

Information requirements for heat pumps								
Model(s):	Indoor unit(s)		IM1-XY 27M*5					
	Outdoor unit		MU1-Y 125M					
Outdoor side heat exchanger of heat pump: Air								
Indoor side heat exchanger of heat pump: Air								
Indication if the heater is equipped with a supplementary heater: no								
If applicable: driver of compressor: electric motor								
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	9,5	kW		Seasonal space heating energy efficiency	$\eta_{s,h}$	149,0	%
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature $T_j$					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures $T_j$			
Item	symbol	value	unit		Item	symbol	value	unit
$T_j = -7^\circ\text{C}$	$P_{dh}$	8,404	kW		$T_j = -7^\circ\text{C}$	$COP_d$	241,4	%
$T_j = 2^\circ\text{C}$	$P_{dh}$	5,196	kW		$T_j = 2^\circ\text{C}$	$COP_d$	375,4	%
$T_j = 7^\circ\text{C}$	$P_{dh}$	3,473	kW		$T_j = 7^\circ\text{C}$	$COP_d$	499,0	%
$T_j = 12^\circ\text{C}$	$P_{dh}$	2,905	kW		$T_j = 12^\circ\text{C}$	$COP_d$	586,9	%
$T_{biv}$ = bivalent temperature	$P_{dh}$	8,404	kW		$T_{biv}$ = bivalent temperature	$COP_d$	241,4	%
$T_{OL}$ = operating limit	$P_{dh}$	8,892	kW		$T_{OL}$ = operating limit	$COP_d$	209,7	%
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{OL} < -20^\circ\text{C}$ )	$P_{dh}$	x,x	kW		For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{OL} < -20^\circ\text{C}$ )	$COP_d$	x,x	%
Bivalent temperature	$T_{biv}$	-7	°C		For water-to-air heat pumps: Operation limit temperature	$T_{ol}$	-15	°C
Degradation co-efficient heat pumps (**)	$C_{dh}$	0,25	—					
Power consumption in modes other than 'active mode'					Supplementary heater			
Off mode	$P_{off}$	0,0183	kW		Back-up heating capacity (*)	$e_{bu}$	0,608	kW
Thermostat-off mode	$P_{TO}$	0,0342	kW		Type of energy input			
Crankcase heater mode	$P_{CK}$	0,000	kW		Standby mode	$P_{sb}$	0,0183	kW
Other items								
Capacity control	variable				For air-to-air heat pumps: air flow rate, outdoor measured	—	3850	m <sup>3</sup> /h
Sound power level, indoor/outdoor measured	$L_{WA}$	54/69	dB		For water/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger	—	x	m <sup>3</sup> /h
Emissions of nitrogen oxides (if applicable)	$NO_x$ (**)	x	mg/kWh fuel input GCV					
GWP of the refrigerant		675	kg CO <sub>2</sub> eq (100 years)					
Contact details	CLIVET S.p.A. Via Camp Lonc, 25 - Z.I. VILLAPAIERA - 32032 FELTRE (BL) - ITALIA Tel. +39 439 3131 - Fax +39 439 022022							