

B43CB Technical Data Sheet

Compressor model **B43CB**
 Voltage **220-240V 50Hz ~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 4,30 cm³
 Diameter 19,00 mm
 Stroke 15,20 mm
 Net Weight 4,60 Kg
 Oil type ISO VG 10 MINER
 Oil charge 120 cm³

MOTOR

Nominal Power 1/12 hp
 Voltage/Frequency 220-240V 50Hz
 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 54,20 Q
 Start W. resist. at 25°C 21,60 Q

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	59 kCal/h	51 W
COP	1,16 W/W	0,91 W/W
EER	1,00 kCal/Wh	0,79 kCal/Wh
Input Power	59 W	56 W
Current	0,47 A	0,46 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 50 Hz	220 V 50 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 1	Option 2	Option 3	
Reference	BT20-120 (045)	BT20-120A61D3 (045)	DRB10N61A1 (045)	
Current				
Time check				
Disc temp. (Open/Close)				

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ASHRAE

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	kCal/h	W	A	W/W	kCal/Wh
40	-35	37	43	0,39	1,00	0,86
40	-30	48	49	0,42	1,15	0,99
40	-25	63	55	0,45	1,33	1,14
40	-23,3	68	57	0,46	1,39	1,19
40	-20	80	62	0,48	1,51	1,30
40	-15	101	69	0,52	1,70	1,46
40	-10	125	77	0,57	1,89	1,62

45	-35	35	43	0,39	0,94	0,81
45	-30	46	49	0,42	1,09	0,94
45	-25	60	55	0,45	1,25	1,08
45	-23,3	65	58	0,46	1,31	1,13
45	-20	77	63	0,49	1,43	1,23
45	-15	97	70	0,53	1,61	1,38
45	-10	121	79	0,58	1,79	1,54

50	-35	32	42	0,39	0,89	0,76
50	-30	43	49	0,42	1,02	0,88
50	-25	57	56	0,45	1,18	1,01
50	-23,3	62	58	0,47	1,24	1,06
50	-20	74	63	0,49	1,35	1,16
50	-15	94	72	0,54	1,52	1,31
50	-10	117	80	0,59	1,69	1,46

55	-35	30	42	0,39	0,83	0,71
55	-30	40	49	0,42	0,96	0,82
55	-25	54	56	0,46	1,11	0,95
55	-23,3	59	59	0,47	1,16	1,00
55	-20	70	64	0,50	1,27	1,09
55	-15	90	73	0,55	1,44	1,24
55	-10	113	82	0,60	1,60	1,38

60	-35	28	42	0,39	0,77	0,66
60	-30	38	49	0,42	0,89	0,77
60	-25	51	57	0,46	1,04	0,89
60	-23,3	56	60	0,47	1,09	0,94
60	-20	67	65	0,50	1,19	1,03
60	-15	86	74	0,55	1,36	1,17
60	-10	109	84	0,61	1,52	1,30

CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-35	40	43	0,39	0,94	0,81
40	-30	54	49	0,42	1,10	0,95
40	-25	70	55	0,45	1,27	1,10
40	-23,3	76	57	0,46	1,33	1,15
40	-20	89	62	0,48	1,44	1,25
40	-15	111	69	0,52	1,61	1,39
40	-10	137	77	0,57	1,77	1,53

45	-35	37	43	0,39	0,86	0,74
45	-30	49	49	0,42	1,00	0,86
45	-25	64	55	0,45	1,15	0,99
45	-23,3	70	58	0,46	1,20	1,04
45	-20	82	63	0,49	1,31	1,13
45	-15	103	70	0,53	1,46	1,26
45	-10	127	79	0,58	1,62	1,40

50	-35	33	42	0,39	0,77	0,67
50	-30	44	49	0,42	0,89	0,77
50	-25	58	56	0,45	1,03	0,89
50	-23,3	63	58	0,47	1,08	0,93
50	-20	75	63	0,49	1,18	1,02
50	-15	95	72	0,54	1,32	1,14
50	-10	118	80	0,59	1,46	1,27

