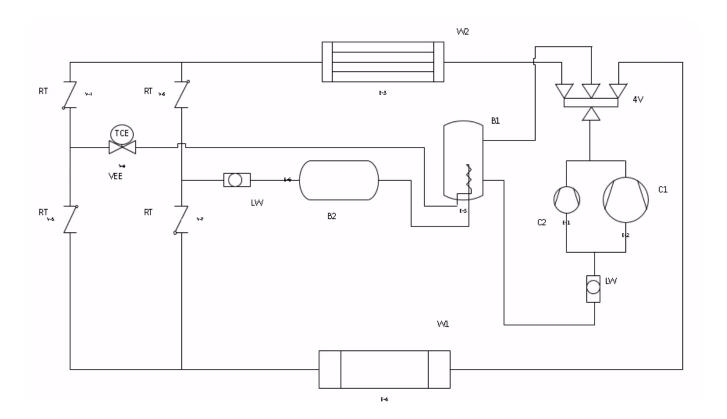


## **ANNEX A (System scheme)**

Number position	W1	W2	C1	C2
Model	-	1	GSD60137VL	GSD80295VL
Device	Evaporator	Condenser	Compressor	Compressor
Volumetric flow rate [m3/h]	23000	47946	21.901	46.59
Power	115.36	147.97	8.9655	21.335

Circuit number	VEE	RT	4V	LW	B1	B2
Device	Expansion valve	Retention valve	4-ways valve	Liquid viewer	Liquid exchanger	Liquid receiver
Model	ETS Colibri 12C-22	NRVH 22 E	061L1287	SGS 7/8	LCYE 1517 S/MMS	RH-10-GB
Diameter [inches]	7/8	7/8	(1 5/8 // 2 1/8)	7/8	-	-
Volume [l]	-	-	-	-	15.2	10



## **ANNEX B (Technical Description-Heat Mode)**

at exchange	r of the heat	pump. → Air	•			
			arv heater. > Not	included		
	d for the ave	rage heating so	eason, parameters f	or the warmer	and colder h	neating
	Value	Unit	Item	Symbol	Value	Unit
+ •	100	kW			160	%
rated,ii			*			
g capacity fo	or part load a	at indoor		1		
		- <b>J</b>				
P <sub>dh</sub>	72.53	kW	Ti = -7 °C	COPd	3.14	
-						
-						
			Ti - + 12 °C			
- un	122.17	IX VV	15 - 112 0	COI	1.00	
P <sub>dh</sub>	66.13	kW	Thiv = $-10$	COPd	2.99	
			102 0	COLU	3,05	
Cun	0,20					
tion in mode	es other than	'active mode'		1		
	omer mun	inode				
Poee	0.06	kW				
10	0.120	1.,,				
P <sub>SR</sub>	0.06					
		kW				
- CK	0.12	1.,,				
1						
•						
	650	kg CO2				
	650	kg CO <sub>2 eq</sub> (100				
	at exchange texchanger to heater is equilibrium. It	at exchanger of the heat exchanger of the heat per heater is equipped with the declared for the average of the heat per heater is equipped with the declared for the average of the heat per heater is equipped with the declared for the average of the heat per heater is equipped with the declared for the average of the declared for the average of the declared for the average of the average of the declared for the average of the heat per heater is equipped with the average of the aver	at exchanger of the heat pump. → Air exchanger of the heat pump. → Air heater is equipped with a supplement.  I be declared for the average heating smal.  Symbol Value Unit  Prated,h 100 kW  g capacity for part load at indoor  C and outdoor temperature Tj  Pdh 72.53 kW  Pdh 94.20 kW  Pdh 107.74 kW  Pdh 122.19 kW  Pdh 66.13 kW  Pdh 70.43 kW  Cdh 0,25 -  tion in modes other than 'active mode'  Poff 0.06 kW  Pro 0.128 kW  PsB 0.06  PCK 0.15 kW	at exchanger of the heat pump. $\Rightarrow$ Air exchanger of the heat pump. $\Rightarrow$ Air heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equipped with a supplementary heater. $\Rightarrow$ Not in the heater is equippe	texchanger of the heat pump. $\rightarrow$ Air heater is equipped with a supplementary heater. $\rightarrow$ Not included  I be declared for the average heating season, parameters for the warmer anal.    Symbol   Value   Unit   Item   Symbol     P_rated,h   100   kW   Seasonal space heating energy efficiency   or part load at indoor or and outdoor temperature Tj      P_dh   72.53   kW   Tj = -7 °C   COP_d     P_dh   94.20   kW   Tj = +2 °C   COP_d     P_dh   107.74   kW   Tj = +7 °C   COP_d     P_dh   122.19   kW   Tj = +12 °C   COP_d     P_dh   66.13   kW   Tbiv = -10   COP_d     P_dh   70.43   kW   TOL = -8   COP_d     P_dh   0,25   -	at exchanger of the heat pump. $\rightarrow$ Air exchanger of the heat pump. $\rightarrow$ Air heater is equipped with a supplementary heater. $\rightarrow$ Not included  I be declared for the average heating season, parameters for the warmer and colder hand.  Symbol Value Unit Item Symbol Value  Prated.h 100 kW Seasonal space heating energy efficiency  g capacity for part load at indoor C and outdoor temperature Tj  Pdh 72.53 kW Tj = -7 °C COPd 3.14  Pdh 94.20 kW Tj = +2 °C COPd 3.57  Pdh 107.74 kW Tj = +7 °C COPd 3.81  Pdh 122.19 kW Tj = +7 °C COPd 4.06  Pdh 66.13 kW Tbiv = -10 COPd 2.99  Pdh 70.43 kW TOL = -8 COPd 3.09  TOL = -8 COPd 3.09  TOL = -8 COPd 3.09  Porf 0.06 kW  Porf 0.128 kW  Psb 0.06  Pck 0.15 kW

## **ANNEX C (Technical Description-Cooling Mode)**

Information to identifies the model(s) to which the information relates:
Outdoor side heat exchanger of the heat pump. $\rightarrow$ <b>Air</b>
Indoor side heat exchanger of the heat pump. → Air
Indication if the heater is equipped with a supplementary heater. → <b>Not included</b>

Parameters shall be declared for the average heating season, parameters for the warmer and colder heating season are optional.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling	P rated,c	100	kW	Seasonal space	ηs,c	177	%
capacity	- Tatea,c			cooling energy			
				efficiency			
Tj = 35 °C	$P_{dh}$	109.68	kW	Tj = 35 °C	EER <sub>d</sub>	3.00	
Tj = 30 °C	P <sub>dh</sub>	114.54	kW	Tj = 30 °C	EER <sub>d</sub>	3.46	
Tj = 25 °C	P <sub>dh</sub>	119.23	kW	Tj = 25 °C	EER <sub>d</sub>	3.99	
Tj = 20 °C	P <sub>dh</sub>	123.83	kW	Tj = 20 °C	EER <sub>d</sub>	4,58	
Degradation co-efficient	C <sub>dh</sub>	0,25	-				
Power consump	_			,			
Off mode	P <sub>OFF</sub>	0.06	kW				
Thermostat-off mode	$P_{TO}$	0.128	kW				
Standby mode	$P_{SB}$	0.06					
Crankcase	P <sub>CK</sub>	0.15	kW				
heater mode							
Capacity control	ĺ						
GWP of the		650	kg CO <sub>2 eq</sub>	1			
refrigerant			(100				
			years)				