Product fiche concerning the COMMISSION DELEGATED REGULATIONS

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Air Source Heat Pumps

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Models:	Outdoor Unit:	Aerona^3 HPID16
	Indoor Unit:	None
Air-to-water heat pump		Yes
Brine-to-water heat pump		No
Low temperature heat pump		No
Equipped with a supplementary heater		No
Heat Pump Combination Heater		Yes
Parameters shall be declared for		low-temperature applications
Parameters shall be declared for		Average Climate Conditions

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated Heat Output (*)	Prated	12.75	kW	Seasonal space heating energy efficiency	ηs	167	%
Declared capacity for heating for part load at indoor Temperature 20°C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = -10°C	Pdh	11.8	kW	Tj = -10°C	COPd	2.30	
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = -7°C	Pdh	11.31	kW	Tj = -7°C	COPd	2.73	
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +2°C	Pdh	6.81	kW	Tj = +2°C	COPd	4.21	
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +7°C	Pdh	4.61	kW	Tj = +7°C	COPd	5.73	
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12°C	Pdh	4.80	kW	Tj = +12°C	COPd	6.30	
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	11.31	kW	Tj = bivalent temperature	COPd	2.73	
Tj = operation limit temperature	Pdh	11.8	kW	Tj = operation limit temperature	COPd	2.30	
Tj = -15°C (if TOL < -20°C)	Pdh	-	kW	Tj = -15°C (if TOL < -20°C)	COPd	-	
Bivalent temperature	Tbiv	-7		Operation limit temperature	TOL	-10	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				**Supplementary Heater**			
Off Mode	P_{OFF}	0.01	kW	Rate heat output	P_{sup}	0.95	kW
Thermostat-off mode	P_{TO}	0.04	kW				
Standby mode	P_{SB}	0.01	kW	Type of energy input			
Crankcase heater mode	P_{CK}	0.00	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors	-	4464	m³/h
Sound power level indoors/outdoors	L_{WA}	40/61	dBA				
Annual Energy consumption	Q_{HE}	6058	kWh				
For heat pump combination heater				Water heating energy efficiency	ηwh	-	%
Declared load profile	-	-	-				
Daily electricity consumption	Qelec	-	kW/h				
Annual electricity consumption	AEC	-	kW/h				

Contact Details:

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(*) For heat pumps space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating

Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Models:	Outdoor Unit:	Aerona^3 HPID16
	Indoor Unit:	None
Air-to-water heat pump		Yes
Brine-to-water heat pump		No
Low temperature heat pump		No
Equipped with a supplementary heater		No
Heat Pump Combination Heater		Yes
Parameters shall be declared for		Medium-temperature applications
Parameters shall be declared for		Average Climate Conditions

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated Heat Output (*)	Prated	11	kW	Seasonal space heating energy efficiency	ηs	126	%
Declared capacity for heating for part load at indoor Temperature 20°C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = -10°C	Pdh	11.0	kW	Tj = -10°C	COPd	1.60	
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = -7°C	Pdh	9.05	kW	Tj = -7°C	COPd	1.81	
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +2°C	Pdh	6.05	kW	Tj = +2°C	COPd	3.26	
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +7°C	Pdh	3.9	kW	Tj = +7°C	COPd	4.58	
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12°C	Pdh	4.50	kW	Tj = +12°C	COPd	5.70	
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	11.0	kW	Tj = bivalent temperature	COPd	1.60	
Tj = operation limit temperature	Pdh	11.0	kW	Tj = operation limit temperature	COPd	1.60	
Tj = -15°C (if TOL < -20°C)	Pdh	-	kW	Tj = -15°C (if TOL < -20°C)	COPd	-	
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-10	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				**Supplementary Heater**			
Off Mode	P_{OFF}	0.01	kW	Rate heat output	P_{sup}	0.40	kW
Thermostat-off mode	P_{TO}	0.04	kW				
Standby mode	P_{SB}	0.01	kW	Type of energy input			
Crankcase heater mode	P_{CK}	0.00	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors	-	4464	m³/h
Sound power level indoors/outdoors	L_{WA}	42/63	dBA				
Annual Energy consumption	Q_{HE}	6996	kWh				
For heat pump combination heater				Water heating energy efficiency	ηwh	-	%
Declared load profile	-	-	-				
Daily electricity consumption	Qelec	-	kW/h				
Annual electricity consumption	AEC	-	kW/h				

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(*) For heat pumps space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

End of Life Information – Air Source Heat Pumps

General

Grant air source heat pumps incorporate components manufactured from a variety of different materials. However, most of these materials cannot be recycled as they are contaminated by the refrigerant and oil used in the heat pump.

Disassembly

This product may only be disassembled by a suitably qualified (F-gas) refrigeration engineer.

Under no circumstances should the refrigerant be released into the atmosphere.

Recycling

In order for the heat pump to be recycled or disposed of it must be taken to a suitably licensed waste facility. You will need to contact a qualified refrigeration engineer to do this for you.

Disposal

The refrigerant will be removed and returned to the refrigerant manufacturer for recycling or disposal.

The complete heat pump unit, including the compressor and the oil contained within it, must be disposed of at a licensed waste facility, as it still remains contaminated by the refrigerant.

Neil Sawers
Technical Manager