# Solid, simple and smart: advanced reliability in compressed air

60Hz Oil-injected screw compressors fixed and variable speed

CSM60-180 DRD60-120, CSMV60-180 PM DRD60-120 PM







ECHNOLOG YOU CAN TRUST



# High performance components make for CSM60-180 and DRD60-120 series





#### Reliability

- Designed with 150 years industry experience
- Careful qualification of components
- Continuous endurance testing
- World class branded electricals.

#### Safety

- Emergency stop
- Protection grid
- Internal and external protection for the electric fan



- High capacity oil/air coolers, perfect air filtration and cooling guarantee less thermal shocks and a longer life
- IS09001, IS014001 quality assurance
- OHSAS 18001 quality assurance
- End to end quality testing procedure



#### Easy installation and service

- Plug and play design
- No special foundation needed
- Easy access to all service components
- Minimum downtime at service intervention



### Air cooler & oil cooler

Separate oil and air cooler for high-quality cooling. Perfect work at 46° C ambient temperature.



#### ES4000T controller

Easy-to-use, graphical touchscreen display with integrated connectivity to optimize and save energy.



#### Ceccato's in-house designed element

Guarantee the quality of compressed air and efficient operation. Maximum the transmission efficiency via short gearest.



### High efficiency air filter

Low pressure drop, less noise and 99.9% removal efficiency at  $3\mu m$  solid particles.



#### Bionic design of fan

Lower wind drag and lower the noise by latest eagle wing-type fan install.



## Technical Data

| Model   | Working | Pressure |     | otor<br>wer | Capaci | ty FAD* | Noise | Weight | Connection | Dimensions |       | าร    |
|---------|---------|----------|-----|-------------|--------|---------|-------|--------|------------|------------|-------|-------|
|         | mpa     | psig     | kW  | hp          | l/s    | cfm     | dB(A) | kg     | Size       | L(mm)      | W(mm) | H(mm) |
|         | 0.7     | 100      | 45  |             | 128    | 271     | 72    |        |            | 1723       | 980   |       |
| CSM60   | 0.8     | 115      |     | 60          | 128    | 271     |       | 866    | 64.4 (2))  |            |       | 1600  |
| CSIMIOU | 1       | 145      |     |             | 117    | 249     |       | 800    | G11/2''    |            |       | 1000  |
|         | 1.25    | 180      |     |             | 98     | 208     |       |        |            |            |       |       |
|         | 0.7     | 100      |     |             | 172    | 364     | 76    |        |            |            | 1089  |       |
| CSM75   | 0.8     | 115      | 55  | 75          | 161    | 340     |       | 1100   | G2''       | 1656       |       | 1840  |
|         | 1       | 145      |     |             | 143    | 303     |       |        |            |            |       |       |
|         | 0.7     | 100      |     |             | 227    | 481     | 75    |        |            | 1756       |       |       |
| CSM100  | 0.8     | 115      | 75  | 100         | 214    | 454     |       | 1285   | G2''       |            | 1089  | 1840  |
|         | 1       | 145      |     |             | 194    | 412     |       |        |            |            |       |       |
|         | 0.7     | 100      | 90  | 120         | 279    | 590     | 76    |        |            |            |       |       |
| CSM120  | 0.8     | 115      |     |             | 265    | 561     |       | 1400   | G2"        | 1756       | 1089  | 1840  |
|         | 1       | 145      |     |             | 236    | 501     |       |        |            |            |       |       |
|         | 0.7     | 100      |     |             | 345    | 731     | 81    |        |            |            |       |       |
| 6514150 | 0.8     | 115      |     | 150         | 328    | 695     |       | 4725   | DNIGG      | 2052       | 4225  | 2000  |
| CSM150  | 1       | 145      | 110 |             | 293    | 620     |       | 1725   | DN80       | 2052       | 1325  | 2000  |
|         | 1.25    | 180      |     |             | 262    | 554     |       |        |            |            |       |       |
|         | 0.7     | 100      |     | 180         | 407    | 862     | 81    |        |            | 2052       |       | 2000  |
|         | 0.8     | 115      |     |             | 382    | 809     |       |        |            |            |       |       |
| CSM180  | 1       | 145      | 132 |             | 343    | 726     |       | 2015   | DN80       |            | 1325  |       |
|         | 1.25    | 180      |     |             | 306    | 649     |       |        |            |            |       |       |

