

# Technical Data Sheet

ENGINEERING  
TOMORROW



Compressor model **B25G5L**  
Voltage **115V 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	115V 60Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	11,20 mm	Voltage range	98-127 V
Expansion	Capillar/Valve	Net Weight	5,35 Kg	Type	CSIR
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)	9,60 A
Compatible refriger.	R1234yf			Main W. resist. at 25°C	19,00 Ω
				Start W. resist. at 25°C	5,50 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	240 kCal/h	231 W
COP	2,28 W/W	1,93 W/W
EER	1,96 kCal/Wh	1,67 kCal/Wh
Input Power	122 W	119 W
Current	1,66 A	1,64 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	115 V 60 Hz	115 V 60 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	61 µF 330 V		
Relay	Option 1		
Reference	QL2-4.80 (010)		
Pick-Up	A		
Drop-Out	A		
Protector	Option 1	Option 2	
Reference	BT78-135 (036)	DRB242S61A1 (036)	
Current			
Time check			
Disc temp. (Open/Close)			



## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	94	79	1,46	1,40	1,20
40	-10	131	86	1,49	1,78	1,53
40	-5	173	92	1,51	2,19	1,88
40	0	219	97	1,53	2,61	2,25
40	5	270	102	1,56	3,07	2,64
40	7,2	294	104	1,57	3,28	2,82
40	10	326	107	1,58	3,56	3,06

45	-15	86	79	1,46	1,27	1,09
45	-10	121	87	1,49	1,61	1,38
45	-5	160	95	1,52	1,96	1,69
45	0	204	102	1,55	2,33	2,01
45	5	253	108	1,58	2,73	2,35
45	7,2	276	110	1,60	2,91	2,50
45	10	307	113	1,61	3,15	2,71

50	-15	78	80	1,47	1,14	0,98
50	-10	110	89	1,50	1,44	1,24
50	-5	147	98	1,54	1,75	1,51
50	0	189	106	1,57	2,08	1,79
50	5	236	113	1,61	2,42	2,08
50	7,2	258	116	1,63	2,58	2,22
50	10	288	120	1,65	2,78	2,39

55	-15	70	80	1,47	1,01	0,87
55	-10	100	91	1,51	1,28	1,10
55	-5	134	101	1,55	1,55	1,34
55	0	174	110	1,59	1,84	1,58
55	5	219	119	1,64	2,14	1,84
55	7,2	240	122	1,66	2,28	1,96
55	10	268	127	1,69	2,46	2,11

60	-15	61	80	1,47	0,89	0,76
60	-10	89	92	1,51	1,12	0,97
60	-5	122	104	1,56	1,37	1,17
60	0	159	114	1,61	1,62	1,39
60	5	202	124	1,67	1,89	1,62
60	7,2	222	128	1,70	2,01	1,73
60	10	249	134	1,73	2,17	1,86

65	-15	53	81	1,47	0,77	0,66
65	-10	79	94	1,52	0,97	0,84
65	-5	109	107	1,58	1,19	1,02
65	0	144	118	1,64	1,42	1,22
65	5	184	130	1,70	1,65	1,42
65	7,2	204	134	1,73	1,76	1,51
65	10	229	140	1,77	1,90	1,64

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	102	79	1,46	1,29	1,11
40	-10	141	86	1,49	1,64	1,42
40	-5	186	92	1,51	2,02	1,74
40	0	236	98	1,54	2,41	2,08
40	5	291	103	1,56	2,82	2,44
40	7,2	317	105	1,57	3,02	2,61
40	10	351	107	1,58	3,27	2,82

45	-15	92	80	1,47	1,16	1,00
45	-10	129	88	1,49	1,47	1,27
45	-5	171	95	1,52	1,80	1,55
45	0	219	102	1,56	2,14	1,85
45	5	271	109	1,59	2,50	2,16
45	7,2	296	111	1,60	2,66	2,30
45	10	329	114	1,61	2,88	2,48

50	-15	83	80	1,47	1,04	0,90
50	-10	117	89	1,50	1,31	1,13
50	-5	157	98	1,54	1,60	1,38
50	0	201	106	1,58	1,89	1,63
50	5	251	114	1,61	2,20	1,90
50	7,2	275	117	1,63	2,34	2,02
50	10	306	121	1,65	2,53	2,18

