

Indoor Model	Vitocal 222-A AWOT-M-E 221.A04
Outdoor Model	Vitocal 200-A AWO-M-E 201.A04
Air-to-water heat pump	yes
Water-to-water heat pump	no
Brine-to-water heat pump	no
Low-temperature heat pump	no
Equipped with a supplementary heater	yes
Heat pump combination heater	yes



Application	Low temperature
Climate conditions	Average

Rated heat output	Prated	5	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	4.7	kW
Tj = + 2 °C	Pdh	3.0	kW
Tj = + 7 °C	Pdh	3.1	kW
Tj = + 12 °C	Pdh	3.0	kW
Tj = bivalent temperature	Pdh	4.7	kW
Tj = operation limit temperature	Pdh	4.3	kW
Tj = - 15 °C (if TOL < -20 °C)	Pdh		kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcych		kW
Degradation coefficient	Cdh	0.98	
Power consumption in modes other than active mode			
Off mode	P _{OFF}	0.011	kW
Thermostat-off mode	P _{TO}	0.000	kW
Standby mode	P _{SB}	0.016	kW
Crankcase heater mode	P _{CK}	0.000	kW
Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	39/53	dB
Annual energy consumption	Q _{HE}	2476	kWh

Seasonal space heating energy efficiency	η _s	173	%
Declared coefficient of performance for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	COP _d	2.9	
Tj = + 2 °C	COP _d	4.3	
Tj = + 7 °C	COP _d	5.8	
Tj = + 12 °C	COP _d	7.1	
Tj = bivalent temperature	COP _d	2.9	
Tj = operation limit temperature	COP _d	2.6	
Tj = - 15 °C (if TOL < -20 °C)	COP _d		
Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COP _{pcyc}		
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output	P _{sup}	9.0	kW
Type of energy input		Electric	
Rated air flow rate, outdoors			
		2250	m ³ /h

For heat pump combination heater			
Declared load profile			
Daily electric consumption	Q _{elec}	4.153	kWh
Annual electricity consumption	AEC	886	kWh
Standby cylinder heat loss		1104	Wh/day

Water heating energy efficiency			
Daily fuel consumption	η _{wh}	119	%
Annual fuel consumption	Q _{fuel}		kWh
Reference hot water temperature	AFC	52.5	°C
DHW volume accounted for in test		290	l

Application	Medium temperature
Climate conditions	Average

Rated heat output	Prated	5	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	4.6	kW
Tj = + 2 °C	Pdh	3.1	kW
Tj = + 7 °C	Pdh	3.0	kW
Tj = + 12 °C	Pdh	2.9	kW
Tj = bivalent temperature	Pdh	4.6	kW
Tj = operation limit temperature	Pdh	4.4	kW
Tj = - 15 °C (if TOL < -20 °C)	Pdh		kW
Bivalent temperature	T _{biv}	-7	°C
Cycling interval capacity for heating	Pcych		kW
Degradation coefficient	Cdh	0.9	
Power consumption in modes other than active mode			
Off mode	P _{OFF}	0.011	kW
Thermostat-off mode	P _{TO}	0.000	kW
Standby mode	P _{SB}	0.016	kW
Crankcase heater mode	P _{CK}	0.000	kW
Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	39/53	dB
Annual energy consumption	Q _{HE}	3327	kWh

Seasonal space heating energy efficiency	η _s	124	%
Declared coefficient of performance for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	COP _d	2.0	
Tj = + 2 °C	COP _d	3.1	
Tj = + 7 °C	COP _d	4.2	
Tj = + 12 °C	COP _d	5.5	
Tj = bivalent temperature	COP _d	2.0	
Tj = operation limit temperature	COP _d	1.9	
Tj = - 15 °C (if TOL < -20 °C)	COP _d		
Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COP _{pcyc}		
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output	P _{sup}	9.0	kW
Type of energy input		Electric	
Rated air flow rate, outdoors			
		2250	m ³ /h

For heat pump combination heater			
Declared load profile			
Daily electric consumption	Q _{elec}	4.153	kWh
Annual electricity consumption	AEC	886	kWh
Standby cylinder heat loss		1104	Wh/day

Water heating energy efficiency			
Daily fuel consumption	η _{wh}	119	%
Annual fuel consumption	Q _{fuel}		kWh
Reference hot water temperature	AFC	52.5	°C
DHW volume accounted for in test		290	l