

B30U Technical Data Sheet

Compressor model **B30U**
 Voltage **220-240V 50/60Hz ~1**
 Refrigerant **R290**

APPLICATION

COMPRESSOR

MOTOR

Application	Low-Medium Back Pressure	Displacement	3,10 cm ³	Nominal Power	1/7 hp
Refrigerant	R290	Diameter	17,20 mm	Voltage/Frequency	220-240V 60Hz
Evaporating Temp.	-40,0 °C to 0,0 °C	Stroke	13,40 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	6,42 Kg	Type	CSIR
Comp. Cooling	Static/Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	120 cm ³	Main W. resist. at 25°C	14,30 Q
				Start W. resist. at 25°C	23,00 Q

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	144 kCal/h	124 W
COP	1,42 W/W	1,09 W/W
EER	1,22 kCal/Wh	0,94 kCal/Wh
Input Power	118 W	114 W
Current	0,72 A	0,71 A

TEST CYCLE CONDITIONS

	ASHRAE LMBP (B)	CECOMAF LMBP (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	230 V 60 Hz	230 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	61 pF 330 V		
Relay	Option 1		
Reference	QL2-3.3 B3 (012)		
Pick-Up	3.3 A		
Drop-Out	2.6 A		
Protector	Option 1		
Reference	DRB18P61A1 (067)		
Current			
Time check			
Disc temp. (Open/Close)			

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ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	69	99	0,66	0,80	0,69
40	-35	90	107	0,69	0,98	0,84
40	-30	118	116	0,71	1,19	1,02
40	-25	153	124	0,74	1,43	1,23
40	-23,3	166	127	0,75	1,52	1,30
40	-20	193	133	0,77	1,69	1,46
40	-15	240	141	0,80	1,98	1,70
40	-10	293	149	0,83	2,29	1,97
40	-5	353	157	0,86	2,61	2,24
40	0	419	166	0,90	2,94	2,53

45	-40	64	92	0,64	0,81	0,70
45	-35	85	102	0,67	0,97	0,83
45	-30	112	111	0,70	1,17	1,01
45	-25	146	121	0,73	1,40	1,20
45	-23,3	158	124	0,74	1,49	1,28
45	-20	185	130	0,76	1,65	1,42
45	-15	232	140	0,80	1,93	1,66
45	-10	284	149	0,83	2,21	1,90
45	-5	343	159	0,87	2,51	2,16
45	0	408	168	0,91	2,82	2,43

50	-40	60	85	0,62	0,81	0,70
50	-35	80	96	0,65	0,97	0,83
50	-30	106	107	0,68	1,16	0,99
50	-25	139	117	0,72	1,37	1,18
50	-23,3	151	121	0,73	1,45	1,25
50	-20	178	128	0,75	1,61	1,39
50	-15	223	139	0,79	1,87	1,61
50	-10	275	149	0,83	2,14	1,84
50	-5	333	160	0,88	2,42	2,08
50	0	397	171	0,92	2,71	2,33

55	-40	55	78	0,60	0,82	0,71
55	-35	74	90	0,63	0,96	0,82
55	-30	100	102	0,67	1,14	0,98
55	-25	132	114	0,71	1,34	1,16
55	-23,3	144	118	0,72	1,42	1,22
55	-20	170	126	0,75	1,57	1,35
55	-15	214	138	0,79	1,81	1,56
55	-10	265	150	0,83	2,06	1,77
55	-5	323	161	0,88	2,33	2,00
55	0	386	173	0,93	2,60	2,23

60	-40	50	71	0,58	0,83	0,71
60	-35	69	84	0,62	0,95	0,82
60	-30	94	97	0,65	1,12	0,96
60	-25	125	111	0,70	1,31	1,13
60	-23,3	137	115	0,71	1,38	1,19
60	-20	162	124	0,74	1,53	1,31
60	-15	206	137	0,79	1,75	1,51
60	-10	256	150	0,83	1,99	1,71
60	-5	312	163	0,89	2,23	1,92
60	0	375	176	0,94	2,49	2,14

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	74	99	0,66	0,75	0,65
40	-35	101	107	0,69	0,94	0,81
40	-30	134	116	0,71	1,16	1,00
40	-25	173	124	0,74	1,39	1,20
40	-23,3	187	127	0,75	1,47	1,27
40	-20	217	133	0,77	1,64	1,42
40	-15	268	141	0,80	1,90	1,64
40	-10	324	149	0,83	2,17	1,88
40	-5	386	157	0,86	2,46	2,12
40	0	454	166	0,90	2,75	2,37

