

# Technical Data Sheet

Compressor model **GD24MBc**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

Application High Back Pressure  
 Refrigerant R134a  
 Evaporating Temp. -15,0 °C to 10,0 °C  
 Expansion Capillar/Valve  
 Comp. Cooling Static  
 Max. ambient temp. 43,0 °C  
 Compatible refriger. R1234yf

## COMPRESSOR

Displacement 2,44 cm<sup>3</sup>  
 Diameter 18,00 mm  
 Stroke 9,60 mm  
 Net Weight 5,37 Kg  
 Oil type ISO VG 32 ESTER  
 Oil charge 240 cm<sup>3</sup>

## MOTOR

Nominal Power 1/14 hp  
 Voltage/Frequency 220-240V 50Hz  
 Voltage range 187-264 V  
 Type CSIR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 4,50 A  
 Max. Cont. Current (MCC) 1,10 A  
 Main W. resist. at 25°C 35,52 Ω  
 Start W. resist. at 25°C 21,15 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	180 kCal/h	174 W
COP	1,67 W/W	1,42 W/W
EER	1,44 kCal/Wh	1,23 kCal/Wh
Input Power	125 W	122 W
Current	0,80 A	0,79 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HBP (D)	CECOMAF HBP (C)
Evaporating temp. (T <sub>e</sub> )	7,2 °C	5,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	46,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	35,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	35,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	47- 56 μF 330 V		
Relay	Option 1		
Reference	2014 089.		
Pick-Up	1,62 A		
Drop-Out	1,38 A		
Protector	Option 1	Option 2	
Reference	MRT77AMK	T0068	
Current	5,80 A	5,80 A	
Time check	7,5-14 seg	7,5-14 seg	
Disc temp. (Open/Close)	105,00 / 61,00 °C	105,00 / 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	-15	81	82	0,68	1,15	0,99
40	-10	106	89	0,69	1,38	1,19
40	-5	136	96	0,70	1,64	1,41
40	0	169	103	0,72	1,92	1,65
40	5	207	109	0,73	2,22	1,91
40	7,2	225	111	0,74	2,36	2,03
40	10	249	114	0,75	2,54	2,18

45	-15	74	83	0,68	1,04	0,89
45	-10	97	91	0,69	1,24	1,07
45	-5	125	99	0,71	1,47	1,27
45	0	157	106	0,73	1,72	1,48
45	5	193	113	0,75	1,99	1,71
45	7,2	210	116	0,76	2,11	1,82
45	10	233	119	0,77	2,27	1,96

50	-15	67	84	0,68	0,93	0,80
50	-10	89	93	0,69	1,11	0,95
50	-5	114	101	0,71	1,31	1,13
50	0	144	110	0,74	1,53	1,32
50	5	179	117	0,77	1,77	1,52
50	7,2	195	120	0,78	1,88	1,62
50	10	217	124	0,80	2,03	1,75

55	-15	60	85	0,68	0,82	0,71
55	-10	80	95	0,70	0,98	0,84
55	-5	104	104	0,72	1,16	1,00
55	0	132	113	0,75	1,36	1,17
55	5	164	121	0,78	1,57	1,35
55	7,2	180	125	0,80	1,67	1,44
55	10	201	129	0,82	1,81	1,55

60	-15	53	86	0,68	0,72	0,62
60	-10	71	97	0,70	0,85	0,73
60	-5	93	107	0,73	1,02	0,87
60	0	120	116	0,76	1,19	1,03
60	5	150	126	0,80	1,39	1,19
60	7,2	165	130	0,82	1,48	1,27
60	10	185	135	0,85	1,60	1,38

65	-15	46	87	0,68	0,61	0,53
65	-10	62	98	0,71	0,73	0,63
65	-5	83	109	0,74	0,88	0,75
65	0	107	120	0,78	1,04	0,89
65	5	136	130	0,82	1,22	1,05
65	7,2	150	134	0,85	1,30	1,12
65	10	169	140	0,88	1,41	1,21

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	87	82	0,68	1,06	0,91
40	-10	115	90	0,69	1,28	1,10
40	-5	146	97	0,70	1,51	1,31
40	0	182	103	0,72	1,77	1,53
40	5	223	109	0,74	2,04	1,76
40	7,2	242	112	0,75	2,17	1,87
40	10	268	115	0,76	2,33	2,02

