Technical Data Sheet

Compressor model **L88TN**

Voltage **200-220/230V 50/60Hz ~1**

Refrigerant **R22**

APPLICATION

Application	High-Medium Back Pressure
Refrigerant	R22
Evaporating Temp.	-25,0 ºC to 10,0 ºC
Expansion	Capillar/Valve
Comp. Cooling	Fan cooled
Max. ambient temp.	43,0 ºC

COMPRESSOR

Displacement	8,85 cm³
Diameter	25,40 mm
Stroke	17,47 mm
Net Weight	11,31 Kg
Oil type	ISO VG 46 MINER
Oil charge	400 cm³

MOTOR

Nominal Power	3/8 hp
Voltage/Frequency	200-220V 50Hz
Voltage range	180-242 V
Type	CSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	18,00 A
Max. Cont. Current (MCC)	5,80 A
Main W. resist. at 25ºC	3,77 Ω
Start W. resist. at 25ºC	23,86 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	980 kCal/h	974 W
COP	1,97 W/W	1,73 W/W
EER	1,69 kCal/Wh	1,50 kCal/Wh
Input Power	580 W	562 W
Current	3,55 A	3,48 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	HMBP (D)	**HMBP (C)**
Evaporating temp. (T_e)	7,2 ºC	5,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	46,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	35,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	35,0 ºC	32,0 ºC
Voltage/Frequency	200 V 50 Hz	200 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	47- 56 µF 330 V			
Relay	Option 1			
Reference	2014 149.			
Pick-Up	7,80 A			
Drop-Out	6,65 A			
Protector	Option 1	Option 2		
Reference	MRT20ALK	T0103		
Current	15,80 A	15,80 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 61,00 ºC	120,00 / 62,00 ºC		

Technical Data Sheet

cubigel compressors

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	290	279	2,31	1,21	1,04
40	-20	388	304	2,42	1,49	1,28
40	-15	504	331	2,53	1,77	1,52
40	-10	637	360	2,65	2,06	1,77
40	-5	788	391	2,78	2,34	2,02
40	0	956	424	2,92	2,62	2,25
40	5	1.141	459	3,06	2,89	2,49
40	7,2	1.228	475	3,13	3,01	2,58
40	10	1.343	496	3,21	3,15	2,71
45	-25	270	286	2,34	1,10	0,94
45	-20	359	315	2,46	1,32	1,14
45	-15	465	347	2,60	1,56	1,34
45	-10	588	380	2,73	1,80	1,55
45	-5	729	415	2,88	2,04	1,76
45	0	887	453	3,03	2,28	1,96
45	5	1.062	492	3,19	2,51	2,16
45	7,2	1.145	510	3,27	2,61	2,25
45	10	1.255	533	3,36	2,74	2,35
50	-25	250	293	2,37	0,99	0,85
50	-20	329	327	2,51	1,17	1,01
50	-15	425	362	2,66	1,37	1,17
50	-10	539	400	2,82	1,57	1,35
50	-5	670	440	2,98	1,77	1,52
50	0	818	481	3,15	1,98	1,70
50	5	984	525	3,33	2,18	1,87
50	7,2	1.063	545	3,41	2,27	1,95
50	10	1.167	571	3,51	2,38	2,04
55	-25	230	300	2,40	0,89	0,77
55	-20	299	338	2,56	1,03	0,89
55	-15	386	378	2,73	1,19	1,02
55	-10	490	420	2,90	1,36	1,17
55	-5	611	464	3,08	1,53	1,32
55	0	750	510	3,27	1,71	1,47
55	5	906	558	3,46	1,89	1,62
55	7,2	980	580	3,55	1,97	1,69
55	10	1.079	608	3,66	2,06	1,77

