Technical Data Sheet

ENGINEERING TOMORROW

Compressor model **B43C5B**

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	4,30 cm³
Diameter	19,00 mm
Stroke	15,20 mm
Net Weight	4,60 Kg
Oil type	ISO VG 10 MINER
Oil charge	130 cm³

MOTOR

Nominal Power	1/10 hp
Voltage/Frequency	110-115V 60Hz
Voltage range	94-127 V
Type	RSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	3,91 A
Max. Cont. Current (MCC)	1,14 A
Main W. resist. at 25ºC	14,60 Ω
Start W. resist. at 25ºC	7,52 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	67 kCal/h	58 W
COP	1,30 W/W	1,02 W/W
EER	1,12 kCal/Wh	0,88 kCal/Wh
Input Power	60 W	57 W
Current	0,80 A	0,78 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	Option 3	
Reference	JPQII-4.7 (010)	QP2-4.7 (010)	QP2-4R7 (010)	
Voltage	110-115 V	220-240 V	110-120 V	
Resistance	Ω	Ω	Ω	
Protector	Option 1	Option 2	Option 3	
Reference	BT44-120	BT44-120A61D2	DRB178N61A1	
Current				
Time check				
Disc temp. (Open/Close)	120,00 / 61,00 ºC	120,00 / 61,00 ºC	120,00 / 61,00 ºC	

This product is approved for R290 and R600a regarding explosion safety according to standard EN 60335-1 and EN 60335-2-34

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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	41	44	0,68	1,08	0,93
40	-30	54	50	0,73	1,26	1,08
40	-25	71	56	0,77	1,46	1,26
40	-23,3	77	59	0,79	1,53	1,32
40	-20	91	64	0,83	1,67	1,43
40	-15	115	71	0,89	1,88	1,61
40	-10	143	80	0,95	2,08	1,79
45	-35	39	43	0,68	1,04	0,89
45	-30	51	50	0,72	1,20	1,03
45	-25	67	57	0,78	1,39	1,19
45	-23,3	74	59	0,79	1,45	1,25
45	-20	87	64	0,83	1,58	1,36
45	-15	111	73	0,89	1,78	1,53
45	-10	138	82	0,96	1,97	1,69
50	-35	36	43	0,67	0,99	0,85
50	-30	48	49	0,72	1,14	0,98
50	-25	64	57	0,78	1,31	1,13
50	-23,3	70	60	0,80	1,37	1,18
50	-20	84	65	0,84	1,50	1,29
50	-15	107	74	0,90	1,68	1,45
50	-10	134	83	0,98	1,87	1,60
55	-35	34	42	0,67	0,94	0,81
55	-30	46	49	0,72	1,08	0,93
55	-25	61	57	0,78	1,24	1,07
55	-23,3	67	60	0,80	1,30	1,12
55	-20	80	66	0,84	1,41	1,22
55	-15	103	75	0,91	1,59	1,37
55	-10	129	85	0,99	1,77	1,52
60	-35	32	41	0,67	0,89	0,77
60	-30	43	49	0,72	1,02	0,87
60	-25	58	57	0,78	1,17	1,00
60	-23,3	64	60	0,80	1,22	1,05
60	-20	76	66	0,85	1,33	1,15
60	-15	98	76	0,92	1,50	1,29
60	-10	124	87	1,00	1,67	1,43

