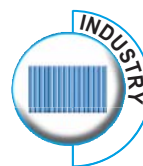




## ROTARY SCREW COMPRESSOR CSM MAXI 7,5 - 10 - 15 - 20 HP



TECHNOLOGY YOU CAN TRUST

# The CSM Maxi Range

MAXI 7,5 - 10 - 15 - 20 HP

A solution to satisfy all needs



## Base Mounted Version

Especially recommended for installations near the place of use or the expansion of existing systems.

The electrocompressor's main components are: Air suction filter, compressor, electric motor, oil filter and cooler, air cooling system, electrical panel for power-on and adjustment, support base and elegant sound-proof casing.

## Tank Mounted Version

Particularly recommended for new or stand-alone installations where there is a need for compressed air with a low noise level.

The unit consists of an electrocompressor on a fixed, 270/500-litre tank.



## Dry Version

Especially recommended for installations with compressed air demand with a low dew point.

The compression unit is made up of electrocompressor, tank and refrigerating dryer with gas R134a with indicator of the Dew Point and timed condensate drain.

## Dry Version with Filters and By-pass Dryer

For compressed air demands without oil, CSM MAXI can be equipped with deoiling pre-filter and afterfilter + By-pass and centralised condensate drain.



# Why choose CSM Maxi

## TWO TECHNOLOGIES COMPARED



yesterday's



**PISTON COMPRESSORS**



today's



**SCREW COMPRESSORS**

70 - 75% of the intake air

**Air yield**

95% of the intake air  
More air with lower energy costs

Greater than 80 dB(A)

**Sound level**

MAXI from 66 to 69 dB(A)  
Almost as low as a household appliance

For intermittent use

**Operation**

Also for continuous use  
An industrial technology

High content of residual  
oil and humidity

**Air quality**

Low oil content and dry air in the  
version with dryer  
Cleaner air for better production

Alternating and pulsing

**Compression**

Continuous and constant  
Uniform pressure in line for better  
functioning utilities

High

**Vibrations**

Absent  
More reliable components

From 7 to 10 times nominal value

**Starting current**

From 3 to 5 times nominal  
value in the star/delta version  
Lower energy consumption at start-up

Thermal circuit breaker

**Standard protections**

Against overload of the electric  
motor due to high oil temperature  
Greater operator safety

Technological evolution, the ever greater needs of increasingly sophisticated users and respect for the environment are just three of the many reasons behind the CSM MAXI's design the small screw compressor with big compressor performance

# Technology

## Screw Compressor

A small-power machine with big-compressor components:

- a high-efficiency screw unit for compressing air without metal parts touching;
- an efficient cooling system;
- dry air in the DRY version with dryer;
- completely automatic operation for an industrial service;
- a complete compression unit ready to use.

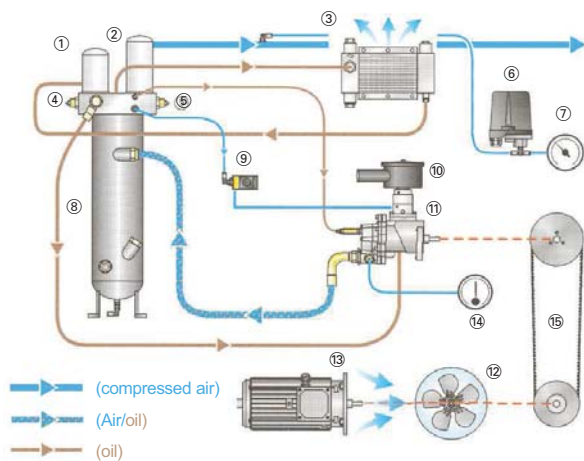


## Adjustment

A new adjustment concept, created by combining the advantages of a piston compressor with those of a screw compressor.

Simple and complete instrumentation for correctly using and operating the compressor.

- |                              |                                |
|------------------------------|--------------------------------|
| 1 - Oil filter               | 9 - Air suction solenoid valve |
| 2 - Air-oil separator filter | 10 - Air suction air filter    |
| 3 - Oil cooler               | 11 - Screw compressor          |
| 4 - Thermostatic valve       | 12 - Fan                       |
| 5 - Safety valve             | 13 - Electric motor            |
| 6 - Pressure switch          | 14 - Thermometer/Thermostat    |
| 7 - Pressure gauge           | 15 - Transmission unit         |
| 8 - Oil reservoir            |                                |



## Dry air

The CSM MAXI with CDX dryer is the winning solution for specific uses that require condensate-free air:

- supplies condensed air without condensate;
- safeguards the operation of the equipment;
- improves the quality of the final product;
- requires less space for installation;
- cancels the cost of installing the dryer;
- respects the environment with the use of ecological gas.