55	-35	29	42	0,39	0,68	0,59
55	-30	39	49	0,42	0,79	0,68
55	-25	51	56	0,46	0,91	0,79
55	-23,3	57	59	0,47	0,96	0,83
55	-20	67	64	0,50	1,05	0,90
55	-15	86	73	0,55	1,18	1,02
55	-10	108	82	0,60	1,32	1,14

60	-35	25	42	0,39	0,60	0,52
60	-30	34	49	0,42	0,69	0,59
60	-25	45	57	0,46	0,80	0,69
60	-23,3	50	60	0,47	0,84	0,72
60	-20	60	65	0,50	0,92	0,80
60	-15	78	74	0,55	1,05	0,91
60	-10	99	84	0,61	1,18	1,02

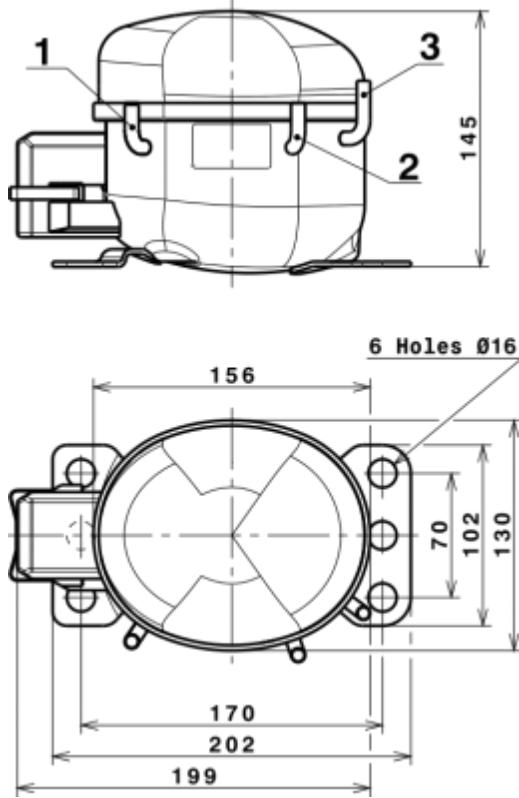
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	286,8233852994	76,4904239358	0,5733917869	2,8908743099805
2	8,2235979631	1,2536614098	0,0089720308	0,091631118838621
3	-2,3818931349	0,5043888541	0,0030595203	-0,012267002945585
4	0,0584870410	0,0114435290	0,0001231217	0,00084828137249628
5	-0,0457938156	0,0163560777	0,0000959140	-0,00017732895247242

