

# Technical Data Sheet

Compressor model **B48H**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R134a**  
 Compressor status

## APPLICATION

Application	Low Back Pressure
Refrigerant	R134a
Evaporating Temp.	-35,0 °C to -15,0 °C
Expansion	Capillar
Comp. Cooling	Static
Max. ambient temp.	43,0 °C
Compatible refriger.	R1234yf

## COMPRESSOR

Displacement	4,80 cm <sup>3</sup>
Diameter	19,00 mm
Stroke	8,60 mm
Net Weight	5,00 Kg
Oil type	ISO VG 15 ESTER
Oil charge	130 cm <sup>3</sup>
HP	1/8 hp

## MOTOR

Voltage/Frequency	220-240V 50Hz
Voltage range	187-255 V
Type	RSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	3,60 A
Max. Cont. Current (MCC)	0,89 A
Main W. resist. at 25°C	24,40 Ω
Start W. resist. at 25°C	25,20 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	93 kCal/h	79 W
COP	1,05 W/W	0,80 W/W
EER	0,90 kCal/Wh	0,69 kCal/Wh
Input Power	103 W	99 W
Current	0,70 A	0,69 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			
Reference	QL2-2.40 (001)			
Pick-Up	A			
Drop-Out	A			
Protector	Option 1			
Reference	DRB15N61A1			
Current	4,80 A			
Time check	7-16 seg			
Disc temp. (Open/Close)	135,00 / 61,00 °C			

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	53	93	0,69	0,66	0,57
40	-30	76	94	0,69	0,94	0,81
40	-25	104	99	0,69	1,21	1,04
40	-23,3	114	102	0,70	1,30	1,12
40	-20	136	108	0,71	1,46	1,26
40	-15	173	121	0,72	1,66	1,43
40	-10	214	137	0,74	1,82	1,56

45	-35	48	90	0,68	0,63	0,54
45	-30	70	92	0,68	0,88	0,76
45	-25	97	99	0,69	1,14	0,98
45	-23,3	107	102	0,70	1,22	1,05
45	-20	128	109	0,71	1,36	1,17
45	-15	164	124	0,73	1,54	1,33
45	-10	204	142	0,75	1,68	1,44

50	-35	44	86	0,68	0,59	0,51
50	-30	65	91	0,68	0,83	0,71
50	-25	90	99	0,69	1,06	0,91
50	-23,3	100	103	0,70	1,13	0,97
50	-20	120	111	0,71	1,26	1,09
50	-15	155	127	0,73	1,42	1,23
50	-10	195	146	0,75	1,55	1,33

55	-35	39	83	0,67	0,55	0,47
55	-30	59	89	0,68	0,77	0,66
55	-25	84	99	0,69	0,98	0,85
55	-23,3	93	103	0,70	1,05	0,90
55	-20	113	112	0,71	1,17	1,00
55	-15	147	130	0,74	1,31	1,13
55	-10	185	151	0,76	1,42	1,23

60	-35	34	80	0,66	0,50	0,43
60	-30	53	87	0,68	0,71	0,61
60	-25	77	99	0,69	0,91	0,78
60	-23,3	86	103	0,70	0,97	0,83
60	-20	105	114	0,72	1,07	0,92
60	-15	138	133	0,74	1,21	1,04
60	-10	175	156	0,76	1,31	1,13

65	-35	30	76	0,66	0,45	0,39
65	-30	48	86	0,67	0,65	0,56
65	-25	70	99	0,69	0,83	0,71
65	-23,3	79	104	0,70	0,88	0,76
65	-20	97	115	0,72	0,98	0,84
65	-15	129	136	0,74	1,11	0,95
65	-10	166	160	0,77	1,20	1,03

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	58	93	0,69	0,62	0,54
40	-30	84	94	0,69	0,89	0,77
40	-25	115	99	0,69	1,16	1,00
40	-23,3	126	102	0,70	1,24	1,07
40	-20	150	108	0,71	1,39	1,20
40	-15	189	121	0,72	1,57	1,36
40	-10	233	137	0,74	1,70	1,47

45	-35	51	90	0,68	0,57	0,49
45	-30	75	92	0,68	0,81	0,70
45	-25	103	99	0,69	1,04	0,90
45	-23,3	114	102	0,70	1,11	0,96
45	-20	135	109	0,71	1,24	1,07
45	-15	172	124	0,73	1,39	1,20
45	-10	213	142	0,75	1,51	1,30