# CSM Maxi



270 litres

Two versions with or without dryer

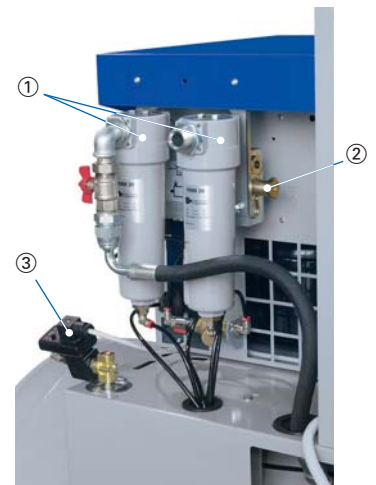


500 litres



## Filters and by-pass dryer

- ① Using the filters, it is possible to eliminate dust and oil particles up to a filtration degree of  $0.01\mu$  and to a degree of residual oil equal to  $0.01 \text{ mg/m}^3$ .
- ② There is also the possibility of by-passing the dryer, assuring in any case air filtration.
- ③ All condensate coming from the dryer, filters and tank, is centrally collected and drained in a single point through a timed drain device.



## A complete compression unit in a small space

Traditional plant

Integrated plant



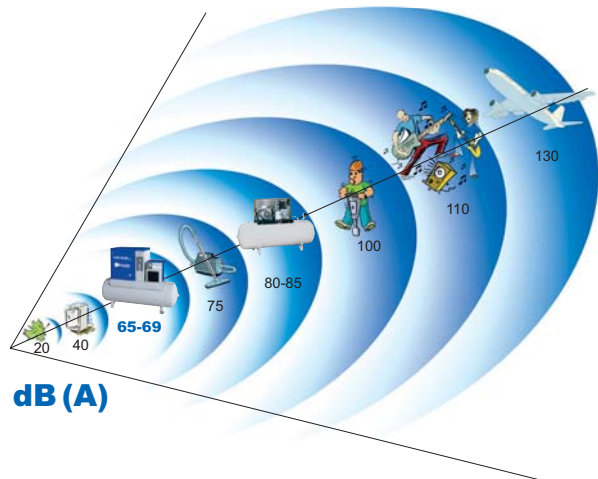
In the version with dryer, one has in a single solution: compressor, dryer, tank and filters in just  $1.2 \text{ m}^2$  (500 l) with the following advantages:

- minimum space requirement and easy installation
- no installation costs for the dryer and the filters (all assembled at the manufacturing factory's premises)
- elimination of air leaks in pipes
- the elimination of many pipes assures a minimum fall of pressure, increasing energy savings.

# Savings

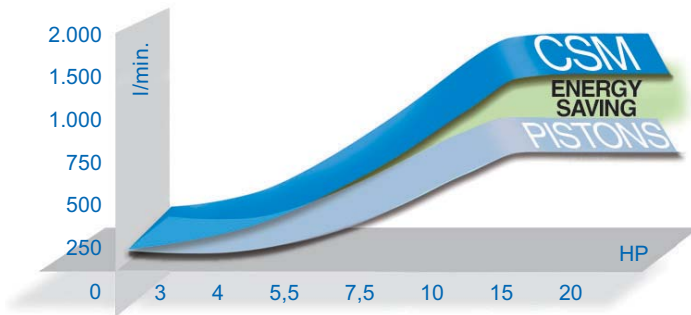
## Maxi low noise level

Given the type of user, the noise pollution produced by small-power compressors was never given the proper attention until now but with CSM MAXI, the problem has been eliminated.



## Mini Vibrations

Thanks to the absence of transmitted vibrations, to the low noise level of our screw compressors and to the effective sound-proofing of the unit, it is possible to reach noise levels allowing the installation in work environments or combined even with using machine with remarkable savings in the creation of the compressed air distribution lines.



## Maxi Yield - Mini Consumptions

The high performance of the screw compressor and the high overall yield of the unit improve the performance of the compressor CSM MAXI.

In this way, it is possible to obtain, at the same power level, compressed air costs per m<sup>3</sup> significantly lower than using the traditional piston compressors.

