

Indoor Unit Model	Vitocal 111-S AWBT-M-E-AC 111.B06 F
Outdoor Unit Model	Vitocal 100-S ODU 230V B06
Equipped with a supplementary heater	yes
Heat pump combination heater	yes

Application	Low temperature
Climate conditions	Average

Rated heat output	Prated	5.1	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	4.5	kW
T _j = + 2 °C	P _{dh}	3.0	kW
T _j = + 7 °C	P _{dh}	3.1	kW
T _j = + 12 °C	P _{dh}	3.6	kW
T _j = bivalent temperature	P _{dh}	4.5	kW
T _j = operation limit temperature	P _{dh}	4.1	kW
T _j = - 15 °C (if TOL < -20 °C)	P _{dh}	-	kW
Bivalent temperature	T _{biv}	-7	°C
Cycling interval capacity for heating	P _{cyh}	-	kW
Degradation coefficient	C _{dh}	0.99	
Power consumption in modes other than active mode			
Off mode	P _{OFF}	0.015	kW
Thermostat-off mode	P _{TO}	0.000	kW
Standby mode	P _{SB}	0.000	kW
Crankcase heater mode	P _{CK}	0.000	kW
Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	41/62	dB
Annual energy consumption	Q _{HE}	10549	kWh

Seasonal space heating energy efficiency	η _{se}	175%	%
Declared coefficient of performance for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	COP _d	2.9	
T _j = + 2 °C	COP _d	4.3	
T _j = + 7 °C	COP _d	5.9	
T _j = + 12 °C	COP _d	8.4	
T _j = bivalent temperature	COP _d	2.9	
T _j = operation limit temperature	COP _d	2.6	
T _j = - 15 °C (if TOL < -20 °C)	COP _d	-	
Operation limit temperature	TOL	-20	°C
Cycling interval efficiency	COP _{cyh}	-	
Heating water operating limit temperature	WTOL	55	°C
Supplementary heater			
Rated heat output	P _{sup}	1.0	kW
Type of energy input		Electric	
Rated air flow rate, outdoors			
		-	m³/h

For heat pump combination heater			
Declared load profile			
Daily electric consumption	Q _{elec}	5841	kWh
Annual electricity consumption	AEC	1251	kWh
Standby cylinder heat loss		1990	Wh/day

Water heating energy efficiency			
Daily fuel consumption	η _{wh}	133	%
Annual fuel consumption	Q _{fuel}	-	kWh
Reference hot water temperature	AFC	-	kWh
DHW volume accounted for in test		53.4	°C
		290	l

Application	Medium temperature
Climate conditions	Average

Rated heat output	Prated	4.1	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	3.3	kW
T _j = + 2 °C	P _{dh}	2.7	kW
T _j = + 7 °C	P _{dh}	2.7	kW
T _j = + 12 °C	P _{dh}	3.3	kW
T _j = bivalent temperature	P _{dh}	3.6	kW
T _j = operation limit temperature	P _{dh}	2.9	kW
T _j = - 15 °C (if TOL < -20 °C)	P _{dh}	-	kW
Bivalent temperature	T _{biv}	-7	°C
Cycling interval capacity for heating	P _{cyh}	-	kW
Degradation coefficient	C _{dh}	0.99	
Power consumption in modes other than active mode			
Off mode	P _{OFF}	0.015	kW
Thermostat-off mode	P _{TO}	0.000	kW
Standby mode	P _{SB}	0.000	kW
Crankcase heater mode	P _{CK}	0.000	kW
Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	41/62	dB
Annual energy consumption	Q _{HE}	8383	kWh

Seasonal space heating energy efficiency	η _{se}	125%	%
Declared coefficient of performance for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	COP _d	1.9	
T _j = + 2 °C	COP _d	3.2	
T _j = + 7 °C	COP _d	4.8	
T _j = + 12 °C	COP _d	6.4	
T _j = bivalent temperature	COP _d	1.9	
T _j = operation limit temperature	COP _d	1.5	
T _j = - 15 °C (if TOL < -20 °C)	COP _d	-	
Operation limit temperature	TOL	-20	°C
Cycling interval efficiency	COP _{cyh}	-	
Heating water operating limit temperature	WTOL	55	°C
Supplementary heater			
Rated heat output	P _{sup}	1.2	kW
Type of energy input		Electric	
Rated air flow rate, outdoors			
		-	m³/h

For heat pump combination heater			
Declared load profile			
Daily electric consumption	Q _{elec}	5814	kWh
Annual electricity consumption	AEC	1251	kWh
Standby cylinder heat loss		1990	Wh/day

Water heating energy efficiency			
Daily fuel consumption	η _{wh}	133%	%
Annual fuel consumption	Q _{fuel}	-	kWh
Reference hot water temperature	AFC	-	kWh
DHW volume accounted for in test		53.4	°C
		290	l