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	45	44	0,68	1,02	0,88
40	-30	60	50	0,73	1,21	1,04
40	-25	79	56	0,77	1,40	1,21
40	-23,3	86	59	0,79	1,47	1,27
40	-20	101	64	0,83	1,59	1,38
40	-15	127	71	0,89	1,78	1,54
40	-10	156	80	0,95	1,95	1,69
45	-35	41	43	0,68	0,94	0,81
45	-30	55	50	0,72	1,10	0,95
45	-25	72	57	0,78	1,27	1,10
45	-23,3	79	59	0,79	1,33	1,15
45	-20	93	64	0,83	1,45	1,25
45	-15	117	73	0,89	1,62	1,40
45	-10	145	82	0,96	1,78	1,54
50	-35	37	43	0,67	0,86	0,74
50	-30	49	49	0,72	1,00	0,86
50	-25	65	57	0,78	1,15	0,99
50	-23,3	71	60	0,80	1,20	1,04
50	-20	85	65	0,84	1,30	1,13
50	-15	108	74	0,90	1,46	1,26
50	-10	134	83	0,98	1,61	1,39
55	-35	33	42	0,67	0,78	0,67
55	-30	44	49	0,72	0,89	0,77
55	-25	58	57	0,78	1,02	0,88
55	-23,3	64	60	0,80	1,07	0,92
55	-20	77	66	0,84	1,16	1,01
55	-15	98	75	0,91	1,31	1,13
55	-10	123	85	0,99	1,45	1,25
60	-35	29	41	0,67	0,69	0,60
60	-30	38	49	0,72	0,78	0,67
60	-25	52	57	0,78	0,90	0,78
60	-23,3	57	60	0,80	0,94	0,81
60	-20	68	66	0,85	1,03	0,89
60	-15	89	76	0,92	1,16	1,01
60	-10	113	87	1,00	1,30	1,12

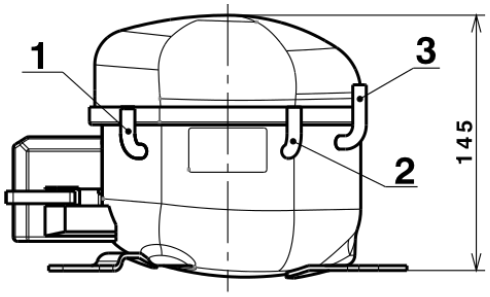
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	331,2416144606	80,2183587225	0,9564564360	3,3471536963393
2	9,6640222321	1,3463132203	0,0111043607	0,10803996218338
3	-2,7782705531	0,5316184002	0,0041123339	-0,014715536077119
4	0,0680905149	0,0141038892	0,0001319293	0,00098703825780212
5	-0,0560477705	0,0190790323	0,0001451045	-0,00024728704194482

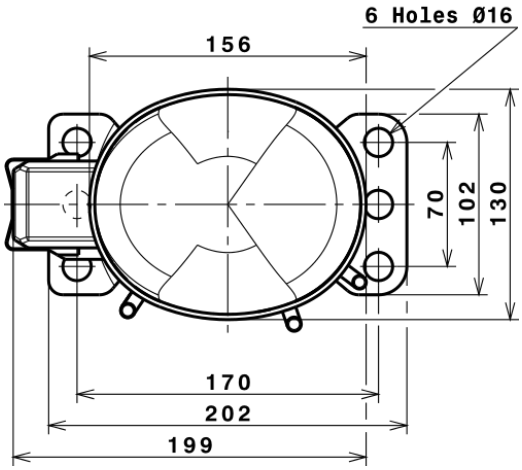
Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$