## MINI Maintenance



The long intervals between one maintenance and the other, the high technology level reached in the screw compressor field, the accurate arrangement of internal components subject to maintenance, and the easy access to any internal component allow an easy, fast and cost-effective maintenance.

..... but this is not enough .....

**Oil level check, which is the most frequent verification, can be carried out simply by outside the unit without needing to remove any panel, just looking at the external sightglass.**

# Adjustment • Savings

## Electronic adjustment

The electronic control unit ES 99 houses all commands (run, stop, reset), all controls (started compressor, compressor with load, live unit) and all alarms (motor thermal alarm, inverse rotation, high temperature, emergency) of the machine.

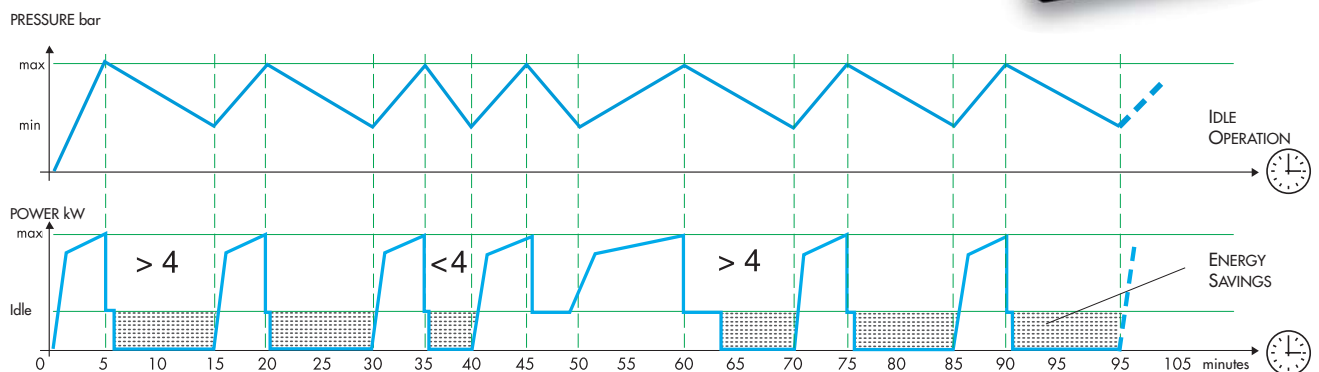
The equipment allows managing all operations concerning the start, stop and control of the machine.

The compressor management program was designed according to the experience gained in more than 10 years of use.



## Energy savings

The compressor management software aims at reducing the electric energy consumptions remarkably.



The smart program of the card is able to distinguish three types of air consumption:

- **High consumption**, - idle time < 4 min. (low idle operation periods), the program sets the idle/with load operation avoiding the stop and restart of the electric motor.
- **Low consumption**, - idle time > 4 min. (long idle operation periods), the program sets the energy saving operation; when the maximum pressure is reached, the compressor idle works for 30' and then switches to stand-by mode, avoiding to run the motor when it is not needed.
- **Discontinuous consumption**, by monitoring continuously the operation times, the program can distinguish the consumption cycles (see graphical representation) self-adjusting according to the needs.

The switching between high and low consumption cycles occurs automatically referring to the test of the last performed cycle.



## Smart condensate drain

### Advantages

- Draining only water and NOT compressed air = Energy savings
- Quiet, no acoustic impact = Respect for the environment

