Technical Data Sheet

ENGINEERING TOMORROW

Compressor model **B35C5B**

Voltage **110-115V 60Hz ~1**

Refrigerant **R600a**

APPLICATION

Application	Low Back Pressure
Refrigerant	R600a
Evaporating Temp.	-35,0 ºC to -15,0 ºC
Expansion	Capillar
Comp. Cooling	Static
Max. ambient temp.	43,0 ºC

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 25ºC	16,10 Ω
Start W. resist. at 25ºC	13,50 Ω

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

APPROVALS

c UL us

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	LBP (B)	**LBP (A)**
Evaporating temp. (T_e)	-23,3 ºC	-25,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	32,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	32,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	32,0 ºC	32,0 ºC
Voltage/Frequency	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

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

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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	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 °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER 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

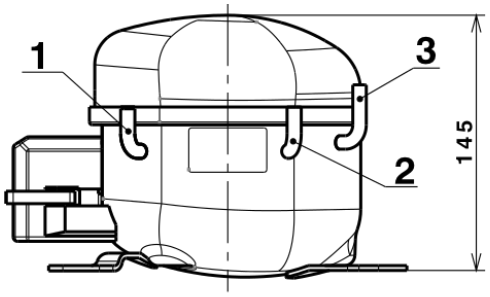
EN12900

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

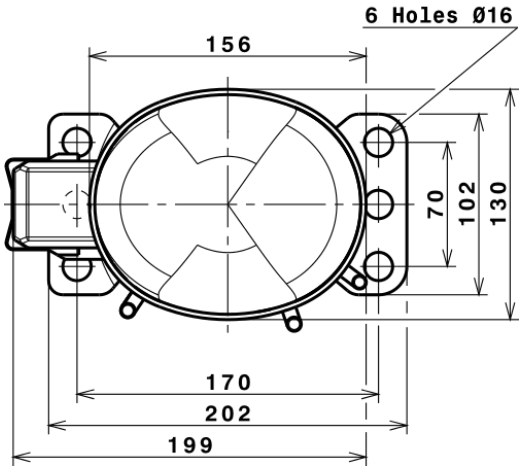
Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$

Technical Data Sheet

COMPRESSOR DIMENSIONS

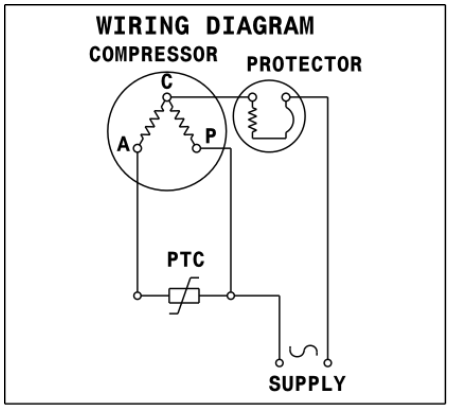


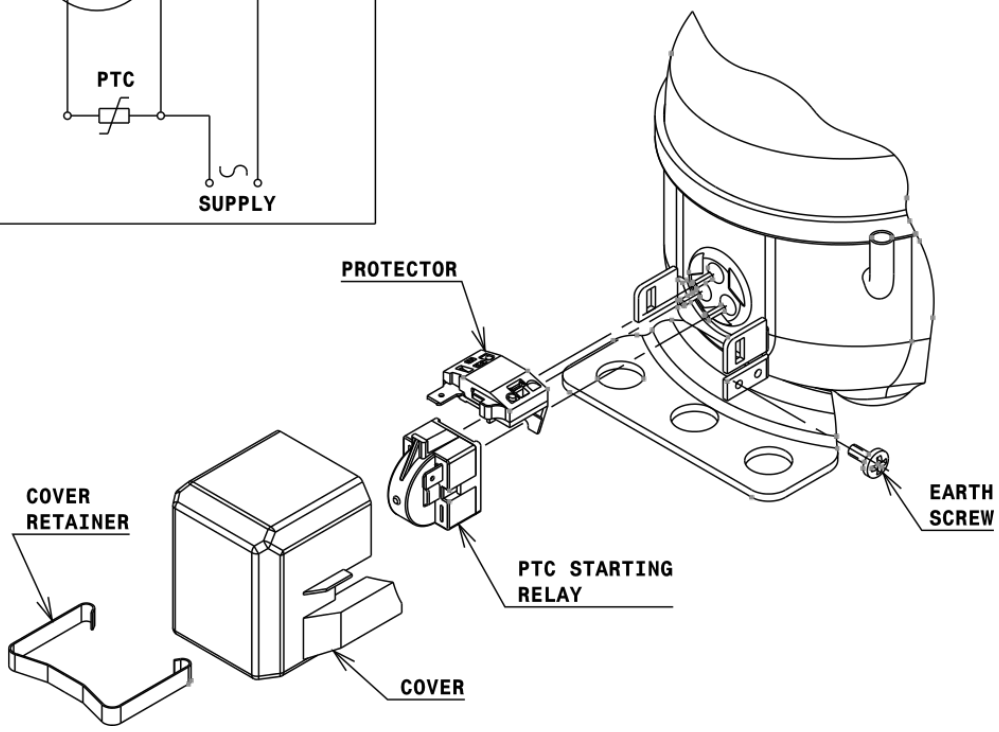
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,1 mm
2	Service	6,1 mm
3	Discharge	5,1 mm



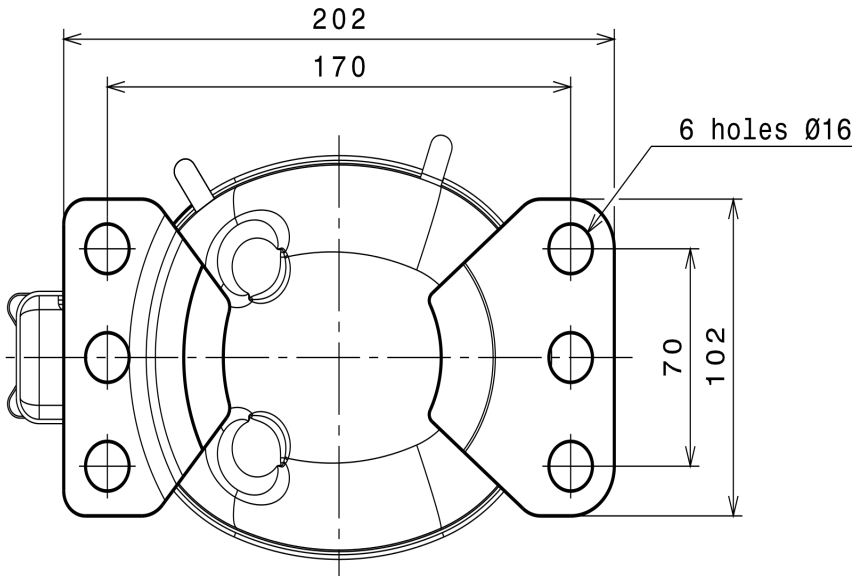
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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





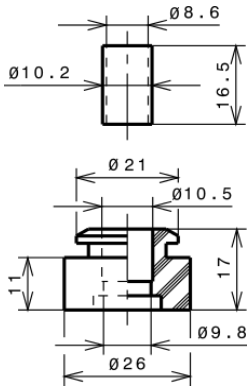
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

