Information requirements for heat pump space heaters and heat pump combination heaters - Commission Regulation (EU) No 813/2013

Indoor Unit Model	***Vitocal 151-A AWOT-M-E-AC-AF 151.A08***
Outdoor Unit Model	***Vitocal 15X-A ODU 230V A06 AF***
Equipped with a supplementary heater	***yes***
Heat pump combination heater	***yes***

Application	***Low temperature***
Climate conditions	***Average***

Rated heat output	*Prated*	5.46	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
T_j = - 7 °C	*Pdh*	4.8	kW
T_j = + 2 °C	*Pdh*	2.9	kW
T_j = + 7 °C	*Pdh*	2.6	kW
T_j = + 12 °C	*Pdh*	2.3	kW
T_j = bivalent temperature	*Pdh*	4.8	kW
T_j = operation limit temperature	*Pdh*	4.4	kW
T_j = - 15 °C (if TOL < -20 °C)	*Pdh*	-	kW
Bivalent temperature	T_{biv}	-7	°C
Cycling interval capacity for heating	*Pcych*	-	kW
Degradation coefficient	*Cdh*	1.0	
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.000	kW
Thermostat-off mode	P_{TO}	0.014	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}	40/51	dB
Annual energy consumption	Q_{HE}	2461	kWh

Seasonal space heating energy efficiency	η_s	180%	%
Declared coefficient of performance for part load at indoor temperature 20 °C and outdoor temperature Tj			
T_j = - 7 °C	COP_d	3.0	
T_j = + 2 °C	COP_d	4.6	
T_j = + 7 °C	COP_d	6.0	
T_j = + 12 °C	COP_d	7.6	
T_j = bivalent temperature	COP_d	3.0	
T_j = operation limit temperature	COP_d	2.7	
T_j = - 15 °C (if TOL < -20 °C)	COP_d	-	
Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc	-	
Heating water operating limit temperature	WTOL	70	°C
Supplementary heater			
Rated heat output	Psup	1.1	kW
Type of energy input		Electric	
Rated air flow rate, outdoors		1954	m^3/h

For heat pump combination heater							
Declared load profile		XL		**Water heating energy efficiency**	η_{wh}	102	%
Daily electric consumption	Q_{elec}	7973	kWh	Daily fuel consumption	Q_{fuel}	-	kWh
Annual electricity consumption	*AEC*	1754	kWh	Annual fuel consumption	*AFC*	-	kWh
Standby cylinder heat loss		1200	Wh/day	Reference hot water temperature		53.2	°C
				DHW volume accounted for in test		263	l

Application	***Medium temperature***
Climate conditions	***Average***

Rated heat output	*Prated*	5.14	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
T_j = - 7 °C	*Pdh*	4.6	kW
T_j = + 2 °C	*Pdh*	2.8	kW
T_j = + 7 °C	*Pdh*	2.5	kW
T_j = + 12 °C	*Pdh*	2.5	kW
T_j = bivalent temperature	*Pdh*	4.6	kW
T_j = operation limit temperature	*Pdh*	4.1	kW
T_j = - 15 °C (if TOL < -20 °C)	*Pdh*	-	kW
Bivalent temperature	T_{biv}	-7	°C
Cycling interval capacity for heating	*Pcych*	-	kW
Degradation coefficient	*Cdh*	1.0	
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.000	kW
Thermostat-off mode	P_{TO}	0.014	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}	40/51	dB
Annual energy consumption	Q_{HE}	2947	kWh

Seasonal space heating energy efficiency	η_s	141%	%
Declared coefficient of performance for part load at indoor temperature 20 °C and outdoor temperature Tj			
T_j = - 7 °C	COP_d	2.3	
T_j = + 2 °C	COP_d	3.6	
T_j = + 7 °C	COP_d	4.7	
T_j = + 12 °C	COP_d	6.5	
T_j = bivalent temperature	COP_d	2.3	
T_j = operation limit temperature	COP_d	2.1	
T_j = - 15 °C (if TOL < -20 °C)	COP_d	-	
Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc	-	
Heating water operating limit temperature	WTOL	70	°C
Supplementary heater			
Rated heat output	Psup	1..04	kW
Type of energy input		Electric	
Rated air flow rate, outdoors		1954	m^3/h

For heat pump combination heater							
Declared load profile		XL		**Water heating energy efficiency**	η_{wh}	102	%
Daily electric consumption	Q_{elec}	7973	kWh	Daily fuel consumption	Q_{fuel}	-	kWh
Annual electricity consumption	*AEC*	1754	kWh	Annual fuel consumption	*AFC*	-	kWh
Standby cylinder heat loss		1200	Wh/day	Reference hot water temperature		53.2	°C
				DHW volume accounted for in test		263	l

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