TECHNICAL DATA SHEET

Information requirements for heat pump space heaters and heat pump combination heaters

Model(s):	**YLHD 25 TC**
Air-to-water heat pump:	yes
Water-to-water heat pump:	not
Brine-to-water heat pump:	not
Low-temperature heat pump:	yes

For low-temperature heat pumps, parameters shall be declared for low-temperature application. Otherwise, parameters shall be declared for medium-temperature application.

Parameters shall be declared for average climate conditions.

Item	Symbol	Value	Unit
Rated heat output at Tdesignh = -10 (-11) °C	Prated = Pdesignh	19,2	kW
Declared capacity for heating for part load at fixed outlet water temperature 35ºC and outdoor temperature T_j			
T_j = – 7 °C	Pdh	14,0	kW
T_j = + 2 °C	Pdh	10,3	kW
T_j = + 7 °C	Pdh	6,7	kW
T_j = + 12 °C	Pdh	3,0	kW
T_j = bivalent temperature	Pdh	15,5	kW
T_j = operation limit temperature	Pdh	11,8	kW
For air-to-water heat pumps: T_j = – 15 °C (if TOL < – 20 °C)	Pdh	x,x	kW
Bivalent temperature (maximum +2°C)	Tbiv	-5	°C
Cycling interval capacity for heating	Pcych	x,x	kW
Degradation coefficient	Cc	0,97	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0,000	kW
Thermostat-off mode	P_{TO}	0,120	kW
Standby mode	P_{SB}	0,000	kW
Crankcase heater mode	P_{CK}	0,066	kW
Other items			
Capacity control	fixed/variable	fixed	
Sound power level, indoors	L_{WA}	x	dB(A)
Sound power level, outdoors	L_{WA}	78	dB(A)
Contact details	Johnson Controls Limited UK Fenton Way Basildom Essex SS15 6RZ United Kingdom		

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η_s	136	%
Declared coefficient of performanc or primary energy ratio for part load at fixed outlet water temperature 35ºC and outdoor temperature T_j			
T_j = – 7 °C	COPd	2,72	–
T_j = + 2 °C	COPd	3,87	–
T_j = + 7 °C	COPd	4,10	–
T_j = + 12 °C	COPd	4,36	–
T_j = bivalent temperature	COPd	2,95	–
T_j = operation limit temperature	COPd	2,34	–
For air-to-water heat pumps: T_j = – 15 °C (if TOL < – 20 °C)	COPd	x,xx	–
For air-to-water HP : Operation limit temperature (maximum -7°C)	TOL	-10	°C
Heating water operating limit temperature	WTOL	50	°C
Cycling interval efficiency	COPcyc	x,xx	–
Supplementary heater (to be declared even if not provided in the unit)			
Rated heat output	Psup = sup(Tj)	7,4	kW
Type of energy input			
Outdoor heat exchanger			
For air-to-water HP: Rated air flow rate	$Q_{airsource}$	8100	m^3/h
For water-to-water: Rated water flow rate	$Q_{watersource}$	x	m^3/h
For brine-to-water: Rated brine flow rate	$Q_{brinesource}$	x	m^3/h

If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

JCI 5163008