

# Technical Data Sheet

Compressor model **B52CL**  
 Voltage **220-240V 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 4,60 Kg  
 Oil type ISO VG 10 MINER  
 Oil charge 130 cm<sup>3</sup>

## MOTOR

Nominal Power 1/10 hp  
 Voltage/Frequency 220-240V 60Hz  
 Voltage range 187-255 V  
 Type RSIR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 3,30 A  
 Max. Cont. Current (MCC) 0,83 A  
 Main W. resist. at 25°C 32,04 Ω  
 Start W. resist. at 25°C 15,10 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	82 kCal/h	72 W
COP	1,25 W/W	0,99 W/W
EER	1,08 kCal/Wh	0,85 kCal/Wh
Input Power	76 W	72 W
Current	0,60 A	0,58 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 60 Hz	220 V 60 Hz

## ELECTRICAL COMPONENTS

	Option 1	Option 2		
Relay				
Reference	JPQII-15 (019)	QP2-15 (019)		
Voltage	V	V		
Resistance	Ω	Ω		
Protector			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	

This product is approved for R290 and R600a regarding explosion safety according to standard EN 60335-1 and EN 60335-2-34

## ASHRAE

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	kCal/h	W	A	W/W	kCal/Wh
40	-35	50	55	0,51	1,06	0,91
40	-30	67	63	0,55	1,22	1,05
40	-25	87	72	0,58	1,41	1,21
40	-23,3	95	75	0,60	1,47	1,27
40	-20	112	82	0,62	1,60	1,37
40	-15	141	91	0,67	1,79	1,54
40	-10	174	102	0,72	1,98	1,71

45	-35	47	54	0,51	1,01	0,87
45	-30	63	63	0,54	1,17	1,00
45	-25	83	72	0,58	1,34	1,15
45	-23,3	91	76	0,60	1,40	1,20
45	-20	107	82	0,63	1,52	1,31
45	-15	136	93	0,67	1,70	1,46
45	-10	168	104	0,72	1,88	1,62

50	-35	44	53	0,50	0,97	0,83
50	-30	59	62	0,54	1,11	0,95
50	-25	79	72	0,58	1,27	1,09
50	-23,3	86	76	0,60	1,33	1,14
50	-20	102	83	0,63	1,44	1,24
50	-15	130	94	0,68	1,61	1,39
50	-10	162	105	0,73	1,79	1,54

55	-35	41	52	0,50	0,92	0,79
55	-30	56	62	0,54	1,05	0,90
55	-25	75	72	0,58	1,20	1,03
55	-23,3	82	76	0,60	1,25	1,08
55	-20	98	83	0,63	1,36	1,17
55	-15	125	95	0,68	1,53	1,31
55	-10	156	107	0,74	1,70	1,46

60	-35	38	51	0,50	0,87	0,75
60	-30	52	61	0,54	0,99	0,85
60	-25	70	72	0,58	1,13	0,97
60	-23,3	78	76	0,60	1,18	1,02
60	-20	93	84	0,63	1,29	1,11
60	-15	119	96	0,69	1,45	1,24
60	-10	150	109	0,75	1,61	1,38

## CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-35	55	55	0,51	0,99	0,86
40	-30	74	63	0,55	1,17	1,01
40	-25	97	72	0,58	1,35	1,16
40	-23,3	106	75	0,60	1,41	1,22
40	-20	124	82	0,62	1,52	1,32
40	-15	155	91	0,67	1,70	1,47
40	-10	190	102	0,72	1,86	1,61

45	-35	50	54	0,51	0,92	0,79
45	-30	67	63	0,54	1,07	0,92
45	-25	89	72	0,58	1,23	1,06
45	-23,3	97	76	0,60	1,28	1,11
45	-20	114	82	0,63	1,39	1,20
45	-15	143	93	0,67	1,55	1,34
45	-10	177	104	0,72	1,70	1,47

