



COMPRESSOR TECHNOLOGY

VALUE ANALYZED – REVOLUTIONARY
TECHNOLOGY DESIGNED SCREW COMPRESSOR



RED LINE

DAPM

ENERGY SAVING SCREW COMPRESSORS

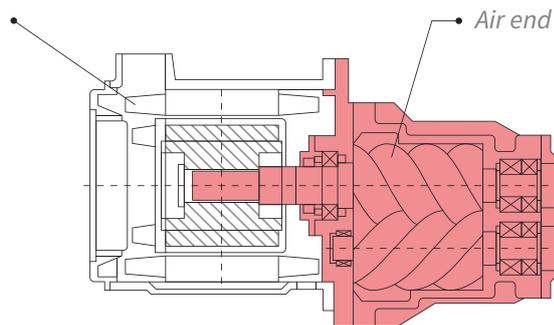
OUR GOAL IS AN OUTSTANDING QUALITY!

- We succeed to achieve the perfect 100% direct drive
- Permanent magnet motor and air end built together
- No belts, no gears neither coupling
- Inner steel pipes instead of rubber hoses (never need to be replaced)
- Half length electric motor without bearings (which means that it is completely maintenance free)
- Soft start, avoiding electrical network overload
- Excessively silenced operation (-10% dB(A))
- Cooling air inlet from the side, hot air outlet at the top
- Side panel doors applied with magnet lock for easy access



Main elements of the new PM construction:

High efficiency permanent magnet PM Motor

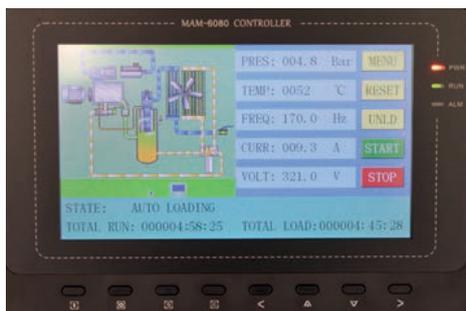


Main advantages of the new PM construction:

- economical due to the variable speed control system
- equal efficiency overall the full regulation range
- 30-40% less energy consumption
- longer lifetime, higher efficiency
- low operational and maintenance costs
- fast payback time because of the value analyzed price



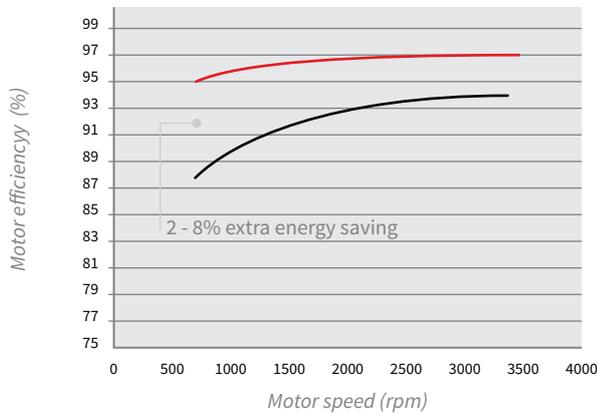
Colour LCD touchscreen control panel:



- one of the most modern visual display control panel on the market
- working mechanism illustrated with real time moving process to let the customer see the compressors up-to-date momentary status
- fully monitored working process, including pressure, temperature, frequency, current and power consumption
- faults and maintenance information message display and storages

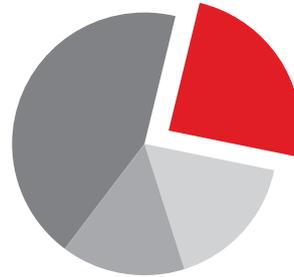
REVOLUTIONARY DESIGN

Efficiency comparison



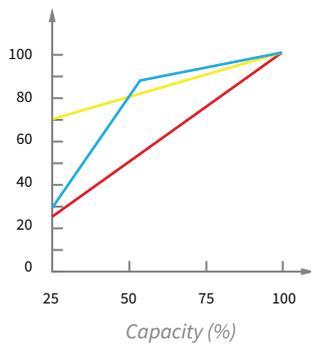
- PM magnet motor (75kW)
- Conventional motor (75kW)

Total cost distribution by category in 5 years interval



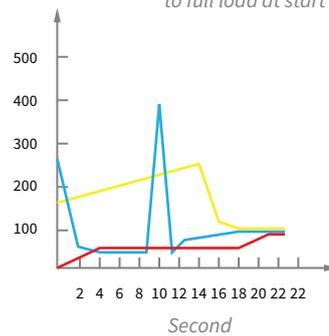
- Energy cost
- Purchase cost
- Maintenance cost
- Energy saving

