

B35CA Technical Data Sheet

Compressor model **B35CA**
 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 3,50 cm³
 Diameter 17,20 mm
 Stroke 15,20 mm
 Net Weight 4,80 Kg
 Oil type ISO VG 10 MINER
 Oil charge 120 cm³

MOTOR

Nominal Power 1/15 hp
 Voltage/Frequency 220-240V 50Hz
 Voltage range 187-254 V
 Type RSCR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 1,20 A
 Main W. resist. at 25°C 99,70 Q
 Start W. resist. at 25°C 35,20 Q

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	50 kCal/h	43 W
COP	1,45 W/W	1,13 W/W
EER	1,25 kCal/Wh	0,97 kCal/Wh
Input Power	40 W	38 W
Current	0,19 A	0,18 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

Run capacitor	3 pF 450 V			
Relay	Option 1	Option 2		
Reference	JPQII-15 A (016)	QP2-15 A (016)		
Voltage	V	V		
Resistance	Q	Q		
Protector	Option 1	Option 2	Option 3	
Reference	BT18-105 (112)	BT18-105A61D3 (112)	DRB10K61A1 (112)	
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	28	29	0,15	1,12	0,96
40	-30	39	32	0,16	1,42	1,23
40	-25	52	34	0,17	1,75	1,50
40	-23,3	57	36	0,18	1,86	1,60
40	-20	68	38	0,18	2,07	1,78
40	-15	87	42	0,20	2,37	2,04
40	-10	108	48	0,21	2,64	2,27

45	-35	26	29	0,15	1,04	0,90
45	-30	36	32	0,16	1,32	1,14
45	-25	49	36	0,18	1,61	1,39
45	-23,3	55	37	0,18	1,71	1,47
45	-20	65	40	0,19	1,90	1,63
45	-15	84	45	0,20	2,17	1,86
45	-10	105	51	0,22	2,41	2,07

50	-35	24	29	0,15	0,96	0,83
50	-30	34	33	0,16	1,22	1,05
50	-25	47	37	0,18	1,49	1,28
50	-23,3	52	38	0,19	1,58	1,36
50	-20	63	42	0,20	1,75	1,50
50	-15	81	48	0,21	1,99	1,71
50	-10	103	54	0,22	2,21	1,90

55	-35	22	29	0,15	0,89	0,76
55	-30	32	33	0,17	1,12	0,97
55	-25	45	38	0,18	1,37	1,18
55	-23,3	50	40	0,19	1,45	1,25
55	-20	60	44	0,20	1,61	1,38
55	-15	79	50	0,22	1,83	1,57
55	-10	100	57	0,23	2,03	1,74

60	-35	20	29	0,15	0,81	0,69
60	-30	30	34	0,17	1,03	0,89
60	-25	43	39	0,19	1,26	1,08
60	-23,3	47	41	0,19	1,33	1,15
60	-20	58	46	0,21	1,48	1,27
60	-15	76	53	0,22	1,68	1,45
60	-10	97	61	0,23	1,87	1,61

CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-35	31	29	0,15	1,05	0,91
40	-30	43	32	0,16	1,36	1,18
40	-25	58	34	0,17	1,68	1,45
40	-23,3	63	36	0,18	1,78	1,54
40	-20	75	38	0,18	1,98	1,71
40	-15	95	42	0,20	2,24	1,94
40	-10	118	48	0,21	2,48	2,14

45	-35	28	29	0,15	0,95	0,82
45	-30	39	32	0,16	1,21	1,05
45	-25	53	36	0,18	1,48	1,28
45	-23,3	58	37	0,18	1,57	1,36
45	-20	69	40	0,19	1,74	1,50
45	-15	89	45	0,20	1,97	1,70
45	-10	111	51	0,22	2,18	1,88

50	-35	24	29	0,15	0,84	0,72
50	-30	35	33	0,16	1,07	0,92
50	-25	48	37	0,18	1,30	1,12
50	-23,3	53	38	0,19	1,38	1,19
50	-20	64	42	0,20	1,52	1,31
50	-15	82	48	0,21	1,72	1,49
50	-10	103	54	0,22	1,91	1,65