50	-35	44	53	0,50	0,84	0,72
50	-30	60	62	0,54	0,97	0,84
50	-25	80	72	0,58	1,11	0,96
50	-23,3	88	76	0,60	1,16	1,00
50	-20	104	83	0,63	1,25	1,08
50	-15	131	94	0,68	1,40	1,21
50	-10	163	105	0,73	1,55	1,34

55	-35	39	52	0,50	0,76	0,65
55	-30	53	62	0,54	0,86	0,75
55	-25	72	72	0,58	0,99	0,85
55	-23,3	79	76	0,60	1,03	0,89
55	-20	94	83	0,63	1,12	0,97
55	-15	119	95	0,68	1,26	1,09
55	-10	149	107	0,74	1,40	1,21

60	-35	34	51	0,50	0,67	0,58
60	-30	47	61	0,54	0,76	0,66
60	-25	63	72	0,58	0,87	0,75
60	-23,3	69	76	0,60	0,91	0,79
60	-20	83	84	0,63	0,99	0,86
60	-15	108	96	0,69	1,12	0,97
60	-10	136	109	0,75	1,25	1,08

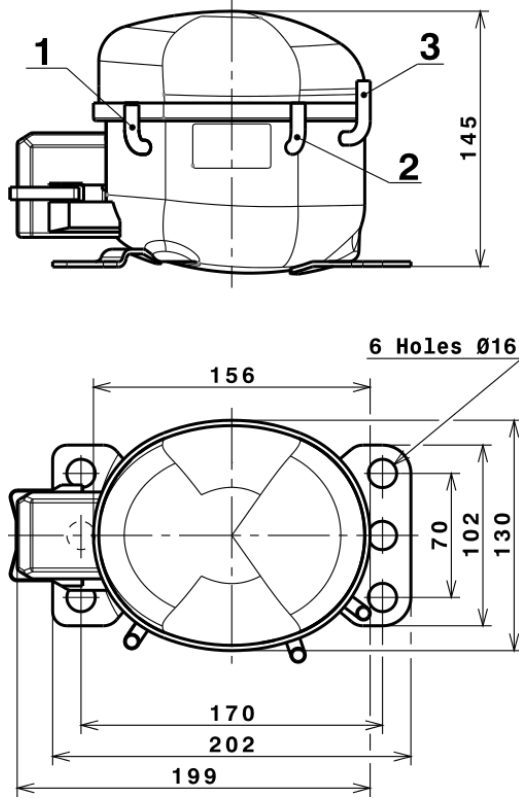
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	403,5014788590	105,2614399758	0,7373235641	4,0797296507071
2	11,4990755965	1,5763738611	0,0082543947	0,12783899434932
3	-3,4516022400	0,5588479463	0,0025786288	-0,018919974956296
4	0,0761600415	0,0116256717	0,0000828222	0,0011066576707499
5	-0,0693465353	0,0218019869	0,0000972924	-0,00031794048250048

