

# COMBIPRESS "CB2"

## Pressure boosting sets



CB2 - MK



CB2 - 2CP



CB2 - 2CP

### OPERATING PRINCIPLE

**COMBIPRESS** are pressure boosting sets consisting of two pumps assembled in a ready to be mounted unit.

The sets are arranged so that, at each increase in demand by the users, one or both pumps in succession start automatically. The operation of the number of pumps necessary to satisfy the demand for water results in a marked reduction in power consumption.

The electronic circuit in the control box alternates the operation of the pumps.

### USES

- Clean water and chemically non-aggressive liquids.
- Water supply: pressure boosting in industrial applications, blocks of flats, hotels, communities, water treatment plants, campsites, schools, hospitals, barracks, etc.
- Irrigation: playing fields in general (football, golf, etc), agriculture, artificial snow systems.

### CONSTRUCTION CHARACTERISTICS

- **PUMPS** complete with intake and exhaust manifolds, spherical valves and non-return valves.
- **BLOCK** constructed from a metal section.
- **COMPONENTS** of command and control installed on the exhaust manifold and consisting of a pressure gauge and two pressure switches which can be set by the user (the factory setting is regulated based on the average use of the set).
- **CONTROL BOX** fitted with a gate block switch, a low voltage pressure switch control circuit, an electronic circuit to alternate the operation of the pumps, an amperometric protection (overload cut-out) and an anti-rebound system at the start of the pumps (to avoid continuous false starts in the case of short and limited requests by the user).

**CB2m:** single-phase 230 V - 50 Hz.

**CB2:** three-phase 230/400 V - 50 Hz up to 4 kW.

400/690 V - 50 Hz from 5.5 to 7.5 kW.

### CONSTRUCTION AND SAFETY STANDARDS

EN 60335-1  
IEC 60335-1  
CEI 61-150

EN 60034-1  
IEC 60034-1  
CEI 2-3



### CERTIFICATIONS

Company with management system certified DNV  
ISO 9001: QUALITY



**PERFORMANCE DATA**
**50 Hz n= 2900 min<sup>-1</sup> HS= 0 m**

| MODEL               | 1~ | 3~ | POWER (P <sub>2</sub> ) |         | ▲ | Q*<br>l/min | m <sup>3</sup> /h | 0   | 1.2  | 2.4   | 4.8  | 7.2  | 9.6 | 12  | 14.4 | 16.8 | 19.2 | 21.6 |
|---------------------|----|----|-------------------------|---------|---|-------------|-------------------|-----|------|-------|------|------|-----|-----|------|------|------|------|
|                     |    |    | kW                      | HP      |   |             | 0                 | 20  | 40   | 80    | 120  | 160  | 200 | 240 | 280  | 320  | 360  |      |
| <b>CB2 - MK 3/3</b> | ●  | ●  | 2 x 0.75                | 2 x 1   |   |             | 52                | 50  | 49   | 45    | 38   | 28   |     |     |      |      |      |      |
| <b>CB2 - MK 3/4</b> | ●  | ●  | 2 x 1.1                 | 2 x 1.5 |   |             | 69.5              | 67  | 65.5 | 60    | 50.5 | 38   |     |     |      |      |      |      |
| <b>CB2 - MK 3/5</b> | ●  | ●  | 2 x 1.1                 | 2 x 1.5 |   |             | 87                | 83  | 82   | 75    | 63.5 | 47   |     |     |      |      |      |      |
| <b>CB2 - MK 3/6</b> | ●  | ●  | 2 x 1.5                 | 2 x 2   |   |             | 104               | 100 | 98   | 90    | 76   | 56   |     |     |      |      |      |      |
| <b>CB2 - MK 5/4</b> | ●  | ●  | 2 x 1.1                 | 2 x 1.5 |   |             | 56                | —   | 55   | 52.5  | 48   | 41.5 | 32  | 20  |      |      |      |      |
| <b>CB2 - MK 5/5</b> | ●  | ●  | 2 x 1.1                 | 2 x 1.5 |   |             | 70                | —   | 69   | 66    | 60   | 51.5 | 40  | 25  |      |      |      |      |
| <b>CB2 - MK 5/6</b> | ●  | ●  | 2 x 1.5                 | 2 x 2   |   |             | 84                | —   | 83   | 79    | 72   | 62   | 48  | 30  |      |      |      |      |
| <b>CB2 - MK 5/7</b> |    | ●  | 2 x 1.8                 | 2 x 2.5 |   |             | 98                | —   | 96   | 92.5  | 84   | 72.5 | 56  | 34  |      |      |      |      |
| <b>CB2 - MK 5/8</b> |    | ●  | 2 x 2.2                 | 2 x 3   |   |             | 112               | —   | 110  | 105.5 | 96   | 82.5 | 64  | 40  |      |      |      |      |
| <b>CB2 - MK 8/4</b> | ●  | ●  | 2 x 1.5                 | 2 x 2   |   |             | 56                | —   | —    | 54    | 52   | 50   | 46  | 39  | 31.5 | 24   | 15   |      |
| <b>CB2 - MK 8/5</b> |    | ●  | 2 x 1.8                 | 2 x 2.5 |   |             | 70                | —   | —    | 67.5  | 66   | 63   | 58  | 50  | 40   | 30   | 18   |      |
| <b>CB2 - MK 8/6</b> |    | ●  | 2 x 2.2                 | 2 x 3   |   |             | 86                | —   | —    | 82    | 78   | 74   | 68  | 58  | 46.5 | 35   | 20   |      |

