

# Technical Data Sheet

ENGINEERING  
TOMORROW



Compressor model **GD36AA**  
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 3,62 cm<sup>3</sup>  
Diameter 19,50 mm  
Stroke 12,10 mm  
Net Weight 6,02 Kg  
Oil type ISO VG 32 ESTER  
Oil charge 200 cm<sup>3</sup>

## MOTOR

Nominal Power 1/12 hp  
Voltage/Frequency 220-240V 50Hz  
Voltage range 187-264 V  
Type RSIR  
Phase number 1 PH  
Locked Rotor Amps (LRA) 6,90 A  
Max. Cont. Current (MCC) 1,00 A  
Main W. resist. at 25°C 32,85 Ω  
Start W. resist. at 25°C 21,90 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	72 kCal/h	61 W
COP	0,99 W/W	0,76 W/W
EER	0,85 kCal/Wh	0,65 kCal/Wh
Input Power	85 W	81 W
Current	0,58 A	0,57 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	
Reference	4TM205NFBYY	T0321	AE24FU	
Current	6,00 A	5,20 A	52,00 A	
Time check	5-15 seg	7,5-14 seg	7,5-14 seg	
Disc temp. (Open/Close)	120,00 / 61,00 °C	120,00 / 62,00 °C	120,00 / 62,00 °C	

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## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	40	62	0,51	0,75	0,65
40	-30	58	70	0,53	0,96	0,83
40	-25	79	79	0,56	1,16	1,00
40	-23,3	87	82	0,57	1,23	1,06
40	-20	103	89	0,59	1,35	1,16
40	-15	132	100	0,63	1,53	1,32
40	-10	164	113	0,67	1,69	1,45

45	-35	37	61	0,51	0,70	0,60
45	-30	54	69	0,53	0,90	0,77
45	-25	74	79	0,56	1,08	0,93
45	-23,3	82	83	0,57	1,15	0,99
45	-20	98	91	0,60	1,26	1,08
45	-15	126	103	0,63	1,42	1,22
45	-10	157	117	0,68	1,57	1,35

50	-35	33	59	0,50	0,65	0,56
50	-30	50	69	0,53	0,83	0,72
50	-25	69	80	0,56	1,01	0,87
50	-23,3	77	84	0,58	1,06	0,92
50	-20	93	92	0,60	1,17	1,01
50	-15	120	106	0,64	1,32	1,14
50	-10	151	120	0,69	1,46	1,25

55	-35	30	58	0,50	0,60	0,52
55	-30	46	69	0,53	0,77	0,66
55	-25	65	81	0,57	0,93	0,80
55	-23,3	72	85	0,58	0,99	0,85
55	-20	87	94	0,61	1,08	0,93
55	-15	114	108	0,65	1,22	1,05
55	-10	144	124	0,70	1,35	1,16

60	-35	27	57	0,50	0,55	0,47
60	-30	42	68	0,53	0,71	0,61
60	-25	60	81	0,57	0,86	0,74
60	-23,3	67	86	0,58	0,91	0,78
60	-20	82	96	0,61	1,00	0,86
60	-15	108	111	0,66	1,13	0,97
60	-10	137	128	0,71	1,25	1,08

65	-35	23	55	0,49	0,49	0,42
65	-30	38	68	0,53	0,64	0,55
65	-25	55	82	0,57	0,78	0,67
65	-23,3	62	87	0,59	0,83	0,71
65	-20	77	97	0,62	0,92	0,79
65	-15	102	114	0,67	1,04	0,90
65	-10	131	131	0,72	1,16	0,99

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	44	62	0,51	0,70	0,61
40	-30	64	70	0,53	0,91	0,79
40	-25	87	79	0,56	1,11	0,96
40	-23,3	96	82	0,57	1,17	1,01
40	-20	114	89	0,59	1,29	1,11
40	-15	145	100	0,63	1,44	1,25
40	-10	179	113	0,67	1,58	1,36