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

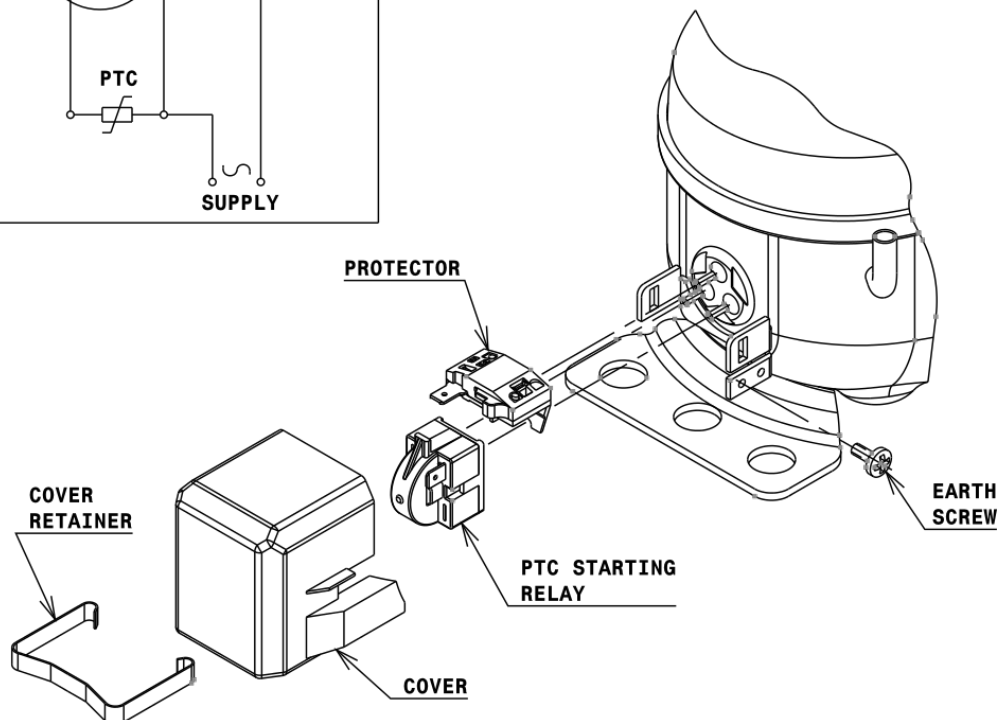
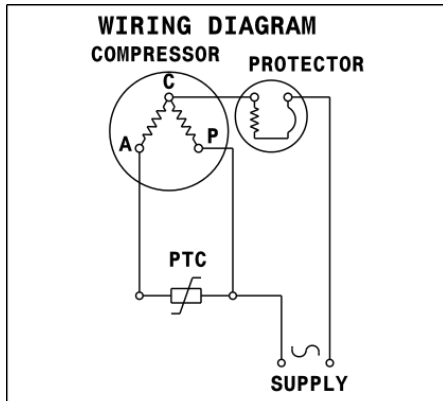
## COMPRESSOR DIMENSIONS



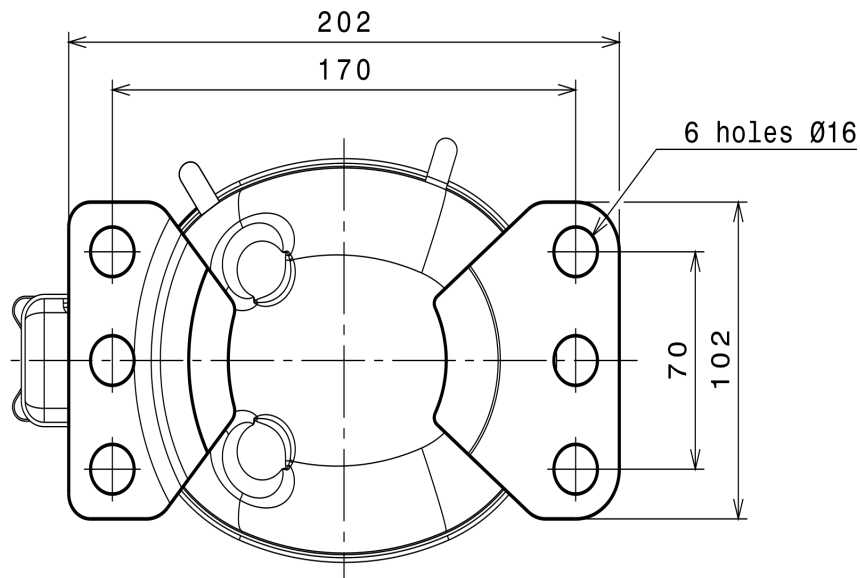
DESIGNATION	INTERNAL DIAM.
1 Suction	6,1 mm
2 Service	6,1 mm
3 Discharge	5,1 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



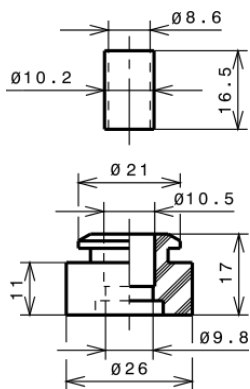
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

Ø16 holes (170x70 net)



### SOA

SOA R600a LBP

