

# Technical Data Sheet

Compressor model **GL45AAa**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

Application Low Back Pressure  
 Refrigerant R134a  
 Evaporating Temp. -35,0 °C to -10,0 °C  
 Expansion Capillar  
 Comp. Cooling Static  
 Max. ambient temp. 43,0 °C  
 Compatible refriger. R1234yf

## COMPRESSOR

Displacement 4,56 cm<sup>3</sup>  
 Diameter 19,09 mm  
 Stroke 15,93 mm  
 Net Weight 7,91 Kg  
 Oil type ISO VG 32 ESTER  
 Oil charge 180 cm<sup>3</sup>

## MOTOR

Nominal Power 1/8 hp  
 Voltage/Frequency 220-240V 50Hz  
 Voltage range 187-264 V  
 Type RSIR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 7,50 A  
 Max. Cont. Current (MCC) 1,00 A  
 Main W. resist. at 25°C 26,26 Ω  
 Start W. resist. at 25°C 30,34 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	96 kCal/h	81 W
COP	1,06 W/W	0,81 W/W
EER	0,91 kCal/Wh	0,70 kCal/Wh
Input Power	105 W	100 W
Current	0,71 A	0,69 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T <sub>e</sub> )	-23,3 °C	-25,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	32,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	32,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	32,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

## ELECTRICAL COMPONENTS

Relay	Option 1			
Reference	PTC K100			
Voltage	200-240 V			
Resistance	14.00 Ω			
Protector	Option 1	Option 2	Option 3	Option 4
Reference	MRP318LZ	4TM205NFBYY	T0453	AE37FJ
Current	5,90 A	6,00 A	5,20 A	5,90 A
Time check	7,5-14 seg	5-15 seg	7,5-14 seg	7,5-14 seg
Disc temp. (Open/Close)	120,00 / 61,00 °C	120,00 / 61,00 °C	125,00 / 62,00 °C	115,00 / 62,00 °C

# Technical Data Sheet

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	52	80	0,62	0,76	0,65
40	-30	75	88	0,65	0,99	0,85
40	-25	103	98	0,69	1,22	1,05
40	-23,3	114	102	0,70	1,30	1,11
40	-20	136	110	0,73	1,43	1,23
40	-15	175	125	0,78	1,62	1,40
40	-10	218	142	0,83	1,79	1,54

45	-35	48	79	0,62	0,70	0,61
45	-30	70	88	0,65	0,93	0,80
45	-25	97	99	0,69	1,15	0,99
45	-23,3	108	103	0,70	1,22	1,05
45	-20	130	112	0,73	1,35	1,16
45	-15	168	128	0,79	1,53	1,31
45	-10	210	146	0,85	1,68	1,44

50	-35	43	77	0,61	0,65	0,56
50	-30	65	87	0,65	0,87	0,74
50	-25	92	99	0,69	1,07	0,92
50	-23,3	102	104	0,71	1,14	0,98
50	-20	124	114	0,74	1,26	1,09
50	-15	161	130	0,80	1,43	1,23
50	-10	203	149	0,86	1,58	1,36

55	-35	39	76	0,61	0,60	0,51
55	-30	60	87	0,65	0,80	0,69
55	-25	86	100	0,69	1,00	0,86
55	-23,3	96	105	0,71	1,06	0,91
55	-20	117	115	0,75	1,18	1,02
55	-15	154	133	0,80	1,34	1,15
55	-10	195	153	0,87	1,48	1,27

60	-35	35	75	0,61	0,54	0,46
60	-30	55	87	0,65	0,74	0,63
60	-25	80	101	0,70	0,93	0,80
60	-23,3	90	106	0,71	0,99	0,85
60	-20	111	117	0,75	1,10	0,95
60	-15	147	136	0,81	1,26	1,08
60	-10	187	157	0,88	1,39	1,20

65	-35	30	73	0,60	0,48	0,41
65	-30	50	86	0,65	0,67	0,58
65	-25	75	101	0,70	0,86	0,74
65	-23,3	84	107	0,72	0,92	0,79
65	-20	105	119	0,76	1,02	0,88
65	-15	140	138	0,82	1,17	1,01
65	-10	180	160	0,89	1,30	1,12