| Model  | Working | Pressure |      | otor<br>wer | Capaci | ity FAD* | Noise | Weight | Connection | D     | imensior | ıs    |  |
|--------|---------|----------|------|-------------|--------|----------|-------|--------|------------|-------|----------|-------|--|
|        | mpa     | psig     | kW   | hp          | l/s    | cfm      | dB(A) | kg     | Size       | L(mm) | W(mm)    | H(mm) |  |
|        | 0.7     | 100      | - 45 |             | 134    | 283      | 70    |        |            |       | 980      |       |  |
| DDDCO  | 0.8     | 115      |      | 60          | 133    | 282      |       | 906    | C1 1 / 21  | 1777  |          | 1600  |  |
| DRD60  | 1       | 145      |      |             | 115    | 244      |       | 906    | G1 1/2"    | 1723  |          | 1600  |  |
|        | 1.25    | 180      |      |             | 98     | 207      |       |        |            |       |          |       |  |
|        | 0.7     | 100      | 55   |             | 187    | 396      | 76    |        | G2"        | 1656  | 1089     |       |  |
| DRD75  | 0.8     | 115      |      | 75          | 177    | 375      |       | 1110   |            |       |          | 10/0  |  |
|        | 1       | 145      |      | 75          | 153    | 325      |       | 1110   |            |       |          | 1840  |  |
|        | 1.25    | 180      |      |             | 138    | 292      |       |        |            |       |          |       |  |
|        | 0.7     | 100      | 75   | 100         | 248    | 526      | 75    |        |            | 1756  | 1089     |       |  |
| 000100 | 0.8     | 115      |      |             | 235    | 498      |       | 1205   | 6211       |       |          | 10/0  |  |
| DRD100 | 1       | 145      |      |             | 204    | 433      |       | 1295   | G2''       |       |          | 1840  |  |
|        | 1.25    | 180      |      |             | 175    | 370      |       |        |            |       |          |       |  |
|        | 0.7     | 100      | 90   | 120         | 282    | 598      | 76    |        |            |       |          |       |  |
|        | 0.8     | 115      |      |             | 269    | 570      |       |        |            |       |          |       |  |
| DRD120 | 1       | 145      |      |             | 240    | 508      |       | 1300   | G2''       | 1756  | 1089     | 1840  |  |
|        | 1.25    | 180      |      |             | 207    | 438      |       |        |            |       |          |       |  |

\* Unit performance measured according to ISO 1217. Annex C. latest edition and ISO 2151.



### Pioneering components make for a revolutionary range

- 1 Controller
- 2 Oil filter
- 3 Air filter
- 4 Air cooler & oil cooler
- 5 Oil-separator vessel
- 6 Screw element







### Variable speed series: CSMV60-180 PM, DRD60-120 PM

Concerning to the factory life-cycle cost, the minimal operation cost can really benefit customer investment. Designed for frequently commissioning at load and unload condition, Ceccato CSMV PM and DRD PM air compressor meets the minimum power consumption to throughout the long-term commissioning and it can cut your energy bill by up to 35%.





#### ES4000T controller

- Remotely connect to your compressor anywhere, at any given moment
- Maximize productivity by eliminating the risk of downtime
- Increase reliability through planned service interventions
- Reports suggest cost optimizations



**Oil-cooled drive train** Unique design, reliable and high efficiency drive train contribute to reduce energy loss and operation cost.



**Imperium inverter** In-house designed Imperium inverter ensures perfect match between air demand and air supply.



Integrated fan

- Start stop coordinated by controller in accordance with the oil temperature.



