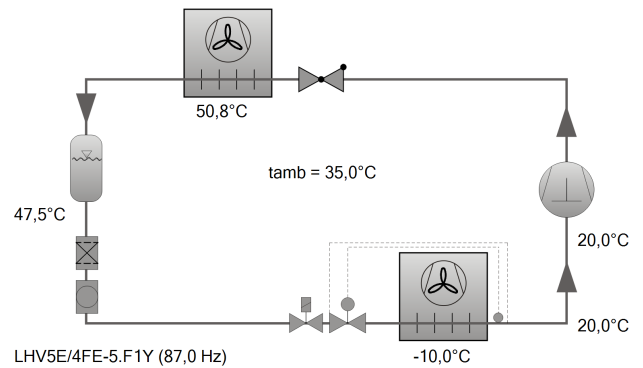




### Selection: Condensing Units

#### Input Values

Unit type	LHV5E/4FE-5.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

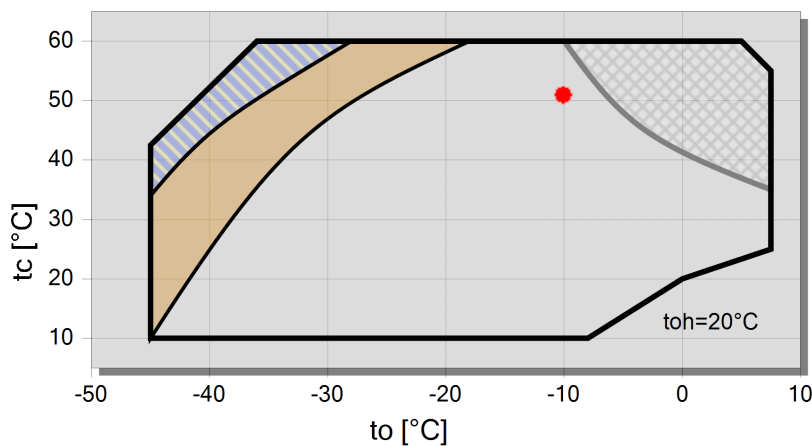
Unit type	<b>LHV5E/4FE-5.F1Y-40S</b>
Frequency compressor	87,0 Hz
Cooling capacity	14,09 kW
Evaporator capacity	14,09 kW
Power input	8,65 kW
Current (400V)	13,00 A
Mass flow	441 kg/h
Condensing SDT	50,8 °C
Liquid subcooling	3,00 K
Fan power absorbed	0,35 kW
min. cooling capacity	4,73 kW (25 Hz)
max. cooling capacity	14,09 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/4FE-5.F1



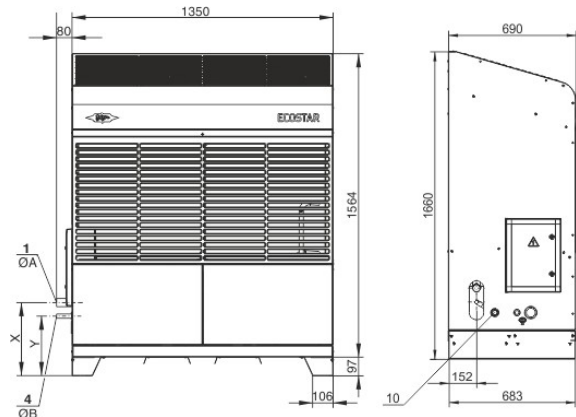
#### Legend

-  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

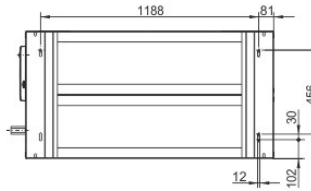


## Technical Data: LHV5E/4FE-5.F1Y

### Dimensions and Connections



Ansicht von unten / bottom view / vue de dessous



Typ Type Type	OA		OB		X	Y
	mm	inch	mm	inch		
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	312 kg
Total width	1350 mm
Total depth	690 mm
Total height	1660 mm
Connection suction line	28 mm - 1 1/8"
Connection liquid line	16 mm - 5/8"
Fans: Number	1xEC
Air flow condenser 50Hz	5200 m <sup>3</sup> /h
Coil Volume	2,8 dm <sup>3</sup>
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
Oil level monitoring	Delta-PII
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  
Low sound

42.5 dB(A) @ 80Hz R134a  
40 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.