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

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.

The CSM Maxi Range

MAXI 7.5 - 10 - 15 - 20 HP

A solution to satisfy all needs
## Why choose CSM Maxi

### Two Technologies Compared

<table>
<thead>
<tr>
<th>Yesterday's</th>
<th>Today's</th>
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<tbody>
<tr>
<td>Piston Compressors</td>
<td>Screw Compressors</td>
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<td>Air yield</td>
<td>70 - 75% of the intake air</td>
<td>95% of the intake air</td>
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<td>- More air with lower energy costs</td>
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<td>Sound level</td>
<td>Greater than 80 dB(A)</td>
<td>Maxi from 66 to 69 dB(A)</td>
<td>- Almost as low as a household appliance</td>
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<td>- For intermittent use</td>
<td>- Also for continuous use</td>
<td>- An industrial technology</td>
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<td>Air quality</td>
<td>High content of residual oil and humidity</td>
<td>Low oil content and dry air in the version with dryer</td>
<td>- Cleaner air for better production</td>
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<td>- Alternating and pulsing</td>
<td>Cleaner air for better production</td>
<td>- Continuous and constant</td>
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<td>Compression</td>
<td>High</td>
<td>Uniform pressure in line for better functioning utilities</td>
<td>- Absent</td>
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<td>- From 7 to 10 times nominal value</td>
<td>Uniform pressure in line for better functioning utilities</td>
<td>- More reliable components</td>
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<td>Vibrations</td>
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<td>- From 3 to 5 times nominal value in the star/delta version</td>
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<td>- Absent</td>
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<td>- Lower energy consumption at start-up</td>
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<td>Starting current</td>
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<td>- Against overload of the electric motor due to high oil temperature</td>
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<td>- Greater operator safety</td>
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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.
### 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.

### 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.

### 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
2. Air-oil separator filter
3. Oil cooler
4. Thermostatic valve
5. Safety valve
6. Pressure switch
7. Pressure gauge
8. Oil reservoir
9. Air suction solenoid valve
10. Air suction air filter
11. Screw compressor
12. Fan
13. Electric motor
14. Thermometer/Thermostat
15. Transmission unit
In the version with dryer, one has in a single solution: compressor, dryer, tank and filters in just 1.2 m² (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.

Filters and by-pass dryer

1. Using the filters, it is possible to eliminate dust and oil particles up to a filtration degree of 0.01μ and to a degree of residual oil equal to 0.01 mg/m³.
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

270 litres

500 litres

CSM Maxi
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 m³ 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.
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 or 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.

Adjustment • Savings

Smart condensate drain

**Advantages**

- Draining only water and **NOT** compressed air
  - Energy savings
- Quiet, no acoustic impact
  - Respect for the environment
### CSM MAXI Tank Mounted Compressor - 500 lt tanks

| Type | bar | psi | HP | kW | l/min | m³/h | cfm | dB (A) | V/hz/Ph | bar | psi | l/min | m³/h | cfm | dB (A) | V/hz/Ph | bar | psi | l/min | m³/h | cfm | dB (A) | V/hz/Ph |
|------|-----|-----|----|----|-------|------|-----|--------|---------|-----|-----|-------|------|-----|--------|---------|-----|-----|-------|------|-----|--------|---------|-----|-----|-------|------|-----|--------|---------|
| CSM 7.5/8 BX | 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 BX | 10 | 145 | 7.5 | 5.5 | 630 | 38 | 22.2 | 65 | 400/50/3 | 1935 | 620 | 1463 | 500 | 1/2" | 281 |
| CSM 10/8 BX | 10 | 145 | 10 | 7.5 | 1008 | 60 | 35.6 | 66 | 400/50/3 | 1935 | 620 | 1463 | 500 | 1/2" | 281 |
| CSM 10/10 BX | 10 | 145 | 10 | 7.5 | 920 | 55 | 32.5 | 66 | 400/50/3 | 1935 | 620 | 1463 | 500 | 1/2" | 281 |
| CSM 13/8 BX | 13 | 188 | 10 | 7.5 | 557 | 33 | 19.7 | 66 | 400/50/3 | 1935 | 620 | 1463 | 500 | 1/2" | 281 |
| CSM 15/10 BX | 10 | 145 | 15 | 11 | 1310 | 79 | 46.3 | 66 | 400/50/3 | 1935 | 620 | 1463 | 500 | 1/2" | 281 |
| CSM 15/13 BX | 13 | 188 | 15 | 11 | 887 | 53 | 31.3 | 66 | 400/50/3 | 1935 | 620 | 1463 | 500 | 1/2" | 281 |
| CSM 20/8 BX | 10 | 145 | 20 | 15 | 1750 | 105 | 61.8 | 69 | 400/50/3 | 1935 | 620 | 1463 | 500 | 1/2" | 281 |
| CSM 20/10BX | 13 | 188 | 20 | 15 | 1650 | 99 | 58.3 | 69 | 400/50/3 | 1935 | 620 | 1463 | 500 | 1/2" | 281 |
| CSM 20/13 BX | 13 | 188 | 20 | 15 | 1190 | 71 | 42 | 69 | 400/50/3 | 1935 | 620 | 1463 | 500 | 1/2" | 281 |

### CSM MAXI Dry Version Compressor - 500 Lt tanks - Dryer

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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.