45	-15	79	83	0,68	0,95	0,82
45	-10	104	92	0,69	1,14	0,99
45	-5	134	99	0,71	1,35	1,17
45	0	168	107	0,73	1,58	1,36
45	5	206	114	0,75	1,82	1,57
45	7,2	225	116	0,76	1,93	1,67
45	10	249	120	0,78	2,08	1,80

50	-15	71	84	0,68	0,85	0,73
50	-10	94	93	0,69	1,01	0,87
50	-5	122	102	0,71	1,19	1,03
50	0	154	110	0,74	1,40	1,21
50	5	190	118	0,77	1,61	1,39
50	7,2	207	121	0,78	1,71	1,48
50	10	231	125	0,80	1,84	1,59

55	-15	63	85	0,68	0,74	0,64
55	-10	84	95	0,70	0,89	0,77
55	-5	110	105	0,72	1,05	0,91
55	0	140	114	0,75	1,23	1,06
55	5	174	122	0,79	1,42	1,23
55	7,2	190	126	0,80	1,51	1,31
55	10	212	130	0,83	1,63	1,41

60	-15	56	86	0,68	0,64	0,56
60	-10	74	97	0,70	0,77	0,66
60	-5	98	107	0,73	0,91	0,79
60	0	125	117	0,77	1,07	0,92
60	5	157	127	0,81	1,24	1,07
60	7,2	173	131	0,83	1,32	1,14
60	10	194	135	0,85	1,43	1,24

65	-15	48	87	0,68	0,54	0,47
65	-10	64	99	0,71	0,65	0,56
65	-5	85	110	0,74	0,78	0,67
65	0	111	121	0,78	0,92	0,79
65	5	141	131	0,83	1,08	0,93
65	7,2	155	135	0,85	1,15	0,99
65	10	175	141	0,88	1,25	1,08

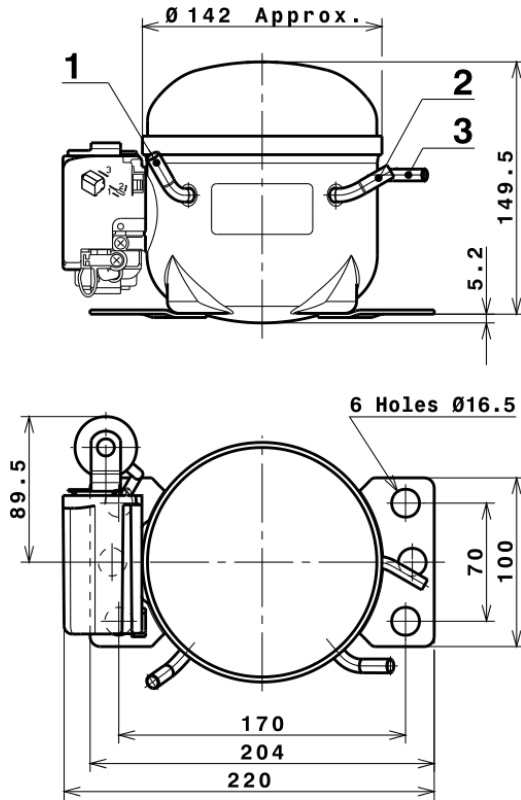
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	296,9428807352	77,0775217835	0,5999298172	5,1657170390657
2	11,1172887598	-0,0601470045	-0,0027679597	0,20281700306634
3	-2,9250946918	0,7192409285	0,0029809479	-0,028878548589692
4	0,0870967187	-0,0081664221	0,0001161226	0,0026176130509591
5	-0,0883878111	0,0342300652	0,0001793887	-0,00057000701085123

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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# Technical Data Sheet