55	-15	74	80	1,47	0,92	0,79
55	-10	105	91	1,51	1,16	1,00
55	-5	142	101	1,55	1,40	1,21
55	0	184	111	1,60	1,66	1,44
55	5	231	119	1,64	1,93	1,67
55	7,2	253	123	1,66	2,06	1,78
55	10	283	128	1,69	2,22	1,92

60	-15	64	81	1,47	0,80	0,69
60	-10	93	93	1,51	1,01	0,87
60	-5	127	104	1,56	1,22	1,06
60	0	167	115	1,62	1,45	1,25
60	5	211	125	1,68	1,69	1,46
60	7,2	232	129	1,70	1,80	1,55
60	10	261	134	1,73	1,94	1,67

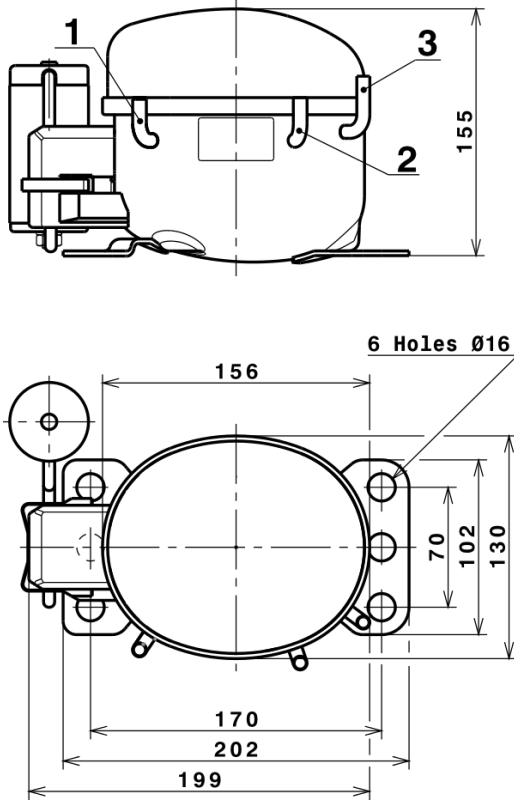
65	-15	55	81	1,47	0,68	0,59
65	-10	81	95	1,52	0,86	0,74
65	-5	113	107	1,58	1,05	0,91
65	0	149	119	1,64	1,25	1,08
65	5	191	130	1,71	1,46	1,27
65	7,2	211	135	1,74	1,56	1,35
65	10	238	141	1,78	1,69	1,46

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	374,9528422890	65,8076001155	1,3534829663	6,4529626457676
2	14,8279655778	-0,9502048596	-0,0061935788	0,26495668248485
3	-3,5544440589	0,8678481417	0,0046863717	-0,031538054374736
4	0,1019086309	-0,0117749026	0,0000517264	0,0031320593743306
5	-0,1113408656	0,0519114997	0,0002919611	-0,00048927084223132