45	-35	39	61	0,51	0,63	0,55
45	-30	57	69	0,53	0,82	0,71
45	-25	79	79	0,56	0,99	0,86
45	-23,3	87	83	0,57	1,05	0,90
45	-20	104	91	0,60	1,15	0,99
45	-15	132	103	0,63	1,28	1,11
45	-10	164	117	0,68	1,41	1,22

50	-35	33	59	0,50	0,56	0,49
50	-30	50	69	0,53	0,72	0,62
50	-25	70	80	0,56	0,87	0,75
50	-23,3	77	84	0,58	0,92	0,80
50	-20	93	92	0,60	1,01	0,87
50	-15	120	106	0,64	1,13	0,98
50	-10	150	120	0,69	1,25	1,08

55	-35	28	58	0,50	0,49	0,42
55	-30	43	69	0,53	0,63	0,54
55	-25	61	81	0,57	0,76	0,65
55	-23,3	68	85	0,58	0,80	0,69
55	-20	83	94	0,61	0,88	0,76
55	-15	107	108	0,65	0,99	0,86
55	-10	136	124	0,70	1,09	0,95

60	-35	23	57	0,50	0,41	0,36
60	-30	36	68	0,53	0,53	0,46
60	-25	52	81	0,57	0,64	0,56
60	-23,3	59	86	0,58	0,68	0,59
60	-20	72	96	0,61	0,75	0,65
60	-15	95	111	0,66	0,86	0,74
60	-10	122	128	0,71	0,95	0,82

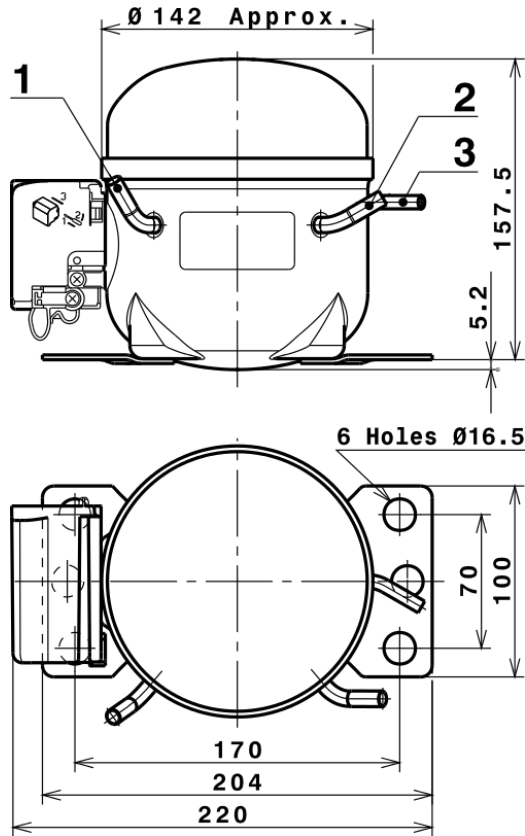
65	-35	18	55	0,49	0,33	0,28
65	-30	29	68	0,53	0,43	0,37
65	-25	44	82	0,57	0,53	0,46
65	-23,3	49	87	0,59	0,57	0,49
65	-20	61	97	0,62	0,63	0,55
65	-15	83	114	0,67	0,73	0,63
65	-10	107	131	0,72	0,82	0,71

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	398,0415443203	99,3297327868	0,6247187196	7,2608150088515
2	11,3261285836	1,6260620837	0,0053972703	0,22648120385601
3	-3,6462447616	1,1601603912	0,0036145670	-0,038252825027405
4	0,0667160692	0,0259686917	0,0000911744	0,0018180616246256
5	-0,0752175268	0,0409303186	0,0001260593	-0,00064682295257104

