

B43CB Technical Data Sheet

Compressor model **B43CB**
 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 3,80 cm³
 Diameter 19,00 mm
 Stroke 13,40 mm
 Net Weight 4,60 Kg
 Oil type ISO VG 10 MINER
 Oil charge 120 cm³

MOTOR

Nominal Power 1/16 hp
 Voltage/Frequency 220-240V 60Hz
 Voltage range 187-255 V
 Type RSIR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 2,23 A
 Max. Cont. Current (MCC) 0,55 A
 Main W. resist. at 25°C 53,30 Q
 Start W. resist. at 25°C 21,62 Q

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	60 kCal/h	52 W
COP	1,25 W/W	0,98 W/W
EER	1,07 kCal/Wh	0,85 kCal/Wh
Input Power	56 W	53 W
Current	0,38 A	0,37 A

TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T _e)	-23,3 °C	-25,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	32,0 °C	55,0 °C
Ambient temp. (T _{amb.})	32,0 °C	32,0 °C
Suction temp. (T _{suction})	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 A (003)	QP2-15 A (003)		
Voltage	V	V		
Resistance	Q	Q		
Protector			Option 3	
Reference	BT20-120 (210)	BT20-120A61D3 (210)	DRB10N61A1 (210)	
Current				
Time check				
Disc temp. (Open/Close)				

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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	38	41	0,32	1,08	0,93
40	-30	49	46	0,34	1,23	1,06
40	-25	64	52	0,37	1,41	1,22
40	-23,3	69	55	0,37	1,48	1,27
40	-20	81	59	0,39	1,61	1,38
40	-15	103	66	0,42	1,81	1,56
40	-10	127	73	0,45	2,01	1,73

45	-35	36	41	0,32	1,02	0,88
45	-30	47	46	0,34	1,17	1,00
45	-25	61	53	0,37	1,34	1,15
45	-23,3	66	55	0,38	1,40	1,20
45	-20	78	60	0,39	1,52	1,31
45	-15	99	67	0,42	1,72	1,48
45	-10	123	75	0,46	1,91	1,64

50	-35	33	40	0,32	0,97	0,83
50	-30	44	46	0,34	1,10	0,95
50	-25	58	53	0,37	1,26	1,09
50	-23,3	63	56	0,38	1,32	1,14
50	-20	75	60	0,40	1,44	1,24
50	-15	95	68	0,43	1,63	1,40
50	-10	119	76	0,46	1,81	1,56

55	-35	31	40	0,32	0,91	0,78
55	-30	41	46	0,34	1,03	0,89
55	-25	55	53	0,37	1,19	1,02
55	-23,3	60	56	0,38	1,25	1,07
55	-20	71	61	0,40	1,36	1,17
55	-15	92	69	0,43	1,54	1,32
55	-10	115	78	0,47	1,72	1,48

60	-35	29	39	0,32	0,85	0,73
60	-30	39	46	0,34	0,97	0,83
60	-25	52	54	0,37	1,12	0,96
60	-23,3	57	56	0,38	1,17	1,01
60	-20	68	62	0,40	1,28	1,10
60	-15	88	70	0,44	1,45	1,25
60	-10	111	79	0,48	1,63	1,40

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	42	41	0,32	1,02	0,88
40	-30	55	46	0,34	1,18	1,02
40	-25	71	52	0,37	1,36	1,17
40	-23,3	77	55	0,37	1,42	1,22
40	-20	90	59	0,39	1,54	1,33
40	-15	113	66	0,42	1,72	1,48
40	-10	139	73	0,45	1,89	1,63

45	-35	38	41	0,32	0,93	0,80
45	-30	50	46	0,34	1,07	0,92
45	-25	65	53	0,37	1,23	1,06
45	-23,3	71	55	0,38	1,28	1,11
45	-20	83	60	0,39	1,39	1,20
45	-15	105	67	0,42	1,56	1,35
45	-10	129	75	0,46	1,73	1,49

