

# Technical Data Sheet

ENGINEERING  
TOMORROW



Compressor model **B25G**  
Voltage **220-240V 50/60Hz ~1**  
Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High Back Pressure	Displacement	2,60 cm <sup>3</sup>	Nominal Power	1/14 hp
Refrigerant	R134a	Diameter	17,20 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	11,20 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	4,65 Kg	Type	RSIR
Comp. Cooling	Static/Fan cooled	Oil type	POE 32	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	130 cm <sup>3</sup>	Locked Rotor Amps (LRA)	3,20 A
Compatible refriger.	R1234yf			Main W. resist. at 25°C	13,40 Ω
				Start W. resist. at 25°C	38,90 Ω

## NOMINAL PERFORMANCE

## APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	208 kCal/h	202 W
COP	2,08 W/W	1,78 W/W
EER	1,79 kCal/Wh	1,53 kCal/Wh
Input Power	116 W	114 W
Current	0,75 A	0,74 A

## 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

	Option 1	Option 2		
Relay	Option 1	Option 2		
Reference	JPQII-22 (002)	QP2-22 (002)		
Voltage	V	V		
Resistance	Ω	Ω		
Protector	Option 1	Option 2	Option 3	
Reference	BT37-120 (126)	BT37-120A61D3 (126)	DRB15N61A1 (126)	
Current	3,70 A	3,70 A	3,70 A	
Time check	7-16 seg	7-16 seg	7-16 seg	
Disc temp. (Open/Close)	120,00 / 61,00 °C	120,00 / 61,00 °C	120,00 / 61,00 °C	



## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	84	77	0,66	1,26	1,08
40	-10	115	82	0,67	1,62	1,39
40	-5	149	87	0,67	1,99	1,71
40	0	186	92	0,68	2,37	2,03
40	5	227	96	0,69	2,76	2,37
40	7,2	247	98	0,70	2,94	2,53
40	10	272	100	0,70	3,17	2,72

45	-15	80	79	0,66	1,17	1,00
45	-10	108	85	0,67	1,48	1,27
45	-5	141	91	0,68	1,80	1,55
45	0	176	96	0,69	2,13	1,83
45	5	215	102	0,71	2,47	2,12
45	7,2	234	104	0,71	2,62	2,25
45	10	258	106	0,72	2,82	2,42

50	-15	76	81	0,66	1,08	0,93
50	-10	102	88	0,68	1,35	1,16
50	-5	133	95	0,69	1,63	1,40
50	0	166	101	0,71	1,91	1,64
50	5	203	107	0,72	2,20	1,89
50	7,2	221	110	0,73	2,34	2,01
50	10	244	113	0,74	2,51	2,16

55	-15	71	83	0,67	1,00	0,86
55	-10	96	91	0,68	1,23	1,06
55	-5	124	99	0,70	1,47	1,26
55	0	156	106	0,72	1,71	1,47
55	5	191	113	0,74	1,97	1,69
55	7,2	208	116	0,75	2,08	1,79
55	10	230	120	0,76	2,23	1,92

60	-15	67	85	0,67	0,92	0,79
60	-10	90	94	0,69	1,11	0,96
60	-5	116	103	0,71	1,32	1,13
60	0	146	111	0,73	1,53	1,32
60	5	179	119	0,76	1,75	1,51
60	7,2	195	122	0,77	1,86	1,60
60	10	216	126	0,78	1,98	1,71

65	-15	63	87	0,68	0,84	0,72
65	-10	84	97	0,70	1,01	0,86
65	-5	108	106	0,72	1,18	1,02
65	0	136	116	0,75	1,37	1,18
65	5	167	124	0,78	1,56	1,34
65	7,2	182	128	0,79	1,65	1,42
65	10	202	133	0,81	1,76	1,52

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	90	78	0,66	1,16	1,00
40	-10	124	83	0,67	1,49	1,29
40	-5	160	88	0,68	1,83	1,58
40	0	201	92	0,68	2,18	1,88
40	5	245	96	0,69	2,54	2,19
40	7,2	265	98	0,70	2,70	2,33
40	10	292	100	0,70	2,91	2,51

45	-15	85	80	0,66	1,07	0,92
45	-10	116	86	0,67	1,36	1,17
45	-5	151	91	0,68	1,65	1,42
45	0	189	97	0,70	1,95	1,68
45	5	231	102	0,71	2,26	1,95
45	7,2	250	104	0,71	2,39	2,07
45	10	276	107	0,72	2,57	2,22