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	57	80	0,62	0,71	0,61
40	-30	83	88	0,65	0,95	0,82
40	-25	114	98	0,69	1,17	1,01
40	-23,3	126	102	0,70	1,24	1,07
40	-20	151	110	0,73	1,36	1,18
40	-15	192	125	0,78	1,53	1,32
40	-10	237	142	0,83	1,67	1,44

45	-35	50	79	0,62	0,64	0,55
45	-30	74	88	0,65	0,85	0,73
45	-25	103	99	0,69	1,05	0,91
45	-23,3	114	103	0,70	1,11	0,96
45	-20	137	112	0,73	1,22	1,06
45	-15	176	128	0,79	1,38	1,19
45	-10	219	146	0,85	1,51	1,30

50	-35	43	77	0,61	0,56	0,49
50	-30	65	87	0,65	0,75	0,65
50	-25	92	99	0,69	0,93	0,80
50	-23,3	103	104	0,71	0,99	0,85
50	-20	124	114	0,74	1,09	0,94
50	-15	160	130	0,80	1,23	1,06
50	-10	202	149	0,86	1,35	1,17

55	-35	37	76	0,61	0,49	0,42
55	-30	57	87	0,65	0,65	0,56
55	-25	81	100	0,69	0,81	0,70
55	-23,3	91	105	0,71	0,86	0,75
55	-20	111	115	0,75	0,96	0,83
55	-15	145	133	0,80	1,09	0,94
55	-10	184	153	0,87	1,20	1,04

60	-35	30	75	0,61	0,41	0,35
60	-30	48	87	0,65	0,55	0,48
60	-25	70	101	0,70	0,70	0,60
60	-23,3	79	106	0,71	0,74	0,64
60	-20	97	117	0,75	0,83	0,72
60	-15	129	136	0,81	0,95	0,82
60	-10	166	157	0,88	1,06	0,92

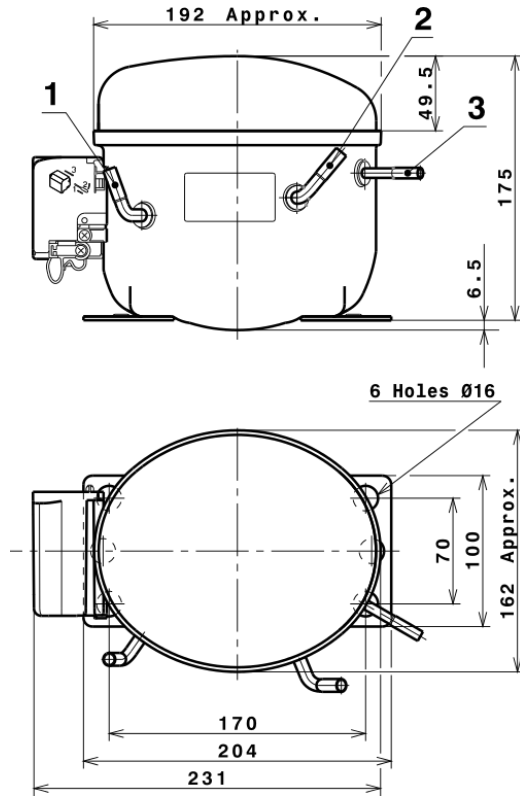
65	-35	24	73	0,60	0,32	0,28
65	-30	39	86	0,65	0,45	0,39
65	-25	59	101	0,70	0,58	0,50
65	-23,3	67	107	0,72	0,63	0,54
65	-20	84	119	0,76	0,71	0,61
65	-15	114	138	0,82	0,82	0,71
65	-10	148	160	0,89	0,92	0,80

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	519,6788156011	140,8141465596	0,8287965389	9,4008327925281
2	15,0453485010	3,0128916292	0,0096172200	0,30017431625312
3	-4,5513103544	1,1601603912	0,0038141243	-0,043061064779523
4	0,0940970443	0,0467374032	0,0001433914	0,0025589356323313
5	-0,0923882753	0,0409303186	0,0001360640	-0,00065036675959654

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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## COMPRESSOR DIMENSIONS

