

# Technical Data Sheet

Compressor model **B35C**  
 Voltage **220-240V 50/60Hz ~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 cm<sup>3</sup>  
 Diameter 17,20 mm  
 Stroke 15,20 mm  
 Net Weight 4,60 Kg  
 Oil type ISO VG 10 MINER  
 Oil charge 120 cm<sup>3</sup>

## MOTOR

Nominal Power 1/15 hp  
 Voltage/Frequency 220-240V 50Hz  
 Voltage range 187-255 V  
 Type RSIR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 1,80 A  
 Main W. resist. at 25°C 66,30 Ω  
 Start W. resist. at 25°C 29,80 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	43 kCal/h	37 W
COP	1,00 W/W	0,77 W/W
EER	0,86 kCal/Wh	0,67 kCal/Wh
Input Power	50 W	48 W
Current	0,38 A	0,38 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T <sub>e</sub> )	-23,3 °C	-25,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	32,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	32,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	32,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

## ELECTRICAL COMPONENTS

Relay	Option 1	Option 2		
Reference	JPQII-15 (019)	QP2-15 (019)		
Voltage	V	V		
Resistance	Ω	Ω		
Protector	Option 1	Option 2	Option 3	
Reference	BT18-105 (094)	BT18-105A61D3 (094)	DRB10K61A1 (094)	
Current				
Time check				
Disc temp. (Open/Close)				

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

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	27	32	0,36	0,98	0,84
40	-30	37	38	0,36	1,13	0,97
40	-25	48	44	0,37	1,29	1,11
40	-23,3	53	45	0,37	1,35	1,16
40	-20	61	49	0,38	1,47	1,26
40	-15	76	53	0,39	1,66	1,43
40	-10	93	58	0,40	1,87	1,61

45	-35	24	33	0,36	0,83	0,72
45	-30	34	39	0,36	0,99	0,85
45	-25	45	45	0,37	1,17	1,00
45	-23,3	49	47	0,37	1,23	1,05
45	-20	58	50	0,38	1,35	1,16
45	-15	73	55	0,39	1,54	1,33
45	-10	89	59	0,41	1,75	1,50

50	-35	21	35	0,36	0,70	0,60
50	-30	31	41	0,36	0,87	0,75
50	-25	42	47	0,37	1,05	0,90
50	-23,3	46	48	0,38	1,11	0,95
50	-20	55	52	0,38	1,23	1,06
50	-15	70	57	0,40	1,43	1,23
50	-10	86	61	0,41	1,63	1,41

55	-35	18	36	0,36	0,57	0,49
55	-30	27	42	0,37	0,75	0,65
55	-25	39	48	0,38	0,94	0,81
55	-23,3	43	50	0,38	1,00	0,86
55	-20	52	54	0,39	1,13	0,97
55	-15	66	58	0,40	1,32	1,14
55	-10	83	63	0,42	1,53	1,31

60	-35	15	37	0,36	0,45	0,39
60	-30	24	44	0,37	0,65	0,56
60	-25	36	50	0,38	0,83	0,72
60	-23,3	40	52	0,38	0,90	0,77
60	-20	49	55	0,39	1,02	0,88
60	-15	63	60	0,41	1,22	1,05
60	-10	79	65	0,43	1,42	1,22

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	30	32	0,36	0,92	0,80
40	-30	41	38	0,36	1,07	0,93
40	-25	54	44	0,37	1,23	1,06
40	-23,3	58	45	0,37	1,28	1,11
40	-20	68	49	0,38	1,40	1,21
40	-15	84	53	0,39	1,57	1,36
40	-10	101	58	0,40	1,76	1,52

45	-35	25	33	0,36	0,76	0,66
45	-30	36	39	0,36	0,91	0,79
45	-25	48	45	0,37	1,07	0,92
45	-23,3	53	47	0,37	1,12	0,97
45	-20	62	50	0,38	1,23	1,06
45	-15	77	55	0,39	1,40	1,21
45	-10	94	59	0,41	1,58	1,37