50	-35	34	40	0,32	0,84	0,72
50	-30	45	46	0,34	0,96	0,83
50	-25	59	53	0,37	1,10	0,95
50	-23,3	64	56	0,38	1,15	1,00
50	-20	76	60	0,40	1,26	1,08
50	-15	96	68	0,43	1,41	1,22
50	-10	120	76	0,46	1,57	1,35

55	-35	30	40	0,32	0,75	0,65
55	-30	39	46	0,34	0,85	0,74
55	-25	52	53	0,37	0,98	0,85
55	-23,3	57	56	0,38	1,03	0,89
55	-20	68	61	0,40	1,12	0,97
55	-15	88	69	0,43	1,27	1,09
55	-10	110	78	0,47	1,41	1,22

60	-35	26	39	0,32	0,65	0,56
60	-30	34	46	0,34	0,74	0,64
60	-25	46	54	0,37	0,86	0,74
60	-23,3	51	56	0,38	0,90	0,78
60	-20	61	62	0,40	0,99	0,85
60	-15	79	70	0,44	1,13	0,97
60	-10	100	79	0,48	1,27	1,10

EN12900

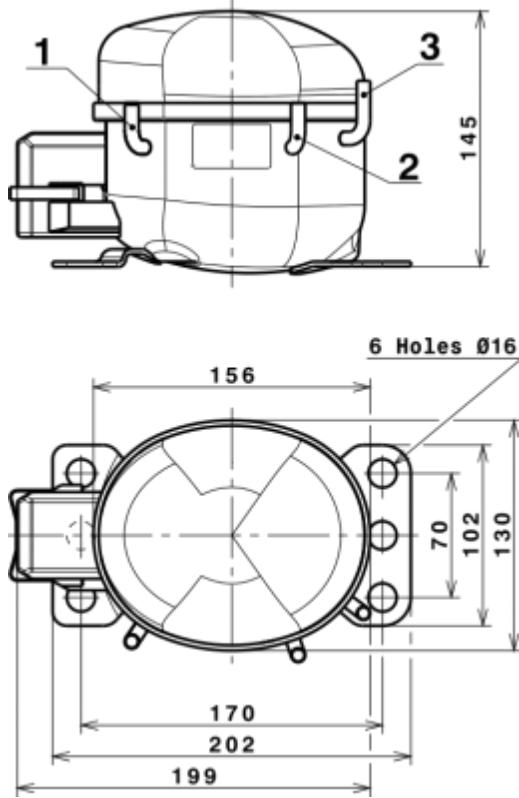
X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	291,2711864058	74,0610936431	0,4569785152	2,9362480737796
2	8,4069235422	1,2062198850	0,0058085438	0,093940508926323
3	-2,4046499859	0,4498526918	0,0019376028	-0,012267002945585
4	0,0612711251	0,0105429949	0,0000685099	0,00088782557879706
5	-0,0461762328	0,0149923984	0,0000629637	-0,00017732895247241

