

# B52C0L Technical Data Sheet

Compressor model **B52C0L**  
 Voltage **100V 50/60Hz ~1**  
 Refrigerant **R600a**

## APPLICATION

Application Low Back Pressure  
 Refrigerant R600a  
 Evaporating Temp. -35,0 °C to -15,0 °C  
 Expansion Capillar  
 Comp. Cooling Static  
 Max. ambient temp. 43,0 °C

## COMPRESSOR

Displacement 5,20 cm<sup>3</sup>  
 Diameter 21,00 mm  
 Stroke 15,20 mm  
 Net Weight 4,80 Kg  
 Oil type ISO VG 10 MINER  
 Oil charge 130 cm<sup>3</sup>

## MOTOR

Nominal Power 1/8 hp  
 Voltage/Frequency 100V 50Hz  
 Voltage range 90-110 V  
 Type RSIR  
 Phase number 1 PH  
 Max. Cont. Current (MCC) 1,80 A  
 Main W. resist. at 25°C 5,10 Q  
 Start W. resist. at 25°C 6,40 Q

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	68 kCal/h	59 W
COP	1,11 W/W	0,88 W/W
EER	0,96 kCal/Wh	0,76 kCal/Wh
Input Power	71 W	67 W
Current	1,51 A	1,49 A

## 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	100 V 50 Hz	100 V 50 Hz

## ELECTRICAL COMPONENTS

Relay	Option 1	Option 2		
Reference	JPQII-4.7 (010)	QP2-4R7 (010)		
Voltage	110-115 V	110-120 V		
Resistance	Q	Q		
Protector	Option 1	Option 2		
Reference	BT68-135 (043)	DRB243S61A2 (043)		
Current		6,80 A		
Time check		7-16 seg		
Disc temp. (Open/Close)	135,00 / 61,00 °C	135,00 / 61,00 °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	42	48	1,37	1,02	0,88
40	-30	55	57	1,42	1,13	0,97
40	-25	73	66	1,48	1,27	1,09
40	-23,3	79	70	1,50	1,32	1,14
40	-20	94	76	1,54	1,43	1,23
40	-15	119	86	1,61	1,60	1,37
40	-10	148	97	1,68	1,77	1,53

45	-35	39	47	1,36	0,97	0,84
45	-30	52	57	1,42	1,07	0,92
45	-25	69	67	1,48	1,20	1,03
45	-23,3	76	70	1,50	1,25	1,08
45	-20	90	77	1,55	1,35	1,16
45	-15	114	88	1,62	1,51	1,30
45	-10	143	99	1,69	1,68	1,44

50	-35	37	46	1,36	0,93	0,80
50	-30	49	56	1,42	1,01	0,87
50	-25	65	67	1,48	1,14	0,98
50	-23,3	72	71	1,51	1,18	1,02
50	-20	86	78	1,55	1,28	1,10
50	-15	110	89	1,63	1,43	1,23
50	-10	138	101	1,71	1,59	1,37

55	-35	34	45	1,35	0,88	0,76
55	-30	46	56	1,42	0,96	0,82
55	-25	62	67	1,49	1,07	0,92
55	-23,3	68	71	1,51	1,11	0,96
55	-20	82	79	1,56	1,20	1,04
55	-15	105	91	1,64	1,35	1,16
55	-10	133	103	1,72	1,50	1,29

60	-35	31	44	1,34	0,83	0,71
60	-30	43	55	1,41	0,90	0,77
60	-25	58	67	1,49	1,00	0,86
60	-23,3	64	71	1,51	1,05	0,90
60	-20	77	79	1,56	1,13	0,97
60	-15	101	92	1,65	1,27	1,09
60	-10	128	105	1,73	1,42	1,22

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	46	48	1,37	0,96	0,83
40	-30	62	57	1,42	1,08	0,93
40	-25	81	66	1,48	1,22	1,05
40	-23,3	88	70	1,50	1,27	1,09
40	-20	104	76	1,54	1,36	1,18
40	-15	131	86	1,61	1,52	1,31
40	-10	162	97	1,68	1,67	1,44

