%
<i>Declared capacity for space heating at part load and at outdoor temperature <math>T_j</math></i>				<i>Declared coefficient of performance for space heating at part load and at outdoor temperature <math>T_j</math></i>			
$T_j = -7\text{ °C}$	Pdh	5,0	kW	$T_j = -7\text{ °C}$	COPd	3,06	kW
$T_j = +2\text{ °C}$	Pdh	3,0	kW	$T_j = +2\text{ °C}$	COPd	3,97	kW
$T_j = +7\text{ °C}$	Pdh	2,0	kW	$T_j = +7\text{ °C}$	COPd	4,63	kW
$T_j = +12\text{ °C}$	Pdh	1,2	kW	$T_j = +12\text{ °C}$	COPd	4,86	kW
$T_j = \text{biv}$	Pdh	5,4	kW	$T_j = \text{biv}$	COPd	2,84	kW
$T_j = \text{TOL}$	Pdh	5,4	kW	$T_j = \text{TOL}$	COPd	2,84	kW
$T_j = -15\text{ °C}$ (if TOL < -20 °C)	Pdh		kW	$T_j = -15\text{ °C}$ (if TOL < -20 °C)	COPd		kW
Bivalent temperature	$T_{\text{biv}}$	-10	°C	Min. outdoor air temperature	TOL	-10	°C
Cycling interval capacity	P <sub>psych</sub>		kW	Cycling interval efficiency	COP <sub>psych</sub>		-
Degradation coefficient	Cdh	0,99	-	Max supply temperature	WTOL	65	°C
<i>Power consumption in modes other than active mode</i>				<i>Additional heat</i>			
Off mode	$P_{\text{OFF}}$	0,002	kW	Rated heat output	P <sub>sup</sub>	0,1	kW
Thermostat-off mode	$P_{\text{TO}}$	0,007	kW				
Standby mode	$P_{\text{SB}}$	0,007	kW	Type of energy input	Electric		
Crankcase heater mode	$P_{\text{CK}}$	0,009	kW				
<i>Other items</i>							
Capacity control	Variable			Rated airflow (air-water)			m <sup>3</sup> /h
Sound power level, indoors/outdoors	$L_{\text{WA}}$	42 / -	dB	Nominal heating medium flow			m <sup>3</sup> /h
Annual energy consumption	$Q_{\text{HE}}$	2 875	kWh	Brine flow brine-water or water-water heat pumps		0,68	m <sup>3</sup> /h
<i>For heat pump combination heater</i>							
<b>Declared load profile for water heating</b>	XL			<b>Water heating energy efficiency</b>	$\eta_{\text{wh}}$	99	%
Daily energy consumption	$Q_{\text{elec}}$	7,73	kWh	Daily fuel consumption	$Q_{\text{fuel}}$		kWh
Annual energy consumption	AEC	1 697	kWh	Annual fuel consumption	AFC		GJ

<b>Model</b>		<b>F1155-16 3x400V</b>					
<b>Model hot water heater</b>		<b>VPB 300</b>					
Type of heat pump	<input type="checkbox"/> Air-water <input type="checkbox"/> Exhaust-water <input checked="" type="checkbox"/> Brine-water <input type="checkbox"/> Water-water						
Low-temperature heat pump	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
Integrated immersion heater for additional heat	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
Heat pump combination heater	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
Climate	<input checked="" type="checkbox"/> Average <input type="checkbox"/> Cold <input type="checkbox"/> Warm						
Temperature application	<input checked="" type="checkbox"/> Average (55 °C) <input type="checkbox"/> Low (35 °C)						
Applied standards	EN-14825 & EN-16147						
<b>Rated heat output</b>	Prated	16,0	kW	<b>Seasonal space heating energy efficiency</b>	$\eta_s$	154	%
<i>Declared capacity for space heating at part load and at outdoor temperature <math>T_j</math></i>				<i>Declared coefficient of performance for space heating at part load and at outdoor temperature <math>T_j</math></i>			
$T_j = -7\text{ °C}$	Pdh	14,2	kW	$T_j = -7\text{ °C}$	COPd	3,0	kW
$T_j = +2\text{ °C}$	Pdh	8,7	kW	$T_j = +2\text{ °C}$	COPd	4,1	kW
$T_j = +7\text{ °C}$	Pdh	5,6	kW	$T_j = +7\text{ °C}$	COPd	4,9	kW
$T_j = +12\text{ °C}$	Pdh	5,5	kW	$T_j = +12\text{ °C}$	COPd	5,0	kW
$T_j = \text{biv}$	Pdh	15,4	kW	$T_j = \text{biv}$	COPd	2,8	kW
$T_j = \text{TOL}$	Pdh	15,4	kW	$T_j = \text{TOL}$	COPd	2,8	kW
$T_j = -15\text{ °C}$ (if TOL < -20 °C)	Pdh		kW	$T_j = -15\text{ °C}$ (if TOL < -20 °C)	COPd		kW
Bivalent temperature	$T_{\text{biv}}$	-10	°C	Min. outdoor air temperature	TOL	-10	°C
Cycling interval capacity	P <sub>ych</sub>		kW	Cycling interval efficiency	COP <sub>yc</sub>		-
Degradation coefficient	Cdh	0,99	-	Max supply temperature	WTOL	65	°C
<i>Power consumption in modes other than active mode</i>				<i>Additional heat</i>			
Off mode	P <sub>OFF</sub>	0,002	kW	Rated heat output	P <sub>sup</sub>	0,6	kW
Thermostat-off mode	P <sub>TO</sub>	0,020	kW	Type of energy input Electric			
Standby mode	P <sub>SB</sub>	0,007	kW				
Crankcase heater mode	P <sub>CK</sub>	0,030	kW				
<i>Other items</i>							
Capacity control	Variable			Rated airflow (air-water)			m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	42 / -	dB	Nominal heating medium flow			m <sup>3</sup> /h
Annual energy consumption	Q <sub>HE</sub>	8 167	kWh	Brine flow brine-water or water-water heat pumps		1,84	m <sup>3</sup> /h
<i>For heat pump combination heater</i>							
<b>Declared load profile for water heating</b>	XXL			<b>Water heating energy efficiency</b>	$\eta_{\text{wh}}$	105	%
Daily energy consumption	Q <sub>elec</sub>	9,33	kWh	Daily fuel consumption	Q <sub>fuel</sub>		kWh
Annual energy consumption	AEC	2 048	kWh	Annual fuel consumption	AFC		GJ