

# IMMERSION CHILLERS FOR CUTTING FLUIDS



**FLUID  
COOLERS**  
FOR MACHINE  
MANUFACTURERS

ISO 9001:2015  
certified Quality  
Management System

MADE IN ITALY



**ECIK is the new Euro Cold series for cutting fluids. The immersion technology makes them extremely easy to fit and service.**

The skills and the experience gained by Euro Cold during its over 35 years of experience in the field are at your disposal. Our power is our ability to respond to the needs of mechanical and industrial systems' manufacturers which are rapidly and constantly changing.

Do not hesitate to contact us in order that we may provide you with the most adequate solution to your specific temperature control needs.

## MAIN FEATURES

- Available models for emulsions cooling up to 8% and oil cooling with viscosity grade ISO 5. Maximum acceptable viscosity: 22 centistok. For higher viscosities, please contact our Technical Department.
- Agitator of the fluid applied on all models.
- High performance rotary vane or scroll compressors with low energy consumption.
- Chiller malfunction signal display (optional in all single-phase models).
- Low-noise axial fans.
- Remote malfunction signal of the chiller.
- Protective metal frame made of S235 steel painted with epoxy powder and with a semi-gloss textured effect.
- **NEW!!!** Fixed or differential set temperature control (standard supply of the kit ambient probe).

## ACCESSORIES

- Electric connectors upon client's request.
- Special power supply voltages.
- Configuration for an ambient temperature up to +55°C.
- Configuration for an ambient temperature down to -15°C.
- Frame available upon request in every type of RAL finish.

For further information, please contact our sales department:  
[commerciale@eurocold.it](mailto:commerciale@eurocold.it)



# IMMERSION CHILLERS FOR CUTTING FLUIDS

# ECIK



## COOLING CAPACITY AT DIFFERENT FLUID CONDITIONS

| EMULSION                  |                            |      |       |       |       |       |       |       |
|---------------------------|----------------------------|------|-------|-------|-------|-------|-------|-------|
| MODEL                     |                            | 45   | 70    | 120   | 160   | 200   | 300   | 350   |
| Ambient temperature<br>°C | Emulsion temperature<br>°C |      |       |       |       |       |       |       |
| 32                        | 20                         | 6055 | 10480 | 17460 | 20955 | 26775 | 34340 | 40740 |
|                           | 25                         | 6345 | 10980 | 18300 | 21960 | 28060 | 35986 | 42700 |
|                           | 30                         | 6635 | 11485 | 19140 | 22965 | 29345 | 37635 | 44650 |

| NEAT OIL                  |                            |      |      |       |       |       |       |       |
|---------------------------|----------------------------|------|------|-------|-------|-------|-------|-------|
| MODEL                     |                            | 45   | 70   | 120   | 160   | 200   | 300   | 350   |
| Ambient temperature<br>°C | Emulsion temperature<br>°C |      |      |       |       |       |       |       |
| 32                        | 20                         | 4510 | 6780 | 11980 | 14770 | 20730 | 23525 | 25660 |
|                           | 25                         | 5160 | 8940 | 14890 | 19460 | 22830 | 30995 | 36440 |
|                           | 30                         | 5300 | 9290 | 15485 | 20250 | 24880 | 32550 | 37920 |

