



BITZER Output data

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Project survey

Selected compressors

Condensing Units

1x LH44E/2GES-2Y



Selection: Condensing Units

Input Values

Unit type	LH44E/2GES-2Y	Useful superheat	100%
Series	Standard	Operating mode	Auto
Refrigerant	R449A	Power supply	400V-3-50Hz
Reference temperature	Dew point temp.	Capacity control	100%
Suction gas temperature	20,00 °C		

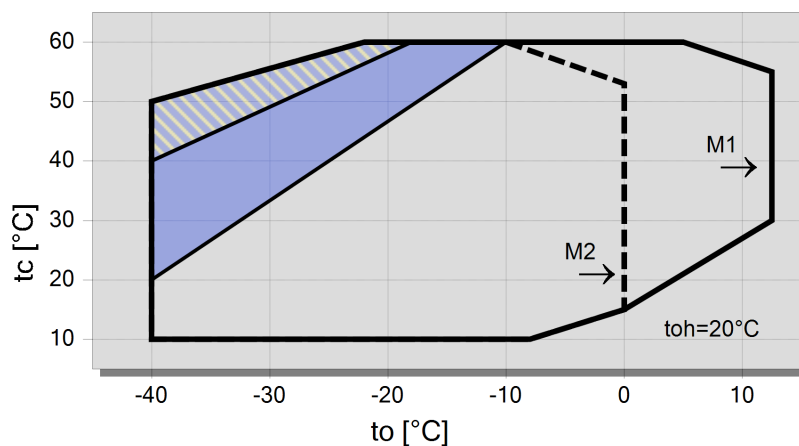
Result

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	10°C	5°C	0°C	-5°C	-10°C	-15°C	-20°C	-25°C
27°C	Q [W]	7105	6168	5284	4463	3709	3028	2420	1886
	P [kW]	2,43	2,24	2,06	1,88	1,71	1,55	1,38	1,22
	I [A]	4,12	3,89	3,68	3,48	3,29	3,11	2,95	2,80
	m [kg/h]	176,9	146,4	120,4	98,2	79,1	62,9	49,2	37,6
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	tc [°C]	51,6	48,8	46,3	43,9	41,7	39,7	37,9	36,2
	dtau [K]	3,00	3,00	3,00	3,00	3,00	3,00	3,00	3,00
32°C	Q [W]	6556	5688	4868	4106	3406	2773	2209	1714
	P [kW]	2,59	2,37	2,16	1,96	1,77	1,58	1,40	1,23
	I [A]	4,33	4,05	3,79	3,56	3,35	3,15	2,97	2,80
	m [kg/h]	171,8	141,8	116,3	94,5	76,0	60,2	46,9	35,6
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	tc [°C]	55,6	53,0	50,5	48,2	46,1	44,1	42,4	40,8
	dtau [K]	3,00	3,00	3,00	3,00	3,00	3,00	3,00	3,00
43°C	Q [W]	--	--	4004	3345	2742	2199	1716	1294
	P [kW]			2,42	2,15	1,91	1,68	1,46	1,26
	I [A]			4,11	3,79	3,50	3,25	3,03	2,83
	m [kg/h]			108,2	86,6	68,5	53,2	40,5	29,9
	Op.			Standard	Standard	Standard	Standard	Standard	Standard
	tc [°C]			60,0	57,8	55,8	54,0	52,4	50,9
	dtau [K]			3,00	3,00	3,00	3,00	3,00	3,00

-- No calculation possible (see message in single point selection)
Power input compressor, power input fan see "T. Data"

Application Limits 1 LH44E/2GES-2



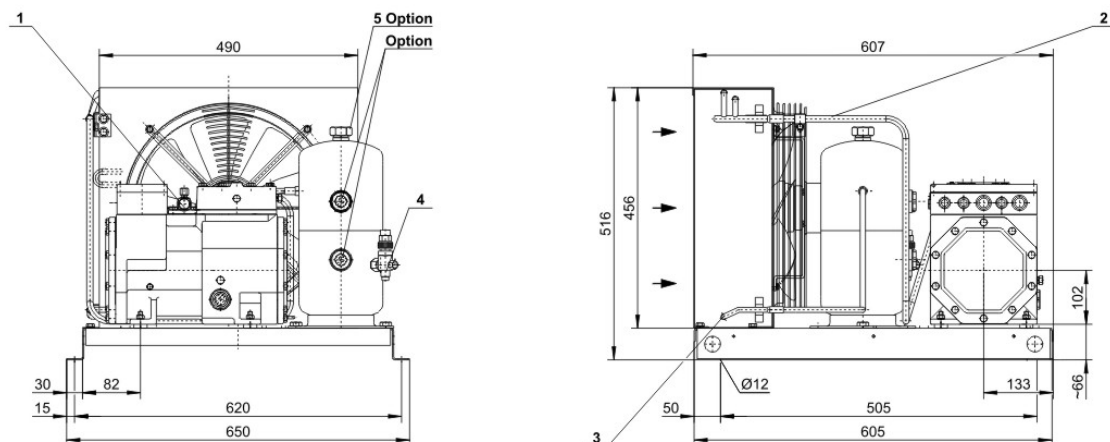
Legend

-  additional cooling & suction gas superheat ≤ 20K
-  additional cooling
-  M1: motor 1
-  M2: motor 2
-  A



Technical Data: LH44E/2GES-2Y

Dimensions and Connections



Technical Data

Technical Data

Weight	78 kg
Total width	650 mm
Total depth	607 mm
Total height	516 mm
Connection suction line	16 mm - 5/8"
Connection liquid line	10 mm - 3/8"
Fans: Number	1xEC
Voltage (50Hz, more on request)	230V-1-50Hz (Standard)
Current / Power consumption of each fan (50Hz)	1,4 A / 160 W
Air flow condenser 50Hz	2000 m³/h
Voltage (60Hz, more on request)	230V-1-60Hz (Standard)
Current / Power consumption of each fan (60Hz)	1,4 A / 155 W
Air flow condenser 60Hz	2000 m³/h
Coil Volume	0,46 dm³
Receiver type (Standard)	FS56
Max. refrigerant charge 90% at 20°C / 68°F	
R22	6,1 kg
R134a	6,2 kg
R407C	5,8 kg
R404A/R507A	5,4 kg
R407A	5,9 kg
R407F	5,7 kg
R448A	5,6 kg
R449A	5,6 kg
R450A	6 kg
R513A	6,2 kg
R1234yf	5,6 kg
R1234ze	5,9 kg
Receiver type (Option)	FS076
R22	8,5 kg
R134a	8,6 kg
R407C	8,1 kg
R404A/R507A	7,5 kg

Extent of delivery (Standard)

Discharge line	Standard
Protective charge	Standard

Available Options

Oil separator	Option
Check valve	Option
High & low pressure switch	Option
Dressed unit	Option
Weather protective housing	Option
Fans: elect. Speed control	Option

Sound measurement

Data of compressors: see compressor program



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.