55	-35	21	29	0,15	0,73	0,63
55	-30	31	33	0,17	0,93	0,80
55	-25	43	38	0,18	1,13	0,97
55	-23,3	48	40	0,19	1,20	1,03
55	-20	58	44	0,20	1,32	1,14
55	-15	76	50	0,22	1,50	1,30
55	-10	96	57	0,23	1,67	1,44

60	-35	18	29	0,15	0,62	0,54
60	-30	27	34	0,17	0,79	0,68
60	-25	38	39	0,19	0,97	0,84
60	-23,3	43	41	0,19	1,03	0,89
60	-20	52	46	0,21	1,14	0,99
60	-15	69	53	0,22	1,31	1,13
60	-10	88	61	0,23	1,46	1,26

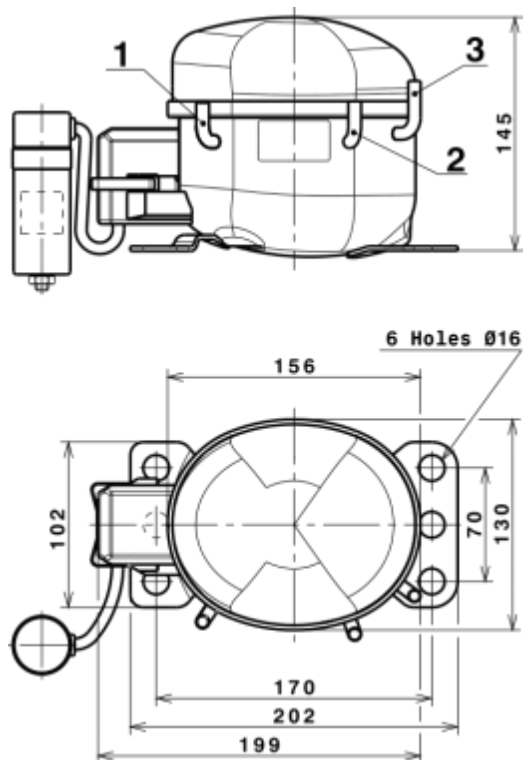
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	242,4918733140	24,2108944158	0,1624749973	2,4103238197723
2	7,1545471275	0,3533099966	-0,0005574421	0,078786653112516
3	-1,8652239972	0,9374003314	0,0017123711	-0,0076469876360731
4	0,0522660713	0,0156123759	-0,0000195039	0,00075862780907352
5	-0,0347759018	0,0274830549	0,0000518054	-6,5117868883263E-5

