

Indoor Model	Vitocal 222-A AWOT-M-E 221.A16
Outdoor Model	Vitocal 200-A AWO-M-E 201.A16
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	11	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	9.4	kW
Tj = + 2 °C	Pdh	5.7	kW
Tj = + 7 °C	Pdh	8.9	kW
Tj = + 12 °C	Pdh	6.7	kW
Tj = bivalent temperature	Pdh	9.4	kW
Tj = operation limit temperature	Pdh	8.5	kW
Tj = - 15 °C (if TOL < -20 °C)	Pdh		kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc		kW
Degradation coefficient	Cdh	0.98	
Power consumption in modes other than active mode			
Off mode	Poff	0.059	kW
Thermostat-off mode	Pto	0.000	kW
Standby mode	Psb	0.025	kW
Crankcase heater mode	Pck	0.000	kW
Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	Lwa	39/56	dB
Annual energy consumption	Qhe	5152	kWh

Seasonal space heating energy efficiency	ηs	175	%
Declared coefficient of performance for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	COPd	3.1	
Tj = + 2 °C	COPd	4.3	
Tj = + 7 °C	COPd	5.7	
Tj = + 12 °C	COPd	7.7	
Tj = bivalent temperature	COPd	3.1	
Tj = operation limit temperature	COPd	2.8	
Tj = - 15 °C (if TOL < -20 °C)	COPd		
Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc		
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output	Psup	9.0	kW
Type of energy input		Electric	
Rated air flow rate, outdoors			
		4500	m³/h

For heat pump combination heater			
Declared load profile			
		L	
Daily electric consumption	Qelec	4.234	kWh
Annual electricity consumption	AEC	904	kWh
Standby cylinder heat loss		1200	Wh/day

Water heating energy efficiency	ηwh	117	%
Daily fuel consumption	Qfuel		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	10	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	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	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc		kW
Degradation coefficient	Cdh	0.98	
Power consumption in modes other than active mode			
Off mode	Poff	0.059	kW
Thermostat-off mode	Pto	0.000	kW
Standby mode	Psb	0.025	kW
Crankcase heater mode	Pck	0.000	kW
Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	Lwa	39/56	dB
Annual energy consumption	Qhe	6524	kWh

Seasonal space heating energy efficiency	ηs	130	%
Declared coefficient of performance for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	COPd	2.1	
Tj = + 2 °C	COPd	3.2	
Tj = + 7 °C	COPd	4.3	
Tj = + 12 °C	COPd	5.6	
Tj = bivalent temperature	COPd	2.1	
Tj = operation limit temperature	COPd	1.9	
Tj = - 15 °C (if TOL < -20 °C)	COPd		
Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc		
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output	Psup	9.0	kW
Type of energy input		Electric	
Rated air flow rate, outdoors			
		4500	m³/h

For heat pump combination heater			
Declared load profile			
		L	
Daily electric consumption	Qelec	4.234	kWh
Annual electricity consumption	AEC	904	kWh
Standby cylinder heat loss		1200	Wh/day

Water heating energy efficiency	ηwh	117	%
Daily fuel consumption	Qfuel		kWh
Annual fuel consumption	AFC		kWh
Reference hot water temperature		52.5	°C
DHW volume accounted for in test		290	l