Technical Data Sheet

COMPRESSOR DIMENSIONS

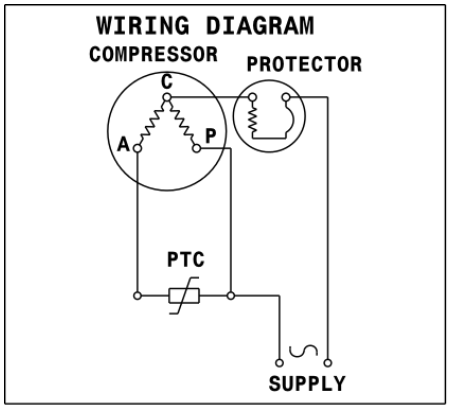


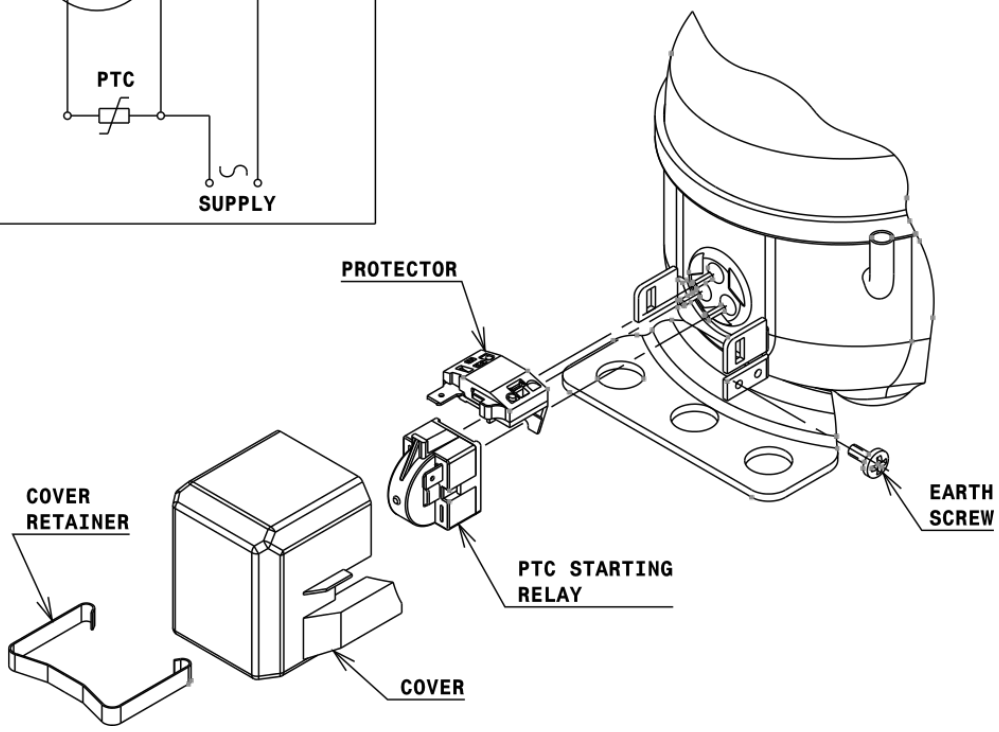
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,1 mm
2	Service	6,1 mm
3	Discharge	5,1 mm



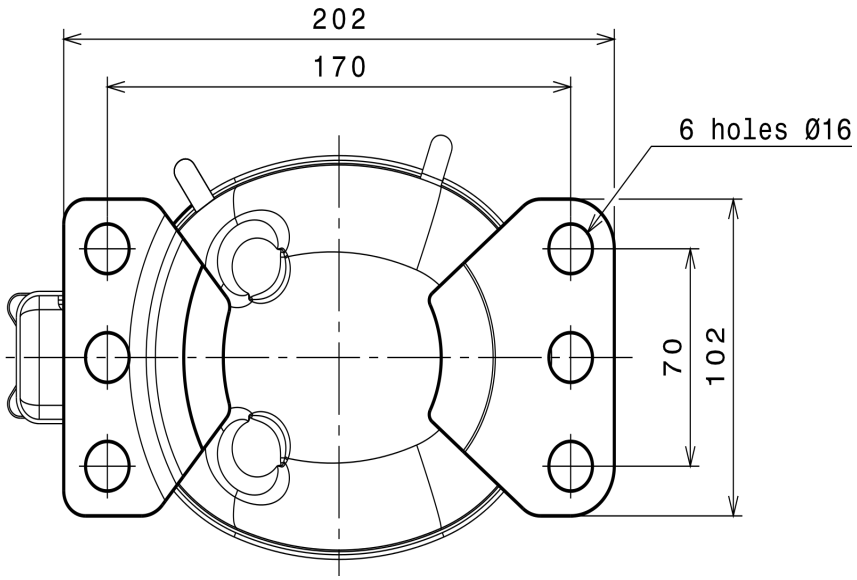
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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





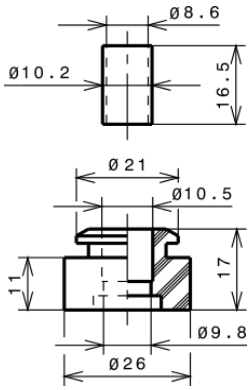
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