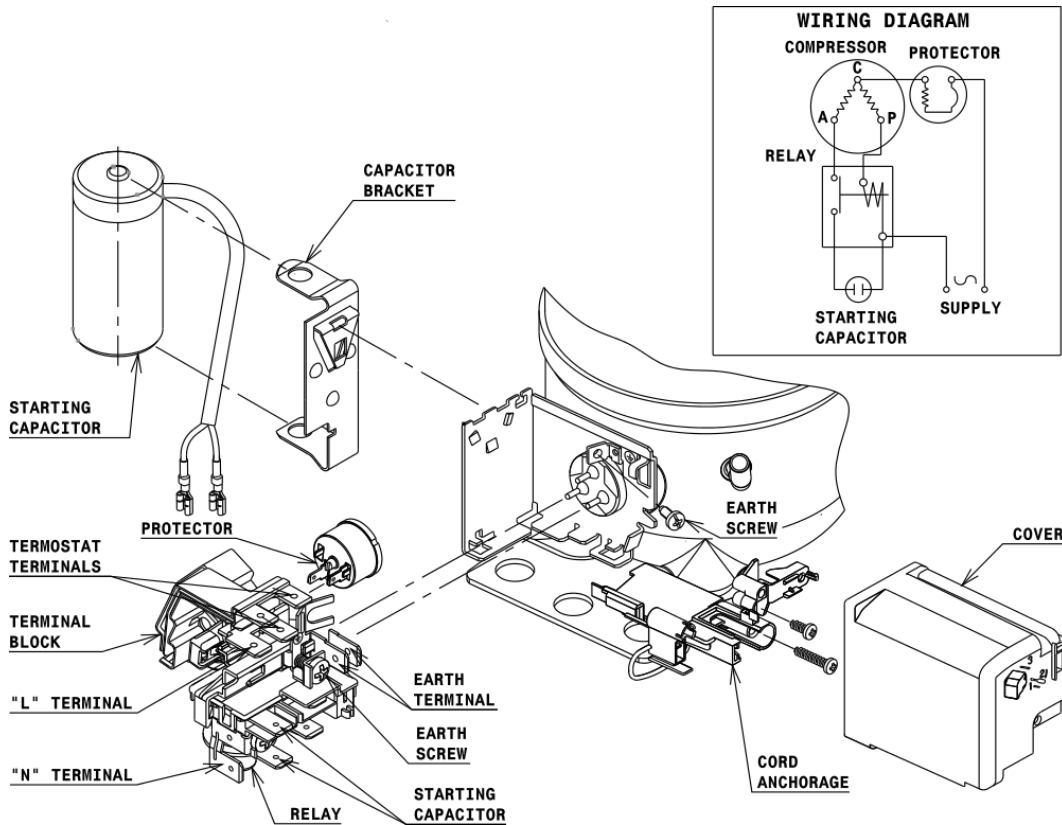
## COMPRESSOR DIMENSIONS



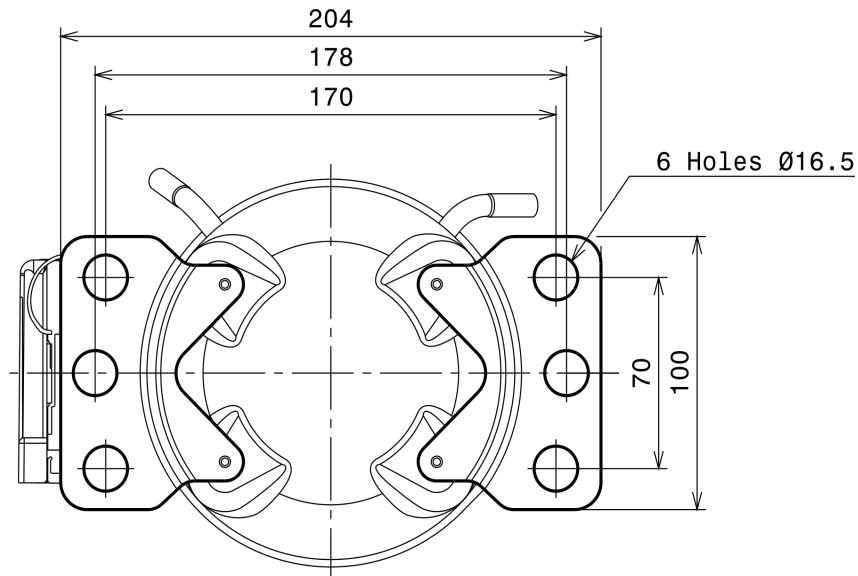
	DESIGNATION	INTERNAL DIAM.
1	Suction/Service	6,5 mm
2	Service/Suction	6,5 mm
3	Discharge	4,9 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (D range)



## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

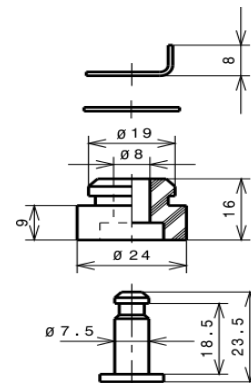
### STANDARD

$\varnothing 16.5$  holes (170x70 net)



### SNAP-ON

$\varnothing 16.5$  holes (170x70 net)



## SOA

SOA R134a HBP

