



### Selection: Condensing Units

#### Input Values

Unit type	(LHV6/4EC-6.F1Y)	Useful superheat	100%
Series	ECOSTAR	Operating mode	Economy
Refrigerant	R404A	Power supply	400V-3-50Hz
Reference temperature	Dew point temp.	Frequency compressor	80,0 Hz
Suction gas temperature	20,00 °C		

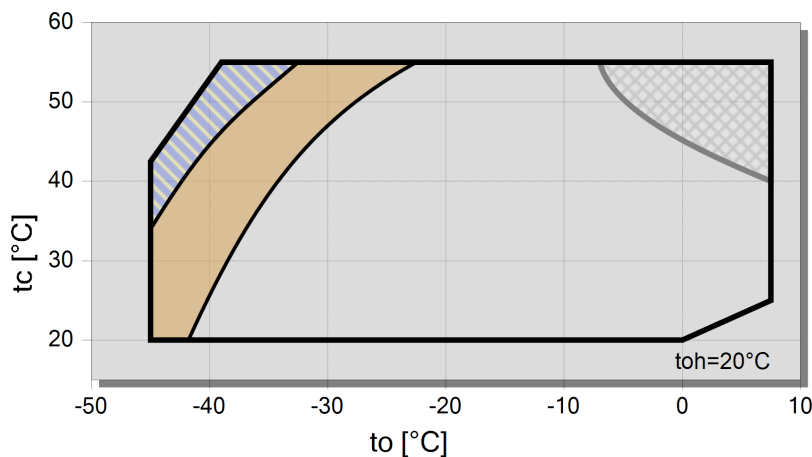
#### Result

Q [W]	Cooling capacity	Op.	Operating mode
P [kW]	Power input	tc [°C]	Condensing SDT
I [A]	Current	dtau [K]	subcooling
m [kg/h]	Mass flow		

tamb	to	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C	-35°C	-40°C
20°C	Q [W]	24985	21384	18064	15033	12238	9685	7447	5525
	P [kW]	9,29	8,49	7,68	6,88	6,10	5,32	4,52	3,73
	I [A]	14,47	13,26	12,08	10,92	9,79	8,65	7,49	6,29
	m [kg/h]	662	547	447	362	288	225	170,8	125,5
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	tc [°C]	37,7	35,4	33,3	31,3	29,8	28,8	28,0	27,3
	dtau [K]	3,00	3,00	3,00	3,00	3,00	3,00	3,00	3,00
30°C	Q [W]	21274	18177	15310	12667	10177	7939	5984	4304
	P [kW]	10,20	9,22	8,25	7,29	6,34	5,39	4,44	3,51
	I [A]	15,88	14,37	12,91	11,51	10,14	8,76	7,37	5,96
	m [kg/h]	630	517	420	337	266	204	151,9	108,1
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	tc [°C]	46,3	44,2	42,2	40,4	39,2	38,3	37,6	37,0
	dtau [K]	3,00	3,00	3,00	3,00	3,00	3,00	3,00	3,00
40°C	Q [W]	--	15065	12640	10384	8236	6306	4623	3176
	P [kW]		9,78	8,65	7,53	6,42	5,32	4,24	3,20
	I [A]		15,22	13,50	11,86	10,26	8,66	7,07	5,48
	m [kg/h]		487	392	312	242	182,1	131,7	89,5
	Op.		Standard	Standard	Standard	Standard	Standard	Standard	Standard
	tc [°C]		52,8	51,0	49,4	48,3	47,6	47,0	46,4
	dtau [K]		3,00	3,00	3,00	3,00	3,00	3,00	2,93

-- No calculation possible (see message in single point selection)

### Application Limits



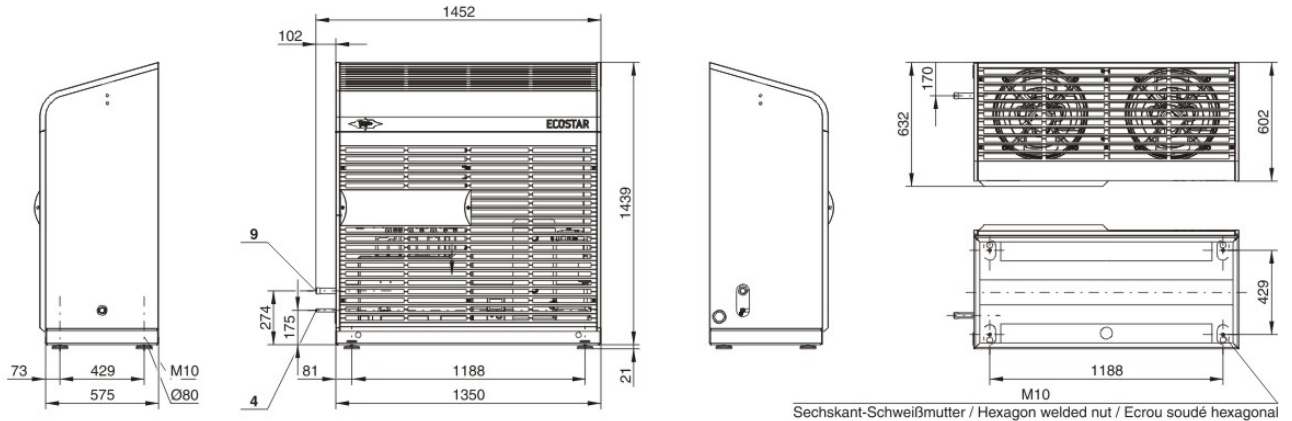
#### Legend

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



## Technical Data: (LHV6/4EC-6.F1Y)

### Dimensions and Connections



Sechskant-Schweißmutter / Hexagon welded nut / Ecrou soudé hexagonal

### Technical Data

#### Technical Data

Weight	295 kg
Total width	1365 mm
Total depth	632 mm
Total height	1360 mm
Connection suction line	28 mm - 1 1/8"
Connection liquid line	16 mm - 5/8"
Air flow condenser 50Hz	8400 m <sup>3</sup> /h
Coil Volume	10,9 dm <sup>3</sup>

#### Extent of delivery (Standard)

Discharge gas line	
Weather protective housing	Standard
Fans: elect. Speed regulator	Standard
Fans: Number	2
Protective charge	
high pressure switch	Standard
Dressed unit	Standard

#### Available Options

Oil level monitoring	OLC-K1 (Option)
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#### Sound measurement

Sound pressure in 10m (to=-10°C, tamb=32°C) R404A	
Economy	47 dB(A) @ 50Hz
Low sound	44 dB(A) @ 50Hz

Data of compressors: see compressor program

#### Max. refrigerant charge 90% at 20°C / 68°F

Receiver type (Standard)	FS188
R22	19,7 kg
R134a	19,8 kg
R407C	18,8 kg
R404A/R507A	17,3 kg



## 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

The data are based on 50Hz operation.

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

For further information 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.