50	-35	44	86	0,68	0,51	0,44
50	-30	65	91	0,68	0,72	0,62
50	-25	91	99	0,69	0,92	0,79
50	-23,3	101	103	0,70	0,98	0,85
50	-20	121	111	0,71	1,09	0,94
50	-15	155	127	0,73	1,23	1,06
50	-10	194	146	0,75	1,33	1,14

55	-35	37	83	0,67	0,44	0,38
55	-30	56	89	0,68	0,63	0,54
55	-25	79	99	0,69	0,80	0,69
55	-23,3	88	103	0,70	0,85	0,74
55	-20	106	112	0,71	0,95	0,82
55	-15	138	130	0,74	1,07	0,92
55	-10	174	151	0,76	1,16	1,00

60	-35	30	80	0,66	0,38	0,32
60	-30	46	87	0,68	0,53	0,46
60	-25	67	99	0,69	0,68	0,59
60	-23,3	75	103	0,70	0,73	0,63
60	-20	92	114	0,72	0,81	0,70
60	-15	121	133	0,74	0,91	0,79
60	-10	155	156	0,76	1,00	0,86

65	-35	23	76	0,66	0,30	0,26
65	-30	37	86	0,67	0,43	0,37
65	-25	55	99	0,69	0,56	0,48
65	-23,3	62	104	0,70	0,60	0,52
65	-20	78	115	0,72	0,67	0,58
65	-15	104	136	0,74	0,77	0,66
65	-10	135	160	0,77	0,84	0,73

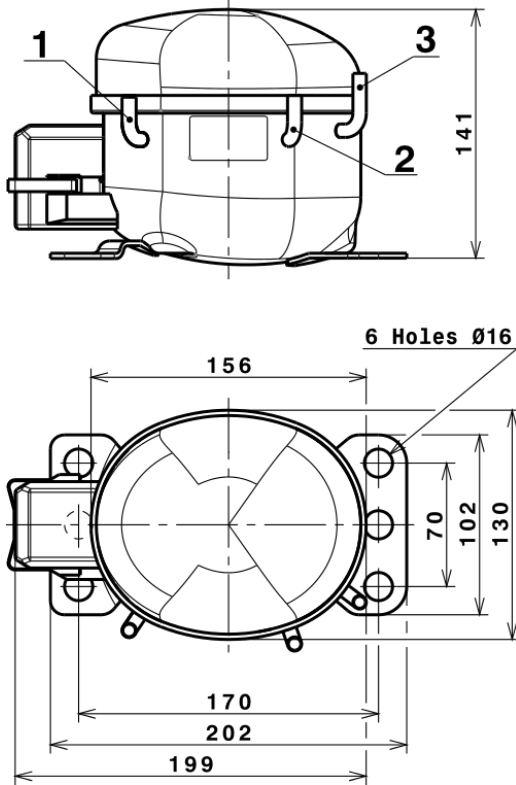
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	526,9421871089	121,3292425781	0,7238032556	9,674786666952
2	14,7943117863	2,7097359829	0,0025578031	0,2963707898043
3	-4,9801860910	1,6102917802	0,0018861021	-0,055773285255785
4	0,0841986766	0,0781643739	0,0000780041	0,0022967086693808
5	-0,1026033451	0,0654655337	0,0000835190	-0,00096897603527258