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

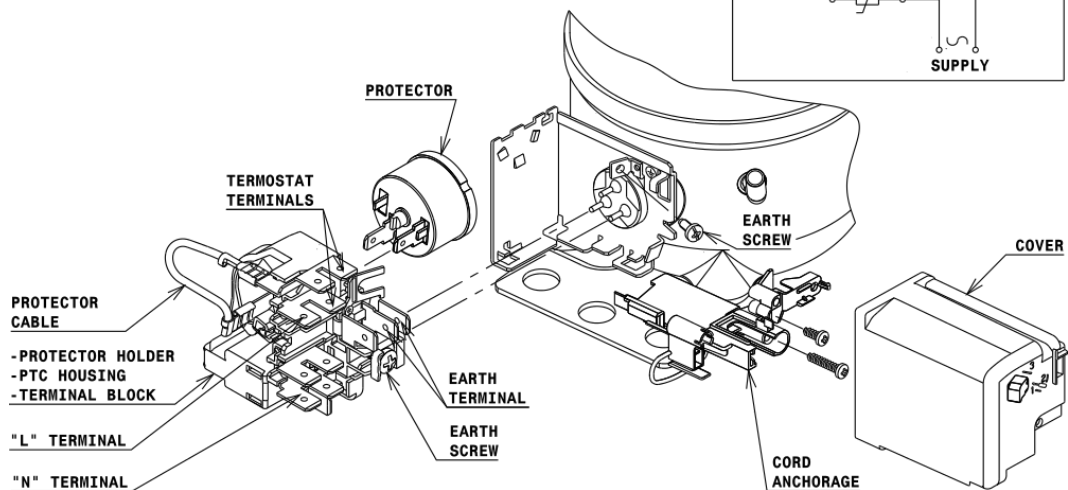
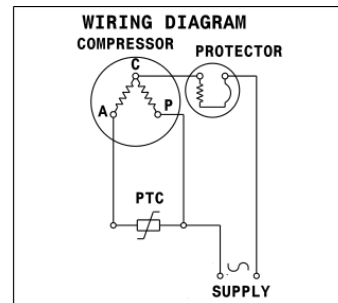


## DESIGNATION INTERNAL DIAM.

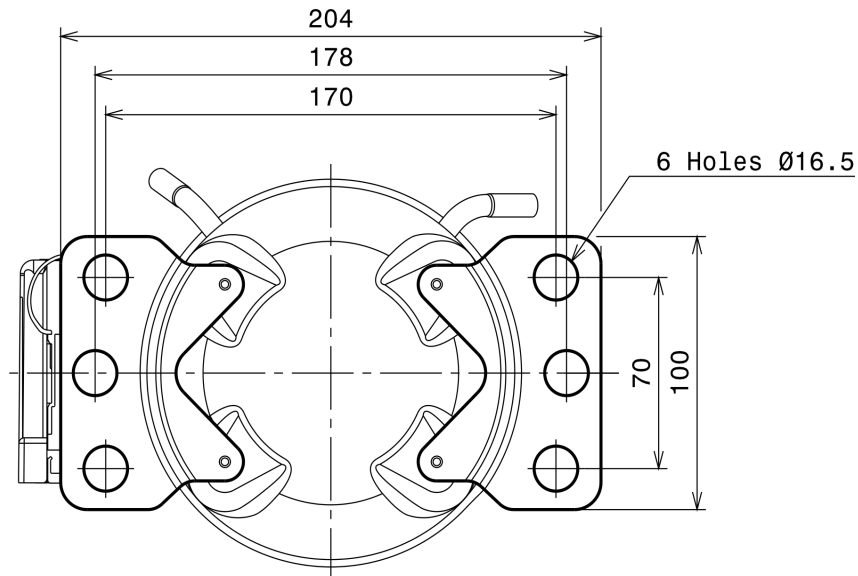
DESIGNATION	INTERNAL DIAM.
1 Suction/Service	6,5 mm
2 Service/Suction	6,5 mm
3 Discharge	4,9 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### RSIR CONNECTION (PTC) (D range)



## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

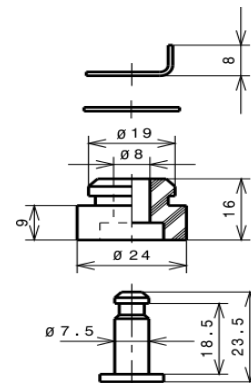
### STANDARD

$\text{Ø}16.5$  holes (170x70 net)



### SNAP-ON

$\text{Ø}16.5$  holes (170x70 net)



## SOA

SOA R134a LBP