45	-40	67	92	0,64	0,72	0,63
45	-35	91	102	0,67	0,89	0,77
45	-30	121	111	0,70	1,08	0,94
45	-25	157	121	0,73	1,30	1,12
45	-23,3	170	124	0,74	1,37	1,18
45	-20	198	130	0,76	1,52	1,31
45	-15	246	140	0,80	1,76	1,52
45	-10	299	149	0,83	2,00	1,73
45	-5	358	159	0,87	2,26	1,95
45	0	423	168	0,91	2,52	2,18

50	-40	59	85	0,62	0,70	0,60
50	-35	80	96	0,65	0,84	0,72
50	-30	107	107	0,68	1,01	0,87
50	-25	140	117	0,72	1,19	1,03
50	-23,3	153	121	0,73	1,26	1,09
50	-20	179	128	0,75	1,40	1,21
50	-15	223	139	0,79	1,61	1,39
50	-10	274	149	0,83	1,83	1,58
50	-5	330	160	0,88	2,06	1,78
50	0	392	171	0,92	2,30	1,99

55	-40	52	78	0,60	0,66	0,57
55	-35	70	90	0,63	0,78	0,67
55	-30	94	102	0,67	0,92	0,80
55	-25	124	114	0,71	1,09	0,94
55	-23,3	135	118	0,72	1,15	0,99
55	-20	160	126	0,75	1,27	1,10
55	-15	201	138	0,79	1,46	1,26
55	-10	249	150	0,83	1,66	1,44
55	-5	302	161	0,88	1,87	1,62
55	0	361	173	0,93	2,09	1,80

60	-40	44	71	0,58	0,63	0,54
60	-35	60	84	0,62	0,71	0,61
60	-30	81	97	0,65	0,83	0,72
60	-25	108	111	0,70	0,97	0,84
60	-23,3	118	115	0,71	1,03	0,89
60	-20	140	124	0,74	1,14	0,98
60	-15	179	137	0,79	1,31	1,13
60	-10	223	150	0,83	1,49	1,29
60	-5	274	163	0,89	1,68	1,45
60	0	330	176	0,94	1,88	1,62

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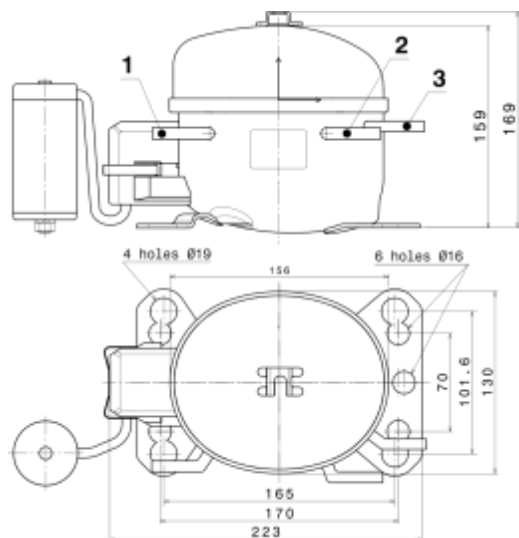
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	702,6836886908	149,3981107744	0,8278830967	6,4473819072307
2	18,8378170709	-0,2369466583	0,0020837810	0,19728067824017
3	-6,3919459336	0,5133955697	0,0022217117	-0,028041932186283
4	0,1142169249	-0,0003231434	0,0000505422	0,0017004344350391
5	-0,1226860322	0,0485933613	0,0001559456	-0,00042596381456644

