

B35C5B Technical Data Sheet

Compressor model **B35C5B**
 Voltage **110-115V 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 3,50 cm³
 Diameter 17,20 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 110-115V 60Hz
 Voltage range 94-127 V
 Type RSIR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 3,90 A
 Max. Cont. Current (MCC) 1,04 A
 Main W. resist. at 25°C 16,10 Q
 Start W. resist. at 25°C 13,50 Q

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	56 kCal/h	49 W
COP	1,21 W/W	0,95 W/W
EER	1,04 kCal/Wh	0,82 kCal/Wh
Input Power	54 W	51 W
Current	0,65 A	0,63 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	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

	Option 1	Option 2		
Relay	Option 1	Option 2		
Reference	QP2-4R7 (010)	JPQII-4.7 (010)		
Voltage	110-120 V	110-115 V		
Resistance	Q	Q		
Protector	Option 1	Option 2		
Reference	DRB174N61A1	BT42-120		
Current				
Time check				
Disc temp. (Open/Close)	120,00 / 61,00 °C	120,00 / 61,00 °C		

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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	35	39	0,56	1,04	0,90
40	-30	46	44	0,59	1,20	1,03
40	-25	59	50	0,62	1,38	1,19
40	-23,3	65	52	0,64	1,44	1,24
40	-20	76	57	0,67	1,57	1,35
40	-15	96	64	0,72	1,75	1,50
40	-10	119	72	0,77	1,92	1,65

45	-35	33	39	0,55	0,99	0,85
45	-30	43	44	0,59	1,14	0,98
45	-25	57	50	0,63	1,30	1,12
45	-23,3	62	53	0,64	1,36	1,17
45	-20	73	57	0,67	1,48	1,27
45	-15	92	65	0,73	1,65	1,42
45	-10	115	74	0,79	1,82	1,56

50	-35	31	38	0,55	0,94	0,81
50	-30	41	44	0,59	1,07	0,92
50	-25	54	51	0,63	1,23	1,06
50	-23,3	59	53	0,65	1,28	1,10
50	-20	70	58	0,68	1,39	1,20
50	-15	89	66	0,73	1,56	1,34
50	-10	111	75	0,80	1,71	1,47

55	-35	29	38	0,55	0,89	0,76
55	-30	38	44	0,59	1,01	0,87
55	-25	51	51	0,63	1,15	0,99
55	-23,3	56	54	0,65	1,21	1,04
55	-20	67	59	0,68	1,31	1,13
55	-15	85	68	0,74	1,46	1,26
55	-10	107	77	0,81	1,62	1,39

60	-35	27	38	0,55	0,83	0,72
60	-30	36	44	0,59	0,95	0,81
60	-25	48	52	0,64	1,08	0,93
60	-23,3	53	55	0,65	1,13	0,97
60	-20	63	60	0,69	1,23	1,06
60	-15	82	69	0,75	1,38	1,18
60	-10	103	79	0,82	1,52	1,31

CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-35	38	39	0,56	0,98	0,85
40	-30	51	44	0,59	1,15	0,99
40	-25	66	50	0,62	1,32	1,14
40	-23,3	72	52	0,64	1,38	1,19
40	-20	85	57	0,67	1,49	1,29
40	-15	106	64	0,72	1,66	1,43
40	-10	130	72	0,77	1,81	1,56

45	-35	35	39	0,55	0,90	0,78
45	-30	46	44	0,59	1,04	0,90
45	-25	60	50	0,63	1,20	1,03
45	-23,3	66	53	0,64	1,25	1,08
45	-20	78	57	0,67	1,35	1,17
45	-15	98	65	0,73	1,50	1,30
45	-10	121	74	0,79	1,64	1,42

