

MAPRO INTERNATIONAL S.p.A.



SLIDING VANE ROTARY COMPRESSORS FOR INDUSTRIAL GASES

MAPRO® sliding vane rotary compressors are suitable for compressing most of the industrial gases as, for instance, Butane, Methane, Propane, Ethylene, Butadiene, Hydrogen, Carbon Dioxide, Natural gas, Biogas, the most varied mixtures of Process Gases, Refinery Gases, Blast Furnace Gas, Coke Oven Gas, Steelworks Gas, etc.

For combustible gases MAPRO® compressors are designed in order to fall within the Equipment-Group II as defined by the 2014/34/EU Directive (ATEX), Category 2 both for the surrounding area conditions and for the internals of the machines.

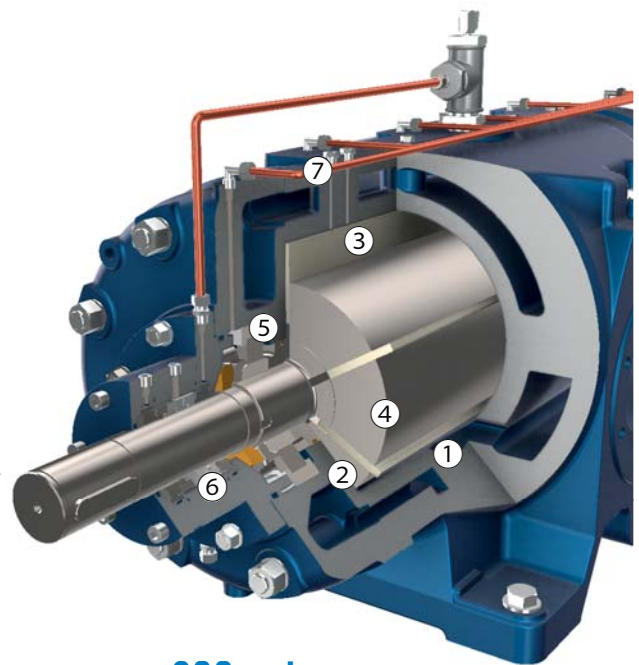


For installation on plants outside Europe the compressors can be supplied, upon request, with ATEX electric motors dual labelled with IECEx Certification Conformity Mark.



Design features

- ① Discharge ports open at different height depending on the design working pressure on plant so that to avoid higher internal compression of the gas and therefore higher unnecessary absorbed power.
- ② Internal clearances tight and in function of the design working pressure on plant so that to avoid excessive internal backflow leakages.
- ③ Rotor blades designed for continuous reliable operation till 360°F.
- ④ Rotor and shaft constructed from a continuous single piece of normalized steel.
- ⑤ Roller bearings with metal cage and internal clearances suitable for high temperature operation.
- ⑥ Shaft mechanical seal, single or dual opposite face depending on the operating gas discharge pressure or on gas composition. For the dual opposite face mechanical seal the compressor-own oil lubricating system is used as barrier fluid.
- ⑦ The oil for the lubrication of the internal mechanical parts protects the compressor's internal surfaces and makes therefore MAPRO® rotary compressors, even if made of cast iron and carbon steel, suitable for handling sour, wet and potentially corrosive gas streams.



200 psig

Maximum allowable working pressure
(depending on inlet pressure and gas mix composition)