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

## COMPRESSOR DIMENSIONS

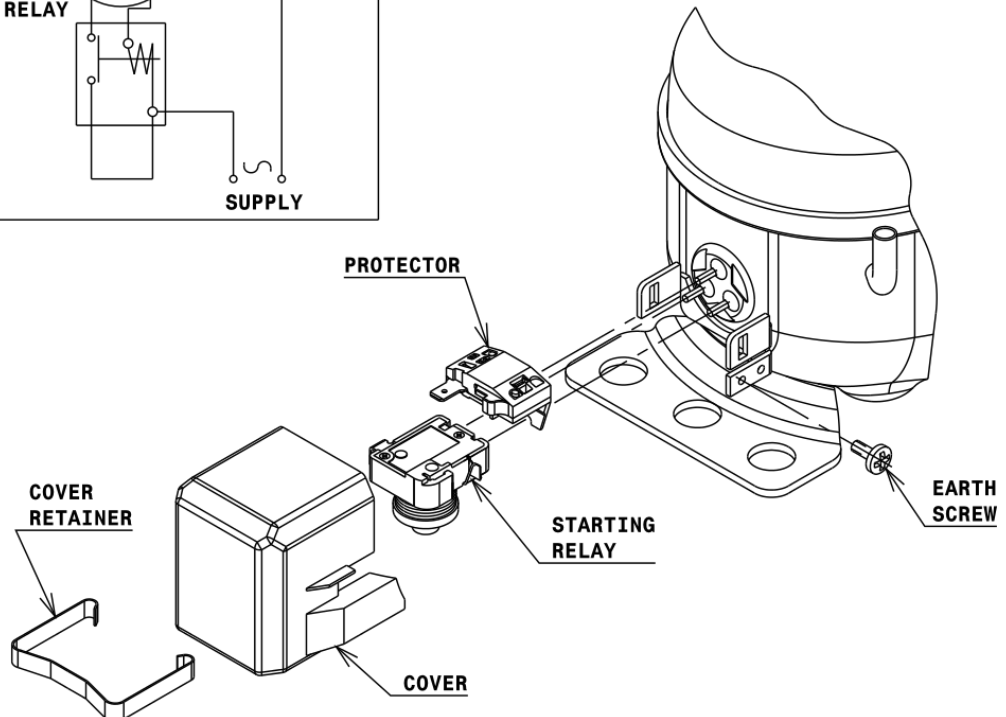
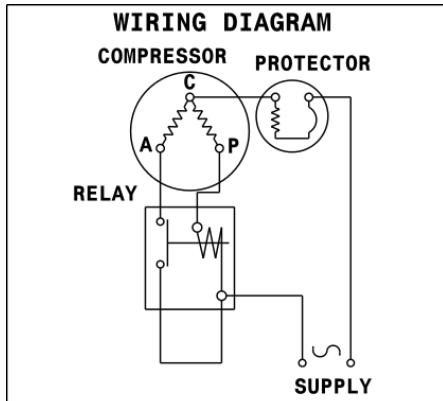


## DESIGNATION INTERNAL DIAM.

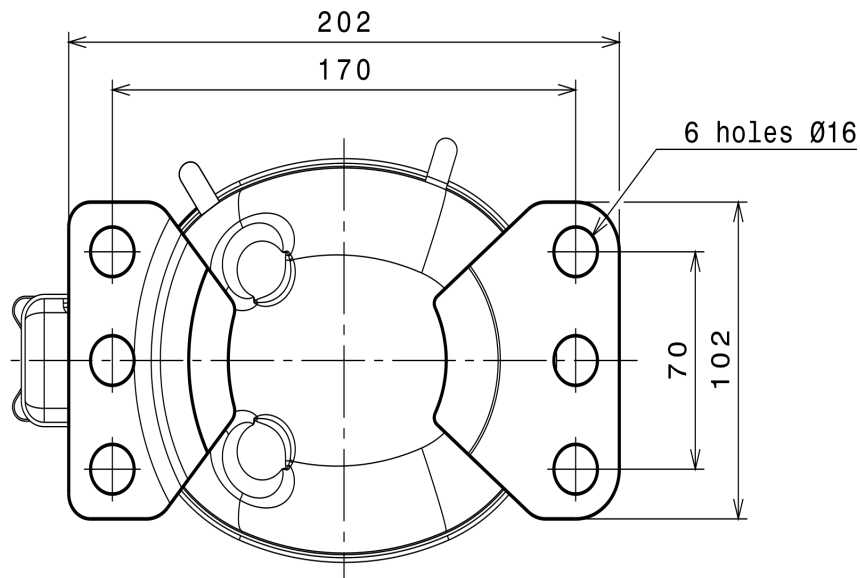
DESIGNATION	INTERNAL DIAM.
1 Suction	6,1 mm
2 Service	6,1 mm
3 Discharge	5,1 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



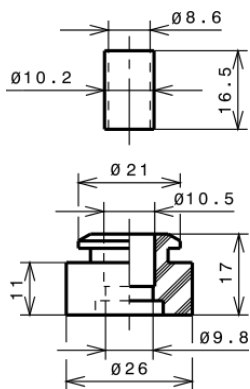
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

Ø16 holes (170x70 net)



### SOA

SOA R134a LBP

