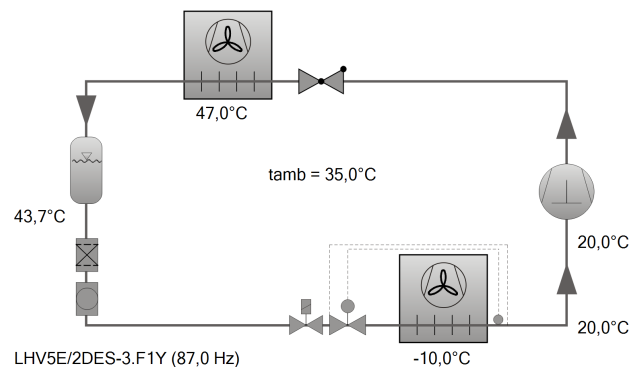




Selection: Condensing Units

Input Values

Unit type	LHV5E/2DES-3.F1Y
Series	ECOSTAR
Refrigerant	R404A
Reference temperature	Dew point temp.
Evaporating SST	-10,00 °C
Ambient temp.	35,0 °C
Suction gas temperature	20,00 °C
Useful superheat	100%
Operating mode	Economy
Power supply	400V-3-50Hz



Result

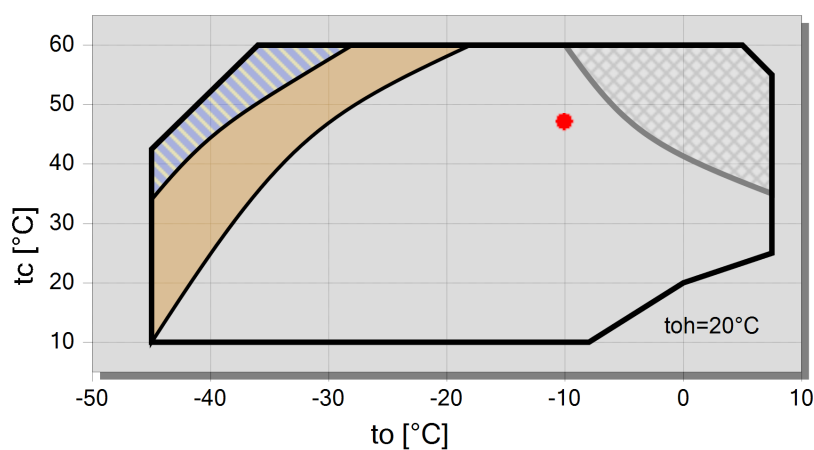
Unit type	LHV5E/2DES-3.F1Y-40S
Frequency compressor	87,0 Hz
Cooling capacity	11,11 kW
Evaporator capacity	11,11 kW
Power input	6,17 kW
Current (400V)	9,39 A
Mass flow	329 kg/h
Condensing SDT	47,0 °C
Liquid subcooling	3,00 K
Fan power absorbed	0,35 kW
min. cooling capacity	4,23 kW (30 Hz)
max. cooling capacity	11,11 kW (87 Hz)

According to EU Regulation 517/2014, the refrigerants R404A and R507A are subject to special restrictions of use Tentative Data.

Estimated calculation

Power input including fan power absorption

Application Limits LHV5E/2DES-3.F1



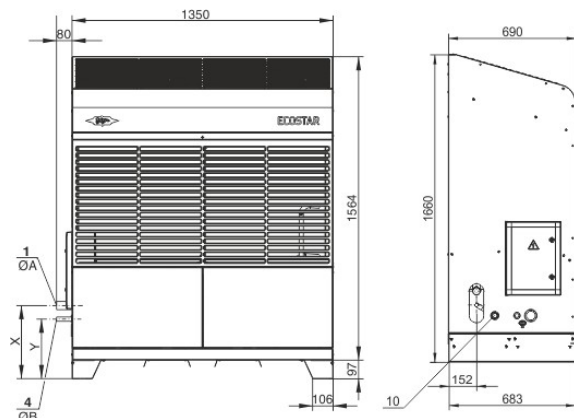
Legend

- RI-system & suction gas superheat ≤ 20K
- RI-system or suction gas superheat ≤ 20K
- application limits of individual compressors depend on max. power consumption of frequency inverter
- A