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

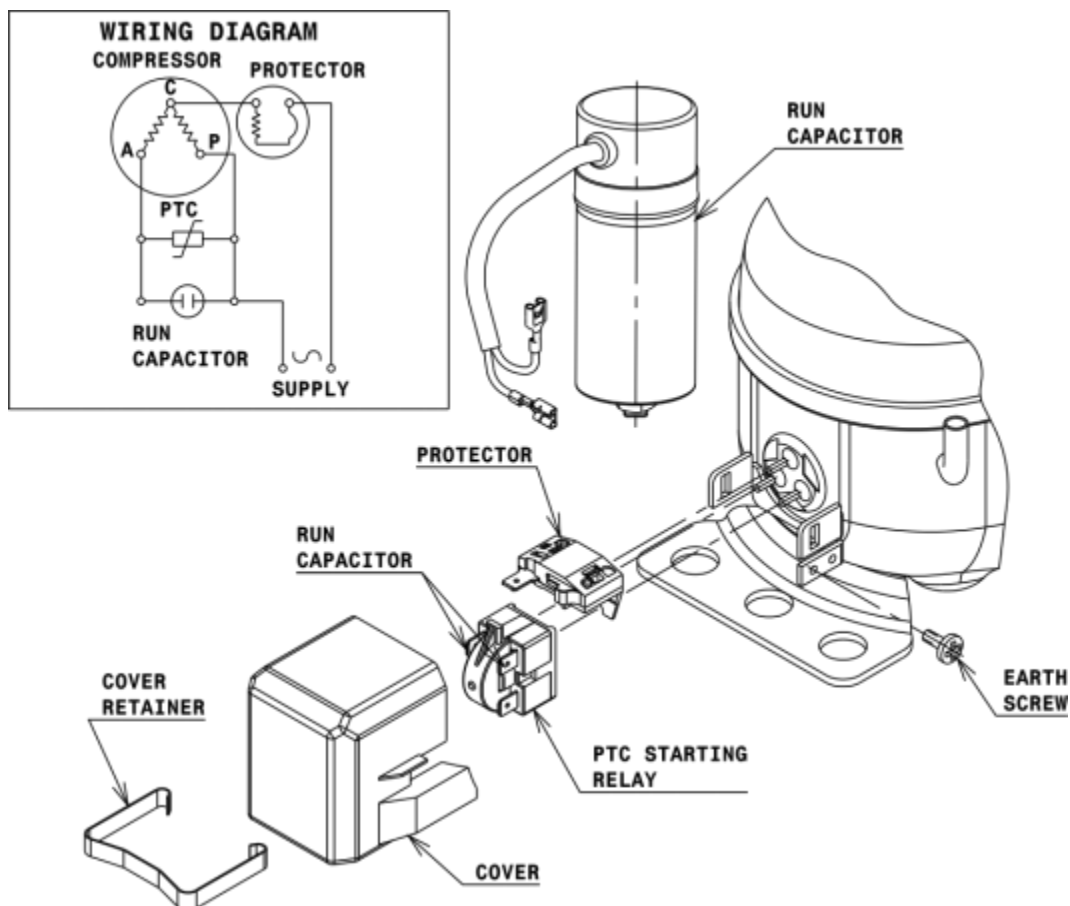


DESIGNATION INTERNAL DIAM.

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

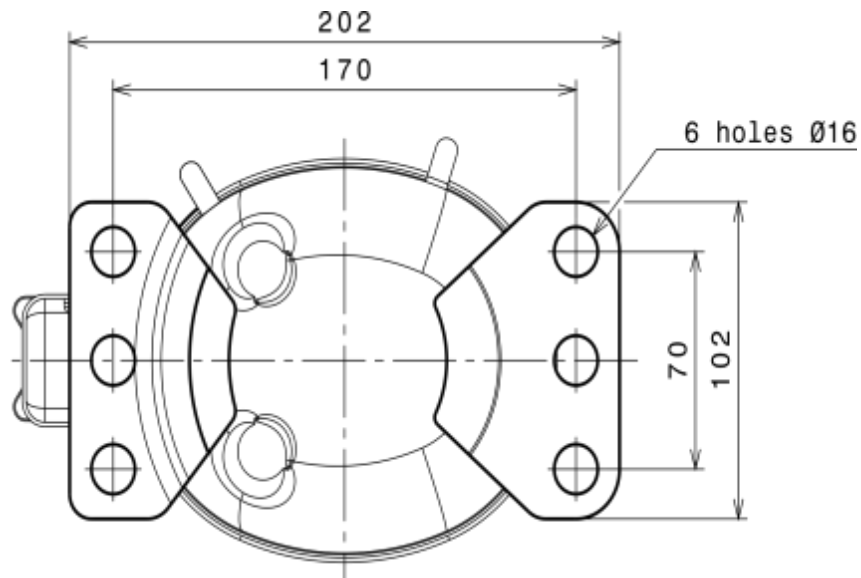
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSCR CONNECTION (B, Small L ranges)



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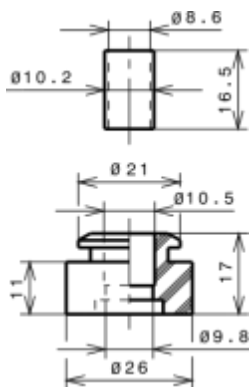
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

