

# Technical Data Sheet

Compressor model **MPT12RG**  
 Voltage **200-220/220-230V 50/60Hz ~1**  
 Refrigerant **R404A**

APPLICATION		COMPRESSOR		MOTOR	
Application	High Back Pressure	Displacement	12,10 cm <sup>3</sup>	Nominal Power	3/8 hp
Refrigerant	R404A	Diameter	27,00 mm	Voltage/Frequency	200-220V 50Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	21,13 mm	Voltage range	170-242 V
Expansion	Capillar/Valve	Net Weight	12,89 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	400 cm <sup>3</sup>	Locked Rotor Amps (LRA)	22,50 A
				Max. Cont. Current (MCC)	6,80 A
				Main W. resist. at 25°C	2,87 Ω
				Start W. resist. at 25°C	7,59 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.620 kCal/h	1.489 W
COP	2,33 W/W	1,87 W/W
EER	2,00 kCal/Wh	1,62 kCal/Wh
Input Power	810 W	796 W
Current	3,81 A	3,74 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HBP (D)	CECOMAF HBP (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	220 V 50 Hz	220 V 50 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	72- 88 µF 330 V		
Run capacitor	20 µF 420 V		
Relay	Option 1		
Reference	2014 158. + NTC15Ω		
Pick-Up	9,05 A		
Drop-Out	7,70 A		
Protector	Option 1		
Reference	T0253		
Current	15,00 A		
Time check	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 52,00 °C		

## ASHRAE

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	kCal/h	W	A	W/W	kCal/Wh
40	-15	883	550	2,64	1,87	1,60
40	-10	1.092	588	2,80	2,16	1,86
40	-5	1.335	623	2,95	2,49	2,14
40	0	1.611	657	3,11	2,85	2,45
40	5	1.920	690	3,25	3,24	2,78
40	7,2	2.067	704	3,31	3,42	2,94
40	10	2.263	720	3,39	3,65	3,14

45	-15	818	565	2,70	1,68	1,45
45	-10	1.008	607	2,88	1,93	1,66
45	-5	1.232	648	3,06	2,21	1,90
45	0	1.489	686	3,24	2,52	2,17
45	5	1.780	723	3,40	2,86	2,46
45	7,2	1.918	739	3,48	3,02	2,60
45	10	2.103	759	3,57	3,23	2,77

50	-15	754	580	2,76	1,51	1,30
50	-10	925	627	2,97	1,72	1,48
50	-5	1.130	672	3,17	1,96	1,68
50	0	1.368	715	3,37	2,22	1,91
50	5	1.639	757	3,56	2,52	2,17
50	7,2	1.769	775	3,64	2,66	2,28
50	10	1.944	797	3,75	2,84	2,44

55	-15	689	595	2,83	1,35	1,16
55	-10	841	646	3,06	1,51	1,30
55	-5	1.027	696	3,28	1,72	1,48
55	0	1.246	744	3,50	1,95	1,67
55	5	1.498	790	3,72	2,21	1,90
55	7,2	1.620	810	3,81	2,33	2,00
55	10	1.784	835	3,93	2,49	2,14

60	-15	625	610	2,90	1,19	1,02
60	-10	758	666	3,14	1,32	1,14
60	-5	924	720	3,39	1,49	1,28
60	0	1.124	773	3,63	1,69	1,45
60	5	1.358	824	3,88	1,92	1,65
60	7,2	1.471	846	3,98	2,02	1,74
60	10	1.624	873	4,11	2,16	1,86

## CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-15	925	553	2,65	1,67	1,44
40	-10	1.147	591	2,81	1,94	1,68
40	-5	1.402	627	2,97	2,23	1,93
40	0	1.689	662	3,13	2,55	2,20
40	5	2.008	695	3,27	2,89	2,50
40	7,2	2.159	709	3,34	3,05	2,63
40	10	2.360	726	3,42	3,25	2,81

45	-15	846	568	2,71	1,49	1,29
45	-10	1.045	611	2,90	1,71	1,48
45	-5	1.276	652	3,08	1,96	1,69
45	0	1.540	691	3,26	2,23	1,92
45	5	1.835	729	3,43	2,52	2,18
45	7,2	1.975	745	3,50	2,65	2,29
45	10	2.163	765	3,60	2,83	2,44

50	-15	767	583	2,78	1,32	1,14
50	-10	943	631	2,99	1,50	1,29
50	-5	1.150	676	3,19	1,70	1,47
50	0	1.390	720	3,39	1,93	1,67
50	5	1.662	762	3,59	2,18	1,88
50	7,2	1.792	780	3,67	2,30	1,98
50	10	1.966	803	3,78	2,45	2,12

55	-15	689	599	2,85	1,15	0,99
55	-10	841	650	3,07	1,29	1,12
55	-5	1.025	701	3,30	1,46	1,26
55	0	1.241	749	3,52	1,66	1,43
55	5	1.489	796	3,74	1,87	1,62
55	7,2	1.608	816	3,84	1,97	1,70
55	10	1.769	841	3,96	2,10	1,82

60	-15	610	614	2,91	0,99	0,86
60	-10	738	670	3,16	1,10	0,95
60	-5	899	725	3,41	1,24	1,07
60	0	1.091	778	3,66	1,40	1,21
60	5	1.316	830	3,90	1,59	1,37
60	7,2	1.425	852	4,01	1,67	1,44
60	10	1.572	880	4,15	1,79	1,54

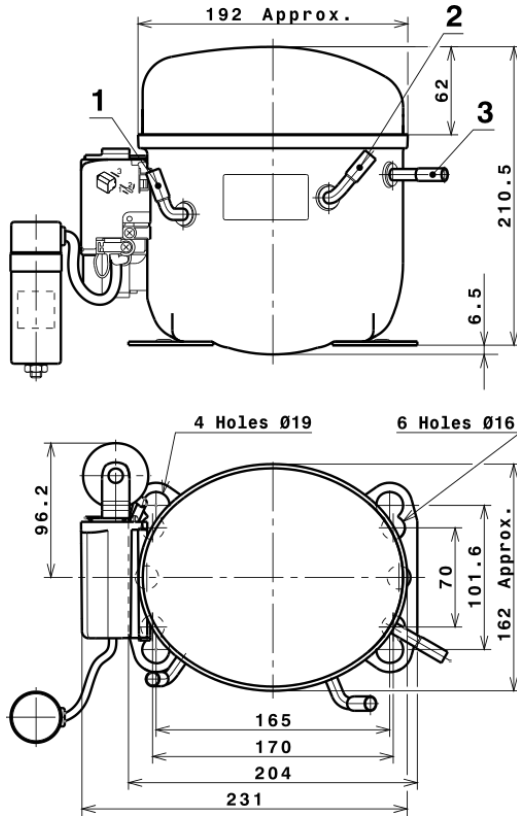
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.886,1241272678	441,7900109057	2,0824095442	56,006818958665
2	98,8773474001	-0,4697438844	-0,0059319950	2,1715863954967
3	-31,0753924360	6,0040985424	0,0281488466	-0,23578825225066
4	0,6091218797	-0,0227038610	-0,0000061564	0,030093103581061
5	-0,9976663000	0,1938882127	0,0009758497	-0,0068687932554304

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 8,1 mm
2	Service 8,1 mm
3	Discharge 6,5 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSR CONNECTION (CURRENT RELAY + NTC) (L, P ranges)



## 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 R404A HBP