45	-35	41	47	1,36	0,88	0,76
45	-30	56	57	1,42	0,98	0,85
45	-25	74	67	1,48	1,10	0,95
45	-23,3	81	70	1,50	1,15	0,99
45	-20	95	77	1,55	1,24	1,07
45	-15	121	88	1,62	1,38	1,19
45	-10	150	99	1,69	1,52	1,31

50	-35	37	46	1,36	0,81	0,70
50	-30	50	56	1,42	0,89	0,77
50	-25	66	67	1,48	0,99	0,86
50	-23,3	73	71	1,51	1,03	0,89
50	-20	87	78	1,55	1,11	0,96
50	-15	111	89	1,63	1,24	1,07
50	-10	139	101	1,71	1,37	1,19

55	-35	33	45	1,35	0,72	0,63
55	-30	44	56	1,42	0,79	0,68
55	-25	59	67	1,49	0,88	0,76
55	-23,3	65	71	1,51	0,92	0,79
55	-20	78	79	1,56	0,99	0,86
55	-15	101	91	1,64	1,11	0,96
55	-10	127	103	1,72	1,24	1,07

60	-35	28	44	1,34	0,64	0,55
60	-30	38	55	1,41	0,69	0,59
60	-25	52	67	1,49	0,77	0,67
60	-23,3	57	71	1,51	0,80	0,69
60	-20	69	79	1,56	0,87	0,75
60	-15	91	92	1,65	0,99	0,85
60	-10	116	105	1,73	1,10	0,95

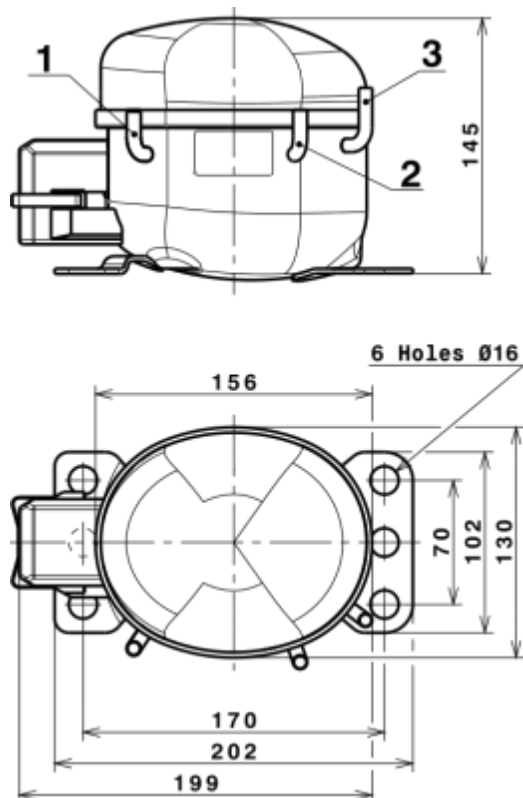
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	345,0734032607	95,7766688459	1,6784662916	3,4948128889225
2	10,1289319215	1,3726810575	0,0104047477	0,11348985723939
3	-2,9024917237	0,6542798079	0,0043712554	-0,01559348895094
4	0,0732761907	0,0077136448	0,0000888439	0,0010610833737365
5	-0,0575645300	0,0245286115	0,0001599352	-0,00024763471748645

