



OIL-LESS COMPRESSORS TOC UNIT

TOC compressors work completely dry. There is no cylinder lubrication and no oil bath for the crankshaft.

Only a totally oil free compressing system provides constant oil free compressed air quality over the service life; oil aerosols and oil vapours cannot pollute the system and the process.

The TOC unit is based on the very successful TO model, which has been on the market since 1973. Due to its very compact design with an enclosed cabinet and integrated process-controller, the TOC unit combines robustness with a modern up-to-date design.

TOC compressors can meet all operational modes. They are designed for constant operation, for intermittent operation and for emergency operation with long standstills. Dry-running compressors are very reliable under all circumstances and also save energy costs by the elimination of idle-run cycles.



FEATURES

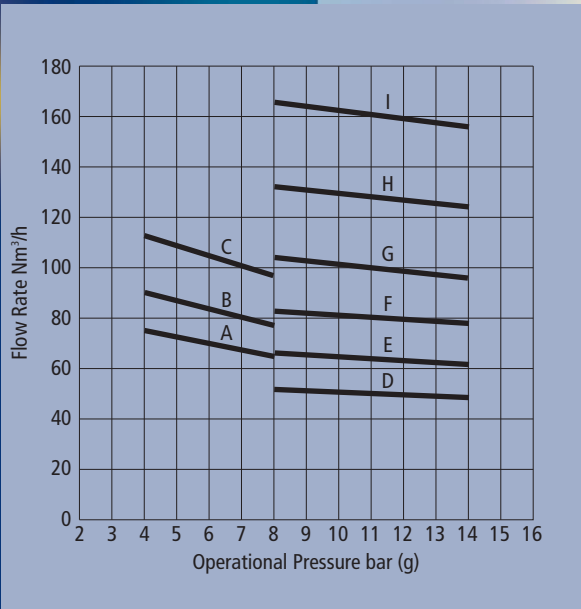
- oil-less, dry-running piston compressor
- long service life of all components
- PLC control
- air or water-cooled
- compact, space-saving design
- low noise level
- motor power 7.5–30 kW
- flow rate 50–160 Nm³/h
- pressure 2–60 bar

APPLICATIONS

Many users need absolutely oil free compressed air. Applications include:

- chemical industry
- pharmaceutical industry
- electronics industry
- clean rooms
- food industry
- beverage processing industry
- pneumatic control
- water supply
- medical compressed air





TECHNICAL DATA

Dimensions:	W = 800/1000 mm / L = 1100 mm / H = 1820 mm
Weight:	acc. to model 500–850 kg
Electrical connection:	standard connection 3phase+E / 400 V / 50 Hz
Interface:	RS 485, optional RS 232
Motor:	standard motor / 2-pole / IP55
Ambient temp.:	standard range 5–35 °C
Compressed air temp.:	compressed air temp. is 5–10 °C over ambient temp.
Noise level:	acc. to model 70–75 dB (A)

Model / Compressor speed	Operational Pressure bar (g)	Motor-Power kW	Flow Rate Nm ³ /h ⁽¹⁾	Graph
1-stage compression				
VTOC 125 LR-L / 1470 rpm	4–8	11	70	(A)
WTOC 125 LR-L / 1170 rpm	4–8	15	84	(B)
WTOC 125 LR-L / 1470 rpm	4–8	15	105	(C)
2-stage compression				
VTOC 180/90 LR-L / 920 rpm	8–14	11	50	(D)
VTOC 180/90 LR-L / 1170 rpm	8–14	11	64	(E)
VTOC 180/90 LR-L / 1470 rpm	8–14	15	80	(F)
QTOC 180/90 LR-L / 920 rpm	8–14	18.5	100	(G)
QTOC 180/90 LR-L / 1170 rpm	8–14	22	127	(H)
QTOC 180/90 LR-L / 1470 rpm	8–14	30 ⁽²⁾	160	(I)

(1) effective flow rate in standard-units (20 °C / 1013 mbar), measured at the average operational pressure

(2) power consumption 22–24 kW

Coolers

Intermediate and end-cooler; cooled by ambient air or water

PLC control and operating functions

Operating functions are: Main-switch, Emergency button, Start and Stop button, Pressure indicator for the discharge pressure. A display shows the operational status and indicates maintenance-work. Controlled are the cabinet temperature, the belt drive and the intermediate and discharge pressure. A connection by a RS 485 makes it possible to control the unit remotely from a central facility. Installations with a number of compressors can be connected easily and an integrated computer used to control each compressor according to the actual air demand and to change periodically the units to be operated at constant load. Further entrances and exits for the monitoring of devices, as for example compressed air dryers ...

Piping and fittings

Piping and fittings are made of stainless steel and brass. The equipment includes cyclone separators, condensate traps and unloading valves in every stage. Flexible hoses enable a vibration free connection between compressor and cabinet.

Compressor block

The heart of the compressor equipped either with 2, 3 or 4 cylinders. The cooling is with ambient air or water.

Drive

The compressor-block is driven by a standard electric motor and a belt drive. The compressor speed can be adapted easily from 920 to 1470 rpm.