50	-35	31	38	0,55	0,82	0,71
50	-30	42	44	0,59	0,94	0,81
50	-25	55	51	0,63	1,07	0,93
50	-23,3	60	53	0,65	1,12	0,97
50	-20	71	58	0,68	1,21	1,05
50	-15	90	66	0,73	1,35	1,17
50	-10	112	75	0,80	1,48	1,28

55	-35	28	38	0,55	0,73	0,63
55	-30	37	44	0,59	0,83	0,72
55	-25	49	51	0,63	0,95	0,82
55	-23,3	54	54	0,65	0,99	0,86
55	-20	64	59	0,68	1,08	0,93
55	-15	82	68	0,74	1,21	1,04
55	-10	102	77	0,81	1,33	1,15

60	-35	24	38	0,55	0,65	0,56
60	-30	32	44	0,59	0,73	0,63
60	-25	43	52	0,64	0,83	0,72
60	-23,3	47	55	0,65	0,87	0,75
60	-20	57	60	0,69	0,95	0,82
60	-15	74	69	0,75	1,07	0,92
60	-10	93	79	0,82	1,18	1,02

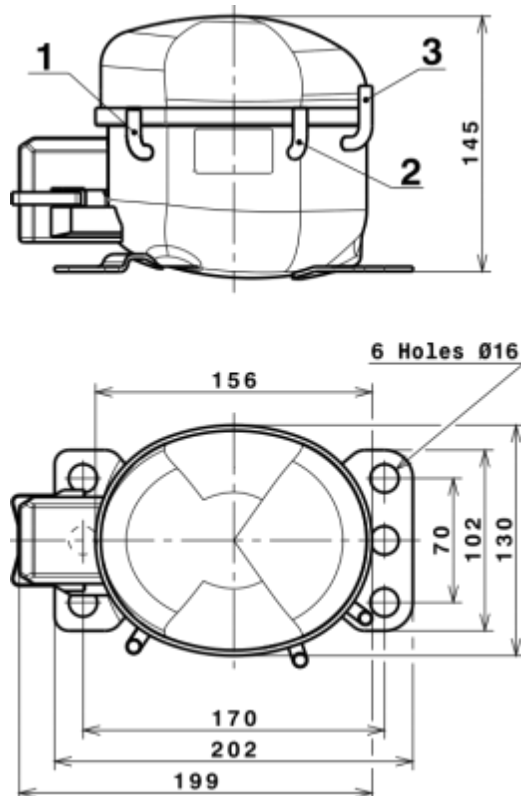
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	276,1085256984	72,1868143240	0,7791045408	2,7944902947744
2	7,9998215906	1,3693999142	0,0108449985	0,089564660020136
3	-2,3345786199	0,5043888541	0,0036675109	-0,012613316637531
4	0,0564693882	0,0149292640	0,0001451069	0,00081844713614414
5	-0,0467421677	0,0163560777	0,0001164708	-0,00021196032166699