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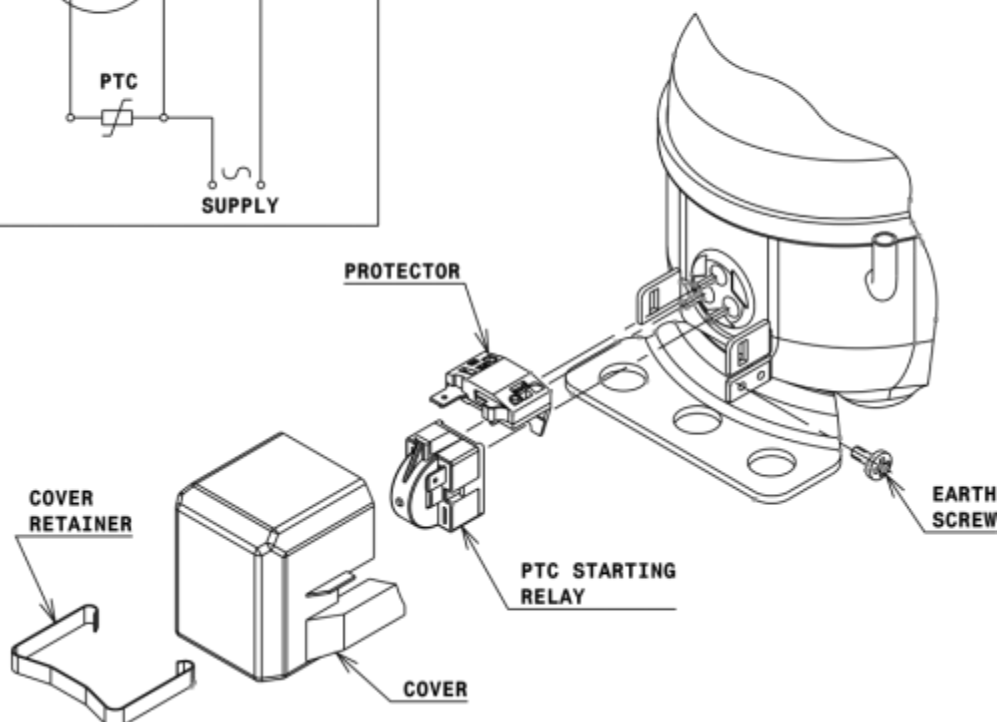
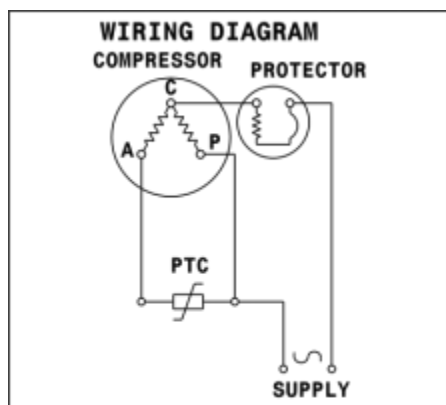
## COMPRESSOR DIMENSIONS



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

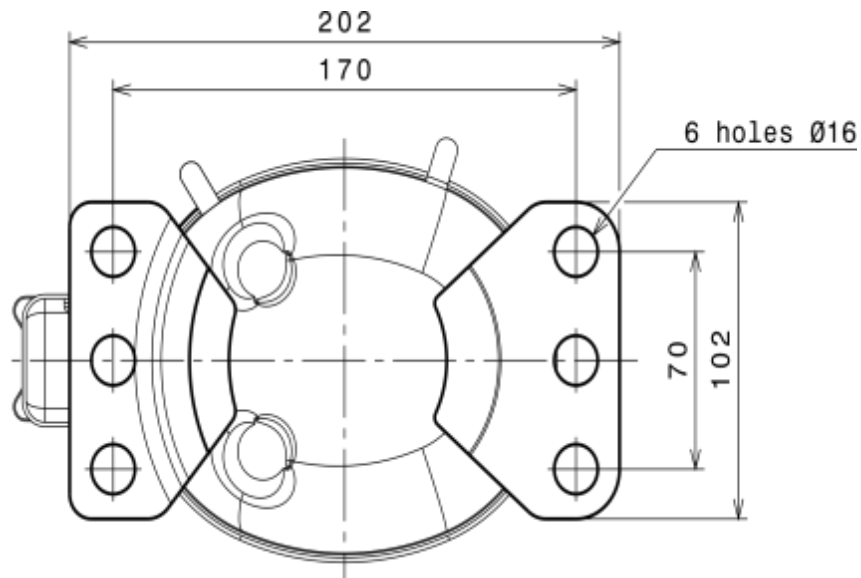
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



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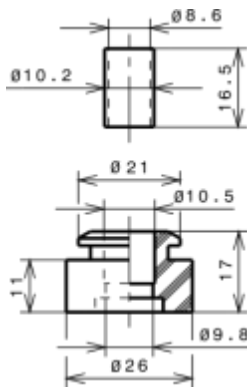
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

Ø16 holes (170x70 net)



## SOA

SOA R600a LBP

