

# Technical Data Sheet

Compressor model **P12TN**  
 Voltage **115V 60Hz ~1**  
 Refrigerant **R22**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	12,05 cm <sup>3</sup>	Nominal Power	1/2 hp
Refrigerant	R22	Diameter	29,37 mm	Voltage/Frequency	115V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	17,78 mm	Voltage range	98-132 V
Expansion	Capillar/Valve	Net Weight	12,00 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 46 MINER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	400 cm <sup>3</sup>	Locked Rotor Amps (LRA)	47,00 A
				Max. Cont. Current (MCC)	14,00 A
				Main W. resist. at 25°C	0,81 Ω
				Start W. resist. at 25°C	5,71 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.588 kCal/h	1.573 W
COP	2,20 W/W	1,92 W/W
EER	1,89 kCal/Wh	1,66 kCal/Wh
Input Power	840 W	819 W
Current	8,70 A	8,51 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T <sub>e</sub> )	7,2 °C	5,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	46,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	35,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	35,0 °C	32,0 °C
Voltage/Frequency	115 V 60 Hz	115 V 60 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	250 µF 160 V		
Run capacitor	15 µF 250 V		
Relay	Option 1	Option 2	
Reference	3ARR3 5L3	RVA 9AC..	
Pick-Up	130-144 V	130-140 V	
Drop-Out	35-77 V	35-77 V	
Protector	Option 1	Option 2	
Reference	MRA38142	T0257	
Current	24,00 A	24,00 A	
Time check	7,5-14 seg	6,0-16 seg	
Disc temp. (Open/Close)	120,00 / 52,00 °C	120,00 / 52,00 °C	

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	463	425	5,29	1,27	1,09
40	-20	620	477	5,69	1,51	1,30
40	-15	808	529	6,09	1,78	1,53
40	-10	1.027	580	6,49	2,06	1,77
40	-5	1.276	630	6,90	2,35	2,02
40	0	1.556	680	7,31	2,66	2,29
40	5	1.867	729	7,73	2,98	2,56
40	7,2	2.014	750	7,91	3,12	2,69
40	10	2.209	777	8,14	3,31	2,84

45	-25	425	430	5,32	1,15	0,99
45	-20	566	486	5,75	1,35	1,16
45	-15	738	542	6,19	1,58	1,36
45	-10	940	597	6,63	1,83	1,58
45	-5	1.174	651	7,07	2,10	1,80
45	0	1.438	704	7,52	2,37	2,04
45	5	1.733	757	7,97	2,66	2,29
45	7,2	1.872	780	8,17	2,79	2,40
45	10	2.058	809	8,43	2,96	2,54

50	-25	388	435	5,36	1,04	0,89
50	-20	512	495	5,82	1,20	1,03
50	-15	668	555	6,29	1,40	1,20
50	-10	854	613	6,76	1,62	1,39
50	-5	1.071	671	7,24	1,86	1,60
50	0	1.319	729	7,73	2,11	1,81
50	5	1.598	785	8,22	2,37	2,03
50	7,2	1.730	810	8,43	2,48	2,14
50	10	1.907	841	8,71	2,64	2,27

55	-25	350	440	5,40	0,93	0,80
55	-20	459	504	5,89	1,06	0,91
55	-15	598	567	6,39	1,23	1,05
55	-10	768	630	6,90	1,42	1,22
55	-5	969	692	7,42	1,63	1,40
55	0	1.200	753	7,94	1,85	1,59
55	5	1.463	814	8,47	2,09	1,80
55	7,2	1.588	840	8,70	2,20	1,89
55	10	1.756	873	9,00	2,34	2,01

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	505	427	5,30	1,18	1,02
40	-20	679	480	5,71	1,41	1,22
40	-15	885	532	6,11	1,66	1,44
40	-10	1.124	583	6,52	1,93	1,67
40	-5	1.397	634	6,93	2,20	1,90
40	0	1.702	684	7,35	2,49	2,15
40	5	2.040	734	7,77	2,78	2,40
40	7,2	2.199	755	7,95	2,91	2,52
40	10	2.411	782	8,19	3,08	2,66

45	-25	463	432	5,34	1,07	0,92
45	-20	617	489	5,77	1,26	1,09
45	-15	805	545	6,21	1,48	1,28
45	-10	1.025	600	6,66	1,71	1,48
45	-5	1.279	655	7,10	1,95	1,69
45	0	1.565	709	7,56	2,21	1,91
45	5	1.884	762	8,01	2,47	2,14
45	7,2	2.035	785	8,22	2,59	2,24
45	10	2.237	815	8,47	2,75	2,37

50	-25	420	437	5,38	0,96	0,83
50	-20	556	498	5,84	1,12	0,96
50	-15	724	558	6,31	1,30	1,12
50	-10	926	617	6,79	1,50	1,30
50	-5	1.161	675	7,28	1,72	1,48
50	0	1.428	733	7,77	1,95	1,68
50	5	1.729	790	8,26	2,19	1,89
50	7,2	1.871	815	8,48	2,30	1,98
50	10	2.062	847	8,76	2,43	2,10

55	-25	377	442	5,42	0,85	0,74
55	-20	494	507	5,91	0,97	0,84
55	-15	644	571	6,42	1,13	0,98
55	-10	827	634	6,93	1,30	1,13
55	-5	1.043	696	7,45	1,50	1,29
55	0	1.291	758	7,98	1,70	1,47
55	5	1.573	819	8,51	1,92	1,66
55	7,2	1.708	846	8,75	2,02	1,74
55	10	1.888	879	9,05	2,15	1,85