Motor performance (%)



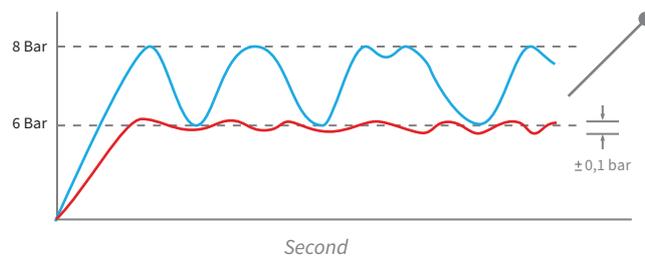
- Speed regulated DAPM
- Load/unload regulation
- Modulation regulation

Power consumption referring to full load at start up (%)



- Speed regulated DAPM
- Start-Delta starter
- Soft starter

Pressure

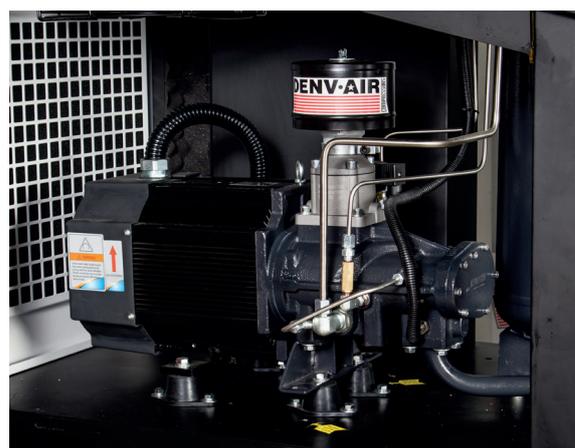


- Variable speed regulated DAPM compressor (permanent and precise pressure level holding)
- On load/Off load controlled conventional compressor

With speed regulation at least 2 bar differential pressure can be recovered in the energy saving range.

Lowering the working pressure level with 1 bar results 7% saving relating the energy consumption. Therefore skipping 2 bar differential pressure could result up to 14% saving regarding the total consumed energy value.

RELIABILITY AND EXPERTISE



DAPM VARIABLE SPEED SCREW COMPRESSOR MODELS

Model		DAPM 7,5A	DAPM 10A	DAPM 15A	DAPM 20A	DAPM 25A	DAPM 30A	DAPM 40A	DAPM 50A	DAPM 60A	DAPM 75A	DAPM 100A	DAPM 150A	DAPM 175A	
Nominal motor power (kW)		5,5	7,5	11	15	18,5	22	30	37	45	55	75	110	132	
Free air delivery (m ³ /min)	8 bar	min.	0,2	0,3	0,39	0,57	0,76	0,91	1,3	1,59	1,81	2,57	3,23	5,9	7,0
		max.	0,82	1,2	1,58	2,3	3,07	3,64	5,2	6,38	7,25	10,3	12,95	19,9	23,98
	10 bar	min.	0,17	0,24	0,34	0,46	0,65	0,78	1,15	1,48	1,65	2,16	2,88	6,0	8,9
		max.	0,71	0,97	1,36	1,86	2,6	3,15	4,63	5,92	6,6	8,67	11,53	17,8	21,55
Noise level (dB(A))		≤65	≤65	≤65	≤65	≤75	≤75	≤75	≤75	≤80	≤80	≤80	≤85	≤85	
Connection		G 3/4"	G 3/4"	G 3/4"	G 3/4"	G 1 1/4"	G 1 1/4"	G 1 1/4"	G 1 1/2"	G 1 1/2"	G 2"	G 2"	DN65	DN65	
Dimensions (mm)	L	950	950	1000	1000	1100	1100	1200	1300	1300	1600	1600	2500	2500	
	W	670	670	820	820	820	820	950	1050	1050	1300	1300	1780	1780	
	H	895	895	1145	1145	1152	1152	1334	1340	1340	1650	1650	2090	2090	
Weight (kg)		195	215	260	270	385	405	600	650	670	1380	1480	2350	2350	
Power		400V / 3 ph / 50 Hz													

Available options: in-line filters, tank, air dryer, automatic condensate drains under the tank or filters, remote monitoring system, built-in heat recovery system

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