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
----------	---

## COMPRESSOR DIMENSIONS

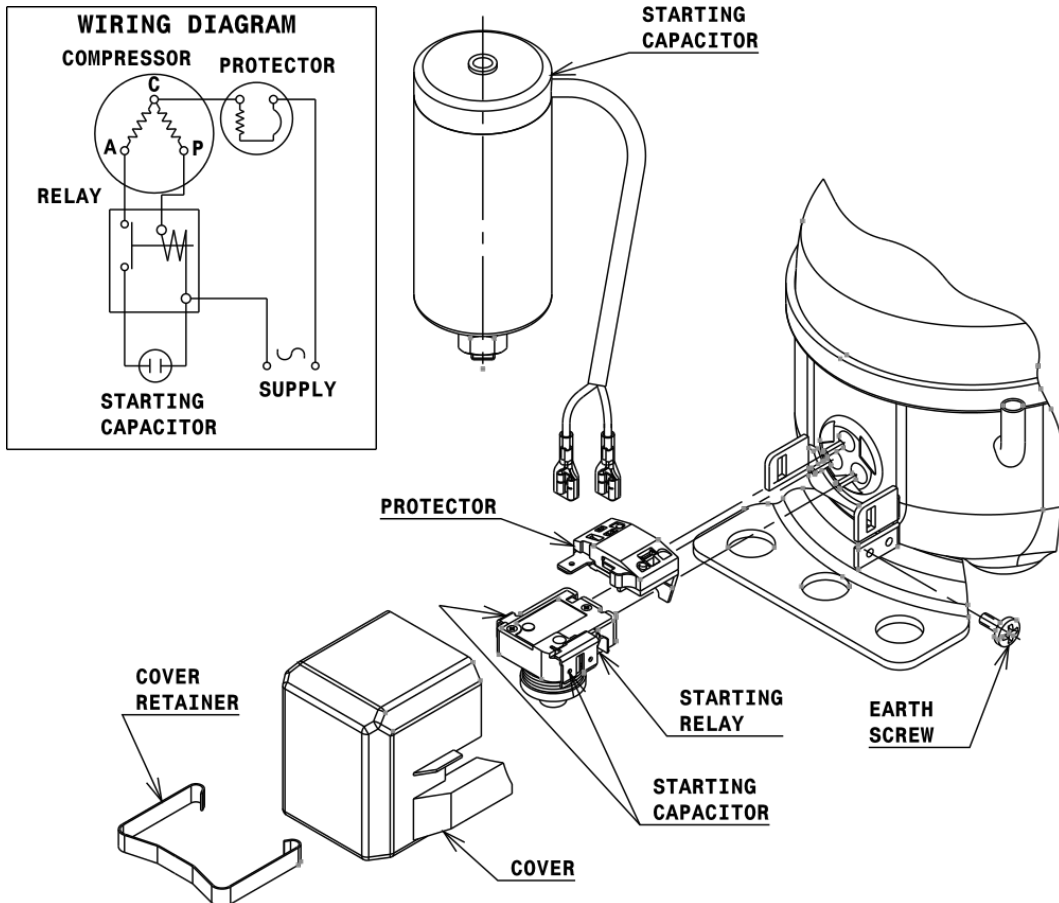


## DESIGNATION INTERNAL DIAM.

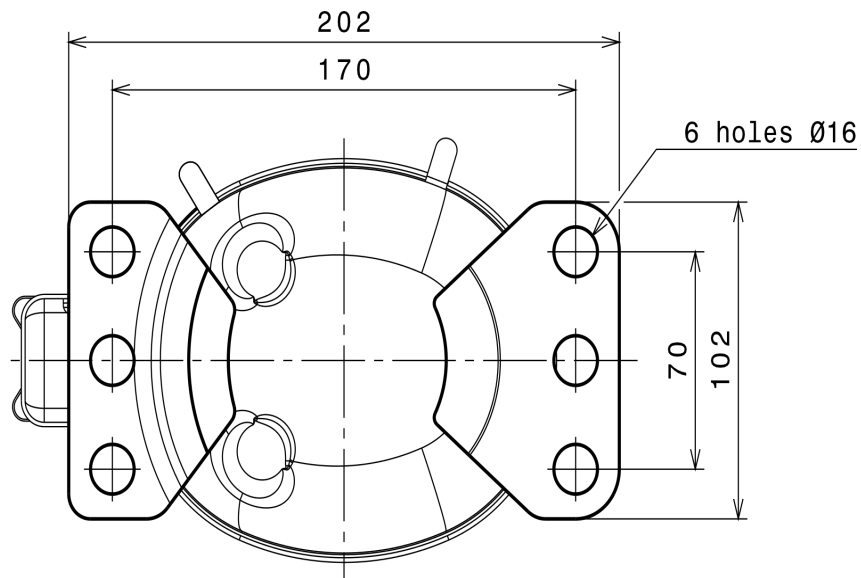
DESIGNATION	INTERNAL DIAM.
1 Suction	6,1 mm
2 Service	6,1 mm
3 Discharge	5,1 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (B, Small L ranges)



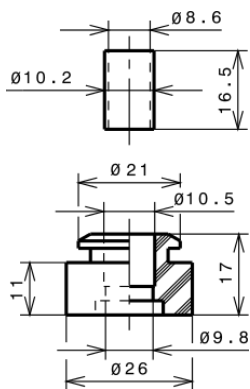
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

$\varnothing 16$  holes (170x70 net)



### SOA

SOA R134a HBP