# IMMERSION CHILLERS FOR CUTTING FLUIDS

# ECIK

## TECHNICAL DATA

|   |                              | ECIK - EMULSION / NEAT OIL       |                  |                  |                  |                    |                    |          |
|---|------------------------------|----------------------------------|------------------|------------------|------------------|--------------------|--------------------|----------|
| MODEL                                       |                              | 45                               | 70               | 120              | 160              | 200                | 300                | 350      |
| Power supply <b>V/ph/Hz</b>                 |                              | 230/1/50                         | 400/3/50         |                  |                  |                    |                    |          |
| Compressor (Max. absorbed power) <b>W</b>   |                              | 1700                             | 2500             | 4200             | 4900             | 6600               | 8500               | 9200     |
| Agitator (Max. absorbed power) <b>W</b>     |                              | 180                              |                  |                  |                  |                    |                    |          |
| Fan   | Air flow <b>mc/h</b>         | 2800                             | 3700             | 5600             | 6700             | 8400               | 12500              |          |
|   | Max. absorbed power <b>W</b> | 190                              | 290              | 530              | 630              | 760                | 750                |          |
| Condenser                                   |                              | Air condenser (copper/aluminium) |                  |                  |                  |                    |                    |          |
| Evaporator                                  |                              | Inox                             |                  |                  |                  |                    |                    |          |
| Refrigerant gas HFC                         |                              | R410A                            |                  |                  |                  |                    |                    |          |
| Noise level (at 1 m distance) <b>db (A)</b> |                              | 60                               | 61               | 62               | 63               | 64                 | 66                 | 68       |
| Frame colour                                |                              | RAL 7035 - RAL 7042              |                  |                  |                  |                    |                    |          |
| Frame type (*)                              |                              | ECIK 45                          | ECIK 70          | ECIK 120         | ECIK 160         | ECIK 200           | ECIK 300           | ECIK 350 |
| WEIGHT & DIMENSIONS                         |                              |                                  |                  |                  |                  |                    |                    |          |
| Weight (approx.) <b>kg</b>                  |                              | 95                               | 120              | 150              | 170              | 210                | 260                | 290      |
| Packaging weight (approx.) <b>kg</b>        |                              | 105                              | 130              | 160              | 180              | 220                | 270                | 300      |
| Dimensions (W x D x H) <b>mm</b>            |                              | 605 x 650 x 1120                 | 680 x 730 x 1340 | 750 x 802 x 1790 | 750 x 800 x 1990 | 1000 x 1050 x 1935 | 1000 x 1052 x 2050 |          |

## NOTES

Thermoregulator with settable range +20°C/+30°C.

Absorbed power data refer to the standard agitator. In case of special agitator the values may differ.

(\*) Technical drawings available in the DOWNLOAD area of our Web site.

Cooling capacity data is based on graphs supplied by the compressor manufacturers.

Maximum and minimum ambient temperature: from +5 to +42°C.

For ambient temperature above +42°C please contact our Technical Department.

Minimum and maximum ambient relative humidity (without condensation): from 10 to 85%.

Maximum ambient altitude: 2000 m.

Minimum and maximum stocking temperature: from +5 to +50°C.

Standard hysteresis ±1,5°K.

All measures on technical drawings are in millimetres unless otherwise specified.

**EURO COLD reserves the right to carry out modifications without prior notice.**

### Cooling capacity correction factor based on ambient temperature: Kcf

| Temperature | 32°C | 37°C | 40°C | 42°C |
|-------------|------|------|------|------|
| Kcf         | 1    | 0,95 | 0,9  | 0,87 |

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# ECIK


## MASTER-SLAVE ECIK: THE POWER OF IMMERSION CHILLERS DOUBLES

Thanks to the new Master-Slave solution, there is the possibility of combining two immersion chillers to achieve higher capacities of up to 89,3 kW.

The chillers can be installed in different positions, depending on the available space, and can be installed very easily; each chiller is equipped with a Harting connector and pre-wired cable for connection. Lastly, the **Master-Slave** solution guarantees redundancy; if one chiller shuts down, the other keeps operating, avoiding potential downtime.

| ECIK - EMULSION |   |       |       |       |       |       |       |       |
|-----------------|---|-------|-------|-------|-------|-------|-------|-------|
| MODEL           |   | 45    | 70    | 120   | 160   | 200   | 300   | 350   |
|                 |  | 6635  | 11485 | 19140 | 22965 | 29345 | 37635 | 44650 |
| 45              | 6635  | 13270 | 18120 | 25775 | 29600 | 35980 | 44270 | 51285 |
| 70              | 11485   | 18120 | 22970 | 30625 | 34450 | 40830 | 49120 | 56135 |
| 120             | 19140   | 25775 | 30625 | 38280 | 42105 | 48485 | 56775 | 63790 |
| 160             | 22965   | 29600 | 34450 | 42105 | 45930 | 52310 | 60600 | 67615 |
| 200             | 29345   | 35980 | 40830 | 48485 | 52310 | 58690 | 66980 | 73995 |
| 300             | 37635   | 44270 | 49120 | 56775 | 60600 | 66980 | 75270 | 82285 |
| 350             | 44650   | 51285 | 56135 | 63790 | 67615 | 73995 | 82285 | 89300 |