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

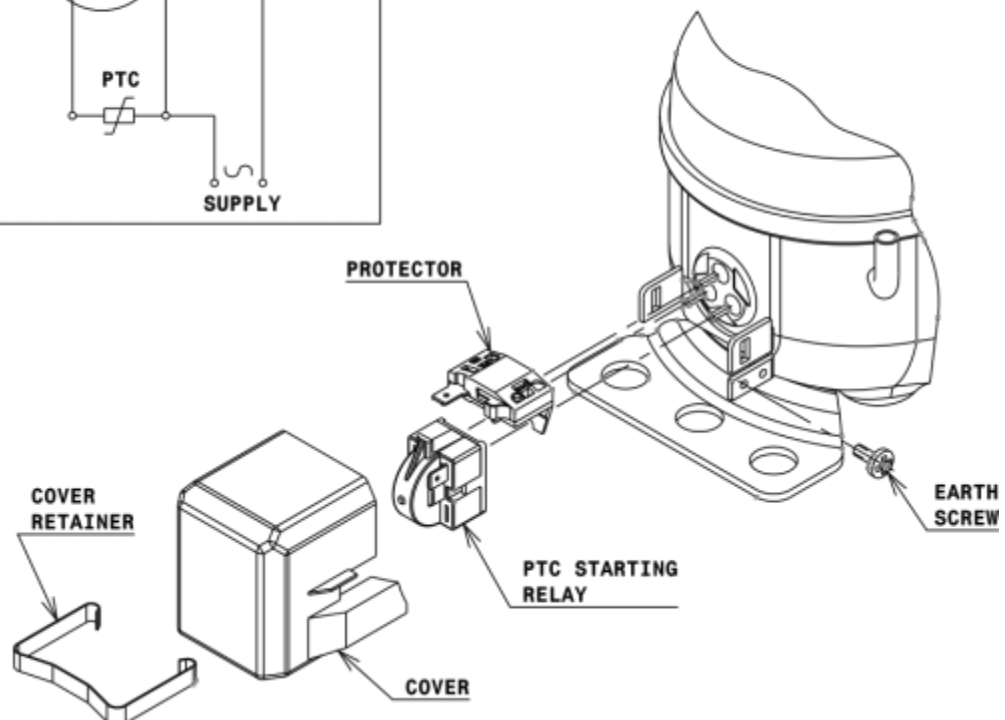
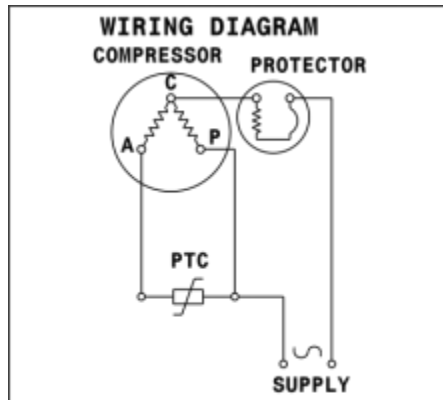


DESIGNATION INTERNAL DIAM.

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

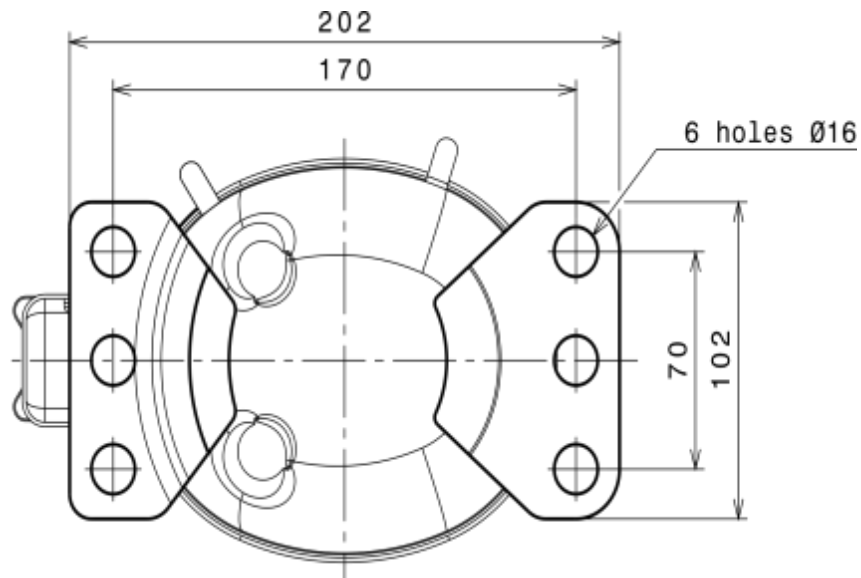
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



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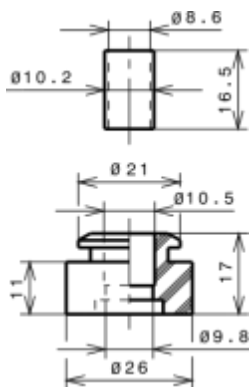
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

