TECHNICAL DATA SHEET

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

Model(s):	YLHD 40 T/TP	
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	Item	Symbol	Value	Unit
Rated heat output at Tdesignh = -10 (-11) °C	Prated = Pdesignh	34,4	kW	Seasonal space heating energy efficiency	η_s	129	%
Declared capacity for heating for part load at fixed outlet water temperature 35ºC and outdoor temperature T_j				Declared coefficient of performanc or primary energy ratio for part load at fixed outlet water temperature 35ºC and outdoor temperature Tj			
$T_j = -7$ °C	Pdh	25,1	kW	$T_j = -7$ °C	COPd	2,60	–
$T_j = +2$ °C	Pdh	18,5	kW	$T_j = +2$ °C	COPd	3,62	–
$T_j = +7$ °C	Pdh	11,9	kW	$T_j = +7$ °C	COPd	3,93	–
$T_j = +12$ °C	Pdh	5,3	kW	$T_j = +12$ °C	COPd	4,15	–
T_j = bivalent temperature	Pdh	27,8	kW	T_j = bivalent temperature	COPd	2,82	–
T_j = operation limit temperature	Pdh	21,1	kW	T_j = operation limit temperature	COPd	2,24	–
For air-to-water heat pumps: $T_j = -15$ °C (if TOL < − 20 °C)	Pdh	x,x	kW	For air-to-water heat pumps: $T_j = -15$ °C (if TOL < − 20 °C)	COPd	x,xx	–
Bivalent temperature (maximum +2°C)	Tbiv	-5	°C	For air-to-water HP : Operation limit temperature (maximum -7°C)	TOL	-10	°C
Cycling interval capacity for heating	Pcych	x,x	kW	Heating water operating limit temperature	WTOL	50	°C
Degradation coefficient	Cc	0,97	—	Cycling interval efficiency	COPcyc	x,xx	–
Power consumption in modes other than active mode				Supplementary heater (to be declared even if not provided in the unit)			
Off mode	P_{OFF}	0,000	kW	Rated heat output	Psup = sup(Tj)	13,3	kW
Thermostat-off mode	P_{TO}	0,120	kW				
Standby mode	P_{SB}	0,000	kW	Type of energy input			
Crankcase heater mode	P_{CK}	0,132	kW				
Other items				Outdoor heat exchanger			
Capacity control	fixed/variable	fixed		For air-to-water HP: Rated air flow rate	$Q_{airsource}$	18000	m³/h
Sound power level, indoors	L_{WA}	x	dB(A)	For water-to-water: Rated water flow rate	$Q_{watersource}$	x	m³/h
Sound power level, outdoors	L_{WA}	88	dB(A)	For brine-to-water: Rated brine flow rate	$Q_{brinesource}$	x	m³/h
Contact details	Johnson Controls Limited UK Fenton Way Basildom Essex SS15 6RZ United Kingdom						

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

JCI 5163009