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

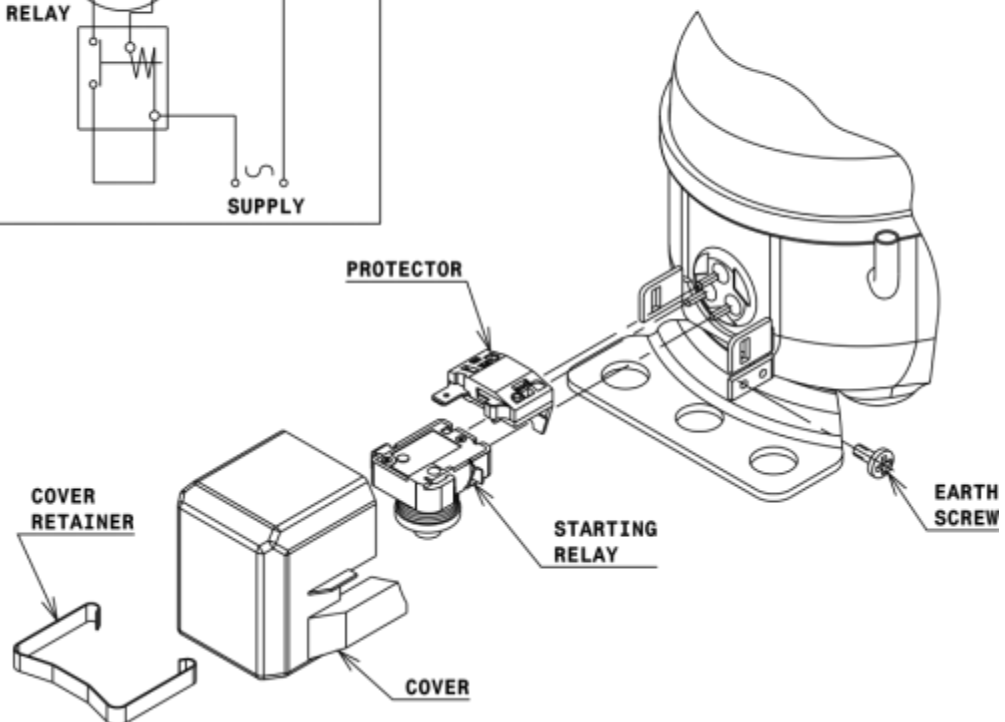
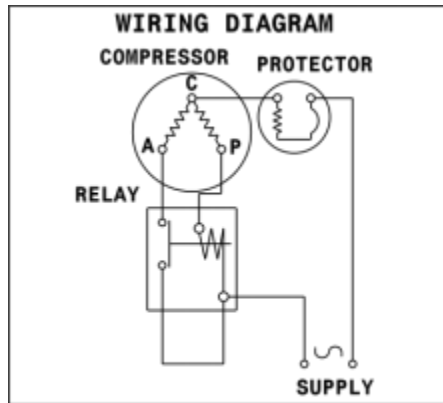


DESIGNATION INTERNAL DIAM.

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

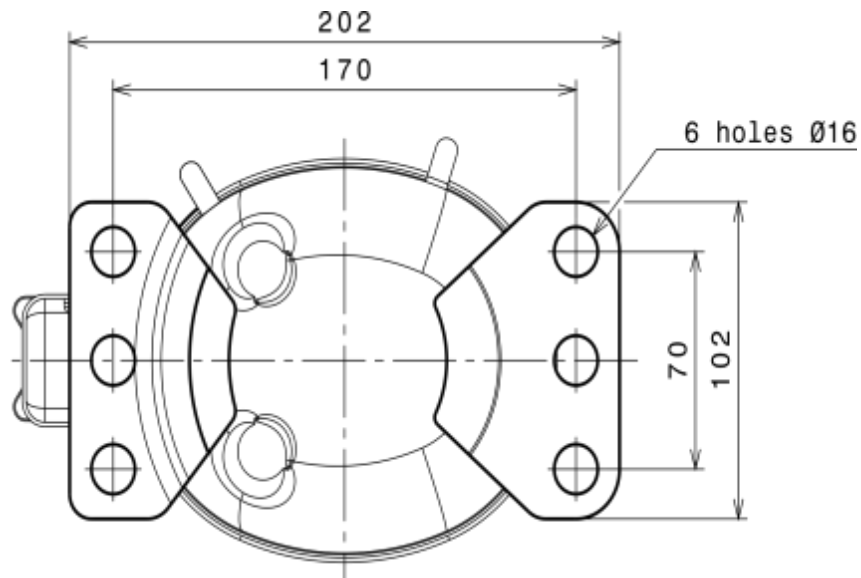
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSIR CONNECTION (RELAY) (B, Small L ranges)



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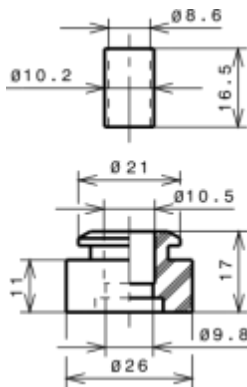
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