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

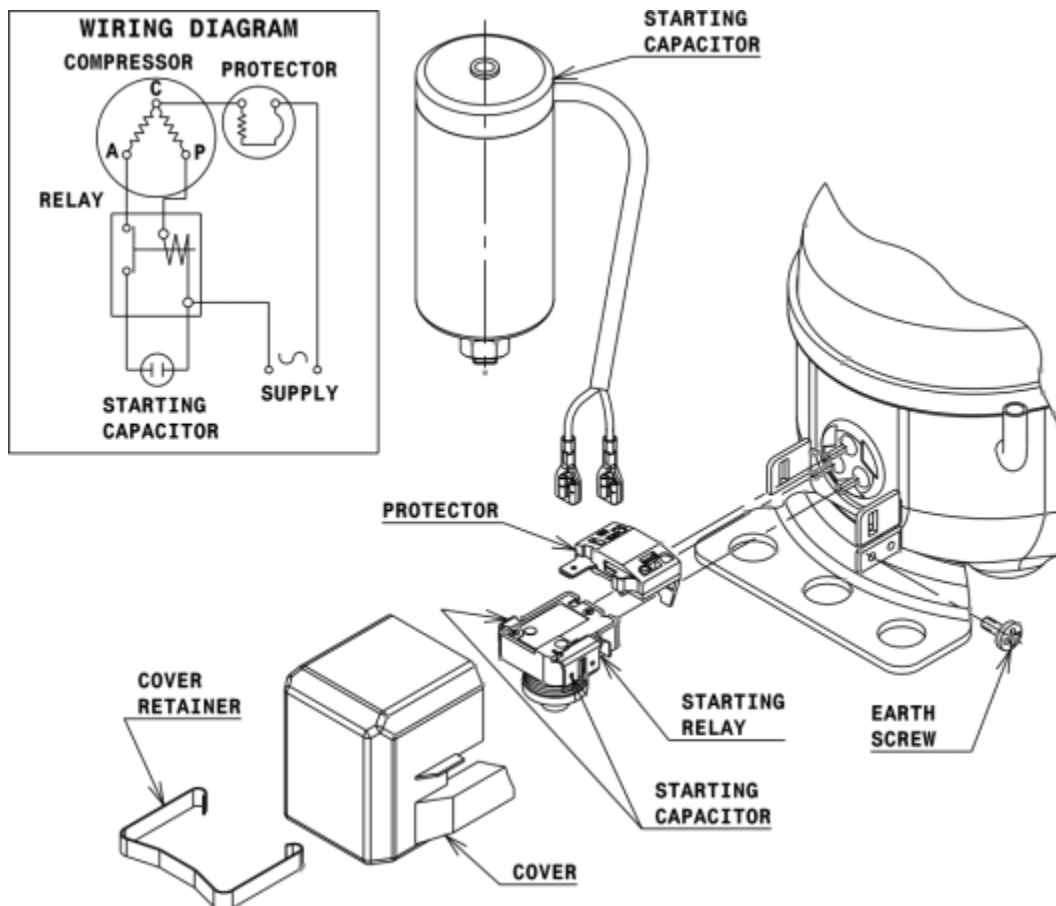


DESIGNATION INTERNAL DIAM.

1	Suction	6,1 mm
2	Service	6,1 mm
3	Discharge	4,9 mm

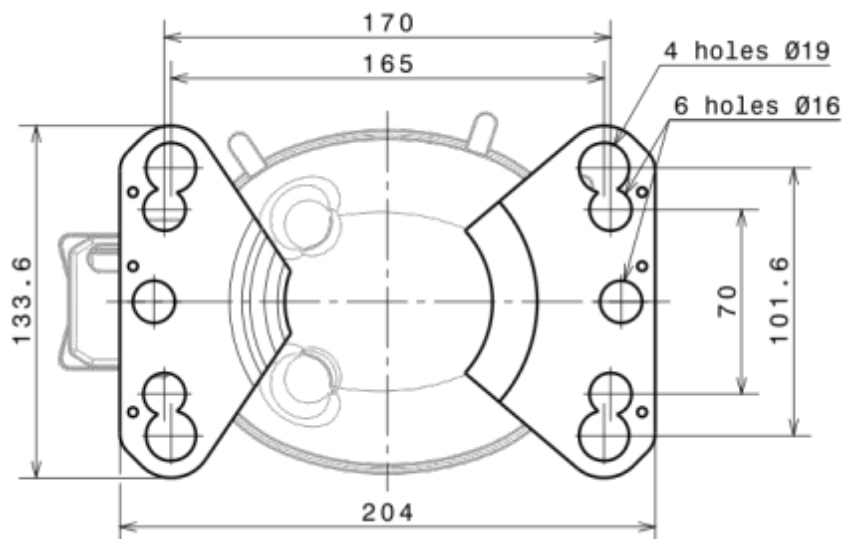
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (B, Small L ranges)



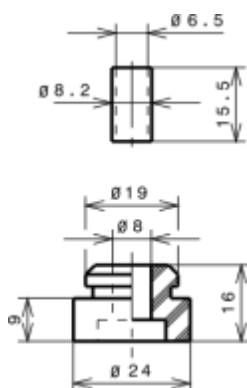
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FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD



SOA

SOA R290 LMBP