| MODEL                | 1~ | 3~ | POWER (P <sub>2</sub> ) |       | ▲   | Q*<br>l/min | m <sup>3</sup> /h | 0  | 0.6 | 1.2 | 2.4 | 3.6 | 4.8 | 7.2 | 8.4  | 9.6  | 10.8 | 12.0 | 13.2 | 14.4 | 15.6 |
|----------------------|----|----|-------------------------|-------|-----|-------------|-------------------|----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
|                      |    |    | kW                      | HP    |     |             | 0                 | 10 | 20  | 40  | 60  | 80  | 120 | 140 | 160  | 180  | 200  | 220  | 240  | 260  |      |
| <b>CB2 - 4CP 100</b> | ●  |    | 2 x 0.75                | 2 x 1 | IE3 | H metres    | 50                | 50 | 49  | 47  | 45  | 42  | 37  | 34  | 30.5 | 26.5 | 22   | 17   | 11   | 5    |      |

| MODEL                | 1~ | 3~ | POWER (P <sub>2</sub> ) |          | ▲ | Q*<br>l/min | m <sup>3</sup> /h | 0  | 0.6  | 1.2  | 2.4 | 3.6  | 4.8  | 6    | 7.2  | 8.4  | 9.6  | 10.8 | 12  | 13.2 | 14.4 | 15.6 |
|----------------------|----|----|-------------------------|----------|---|-------------|-------------------|----|------|------|-----|------|------|------|------|------|------|------|-----|------|------|------|
|                      |    |    | kW                      | HP       |   |             | 0                 | 10 | 20   | 40   | 60  | 80   | 100  | 120  | 140  | 160  | 180  | 200  | 220 | 240  | 260  |      |
| <b>CB2 - 3CRm80</b>  | ●  |    | 2 x 0.45                | 2 x 0.60 |   |             | 40                | 38 | 37   | 34.5 | 31  | 27   | 22.5 | 17   | 11   | 5    |      |      |     |      |      |      |
| <b>CB2 - 4CRm80</b>  | ●  |    | 2 x 0.55                | 2 x 0.75 |   |             | 52                | 50 | 49   | 44.5 | 40  | 34   | 28.5 | 22.5 | 16   | 10   |      |      |     |      |      |      |
| <b>CB2 - 5CRm80</b>  | ●  |    | 2 x 0.75                | 2 x 1    |   |             | 67                | 66 | 64   | 59   | 53  | 45.5 | 37.5 | 29.5 | 20.5 | 12   |      |      |     |      |      |      |
| <b>CB2 - 4CRm100</b> | ●  |    | 2 x 0.75                | 2 x 1    |   |             | 50                | 50 | 49   | 47   | 45  | 42   | 39.5 | 37   | 34   | 30.5 | 26.5 | 22   | 17  | 11   | 5    |      |
| <b>CB2 - 5CRm100</b> | ●  |    | 2 x 1.1                 | 2 x 1.5  |   |             | 63                | 62 | 61.5 | 59.5 | 57  | 53.5 | 50.5 | 46.5 | 42.5 | 38   | 33   | 28   | 22  | 15   | 8    |      |

