



## CHILLERS FOR INDUSTRIAL FLUIDS “MEC”

The new MEC series of self-contained chillers have been designed for the cooling of different fluids such as glycol and water mix, hydraulic oils, cutting fluids for industrial applications. The water chiller temperature range is from +5°C to +30°C. The oil chiller temperature range is from +20°C to 45°C. All units are suitable for ambient temperatures up to 40°C.

The following versions are available for each single unit:

- **Version W**, suitable for low viscosity fluids; it is equipped without pump and tank;
- **Version O**, suitable for medium viscosity fluids; it is equipped without pump and tank ;
- **Version WP** (for water) and **Version OP** (for oil) equipped with pump and without tank; they are suitable for working in open or closed loop circuits which are complete with tank (hydraulics, cutting oils, dielectric oil);
- **Version WVP**, suitable only for water and low viscosity fluids; units are supplied with tank and pump. They are suitable for working in closed loop circuits which do not provide a tank (high speed spindles, spot welding machines, laser);
- **Version EI**, useful for cooling "dirty" fluids; It provides a cleanable evaporator and it is complete with pump, supplied without tank.

**The pump** is selected according to the type of fluid to be cooled:

- Peripheral or centrifugal pump for water, water and glycol mix, other fluid mix
- Gear pump for high-medium viscosity fluids

The built-in tank of the WVP version is an open stainless steel one, easy to clean.

Each unit is selected, according to the type of fluid, with a different evaporator enabling the highest machine performance and reliability:

- Finned coil evaporator plunged into a tank, suitable for units cooling water, water and glycol mix or low viscosity fluids
- Stainless steel brazed plate evaporator used in chillers without tank for the cooling of any clean fluids
- Cleanable evaporator for "dirty" fluids.

MEC



### SPECIAL VERSIONS:

- Models for laser cooling
- Models with horizontal air outlet (fan placed on the back side)
- Higher performance pump





## TECHNICAL DATA

| MODELS                        |                   | MEC 35    | MEC 55    | MEC 70    | MEC 100   |
|-------------------------------|-------------------|-----------|-----------|-----------|-----------|
| <b>Nom. Cooling power (*)</b> | kW                | 3,5       | 5,5       | 7         | 10        |
| <b>Compressor power (*)</b>   | kW                | 1,1       | 1,6       | 2,1       | 3,2       |
| <b>WATER PUMP (1)</b>         |                   |           |           |           |           |
| Power                         | kW                | 0,33      | 0,33      | 0,75      | 0,75      |
| Water flow                    | L/min             | 8 ÷ 38    | 8 ÷ 38    | 16 ÷ 70   | 16 ÷ 70   |
| Pressure                      | bar               | 4,1 ÷ 0,5 | 4,1 ÷ 0,5 | 4,3 ÷ 2,5 | 4,3 ÷ 2,5 |
| <b>OIL PUMP (2)</b>           |                   |           |           |           |           |
| Power                         | kW                | 0,26      | 0,55      | 0,75      | 0,75      |
| Oil flow                      | L/min             | 10        | 25        | 35        | 35        |
| Pressure                      | bar               | 5         | 5         | 5         | 5         |
| <b>FAN</b>                    |                   |           |           |           |           |
| Power                         | KW                | 0,115     | 0,115     | 0,38      | 0,38      |
| Air flow                      | m <sup>3</sup> /h | 3.140     | 3.140     | 3.800     | 3.800     |
| <b>TANK</b>                   |                   |           |           |           |           |
| Capacity                      | litres            | 30        | 30        | 80        | 80        |
| <b>PIPE CONNECTIONS</b>       |                   |           |           |           |           |
|                               | BSP               | ¾"        | ¾"        | 1"        | 1"        |
| <b>DIMENSIONS:</b>            |                   |           |           |           |           |
| <b>height (**)</b>            | mm                | 1010      | 1010      | 1110      | 1110      |
| <b>width</b>                  | mm                | 570       | 570       | 740       | 740       |
| <b>depth (**)</b>             | mm                | 655       | 655       | 905       | 905       |

(\*) For water: referred to an outlet temperature of 15°C and ambient temperature of 25°C

For oil: referred to an outlet temperature of 25°C and ambient temperature of 25°C

(\*\*) Without fan grid. All models (not for EI version) can be equipped with vertical or horizontal air outlet

Dimensions of the fan grid on MEC 35 and MEC 55: 80 mm—Dimensions of the fan grid on MEC 70 and MEC 100: 110 mm

(1) Version WP and WVP Standard pump.

(2) Version OP

Standard equipment (■) optional (●); - = not available

| Version   | Water (*) |    |     | "Dirty" fluids | Oil |    |
|---|-----------|----|-----|----------------|-----|----|
|   | W         | WP | WVP | EI             | O   | OP |
| Cleanable tank                                  | -         | -  | ■   | -              | -   | -  |
| Cleanable evaporator                            | -         | -  | -   | ■              | -   | -  |
| Peripheral pump                                 | -         | ■  | ■   | -              | -   | -  |
| Centrifugal pump                                | -         | ●  | ●   | ■              | -   | -  |
| Gear pump                                       | -         | -  | -   | -              | -   | ■  |
| High pressure switch                            | ■         | ■  | ■   | ■              | ■   | ■  |
| Low pressure switch                             | ■         | ■  | ■   | ■              | ■   | ■  |
| Condensing pressure switch                      | ●         | ●  | ●   | ●              | ●   | ●  |
| Safety by-pass                                  | ●         | ●  | ●   | -              | ■   | ■  |
| Fluid manometer                                 | ●         | ●  | ●   | -              | ●   | ●  |
| Alarm contact (max. and/or min. temperature)    | ●         | ●  | ●   | ●              | ●   | ●  |
| Level control with alarm light and contact      | -         | -  | ■   | -              | -   | -  |
| Flow switch with timer, alarm light and contact | ■         | ■  | ●   | ■              | ●   | ●  |
| Wheels  | ●         | ●  | ●   | ●              | ●   | ●  |
| Injection hot gas                               | ●         | ●  | ●   | ●              | ●   | ●  |

(\*) For water, water and glycol mix., low viscosity fluids. Other custom versions on request.

