

## Information requirements for heat pumps

**Energy Index**: SCOP

Regulations: calculated according to commision regulation (EU) 2013/813, implementing the directive of the

european commission 2009/125/ec "ecodesign".

Climate: Average

Source type: Outdoor air
User type: Low temperature
User flow: Constant user flow rate

<b>User flow:</b> Constant user	flow rate						
Model: <b>LAHP-1152LT454</b>							
Outdoor side heat exchanger o							
Indoor side heat exchanger of I							
Indication if the heater is equip			ry heater: <b>N</b>	lot present			
If applicable: driver of compres							
Parameters shall be declared for	or the avera	ge heating se	ason, parar	neters for the warmer and colder	heating s	easons are optional.	
	symb				symb		
item	ol	value	unit	item	ol	value	unit
				Seasonal space heating			
Rated heating capacity	P rated,h	74.9	kW	energy efficiency	$\eta_{s,h}$	163	%
				Declared coefficien	t of perfo	rmance or gas utilisation	
Declared heating capacity for part load at indoor temperature $20^{\circ}\text{C}$ and outdoor temperature $\mathit{Tj}$				efficiency/auxiliary energy factor for part load at given outdoor temperatures <i>Tj</i>			
<i>Tj</i> = 2°C	Pdh	42.8	kW	<i>Tj</i> = 2°C	COP <sub>d</sub>	4.04	%
<i>Tj</i> = 7°C				$T_i = 7^{\circ}C$		_	
-	Pdh	51.3	kW	1	COP <sub>d</sub>	5.64	%
<i>Tj</i> = 12°C	Pdh	59.3	kW	<i>Tj</i> = 12°C	COP <sub>d</sub>	7.42	%
Tbiv = -7°C	Pdh	66.3	kW	<i>Tj</i> = -7°C	COP <sub>d</sub>	2.48	%
$TOL = -10^{\circ}C$	Pdh	59.9	kW	<i>Tj</i> = -10°C	$COP_d$	2.17	%
For air-to-water heat							
pumps: Operation limit				For air-to-water heat			
temperature $Tj = -^{\circ}C$	Pdh	_	kW	pumps: $Tj = +-^{\circ}C$	COP <sub>d</sub>	-	%
	7 4.7				co. a		,,,
				For air-to-water heat			
<b>5</b> : 1	_	_	0.0	pumps: Operation limit	_	40	20
Bivalent temperature	T <sub>biv</sub>	-7	°C	temperature	T ol	-10	°C
Cycling interval capacity for							
heating	P cych	-	kW	Cycling interval efficiency	COP cyc	-	%
Degradation co-efficient				Heating water operating			
chillers(*)	C <sub>dh</sub>	0.99	_	limit temperature	WTol	60.0	°C
Power consumptio		other than 'a	ctive mode	Supplementary heater	•		
				Back-up heating capacity			
Off mode	P <sub>OFF</sub>	0.02	kW	(*)	elbu	-	kW
Thermostat-off mode	P <sub>TO</sub>	0.43	kW	Type of energy input		_	
					-	0.02	Lake
Crankcase heater mode  Other items	P <sub>CK</sub>	0.10	kW	Standby mode	P <sub>SB</sub>	0.02	kW
Other items	<u> </u>			T			
				For air-to-air heat pumps:			
			air flow rate, outdoor			3	
Capacity control		staged	1	measured	_	36124	m³/h
Sound power level,			dB	For water/brine-to-air heat			
indoor/outdoor measured	L <sub>WA</sub>		mg/kW	pumps: Rated brine or			
Emissions of nitrogen	NOx(**	0/87.5	h fuel	water flow rate, outdoor			2
oxides (if applicable)	*)	0.0	input	side heat exchanger	_	-	m³/h
			GCV				
			kg CO <sub>2</sub> eq (100				
GWP of the refrigerant		466	years)				
Contact details	prova		•				
(*)	F. 0.0						
\ /							

(\*\*\*) From 26 September 2018. Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

<sup>(\*\*)</sup> If Cdh is not determined by measurement then the default degradation coefficient of heat pumps shall be 0,25.