| MODEL                    | 1~ | 3~ | POWER (P <sub>2</sub> ) |         | ▲ | Q*<br>l/min | m <sup>3</sup> /h | 0  | 2.4  | 4.8   | 7.2 | 9.6  | 12.0 | 13.2 | 14.4 | 16.8 | 19.2 | 21.6 | 24.0 | 30.0 | 36.0 | 42.0 | 48.0 |  |
|--------------------------|----|----|-------------------------|---------|---|-------------|-------------------|----|------|-------|-----|------|------|------|------|------|------|------|------|------|------|------|------|--|
|                          |    |    | kW                      | HP      |   |             | 0                 | 40 | 80   | 120   | 160 | 200  | 220  | 240  | 280  | 320  | 360  | 400  | 500  | 600  | 700  | 800  |      |  |
| <b>CB2 - 2CP 25/130</b>  | ●  | ●  | 2 x 0.75                | 2 x 1   |   |             | 42                | 39 | 34   | 28.5  | 22  | 15   |      |      |      |      |      |      |      |      |      |      |      |  |
| <b>CB2 - 2CP 25/14B</b>  | ●  | ●  | 2 x 1.1                 | 2 x 1.5 |   |             | 54                | 52 | 47.5 | 41    | 33  | 22   |      |      |      |      |      |      |      |      |      |      |      |  |
| <b>CB2 - 2CP 25/16C</b>  | ●  | ●  | 2 x 1.1                 | 2 x 1.5 |   |             | 47                | 46 | 44   | 40    | 35  | 30   | 27   | 24   |      |      |      |      |      |      |      |      |      |  |
| <b>CB2 - 2CP 25/16B</b>  | ●  | ●  | 2 x 1.5                 | 2 x 2   |   |             | 58                | 56 | 54   | 51    | 47  | 43   | 40   | 37   | 30   |      |      |      |      |      |      |      |      |  |
| <b>CB2 - 2CP 25/16A</b>  |    | ●  | 2 x 2.2                 | 2 x 3   |   |             | 68                | 67 | 64.5 | 62    | 58  | 54   | 51   | 48   | 41   | 32   |      |      |      |      |      |      |      |  |
| <b>CB2 - 2CP 32/200C</b> |    | ●  | 2 x 3                   | 2 x 4   |   |             | 70                | —  | 66.5 | 65    | 63  | 60.5 | 59   | 58   | 55   | 52   | 49.5 | 46.5 | 36   |      |      |      |      |  |
| <b>CB2 - 2CP 32/200B</b> |    | ●  | 2 x 4                   | 2 x 5.5 |   |             | 85                | —  | 81   | 79    | 77  | 75   | 74   | 72   | 69   | 66   | 62   | 58   | 49   |      |      |      |      |  |
| <b>CB2 - 2CP 32/210B</b> |    | ●  | 2 x 5.5                 | 2 x 7.5 |   |             | 94                | —  | 94   | 93    | 91  | 89   | 87   | 86   | 83   | 79   | 75   | 70   | 56   |      |      |      |      |  |
| <b>CB2 - 2CP 32/210A</b> |    | ●  | 2 x 7.5                 | 2 x 10  |   |             | 112               | —  | 111  | 110.5 | 110 | 108  | 107  | 106  | 102  | 99   | 94   | 89   | 74   |      |      |      |      |  |
| <b>CB2 - 2CP 40/180C</b> |    | ●  | 2 x 4                   | 2 x 5.5 |   |             | 64                | —  | —    | —     | —   | 62   | 61.3 | 60.5 | 59   | 57.5 | 56   | 54.5 | 49   | 43   | 35   |      |      |  |
| <b>CB2 - 2CP 40/180B</b> |    | ●  | 2 x 5.5                 | 2 x 7.5 |   |             | 76                | —  | —    | —     | —   | 73   | 72.5 | 72   | 71   | 70   | 69   | 67.5 | 64   | 59.5 | 54   | 46   |      |  |
| <b>CB2 - 2CP 40/180A</b> |    | ●  | 2 x 7.5                 | 2 x 10  |   |             | 88                | —  | —    | —     | —   | 85   | 84.5 | 84   | 83   | 82   | 81   | 79.5 | 76   | 72   | 67   | 60   |      |  |