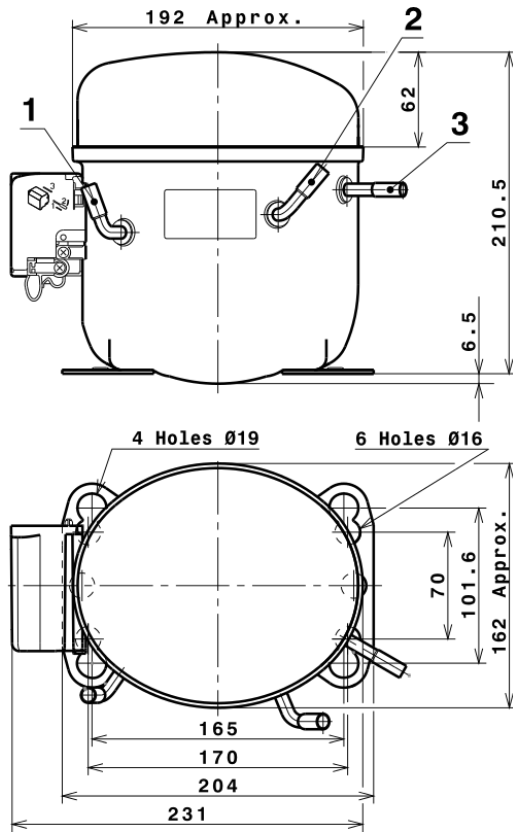
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.832,9000829191	500,3924233206	5,6915007776	49,282241075687
2	95,8179828935	3,9653324771	0,0304177701	1,8166730128977
3	-28,1134353415	5,0572892844	0,0448292442	-0,33000199867615
4	0,6637312504	-0,0085674839	0,0002141696	0,017789709495442
5	-0,7770235382	0,1611586432	0,0014806386	-0,0086613222323014

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

## COMPRESSOR DIMENSIONS

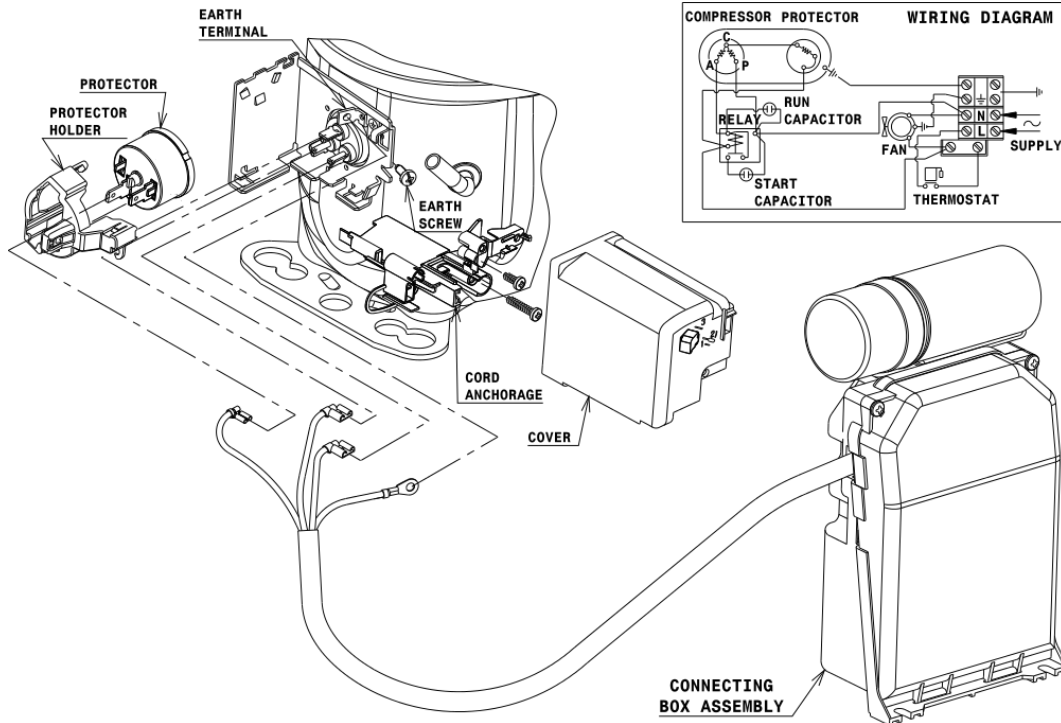


## DESIGNATION INTERNAL DIAM.

DESIGNATION	INTERNAL DIAM.
1 Service	8,1 mm
2 Suction	9,7 mm
3 Discharge	6,5 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSR CONNECTION (EXTERNAL CONNECTING BOX) (P range)



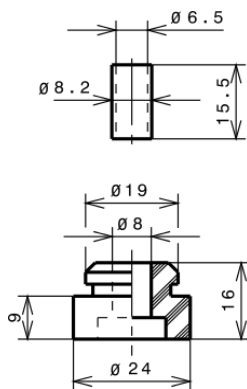
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

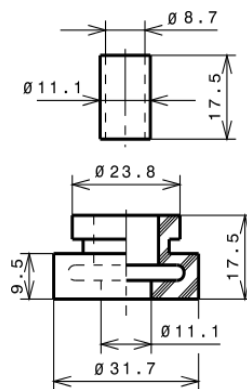
### STANDARD

$\varnothing 16$  holes (170x70 net)



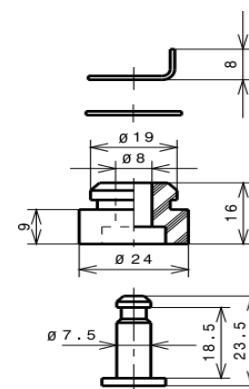
### AMERICAN FEET

$\varnothing 19$  holes (165x101.6 net)



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R22 HMBP