50	-15	80	82	0,67	0,98	0,85
50	-10	109	89	0,68	1,23	1,06
50	-5	141	95	0,69	1,48	1,28
50	0	177	102	0,71	1,74	1,50
50	5	216	108	0,72	2,00	1,73
50	7,2	235	111	0,73	2,12	1,83
50	10	259	114	0,74	2,28	1,97

55	-15	76	84	0,67	0,90	0,78
55	-10	102	92	0,68	1,11	0,96
55	-5	132	99	0,70	1,33	1,14
55	0	165	107	0,72	1,55	1,34
55	5	202	114	0,74	1,78	1,53
55	7,2	219	117	0,75	1,88	1,62
55	10	243	121	0,76	2,01	1,74

60	-15	71	86	0,67	0,82	0,71
60	-10	95	95	0,69	1,00	0,86
60	-5	122	103	0,71	1,18	1,02
60	0	153	111	0,73	1,37	1,19
60	5	188	119	0,76	1,57	1,36
60	7,2	204	123	0,77	1,66	1,43
60	10	226	127	0,79	1,78	1,53

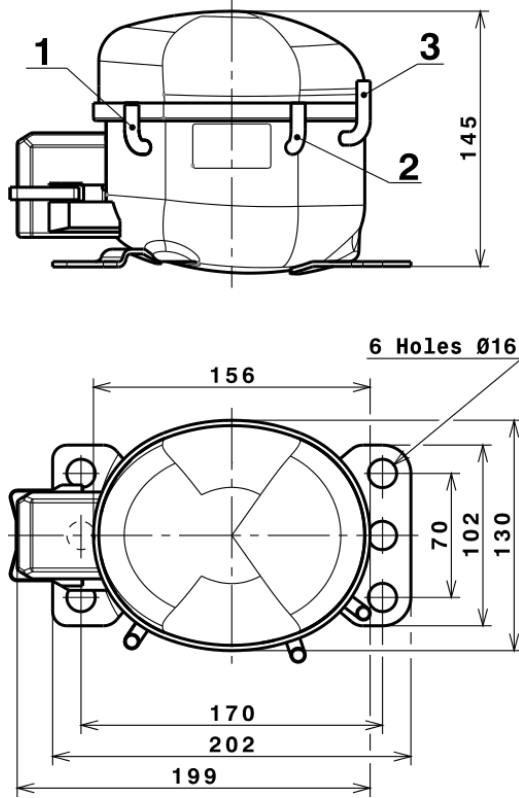
65	-15	66	88	0,68	0,75	0,65
65	-10	87	98	0,70	0,89	0,77
65	-5	112	107	0,72	1,05	0,91
65	0	141	116	0,75	1,21	1,05
65	5	173	125	0,78	1,38	1,20
65	7,2	189	129	0,79	1,46	1,26
65	10	209	134	0,81	1,56	1,35

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	297,2114518323	54,7801893715	0,5751447651	4,9394386317052
2	12,2489687951	-0,6017025933	-0,0032996410	0,21974135109655
3	-2,4777474595	0,9932792475	0,0027735258	-0,012874232313737
4	0,0710965788	-0,0044688661	0,0000443532	0,0022440511552239
5	-0,0974411187	0,0383226454	0,0001393923	-0,00055475563568845