Q = Flow rate H = Total manometric head HS = Suction height

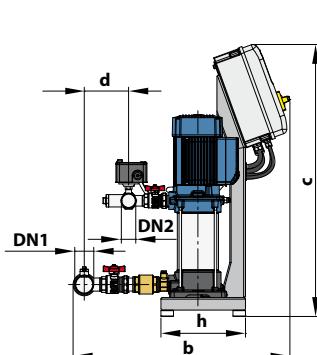
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

\* Maximum flow rate of the pressure boosting set with both pumps running

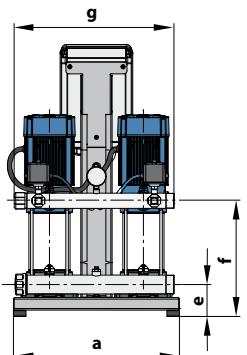
▲ Three-phase motor efficiency class (IEC 60034-30-1)

# COMBIPRESS "CB2"

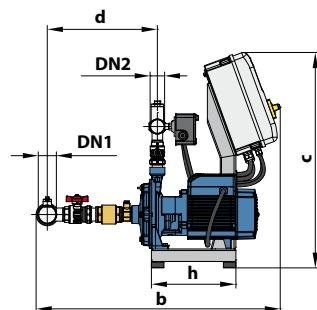
## DIMENSIONS AND WEIGHT



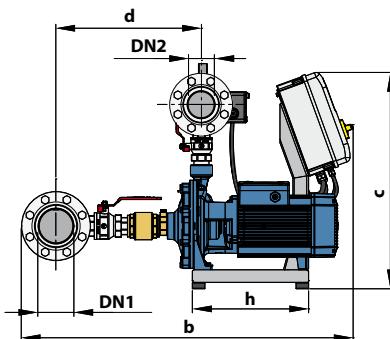
**CB2 - MK**



**CB2 - 4CP • CB2 - 3-5CR**



**CB2 - 2CP 25/ • CB2 - 2CP 32/**



**CB2 - 2CP 40/**

| MODEL             |                   | PORTS |     | DIMENSIONS mm |     |     |            |     |   |     |              | kg   |  |
|-------------------|-------------------|-------|-----|---------------|-----|-----|------------|-----|---|-----|--------------|--|--|
| Single-phase      | Three-phase       | DN1   | DN2 | a             | b   | c   | d          | e   | f   | g   | h            | 1~   | 3~   |
| CB2 - MKm 3/3     | CB2 - MK 3/3      | 2"    | 1½" | 530           | 695 | 868 | 140        | 102 | 251<br>275<br>299<br>323<br>275<br>299<br>323<br>347<br>368 | 500 | 270          | 58.0<br>59.0<br>60.0<br>66.0<br>59.0<br>59.0<br>65.0<br>–<br>– | 59.0<br>59.0<br>60.0<br>64.0<br>59.0<br>60.0<br>63.0<br>66.0<br>67.0 |
| CB2 - MKm 3/4     | CB2 - MK 3/4      |       |     |               |     |     |            |     |   |     |              |  |  |
| CB2 - MKm 3/5     | CB2 - MK 3/5      |       |     |               |     |     |            |     |   |     |              |  |  |
| CB2 - MKm 3/6     | CB2 - MK 3/6      |       |     |               |     |     |            |     |   |     |              |  |  |
| CB2 - MKm 5/4     | CB2 - MK 5/4      |       |     |               |     |     |            |     |   |     |              |  |  |
| CB2 - MKm 5/5     | CB2 - MK 5/5      |       |     |               |     |     |            |     |   |     |              |  |  |
| CB2 - MKm 5/6     | CB2 - MK 5/6      |       |     |               |     |     |            |     |   |     |              |  |  |
| –                 | CB2 - MK 5/7      |       |     |               |     |     |            |     |   |     |              |  |  |
| –                 | CB2 - MK 5/8      |       |     |               |     |     |            |     |   |     |              |  |  |
| CB2 - MKm 8/4     | CB2 - MK 8/4      |       |     |               |     |     |            |     |   |     |              |  |  |
| –                 | CB2 - MK 8/5      | 2½"   | 1½" | 530           | 742 | 868 | 178        | 102 | 261<br>288<br>309   | 500 | 270          | 67.0<br>–<br>–   | 65.0<br>68.0<br>68.0   |
| –                 | CB2 - MK 8/6      |       |     |               |     |     |            |     |   |     |              |  |  |