## TECHNICAL DATA

Type



	bar	psi	HP	kW	l/1'	m³/h	cfm	dB (A)	V/hz/Ph	L	W	H	litres	gas	Kg
<b>CSM MAXI Base Mounted Compressor</b>															
CSM 7,5/8 BX	8	118	7,5	5,5	750	45	26,5	65	400/50/3	810	650	975	-	3/4"	156
CSM 7,5/10 BX	10	145	7,5	5,5	630	38	22,2	65	400/50/3	810	650	975	-	3/4"	156
CSM 10/8 BX	8	118	10	7,5	1008	60	35,6	66	400/50/3	810	650	975	-	3/4"	167
CSM 10/10 BX	10	145	10	7,5	920	55	32,5	66	400/50/3	810	650	975	-	3/4"	167
CSM 10/13 BX	13	188	10	7,5	557	33	19,7	66	400/50/3	810	650	975	-	3/4"	167
CSM 15/8 BX	8	118	15	11	1428	86	50,4	68	400/50/3	810	650	975	-	3/4"	180
CSM 15/10 BX	10	145	15	11	1310	79	46,3	68	400/50/3	810	650	975	-	3/4"	180
CSM 15/13 BX	13	188	15	11	887	53	31,3	68	400/50/3	810	650	975	-	3/4"	180
CSM 20/8 BX	8	118	20	15	1750	105	61,8	69	400/50/3	810	650	975	-	3/4"	189
CSM 20/10 BX	10	145	20	15	1650	99	58,3	69	400/50/3	810	650	975	-	3/4"	189
CSM 20/13 BX	13	188	20	15	1190	71	42	69	400/50/3	810	650	975	-	3/4"	189
<b>CSM MAXI Tank Mounted Compressor - 500 lt tanks ②</b>															
CSM 7,5/8 X-500	8	118	7,5	5,5	750	45	26,5	65	400/50/3	1935	620	1463	500	1/2"	281
CSM 7,5/10 X-500	10	145	7,5	5,5	630	38	22,2	65	400/50/3	1935	620	1463	500	1/2"	281
CSM 10/8 X-500	8	118	10	7,5	1008	60	35,6	66	400/50/3	1935	620	1463	500	1/2"	292
CSM 10/10 X-500	10	145	10	7,5	920	55	32,5	66	400/50/3	1935	620	1463	500	1/2"	292
CSM 10/13 X-500	13	188	10	7,5	557	33	19,7	66	400/50/3	1935	620	1463	500	1/2"	292
CSM 15/8 X-500	8	118	15	11	1428	86	50,4	68	400/50/3	1935	620	1463	500	1/2"	305
CSM 15/10 X-500	10	145	15	11	1310	79	46,3	68	400/50/3	1935	620	1463	500	1/2"	305
CSM 15/13 X-500	13	188	15	11	887	53	31,3	68	400/50/3	1935	620	1463	500	1/2"	305
CSM 20/8 X-500	8	118	20	15	1750	105	61,8	69	400/50/3	1935	620	1463	500	1/2"	314
CSM 20/10 X-500	10	145	20	15	1650	99	58,3	69	400/50/3	1935	620	1463	500	1/2"	314
CSM 20/13 X-500	13	188	20	15	1190	71	42	69	400/50/3	1935	620	1463	500	1/2"	314
<b>CSM MAXI Dry Version Compressor - 500 Lt tanks - Dryer ① ②</b>															
CSM 7,5/8 DX-500	8	118	7,5	5,5	750	45	26,5	65	400/50/3	1935	620	1463	500	1/2"	309
CSM 7,5/10 DX-500	10	145	7,5	5,5	630	38	22,2	65	400/50/3	1935	620	1463	500	1/2"	309
CSM 10/8 DX-500	8	118	10	7,5	1008	60	35,6	66	400/50/3	1935	620	1463	500	1/2"	335
CSM 10/10 DX-500	10	145	10	7,5	920	55	32,5	66	400/50/3	1935	620	1463	500	1/2"	335
CSM 10/13 DX-500	13	188	10	7,5	557	33	19,7	66	400/50/3	1935	620	1463	500	1/2"	335
CSM 15/8 DX-500	8	118	15	11	1428	86	50,4	68	400/50/3	1935	620	1463	500	1/2"	349
CSM 15/10 DX-500	10	145	15	11	1310	79	46,3	68	400/50/3	1935	620	1463	500	1/2"	349
CSM 15/13 DX-500	13	188	15	11	887	53	31,3	68	400/50/3	1935	620	1463	500	1/2"	349
CSM 20/8 DX-500	8	118	20	15	1750	105	61,8	69	400/50/3	1935	620	1463	500	1/2"	367
CSM 20/10 DX-500	10	145	20	15	1650	99	58,3	69	400/50/3	1935	620	1463	500	1/2"	367
CSM 20/13 DX-500	13	188	20	15	1190	71	42	69	400/50/3	1935	620	1463	500	1/2"	367

B = Base mounted

X = Star triangle

D = Dry with dryer

Standard Version:

- Start/delta start-up
- Electric motor IP 55
- First oil charge
- Also available with different voltages
- ① Also available with filters, dryer by-pass and centralised drain of condensate
- ② Available also on 270 litre tank. Size (1533 x 620 x 1332). Weight: - 90 Kg

The company reserves the right to make any changes from the point of view of continuous product improvement.



Design Manufacture,  
Sales and  
Service of air  
compressors,  
Air dryers and  
air filters



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