

# – Screw Compressor Technology

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40 bar

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## MK80 SCREW COMPRESSOR FOR 40 bar

#### MK80 Innovation

ROTORCOMP, one of the leading manufacturers of screw compressor air ends and components, pioneers a novel 40 bar, second stage encapsulated screw booster.

The boostermodule MK80 increases compressed air and gases up to a final pressures of 40 bar with maximum delivery capacity of  $650 \text{ Nm}^3/\text{h} - 380 \text{ scfm}$ .

The compact function unit possesses a unique equipment for problem-free industrial equipment building and safe operation: Screw compressor, filter, valves, complete sensors, electronic control system, connector finished cabling.

#### **Target Markets**

- PET bottle moulding
- Starting air for large diesel engines
- Coating techniques in the wood and glass industry
- Instrument air for power plants
- Process air

#### These advantages convince

- Compact design for reduced floor space
- Smooth, low vibration running (no foundations)
- Lowest operating noise level
- Continuous air supply (no pulsations)
- Belt drive or direct drive
- Designed for continuous duty
- Load-idling-operation or frequency controlled operation for variable delivery capacity

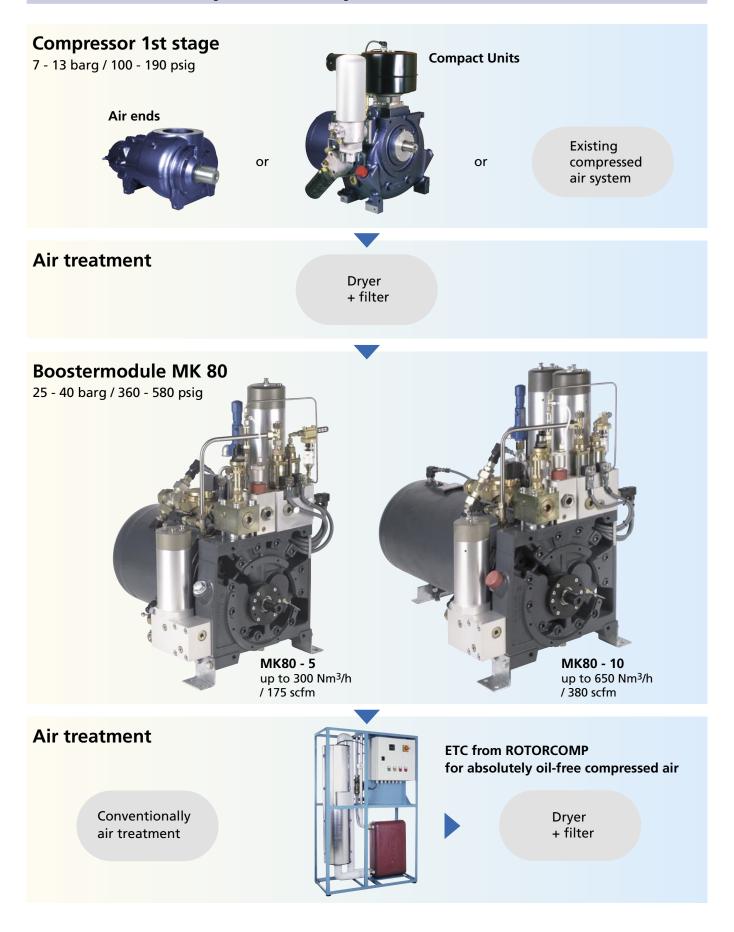
#### Extensive standard delivery

- Sensors for the supervision
- Sensors for service
- Magnet valves for idling and discharge
- Cabling of all valves and sensors
- Electronic control system
- LED- display module for operating modes, interferences and required services

- Low maintenance cost
- Simple heat regeneration
- Range of suitable coolers available
- Operation with bio-degradeable and food-grade lubricants
- Wear-free compressor element
- Expert advice and service through a competent partner



#### The 40 bar Concept with Components of ROTORCOMP





#### MK80 Electronic Control System CC21

The CC21 system is specially designed for monitoring the MK80 and controlling the valves at the MK80 with LED display for service, errors and operating status of the MK80.

The CC21-Control-Module is designed for application in the compressor control cabinet and the CC21-OP-Module for assembly at the control panel.

The communication of the CC21 with the compressor control units takes place via digital I/O ports at the CC21-Control-Module.

The RS232 interface enables the communication to a PC with an easy to operate software by ROTORCOMP.

• Power	E11 Operation	AS Warning A4	Fault
As Start	E12 Dide	EX Discharge	Rese
Valves	Sensors	E6 T-Iniot E2	Oil level
a 🕐 iniet	es P-Supply	E7 . T-Outlet E13	Aux 1
A1 () Iclie	Et 🕐 P-Iniet	83 CH Riter 814	Aux 2
a Discharg	e Es P P-Shatt	E4 Baparator E15	Aux 3

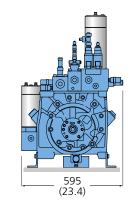


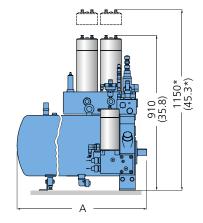
### MK80 Technical Data

Weight (MK80-5/-10)**	240 /	275	kg
	530 /	606	Ibs
Outlet pressure	25 -	40	barg
	360 -	580	psig
Suction pressure	6 -	14	barg
	90 -	200	psig
Free air delivery	max. max.		Nm <sup>3</sup> /min scfm
Power consumption	max.	48	kW
	max.	65	hp
Control voltage		24	VDC
Ambient temperature	max.	45	°C
	max.	113	°F
Drive	Direct Belt		
* ) Height for filter convice			

) Height for filter service

\*\*) w/o oil filling





Dimensions		MK80-5	MK80-10			
^	mm	750	1080			
А	(inch)	(29.5)	(42.5)			

Туре		МК80-10												
Matar	kW	18,5		22		30		3	37		45		55	
Motor	hp	25		30		40		50		60		75		
	kW	17	7.5	21		28	8.5	35		42.5		48		
Shaft power	hp	23	3.5	28		3	8	47		57		64		
Inlet pressure	barg	7	10	7	10	7	10	7	13	7	13	9	11	
	psig	102	145	102	145	102	145	102	190	102	190	130	160	
Outlot process	barg	g 30		30		40		40		40		40		
Outlet pressure psig		43	435 435		35	580		580		580		580		
Capacity*	m <sup>3</sup> /min	2.7	3.9	3.5	4.9	3.4	4.7	4.5	7.8	5.9	9.9	8.3	10.4	
	scfm	95	138	124	173	120	166	159	275	208	350	293	367	

\*) Capacity at 1013 mbar, 0 °C and at inlet temperature 20 °C

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