

Indoor Model	Vitocal 222-A AWOT-M-E 221.A10
Outdoor Model	Vitocal 200-A AWO-M-E 201.A10
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	9	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	8.2	kW
Tj = + 2 °C	Pdh	5.3	kW
Tj = + 7 °C	Pdh	6.6	kW
Tj = + 12 °C	Pdh	6.6	kW
Tj = bivalent temperature	Pdh	8.2	kW
Tj = operation limit temperature	Pdh	7.5	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}	0.050	kW
Thermostat-off mode	P _{TO}	0.000	kW
Standby mode	P _{SB}	0.025	kW
Crankcase heater mode	P _{CK}	0.000	kW
Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	39/56	dB
Annual energy consumption	Q _{HE}	4295	kWh

Seasonal space heating energy efficiency	η _{sp}	176	%
Declared coefficient of performance for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	COP _d	3.2	
Tj = + 2 °C	COP _d	4.3	
Tj = + 7 °C	COP _d	5.8	
Tj = + 12 °C	COP _d	7.5	
Tj = bivalent temperature	COP _d	3.2	
Tj = operation limit temperature	COP _d	2.9	
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			
		4500	m ³ /h

For heat pump combination heater			
Declared load profile			
Daily electric consumption	Q _{elec}	4.234	kWh
Annual electricity consumption	AEC	904	kWh
Standby cylinder heat loss		1200	Wh/day

Water heating energy efficiency			
Daily fuel consumption	Q _{fuel}	117	kWh
Annual fuel consumption	AFC		kWh
Reference hot water temperature		52.5	°C
DHW volume accounted for in test		290	l

Application	Medium temperature
Climate conditions	Average

Rated heat output	Prated	9	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	8.3	kW
Tj = + 2 °C	Pdh	6.1	kW
Tj = + 7 °C	Pdh	5.4	kW
Tj = + 12 °C	Pdh	6.4	kW
Tj = bivalent temperature	Pdh	8.3	kW
Tj = operation limit temperature	Pdh	8.0	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}	0.050	kW
Thermostat-off mode	P _{TO}	0.000	kW
Standby mode	P _{SB}	0.025	kW
Crankcase heater mode	P _{CK}	0.000	kW
Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	39/56	dB
Annual energy consumption	Q _{HE}	5781	kWh

Seasonal space heating energy efficiency	η _{sp}	129	%
Declared coefficient of performance for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	COP _d	2.3	
Tj = + 2 °C	COP _d	3.1	
Tj = + 7 °C	COP _d	4.2	
Tj = + 12 °C	COP _d	5.7	
Tj = bivalent temperature	COP _d	2.3	
Tj = operation limit temperature	COP _d	2.0	
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			
		4500	m ³ /h

For heat pump combination heater			
Declared load profile			
Daily electric consumption	Q _{elec}	4.234	kWh
Annual electricity consumption	AEC	904	kWh
Standby cylinder heat loss		1200	Wh/day

Water heating energy efficiency			
Daily fuel consumption	Q _{fuel}	117	kWh
Annual fuel consumption	AFC		kWh
Reference hot water temperature		52.5	°C
DHW volume accounted for in test		290	l