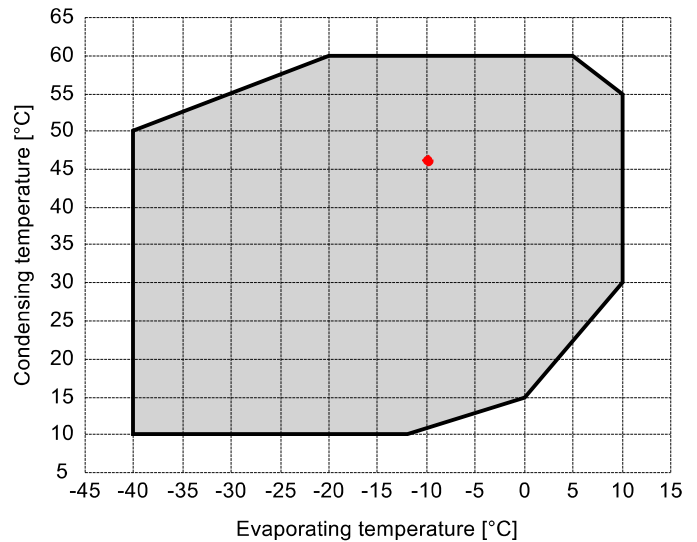


Input data

Refrigerant	R449A	
Reference temperature	Dew point temperature	
Calculation mode	Refrigeration / Air Cond.	
Operating mode	Subcritical	
Power supply	400/3/50	
Ambient temperature	°C	32
Liquid subcooling	K	3
Liquid temperature	°C	39,12
Evaporating temperature	°C	-10
Evaporating pressure	bar	3,61
Suction gas superheating	K	10
Useful fraction of superheating	%	100



Output data

Compressor :	LB2-Q733-0Y-2T	
Number of compressors :	FSx1	
Refrigerating capacity	kW	15,81
Condensing temperature (dew point)	°C	46,35
Evaporator capacity	kW	15,81
Power input (with fan)	W	7543
Condenser capacity, theor.	kW	22,724
Current	A	13,44
COP/EER (with fan)	W/W	2,1
Mass flow	kg/h	397
Operating frequency	Hz	50
Connection	-	DOL-STAR
Operating mode	-	100%
Discharge temperature	°C	87,75
Ratio (%)	%	100,0%
Note	-	
Oil flow	l/min	-
Heat Exchanged (oil Cooler)	kW	-
Oil Temp. at Oil Cooler Outlet	°C	-
Certified by	-	Frascold

Compliant with EU Ecodesign Directive 2009/125/EC - Regulation EU 2015/1095.

Certified by:

- Frascold Data

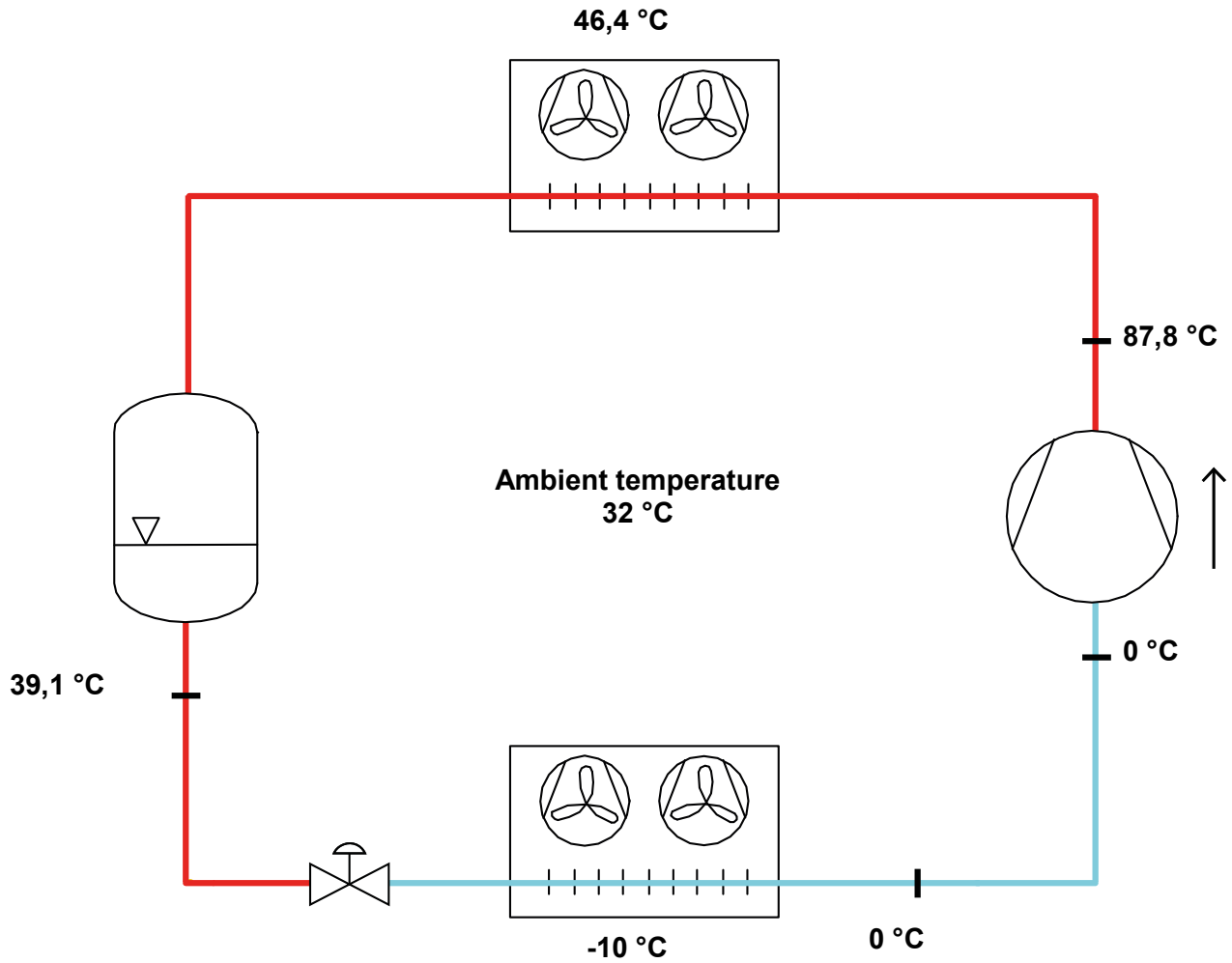


Legend:

- *ref: At conditions according to EN12900
- Suction gas temperature = 20 °C
- Liquid subcooling = 0 K

All data subject to change without notice

P&I Diagram:



All data subject to change without notice

Model: LB2-Q733-0Y-2T

Refrigerant: R449A

Power supply: 400/3/50 DOL-STAR

Technical data:

Compressor

Compressor	Q7-33.1Y
Displacement	32,66 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	20 A
Locked rotor current (LRA)	87,3 A
Number of pistons	4
Net weight	79 kg
Lubricant	FRASCOLD POE32
Oil charge	1,6 l
Maximum static pressure LP	20,5 bar
Maximum operating pressure HP	30 bar

Condenser

Volume	4,85 l
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Fan motor

Number	2
Air flow	11400 m³/h
Power supply	230 - 400/3/50
Max power input (x1)	315 W
Max Current (x1) @400V	0,65 A
Max Current (x1) @230V	1,13 A

Liquid receiver

Code	USLR06-M
Volume	5,7 l

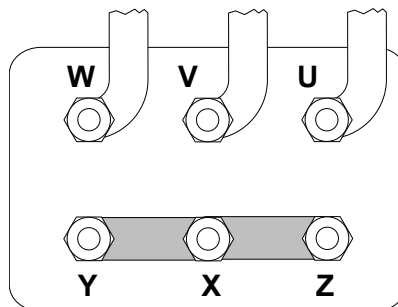
Net weight

STANDARD	168 kg
with housing	212 kg

Sound level:

*half sphere model

Motor connections:



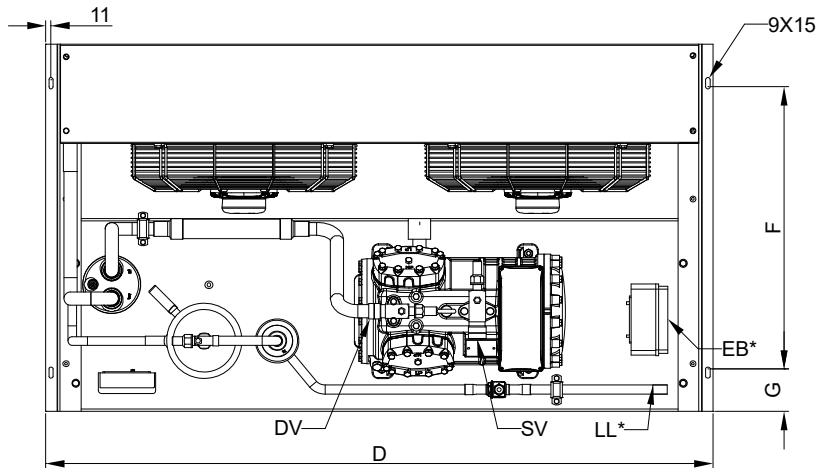
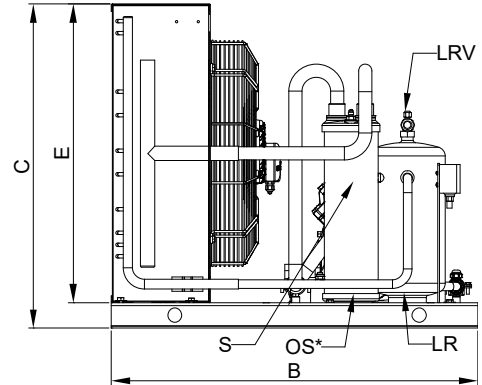
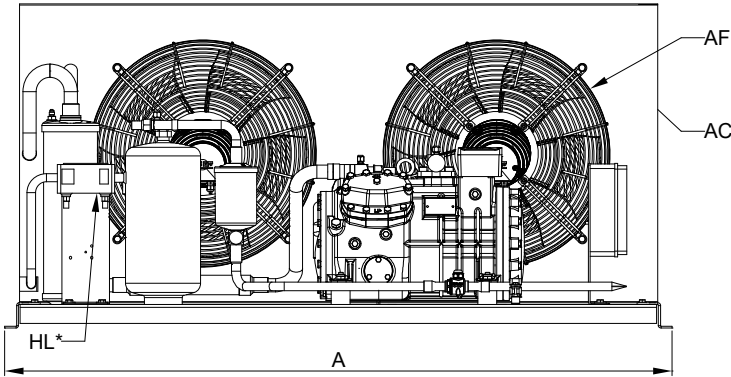
All data subject to change without notice