CECOMAF

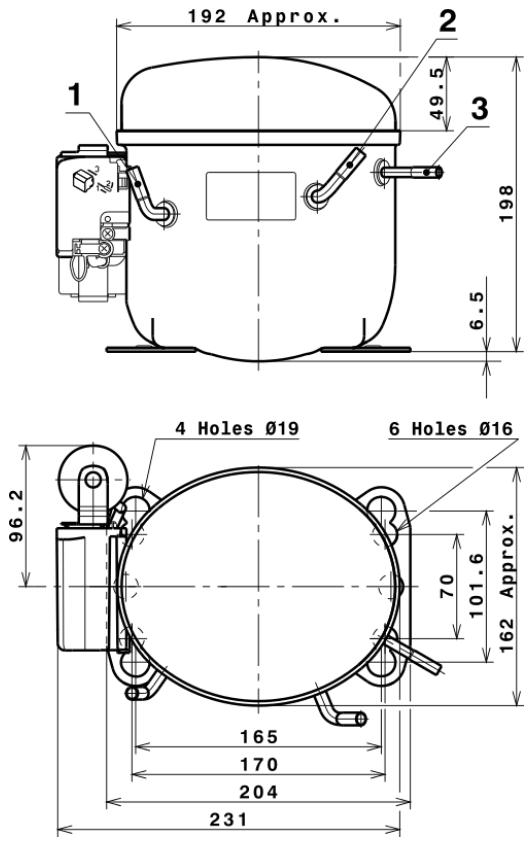
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	317	281	2,32	1,13	0,98
40	-20	425	306	2,42	1,39	1,20
40	-15	552	333	2,54	1,66	1,43
40	-10	698	362	2,66	1,93	1,67
40	-5	862	393	2,79	2,19	1,89
40	0	1.045	427	2,93	2,45	2,12
40	5	1.246	462	3,07	2,70	2,33
40	7,2	1.340	478	3,14	2,80	2,42
40	10	1.466	499	3,23	2,93	2,54
45	-25	294	288	2,35	1,02	0,88
45	-20	391	317	2,47	1,23	1,07
45	-15	507	349	2,60	1,45	1,26
45	-10	641	382	2,74	1,68	1,45
45	-5	794	418	2,89	1,90	1,64
45	0	965	455	3,05	2,12	1,83
45	5	1.155	495	3,21	2,33	2,02
45	7,2	1.245	513	3,28	2,42	2,09
45	10	1.364	537	3,38	2,54	2,19
50	-25	271	295	2,38	0,92	0,79
50	-20	357	328	2,52	1,09	0,94
50	-15	461	364	2,67	1,27	1,09
50	-10	584	402	2,83	1,45	1,26
50	-5	726	442	2,99	1,64	1,42
50	0	886	484	3,16	1,83	1,58
50	5	1.065	529	3,34	2,01	1,74
50	7,2	1.149	549	3,42	2,09	1,81
50	10	1.262	575	3,53	2,20	1,90
55	-25	248	302	2,41	0,82	0,71
55	-20	322	340	2,57	0,95	0,82
55	-15	416	380	2,73	1,09	0,94
55	-10	528	422	2,91	1,25	1,08
55	-5	658	467	3,09	1,41	1,22
55	0	807	513	3,28	1,57	1,36
55	5	974	562	3,48	1,73	1,50
55	7,2	1.054	584	3,57	1,80	1,56
55	10	1.160	612	3,68	1,89	1,64

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.702,1211391382	199,9020535056	2,0196947004	29,367750436483
2	57,2506571246	-0,0289796669	0,0006392723	1,0814040339394
3	-16,3333596747	5,9538224773	0,0239635906	-0,18041866905808
4	0,3740473721	0,0459032473	0,0001578638	0,010123140213387
5	-0,4652859923	0,1805667996	0,0007160864	-0,0050974116110505