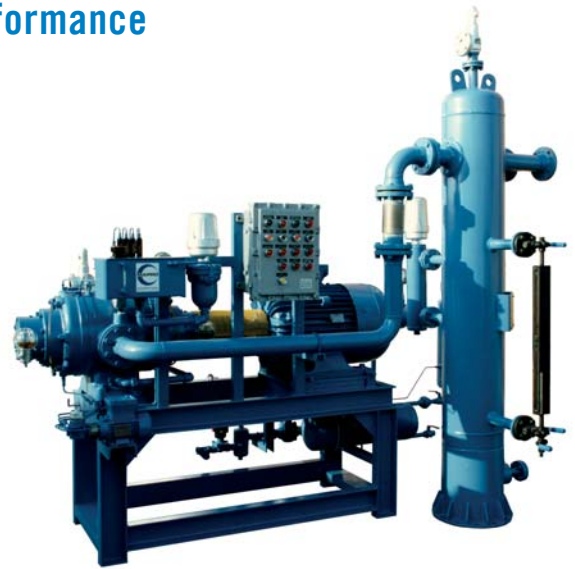
360°F

Maximum allowable
working temperature



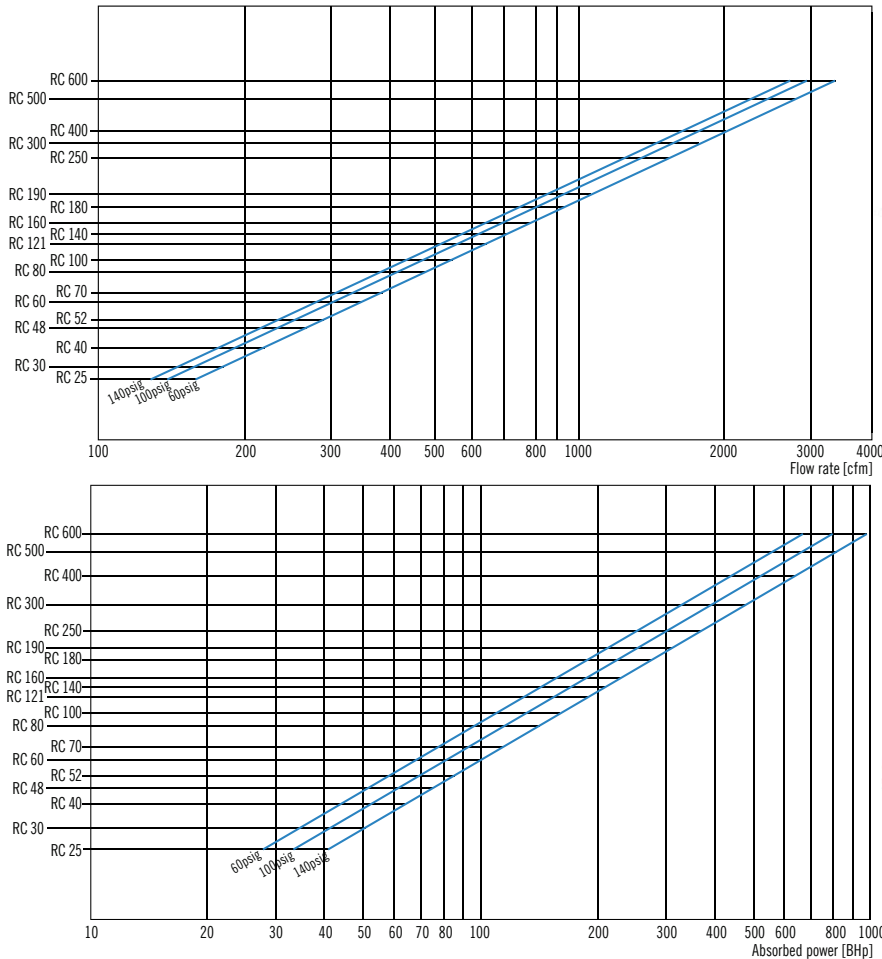
Water cooled single stage rotary compressors / Performance

Outlet pressure [psig]		15		25		35		45		55	
Flow rate		cfm	BHp	cfm	BHp	cfm	BHp	cfm	BHp	cfm	BHp
rpm	Compressor type	Absorbed power									
		15		25		35		45		55	
1450	R 25	138	12	130	16	122	20	113	23	103	26.2
	R 30	173	14.9	161	20	150	24.5	141	28.6	132	32.6
	R 40	219	19.8	207	25.3	196	31	184	36	170	41
	R 48	255	22.5	240	29.8	225	36.7	212	42.9	199	48.2
	R 52	288	25.2	272	32.4	258	39.6	243	47	225	54.1
975	R 61	329	27.8	310	37.5	291	46.8	275	54.5	259	61.4
	R 60	333	30	315	39	298	47	276	57	260	64
	R 70	384	34	361	45	338	56	319	65	301	73
	R 80	471	41	448	53	425	65	393	80	371	90
	R 100	545	46.5	514	62	482	77	457	90	431	102
735	R 121	651	54.5	614	73	576	91	546	107	516	121
	R 140	735	63	701	83	666	102	632	119	599	134
	R 160	812	69	774	91	737	111	700	131	662	147
	R 180	958	82	913	108	867	131	809	159	766	177
	R 190	1088	92	1021	124	973	152	925	178	877	200
585	R 250	1323	109	1247	148	1190	180	1133	211	1074	239
	R 300	1696	137	1601	185	1528	229	1455	267	1382	303
485	R 400	2049	191	1985	251	1894	306	1803	357		
	R 500	2702	243	2586	322	2471	392	2356	460		
	R 600	3230	286	3094	380	2958	464	2821	545		



Performance not binding and given, for informational purposes only, for air at 60°F and 29.92 inHg (abs) inlet conditions

Water cooled two stage rotary compressors



Diagrams for informational purposes only, for air at 60°F and 29.92 inHg (abs) inlet conditions

This flyer is for informational purposes only. It should not be considered as a binding description of the products or their performance

FV R-RC 09-19 US

MAPRO INTERNATIONAL S.p.A.

20834 Nova Milanese (MB) - Italy - via Vesuvio, 2
 tel. +39 0362366356 - fax +39 0362450342
 e-mail: mapro@maproint.com - www.maproint.com

MAPRO Deutschland GmbH

e-mail: deutschland@maproint.com

MAPRO France SARL

e-mail: france@maproint.com



ISO 9001 - Cert. 1835