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

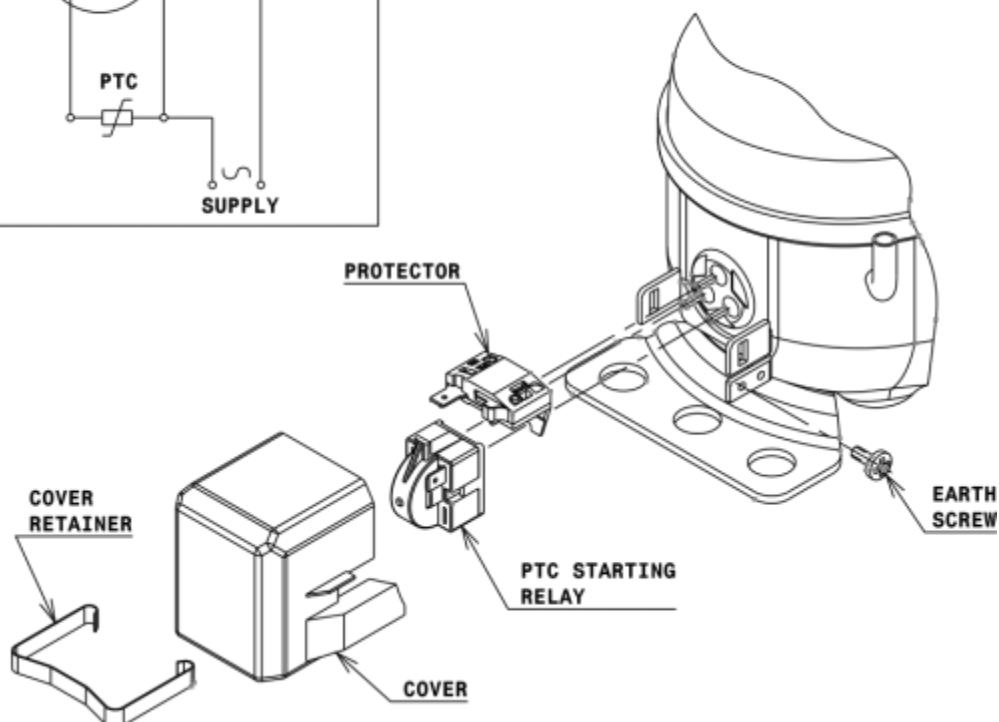
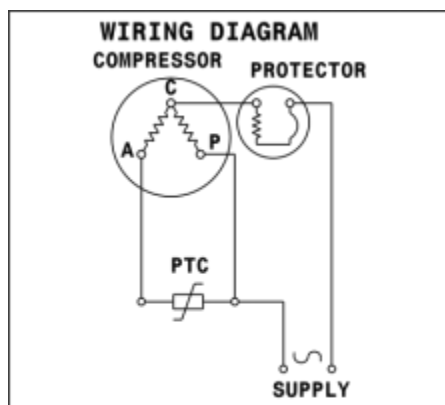


DESIGNATION INTERNAL DIAM.

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

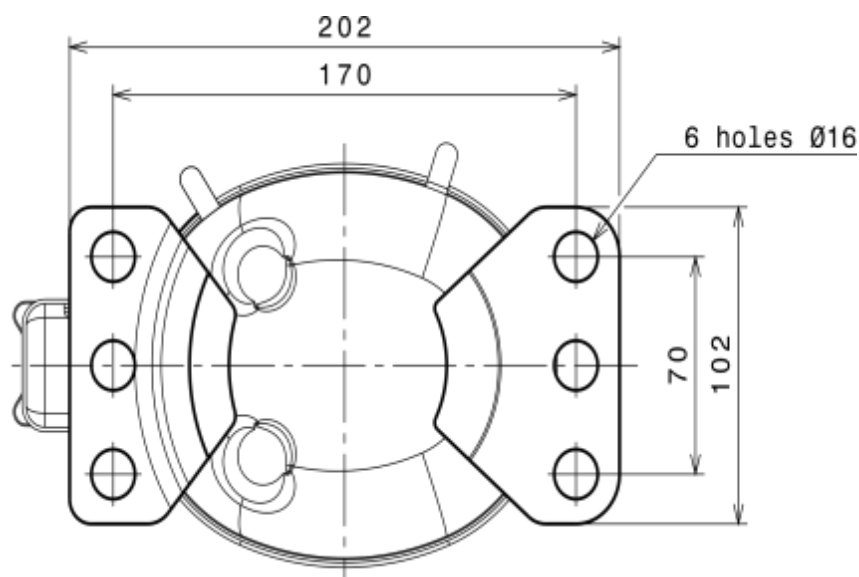
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



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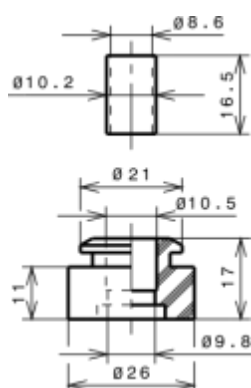
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

