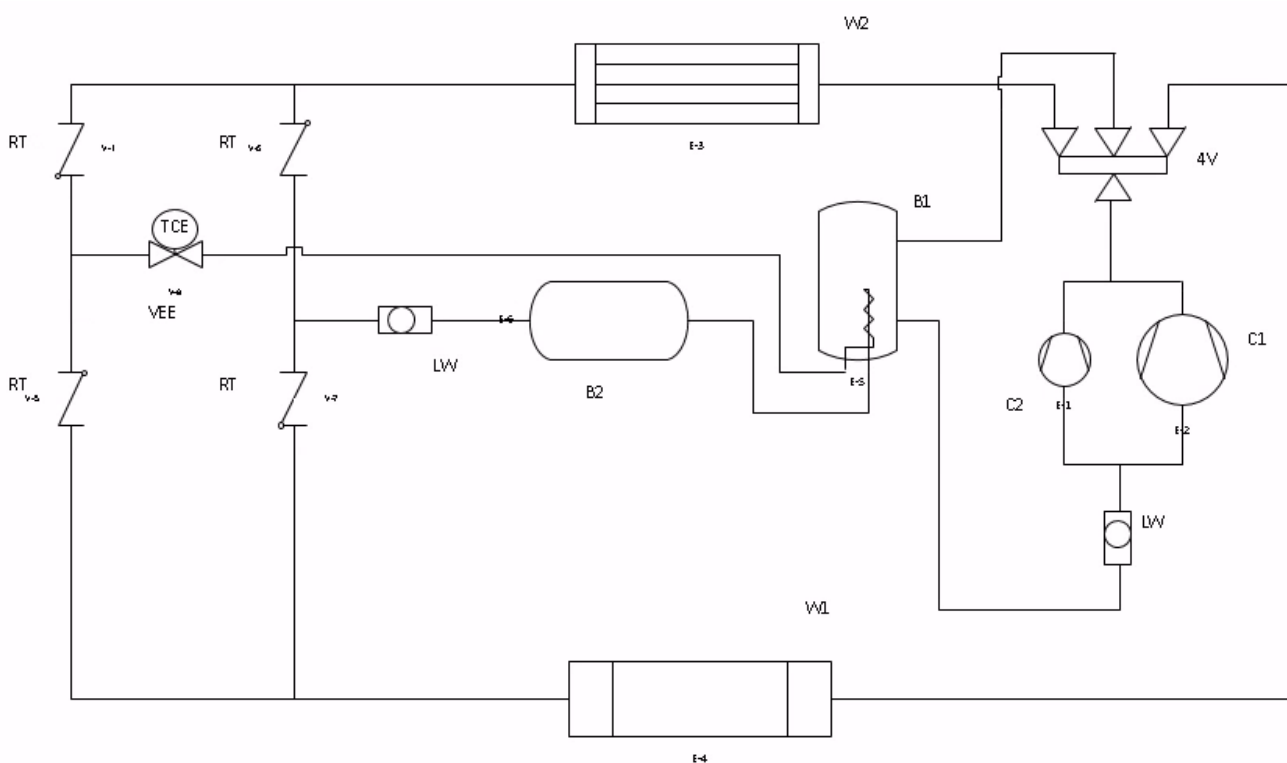

ANNEXES

ANNEX A (System scheme)

Number position	W1	W2	C1	C2
Model	-	-	GSD60137VL	GSD80295VL
Device	Evaporator	Condenser	Compressor	Compressor
Volumetric flow rate [m ³ /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)

Information to identifies the model(s) to which the information relates:

Outdoor side heat exchanger of the heat pump. → **Air**

Indoor side heat exchanger of the heat pump. → **Air**

Indication if the heater is equipped with a supplementary heater. → **Not included**

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 heating capacity	$P_{\text{rated,h}}$	100	kW	Seasonal space heating energy efficiency	$\eta_{\text{s,h}}$	160	%
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T_j							
$T_j = -7\text{ °C}$	P_{dh}	72.53	kW	$T_j = -7\text{ °C}$	COP_d	3.14	
$T_j = +2\text{ °C}$	P_{dh}	94.20	kW	$T_j = +2\text{ °C}$	COP_d	3.57	
$T_j = +7\text{ °C}$	P_{dh}	107.74	kW	$T_j = +7\text{ °C}$	COP_d	3.81	
$T_j = +12\text{ °C}$	P_{dh}	122.19	kW	$T_j = +12\text{ °C}$	COP_d	4.06	
Tbiv = -10	P_{dh}	66.13	kW	Tbiv = -10	COP_d	2.99	
TOL = -8	P_{dh}	70.43	kW	TOL = -8	COP_d	3.09	
Degradation co-efficient	C_{dh}	0,25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{OFF}	0.06	kW				
Thermostat-off mode	P_{TO}	0.128	kW				
Standby mode	P_{SB}	0.06					
Crankcase heater mode	P_{CK}	0.15	kW				
Capacity control							
GWP of the refrigerant		650	kg CO ₂ eq (100 years)				

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. → **Air**

Indoor side heat exchanger of the heat pump. → **Air**

Indication if the heater is equipped with a supplementary heater. → **Not included**

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 capacity	$P_{\text{rated,c}}$	100	kW	Seasonal space cooling energy efficiency	$\eta_{\text{s,c}}$	177	%
$T_j = 35\text{ }^\circ\text{C}$	P_{dh}	109.68	kW	$T_j = 35\text{ }^\circ\text{C}$	EER_d	3.00	
$T_j = 30\text{ }^\circ\text{C}$	P_{dh}	114.54	kW	$T_j = 30\text{ }^\circ\text{C}$	EER_d	3.46	
$T_j = 25\text{ }^\circ\text{C}$	P_{dh}	119.23	kW	$T_j = 25\text{ }^\circ\text{C}$	EER_d	3.99	
$T_j = 20\text{ }^\circ\text{C}$	P_{dh}	123.83	kW	$T_j = 20\text{ }^\circ\text{C}$	EER_d	4,58	
Degradation co-efficient	C_{dh}	0,25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{OFF}	0.06	kW				
Thermostat-off mode	P_{TO}	0.128	kW				
Standby mode	P_{SB}	0.06					
Crankcase heater mode	P_{CK}	0.15	kW				
Capacity control							
GWP of the refrigerant		650	kg CO ₂ eq (100 years)				