### **Technical Data**

| Model      |           | Working Pressure<br>Min-Max |     | otor<br>wer | Capaci  | ty FAD* | Noise | Weight Connection |             | Dimensions |       |       |
|------------|-----------|-----------------------------|-----|-------------|---------|---------|-------|-------------------|-------------|------------|-------|-------|
|            | mpa       | psig                        | kW  | hp          | l/s     | cfm     | dB(A) | kg                | Size        | L(mm)      | W(mm) | H(mm) |
| CSMV60 PM  | 0.7-1.0   | 100-145                     | 45  | 60          | 28-142  | 60-300  | 74    | 750               | G1 1/2''    | 1723       | 980   | 1600  |
|            | 0.70-0.85 | 100-123                     | 55  | 75          | 43-183  | 92-388  | 76    |                   | G2"<br>G2"  | 1656       | 1089  | 10/0  |
| CSMV75 PM  | 1.00-1.05 | 145-152                     |     |             | 38-157  | 81-332  |       | 840               |             |            |       | 1840  |
| CSMV100 PM | 0.70-0.85 | 100-123                     | 75  | 100         | 52-210  | 109-445 | 80    | 865               | G2"         | 1656       | 1089  | 1840  |
|            | 1.00-1.05 | 145-152                     |     |             | 47-182  | 99-385  |       | 202               |             |            |       | 1040  |
| CSMV120 PM | 0.70-0.85 | 100-123                     | 90  | 120         | 67-288  | 141-611 | 78    | 1080              | <b>C</b> 2" | 1756       | 1089  | 1840  |
|            | 1.00-1.05 | 145-152                     |     |             | 60-240  | 127-509 |       | 1080              | G2''        |            |       | 1840  |
|            | 0.70-0.85 | 100-123                     | 110 | 150         | 87-340  | 184-720 | 81    | 1400              | DNGG        | 2052       |       | 2000  |
| CSMV150 PM | 1.00-1.30 | 145-189                     | 110 | 150         | 102-287 | 215-607 |       | 1490              | DN80        | 2052       | 1325  | 2000  |
|            | 0.70-0.85 | 100-123                     | 177 | 100         | 98-402  | 208-851 | 81    | 1500              | DNGG        | 2052       | 1325  | 2000  |
| CSMV180 PM | 1.00-1.30 | 145-189                     | 132 | 180         | 102-340 | 215-720 |       | 1580              | DN80        |            |       | 2000  |

| Model     | Working Pressure<br>Min-Max |         |    | Motor Capacity FAD* Nois |        | Noise   | Weight | Connection | D        | Dimensions |       |       |
|-----------|-----------------------------|---------|----|--------------------------|--------|---------|--------|------------|----------|------------|-------|-------|
|           | mpa                         | psig    | kW | hp                       | l/s    | cfm     | dB(A)  | kg         | Size     | L(mm)      | W(mm) | H(mm) |
| DRD60 PM  | 0.7-1.3                     | 100-190 | 45 | 60                       | 33-145 | 69-307  | 71     | 733        | G1 1/2'' | 1723       | 980   | 1600  |
| 00075 014 | 0.70-0.85                   | 100-123 | 55 | 75                       | 45-188 | 95-399  | 76     |            | G2''     | 1656       | 1089  | 1840  |
| DRD75 PM  | 1.00-1.30                   | 145-189 |    |                          | 40-162 | 85-343  |        | 825        |          |            |       |       |
| 22225 244 | 0.70-0.85                   | 100-123 | 75 | 100                      | 53-215 | 113-456 | 80     | 040        | G1 1/2"  | 1050       | 1000  | 10/0  |
| DRD95 PM  | 1.00-1.30                   | 145-189 |    |                          | 43-185 | 92-392  |        | 840        |          | 1656       | 1089  | 1840  |
|           | 0.70-0.85                   | 100-123 | 75 | 100                      | 58-250 | 124-530 | 77     | 1075       | 67.W     | 1756       | 1089  | 10/0  |
| DRD100 PM | 1.00-1.30                   | 145-189 |    | 100                      | 48-213 | 102-452 |        | 1035       | u2"      |            |       | 1840  |
| DRD120 PM | 0.70-0.85                   | 100-123 |    |                          | 70-300 | 148-636 | 77     | 10.55      |          | 1756       | 1089  | 10/0  |
|           | 1.00-1.30                   | 145-189 | 90 | 120                      | 55-255 | 117-540 |        | 1065       | u2"      |            |       | 1840  |

\* Unit performance measured according to ISO 1217. Annex C. latest edition and ISO 2151.