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

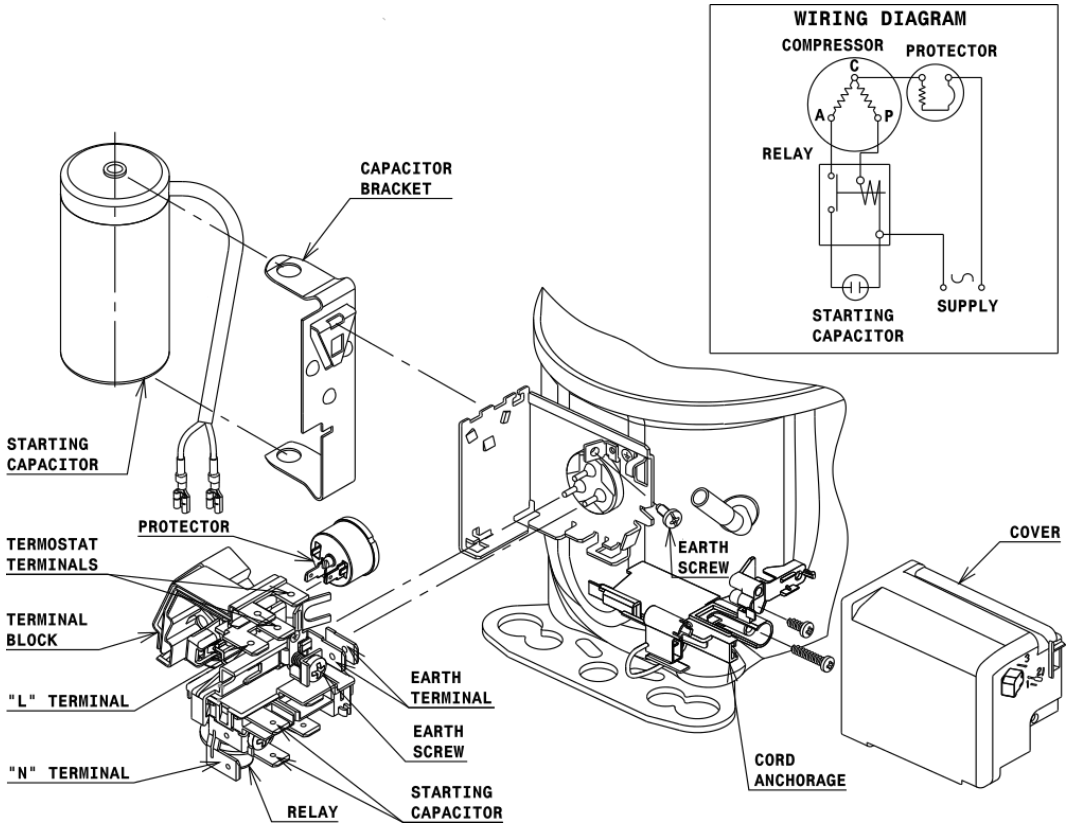
COMPRESSOR DIMENSIONS



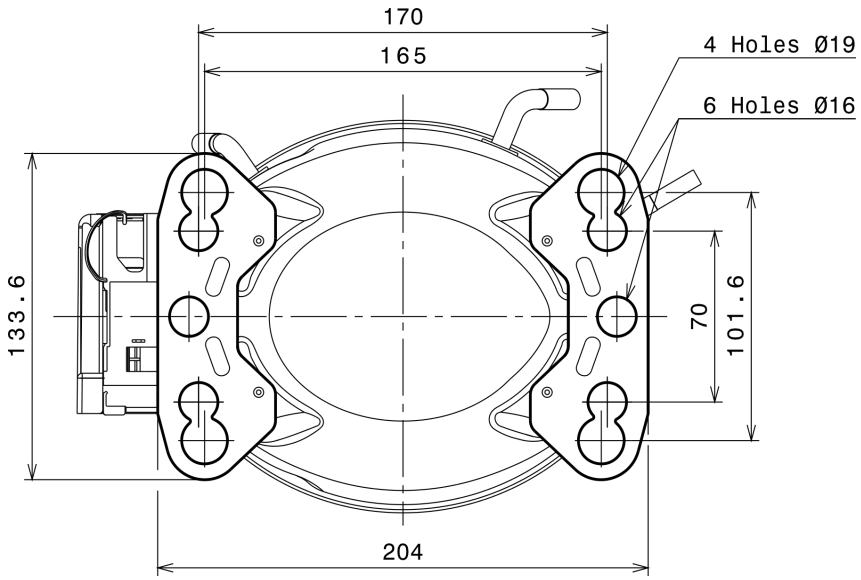
	DESIGNATION	INTERNAL DIAM.
1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



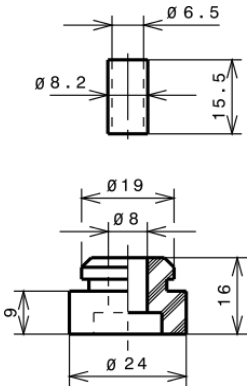
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

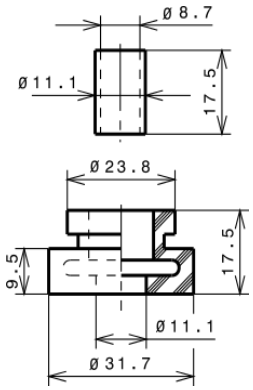
STANDARD

Ø16 holes (170x70 net)



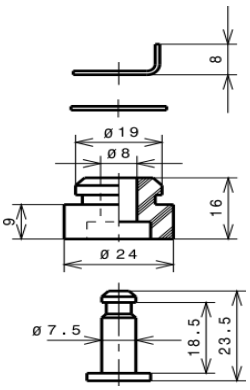
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R22 HMBP