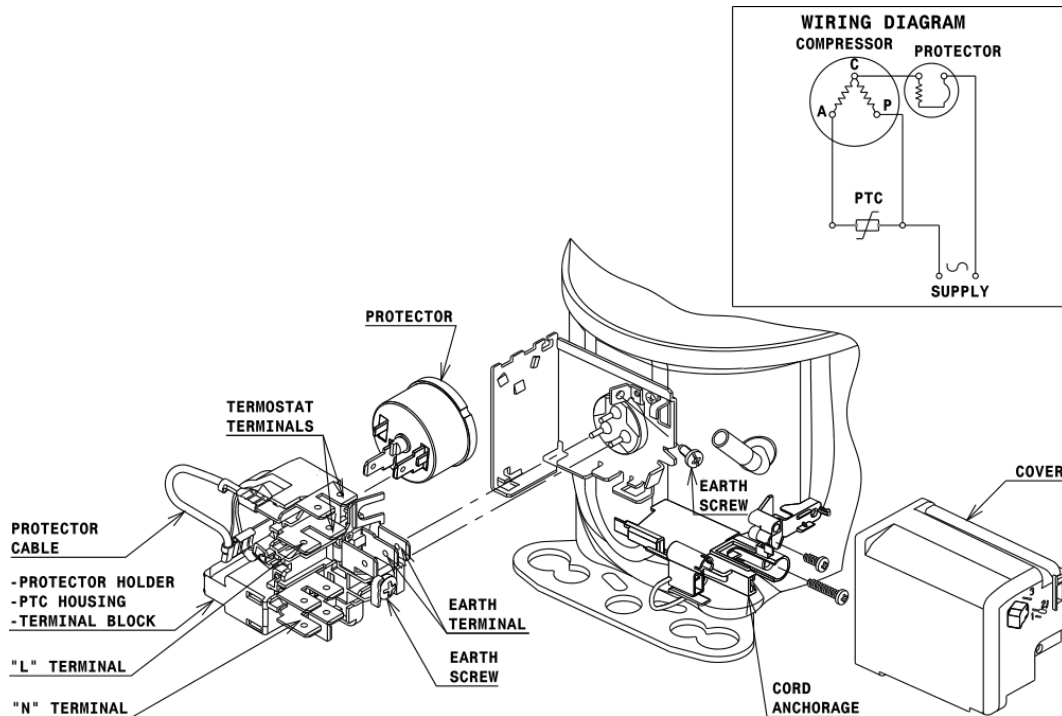


## DESIGNATION INTERNAL DIAM.

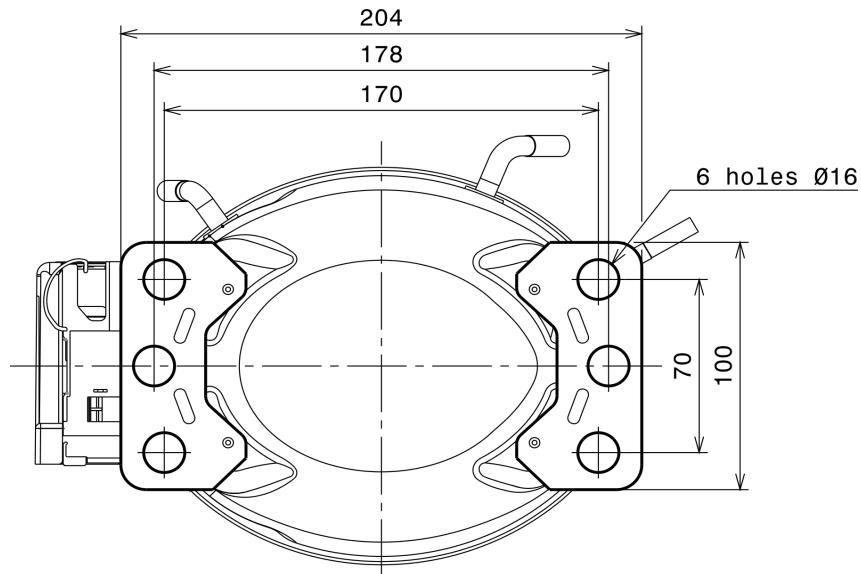
DESIGNATION	INTERNAL DIAM.
1 Suction	6,5 mm
2 Service	6,5 mm
3 Discharge	4,9 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### RSIR CONNECTION (PTC)



## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

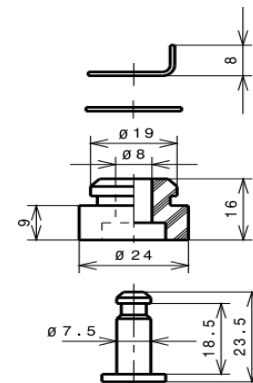
### STANDARD

Ø16 holes (170x70 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R134a LBP