50	-35	21	35	0,36	0,61	0,53
50	-30	31	41	0,36	0,76	0,66
50	-25	43	47	0,37	0,91	0,79
50	-23,3	47	48	0,38	0,97	0,84
50	-20	56	52	0,38	1,07	0,93
50	-15	70	57	0,40	1,24	1,07
50	-10	87	61	0,41	1,41	1,22

55	-35	17	36	0,36	0,47	0,41
55	-30	26	42	0,37	0,62	0,54
55	-25	37	48	0,38	0,77	0,67
55	-23,3	41	50	0,38	0,82	0,71
55	-20	50	54	0,39	0,93	0,80
55	-15	64	58	0,40	1,09	0,94
55	-10	79	63	0,42	1,26	1,09

60	-35	13	37	0,36	0,34	0,30
60	-30	21	44	0,37	0,49	0,42
60	-25	32	50	0,38	0,64	0,55
60	-23,3	36	52	0,38	0,69	0,60
60	-20	43	55	0,39	0,79	0,68
60	-15	57	60	0,41	0,94	0,82
60	-10	72	65	0,43	1,11	0,96

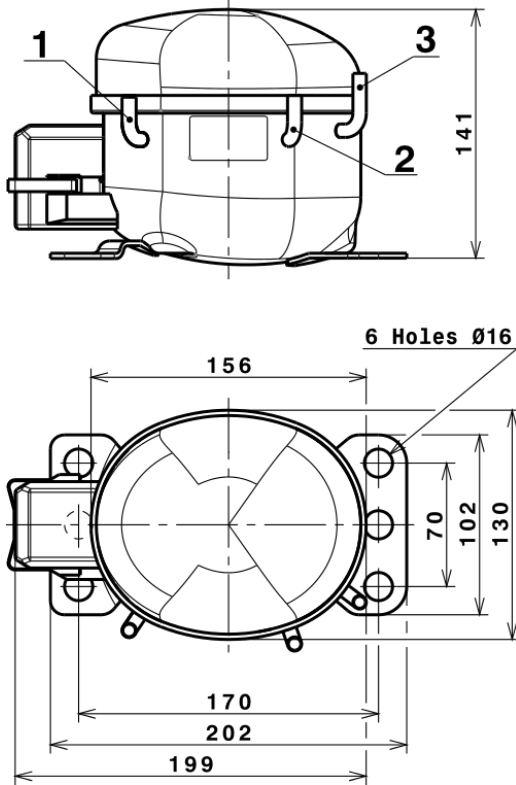
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	208,1631596721	50,0308541960	0,3680399388	2,0793842051751
2	5,2425429116	0,4975096141	0,0022882225	0,055832633168822
3	-1,7616716424	0,4064138684	0,0018645995	-0,0090219483225755
4	0,0303942625	-0,0088443925	0,0000540976	0,00044691616517412
5	-0,0266923185	0,0038319545	0,0000500277	-2,771871385249E-5

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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# Technical Data Sheet