| CB2 - 4CPm100     | –                 |       |     |               |     |     |            |     |   |     |              |  |  |
| CB2 - 3CRm80      | –                 | 1½"   | 1½" | 530           | 764 | 689 | 349<br>374 | 192 | 372   | 500 | 270          | 39.8<br>41.8<br>46.6   | –<br>–<br>–  |
| CB2 - 4CRm80      | –                 |       |     |               |     |     |            |     |   |     |              |  |  |
| CB2 - 5CRm80      | –                 |       |     |               |     |     |            |     |   |     |              |  |  |
| CB2 - 4CRm100     | –                 | 2"    | 2"  | 837           | 412 | 412 | 192        | 372 | 500   | 270 | 52.9<br>53.7 | –<br>–   | –<br>–   |
| CB2 - 5CRm100     | –                 |       |     |               |     |     |            |     |   |     |              |  |  |
| CB2 - 2CPm 25/130 | CB2 - 2CP 25/130  | 2"    | 1½" | 530           | 746 | 688 | 343        | 152 | 394   | 500 | 270          | 52.5<br>70.5<br>70.5<br>79.5                                   | 51.0<br>70.0<br>70.0<br>79.0   |
| CB2 - 2CPm 25/14B | CB2 - 2CP 25/14B  |       |     |               |     |     |            |     |   |     |              |  |  |
| CB2 - 2CPm 25/16C | CB2 - 2CP 25/16C  |       |     |               |     |     |            |     |   |     |              |  |  |
| CB2 - 2CPm 25/16B | CB2 - 2CP 25/16B  |       |     |               |     |     |            |     |   |     |              |  |  |
| –                 | CB2 - 2CP 25/16A  | 3"    | 2"  | 780           | 982 | 688 | 450        | 192 | 535   | 700 | 370          | 82.0<br>112.0<br>118.0<br>149.0                                | –<br>–<br>–<br>–   |
| –                 | CB2 - 2CP 32/200C |       |     |               |     |     |            |     |   |     |              |  |  |
| –                 | CB2 - 2CP 32/200B |       |     |               |     |     |            |     |   |     |              |  |  |
| –                 | CB2 - 2CP 32/210B |       |     |               |     |     |            |     |   |     |              |  |  |
| –                 | CB2 - 2CP 32/210A | 4"    | 3"  | 700           | 987 | 688 | 454        | 199 | 565   | 700 | 370          | 156.0<br>168.0<br>178.0<br>188.0                               | –<br>–<br>–<br>–   |
| –                 | CB2 - 2CP 40/180C |       |     |               |     |     |            |     |   |     |              |  |  |
| –                 | CB2 - 2CP 40/180B |       |     |               |     |     |            |     |   |     |              |  |  |
| –                 | CB2 - 2CP 40/180A |       |     |               |     |     |            |     |   |     |              |  |  |