Model: LB2-Q733-0Y-2T

Refrigerant: R449A

Power supply: 400/3/50 DOL-STAR

Dimensions:



Legend:

SV: Suction Valve	35 mm - 1 3/8" in	S: Safety Valve	
LRV: Liquid valve	19 mm - 3/4" in	AC: Condenser	
A: Length	1420 mm	AF: Fan motor	AC Type
B: Width	780 mm	DV: Discharge valve	
C: Height	689 mm	LR: Liquid receiver	
A: Length (with housing)	1420 mm	OS*: Oil separator	
B: Width (with housing)	804 mm	EB*: Electric box	
C: Height (with housing)	713 mm	HL*: High/Low pressure switch	
D: Base length	1370 mm	H*: High pressure switch	
E: Condenser Height	635 mm	LL*: Liquid line	
F: Base mounting	600 mm	*Package	
G: Base mounting	80 mm		

All data subject to change without notice

Model: LB2-Q733-0Y-2T

Refrigerant: R449A

Power supply: 400/3/50 DOL-STAR

Polynomial coefficients according to EN12900 for Q7-33.1Y:

*S = T_{evap} ; D = T_{cond}

Reference conditions

Refrigerant	R449A
Ambient temperature	32 °C
Suction gas temperature	20 °C
Liquid subcooling	3 K
Frequency	50 Hz

	Refrigerating capacity [W]	Power input [W]
C1	4,163930E+004	1,641160E+003
C2	1,541820E+003	-1,234810E+002
C3	-3,784850E+002	1,808500E+002
C4	2,088160E+001	-3,804630E+000
C5	-1,164190E+001	5,700820E+000
C6	1,966630E-001	-8,585570E-001
C7	1,049710E-001	-3,084350E-002
C8	-1,212660E-001	3,833560E-002
C9	-1,095090E-002	-1,555590E-002
C10	-4,596950E-003	-2,056770E-004

$$Y = C1 + C2*S + C3*D + C4*S^2 + C5*S*D + C6*D^2 + C7*S^3 + C8*D*S^2 + C9*S*D^2 + C10*D^3$$

All data subject to change without notice

Seasonal efficiency calculation according to EU Regulation 2015/1095

Model: LB2-Q733-0Y-2T

Refrigerant: R449A



Item	Symbol	Value		Unit
Evaporating temperature	t	-10	-35	[°C]
Annual electricity consumption	Q	33702	21995	[kWh/a]
Seasonal energy performance ratio	SEPR	2,98	1,66	[-]

Parameters at full load and ambient temperature 32°C (Point A)				
Rated cooling capacity	P _A	16,319	4,908	[kW]
Rated power supply	D _A	7,518	3,865	[kW]
Rated COP	COP_A	2,17	1,27	[-]

Parameters at part load and ambient temperature 25°C (Point B)				
Declared cooling capacity	P _B	18,013	5,554	[kW]
Declared power supply	D _B	7,106	3,828	[kW]
Declared COP	COP_B	2,53	1,45	[-]

Parameters at part load and ambient temperature 15°C (Point C)				
Declared cooling capacity	P _C	20,396	6,502	[kW]
Declared power supply	D _C	6,424	3,722	[kW]
Declared COP	COP_C	3,17	1,75	[-]

Parameters at part load and ambient temperature 5°C (Point D)				
Declared cooling capacity	P _D	22,735	7,499	[kW]
Declared power supply	D _D	5,639	3,557	[kW]
Declared COP	COP_D	4,03	2,11	[-]

Parameters at full load and ambient temperature 43°C (Point 3)				
Declared cooling capacity	P ₃	13,645	3,908	[kW]
Declared power supply	D ₃	8,045	3,864	[kW]
Declared COP	COP₃	1,7	1,01	[-]

Other Items				
Capacity control		Fixed		
Degradation coefficient for fixed and staged capacity units	Cdc	0.25		[-]
Power supply		400/3/50		
Fan speed regulation (Rated)	V	Fixed		[V]
Reference temperature		Dew point temperature		
Suction gas temperature	toh	20		[°C]
Subcooling	SC	3		[K]

Declaration of conformity - Directive 2009/125/UE Ecodesign - Condensing units LB2 series: FDEC151

All data subject to change without notice