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

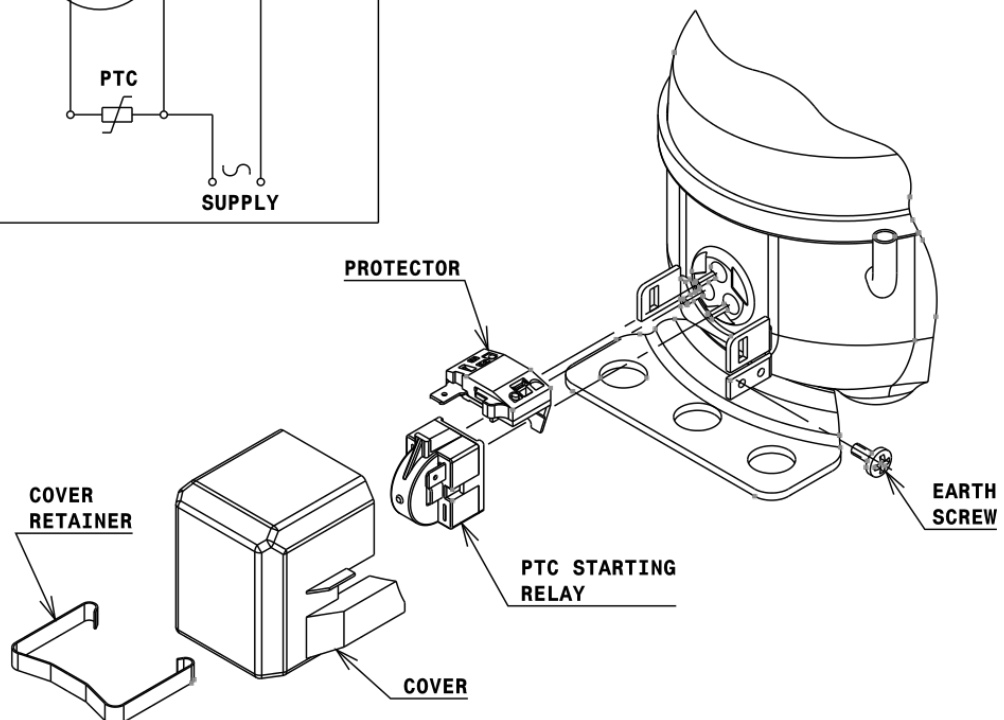
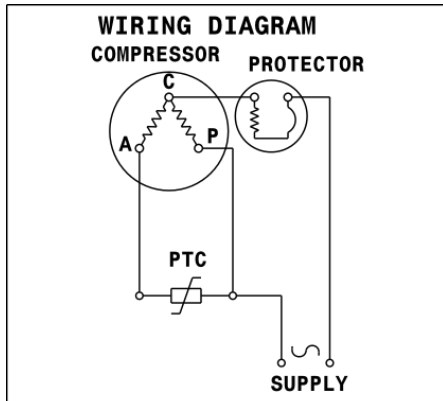


## DESIGNATION INTERNAL DIAM.

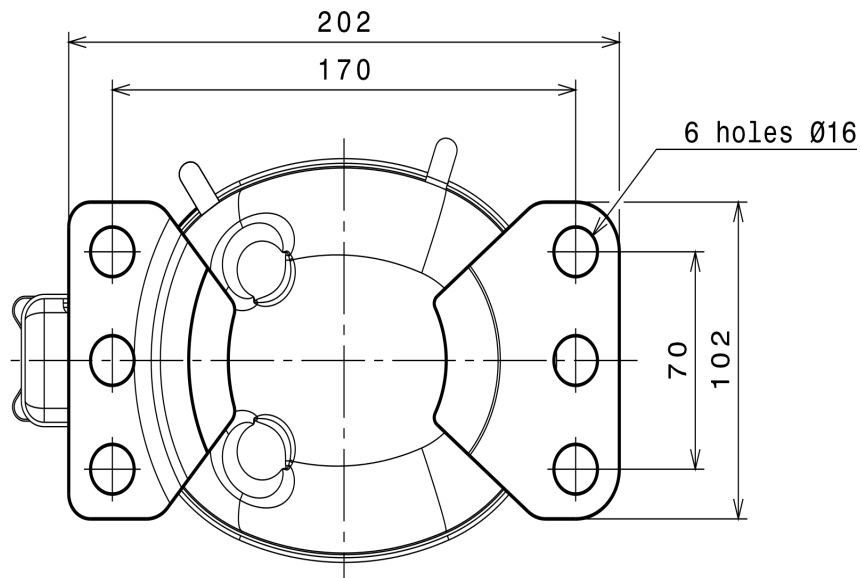
DESIGNATION	INTERNAL DIAM.
1 Suction	6,1 mm
2 Service	6,1 mm
3 Discharge	5,1 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### RSIR CONNECTION (PTC) (B, Small L ranges)



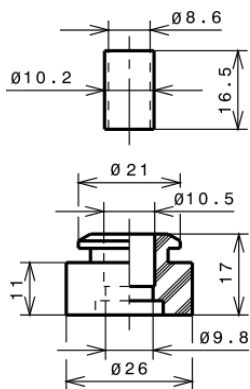
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

$\varnothing 16$  holes (170x70 net)



### SOA

SOA R134a HBP