 Nominal cooling capacity in **Watts** referred to fluid at +30°C and ambient at +32°C

| ECIK - NEAT OIL |   |       |       |       |       |       |       |       |
|-----------------|---|-------|-------|-------|-------|-------|-------|-------|
| MODEL           |   | 45    | 70    | 120   | 160   | 200   | 300   | 350   |
|                 |  | 5300  | 9290  | 15485 | 20250 | 24880 | 32550 | 37920 |
| 45              | 5300  | 10600 | 14590 | 20785 | 25550 | 30180 | 37850 | 43220 |
| 70              | 9290  | 14590 | 18580 | 24775 | 29540 | 34170 | 41840 | 47210 |
| 120             | 15485   | 20785 | 24775 | 30970 | 35735 | 40365 | 48035 | 53405 |
| 160             | 20250   | 25550 | 29540 | 35735 | 40500 | 45130 | 52800 | 58170 |
| 200             | 24880   | 30180 | 34170 | 40365 | 45130 | 49760 | 57430 | 62800 |
| 300             | 32550   | 37850 | 41840 | 48035 | 52800 | 57430 | 65100 | 70470 |
| 350             | 37920   | 43220 | 47210 | 53405 | 58170 | 62800 | 70470 | 75840 |

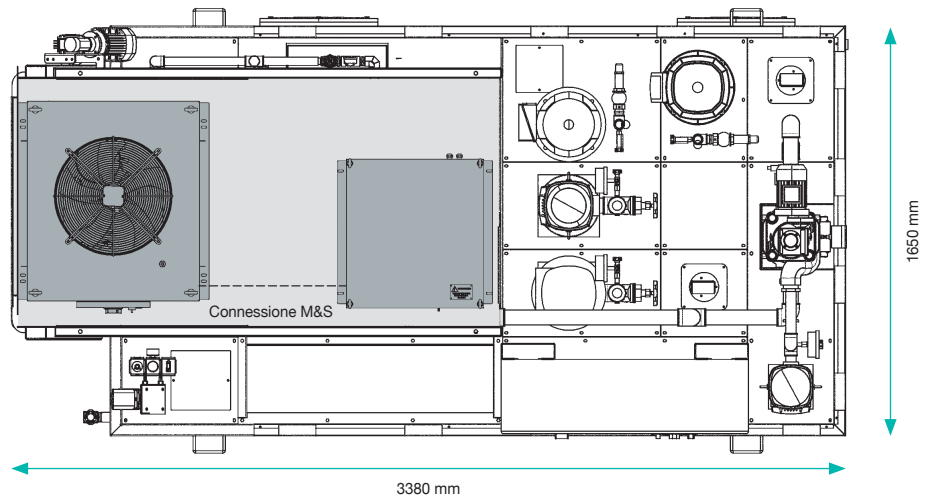
 Nominal cooling capacity in **Watts** referred to fluid at +30°C and ambient at +32°C

# IMMERSION CHILLERS FOR CUTTING FLUIDS

# ECIK

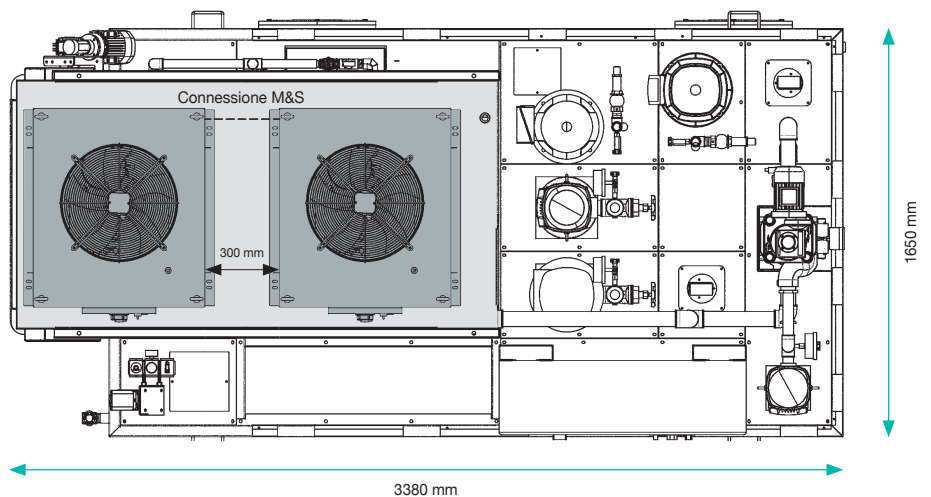
1

Depending on the available space, it is possible to combine two chillers of different sizes and power ratings.



2

The compactness of the ECik chillers allows installation of high capacities in small spaces. The M&S system allows the combination of two chillers only at the same time.



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