### Features and benefits











### Revolutionary drive train technology

#### Improved energy efficiency saves your money

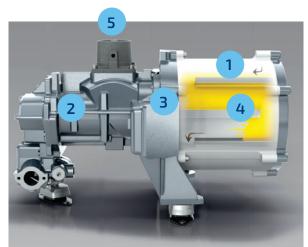
- In-house designed oil-cooled PM motor with oil-cooled PM Super Premium Efficiency.
- New generation in-house designed screw elements, with improved efficiency.
- Integrated direct drive transmission for minimal losses.
- Smart inlet valve optimizes the inlet flow and improves efficiency.

#### Increased reliability extends lifetime

- Oil-cooled PM motor rated IP66, premium protection against dust and water ingress.
- Globally renowned screw elements, proven in thousands of installations.
- Optimal cooling at all speeds and conditions thanks to oilcooling principle of the oil-cooled PM motor.

### Maintenance-free design minimizes downtime and improves your productivity

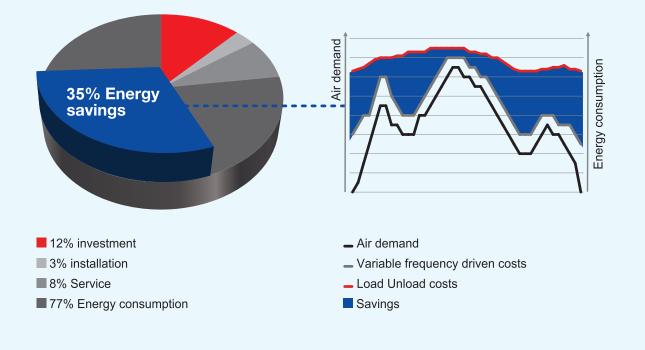
- Coupling-free direct drive design, no maintenance needed.
- Smart inlet valve, no maintenance needed.



- Oil-cooled PM motor
  In-house designed screw elements
  Direct drive
  Oil-cooling
- 5 Smart inlet value

### We protect your efficiency

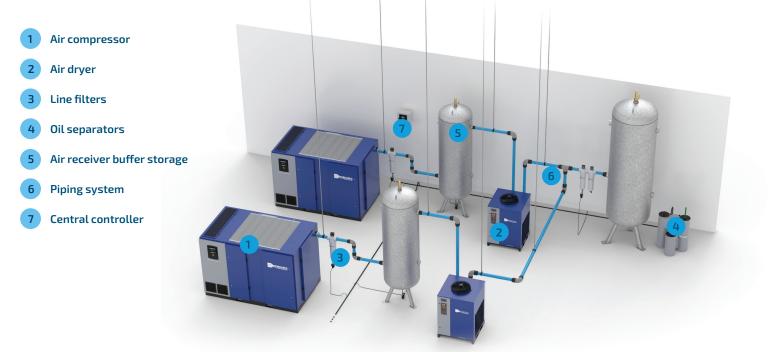
Energy costs represent about 70% of the total operating cost of your compressor over a 5 year period. That's why reducing the operating cost of a compressed air solution is a major focus. Variable frequency driven compressors can cut the energy bill of your compressor by up to 35%.





### A total solution for your quality air

#### Complete compressor room solutions



#### **Line Filters**

Purify the compressed air by eliminating oil/dust contaminants resulting in higher final product quality and an increase of your overall productivity.

#### **Air Receiver**

Buffer storage for compressed air. Helps with condensate separation, pressure stabilization and more efficient operation of the compressor.

#### **Oil Water Separator**

Captures the oil in compressor condensate so it can be disposed of in an safe and environment-friendly way.

#### AIRnet

Fast to install, reliable piping system, designed for compressed air applications offers lowest total cost of ownership.

### Complete your compressed air installation with an ICONS plan

What if your compressor needs service or an immediate intervention? With an ICONS plan, you get an alert from your controller delivered straight to your computer, tablet or smartphone. Wherever you are, you can take immediate action and reduce the risk of downtime and other costs.



#### Without connectivity





### Contact your local representative:

www.ceccato.com



#### CARE

Care is what service is all about: professional service by knowledgeable people, using high-quality original parts.

#### TRUST

Trust is earned by delivering on our promises of reliable, uninterrupted performance and long equipment lifetime.

#### **EFFICIENCY**

Equipment efficiency is ensured by regular maintenance. Efficiency of the service organization is how Original Parts and Service make the difference.

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