## COMPRESSOR DIMENSIONS

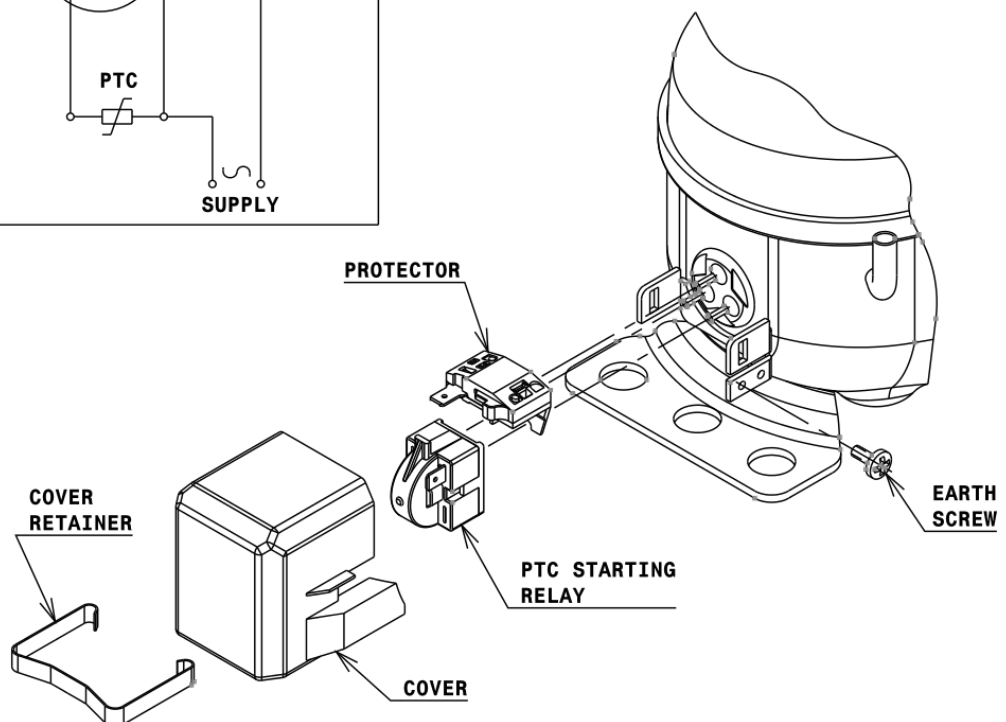
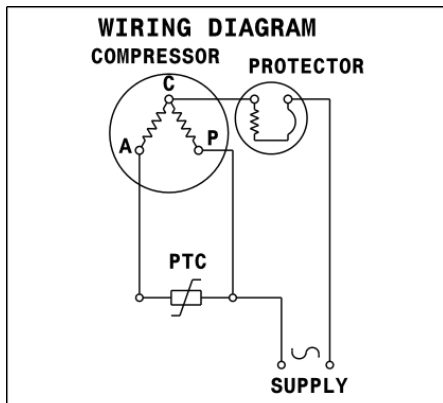


## DESIGNATION INTERNAL DIAM.

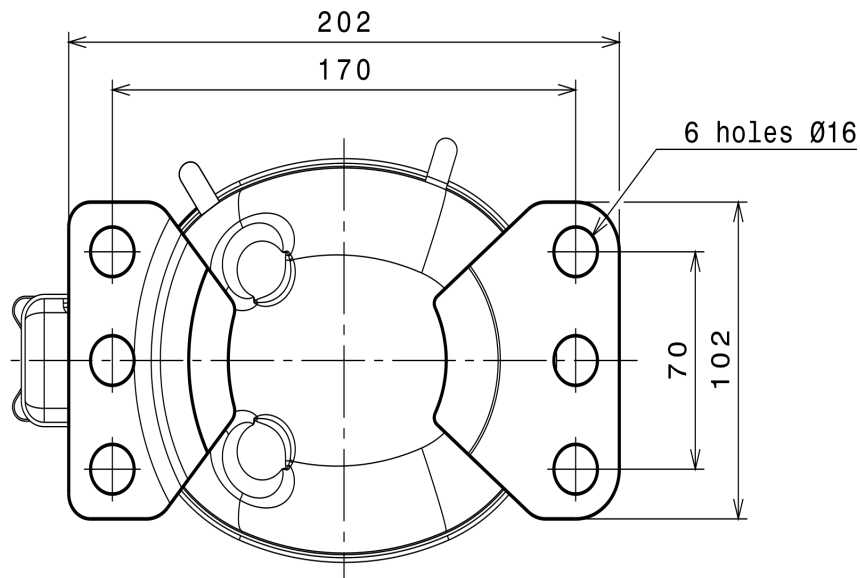
DESIGNATION	INTERNAL DIAM.
1 Suction	6,1 mm
2 Service	6,1 mm
3 Discharge	5,1 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



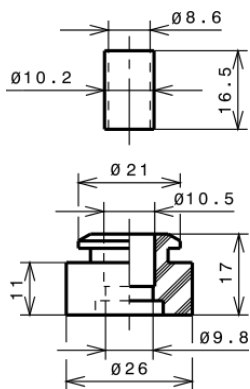
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

Ø16 holes (170x70 net)



### SOA

SOA R600a LBP