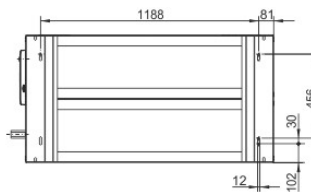


Technical Data: LHV5E/2DES-3.F1Y

Dimensions and Connections



Ansicht von unten / bottom view / vue de dessous



Typ Type Type	OA		OB		X		Y
	mm	inch	mm	inch	mm	mm	
LHV5E/2DES-3.F1Y	22	7/8	16	5/8	372	310	
LHV5E/4FE-5.F1Y	28	1 1/8	16	5/8	375	310	
LHV5E/4EE-6.F1Y	28	1 1/8	16	5/8	375	310	
LHV7E/4FE-5.F1Y	28	1 1/8	16	5/8	375	310	
LHV7E/4EE-6.F1Y	28	1 1/8	16	5/8	375	310	
LHV7E/4DE-5.F1Y	35	1 3/8	22	7/8	383	308	
LHV7E/4CE-6.F1Y	35	1 3/8	22	7/8	383	308	
LHV7E/4DE-7.F3Y	35	1 3/8	22	7/8	383	308	
LHV7E/4CE-9.F3Y	35	1 3/8	22	7/8	383	308	
LHV7E/4VE-7.F3Y	42	1 5/8	22	7/8	383	308	
LHV7E/4TE-9.F3Y	42	1 5/8	22	7/8	383	308	
LHV7E/4PE-12.F3Y	42	1 5/8	22	7/8	383	308	
LHV7E/4NE-14.F3Y	42	1 5/8	22	7/8	383	308	

Technical Data

Technical Data

Weight	295 kg
Total width	1350 mm
Total depth	690 mm
Total height	1660 mm
Connection suction line	22 mm - 7/8"
Connection liquid line	16 mm - 5/8"
Fans: Number	1xEC
Air flow condenser 50Hz	5200 m³/h
Coil Volume	2,8 dm³
Receiver type (Standard)	F212N3
Max. refrigerant charge 90% at 20°C / 68°F	
R22	22,9 kg
R134a	23,2 kg
R407C	21,9 kg
R404A/R507A	20,2 kg
R407A	22,1 kg
R407F	21,5 kg
R448A	21 kg
R449A	21,1 kg
R450A	22,5 kg
R513A	23,1 kg

Extent of delivery (Standard)

High & low pressure switch	Standard
Dressed unit	Standard
Weather protective housing	Standard
Fans: elect. Speed control	Standard
Protective charge	
Discharge gas temperature sensor	Standard
suction gas temperature sensor	Standard
Filter Drier	Standard
data logging	Standard

Available Options

RI System	Option
room temperature sensor	Option
external display LUP200	Option
Oil separator with check valve	Option
check valve for liquid line (additional pressure relief valve according to EN 378 required)	Option

Sound measurement

Sound pressure in 10m (to=-10°C, tamb=32°C)

Economy

41.5 dB(A) @ 80Hz R134a

Low sound

39 dB(A) @ 80Hz R134a



Condensing Units

Motor 1 = e.g. LH..E/4TES-12 with 12 "HP", primary for air-conditioning (e.g. R22, R407C) and medium temperature application (e.g. R134a, R407F, R407A, R404A, R507A, R22) and air-conditioning with R134a at high ambient temperatures.

Motor 2 = e.g. LH..E/4TES-9 with 8 "HP", for medium and low temperature application (e.g. R134a, R407F, R407A, R404A, R507A, R22) and air-conditioning with R134a.

For more information concerning the application range use the "limits" button.

Operation modes for LH..E/4VES-7 to LH../6HE-28 with R22

CIC = liquid injection with low temperature application, suction gas cooled motor

Specifications for sound emission Ecostar

The data are based on 50 Hz operation with R404A.

Soundpressure: Data are valid for free field conditions according to EN13487 with a block-shaped reference area in a distance of 10m.

For further informations see technical information for sound data.

Legend of connection positions according to "Dimensions":

- 1 Suction gas valve
 - 2 Discharge gas line
 - 3 Condensate line
 - 4 Refrigerant outlet (liquid line)
 - 5 Pressure relief valve connection
 - 6 Liquid injection (operation without liquid subcooler and with thermostatic expansion valve)
 - 7 Refrigerant inlet at liquid subcooler
 - 8 Refrigerant outlet at liquid subcooler
 - 9 Suction gas line
 - 10 Sight glass
 - 11 Load suspension points
 - 12 Plug for screwed cable gland
 - 13 Cable bushing (for cables $\varnothing$ 9-17 mm) (only ECOLITE)
- Dimensions can show tolerances according to EN ISO 13920-B.