

Scambiatori Aria-olio Serie DRAIN 2000K

*Air-oil heat-exchangers
DRAIN 2000K Series*



ENNEMECI





Gli scambiatori di calore aria-olio **EMMEGI**, sono impiegati per il raffreddamento di circuiti oleodinamici usando, come fluido raffreddante, l'aria ambiente, convogliata sulla radiante da una ventola azionata da un motore elettrico o idraulico. La massa radiante, in lega d'alluminio ad alta resistenza, è ottenuta mediante un processo costruttivo di saldobrasatura sottovuoto.

La particolare configurazione dei condotti aumenta la turbolenza del fluido e di conseguenza la capacità di scambio; inoltre, la presenza di speciali turbolatori sull'alettatura del pacco radiante, migliora ulteriormente il coefficiente di trasmissione totale. Il risultato è un prodotto tecnologicamente avanzato di dimensioni contenute, leggero e robusto.

Gli scambiatori aria-olio serie DRAIN nascono dalle esigenze applicative, ad ampio raggio, espresse dal mercato.

Punto di forza di questi prodotti è l'elevata efficienza con basse portate di olio.

EMMEGI air-oil heat exchangers are used for cooling oil hydraulic systems using as the coolant ambient air that passes over the radiant by means of a fan operated by an electric or hydraulic motor.

The cooler element, in high resistance aluminium alloy, is obtained by means of a braze-welding process carried out under vacuum.

The particular configuration of the cooling pipes increase the turbulence of the fluid consequently of the exchange capacity; moreover, the presence of special jets on the cooler finning further improves the total transmission coefficient.

The result is a very small, light and robust technologically advanced product.

The air-oil heat-exchangers DRAIN Series were born to answer the large application needs of the market.

The main characteristic of this heat exchanger is the high efficiency with low oil flows.

Fluidi compatibili

- . OIL MINERALI, HL, HLP.
- . EMULSIONI ACQUA-OLIO
- . ACQUA-GLICOLE
- . Per altri fluidi consultare EMMEGI.

Compatible fluids

- . MINERAL OILS; HL; HLP.
- . WATER-OIL EMULSION.
- . WATER-GLYCOL.
- . Consults EMMEGI for other fluids.

Specifiche tecniche Masse Radianti

- . Materiale: alluminio "long life".
- . Pressione d'esercizio: 20 bar.
- . Pressione di collaudo: 35 bar.
- . Temperatura max d'esercizio: 120°C
- . Per particolari atmosfere aggressive consultare l'EMMEGI.

Technical specification of Cooler Element

- . Material: "long life" aluminium.
- . Operating pressure: 20 bar
- . Test pressure: 35 bar.
- . Max operating temperature: 120°C.
- . For specially "aggressive" atmospheres contact EMMEGI.

Installazione

Lo scambiatore può essere montato in posizione orizzontale o verticale, rispettando la distanza minima dalla parete (vedi fig. 1), in modo da assicurare un naturale afflusso e deflusso dell'aria di raffreddamento.

Lo scambiatore è installato, di norma, sulle tubazioni di ritorno dell'olio al serbatoio; deve, inoltre, essere protetto da urti e vibrazioni meccaniche mediante supporti e collegato all'impianto con tubazioni flessibili. È necessario evitare che sia sottoposto a brusche variazioni di portata, colpi d'ariete e pulsazioni continue che danneggiano in modo irreversibile la radiante.

Per preservare lo scambiatore dalla sovrappressione che si genera all'avviamento dell'impianto, per elevata viscosità dell'olio, si suggerisce l'inserimento di una valvola di by-pass (vedi fig.2).

Installation

The exchangers can be fitted in a horizontal position, respecting the minimum distance from the wall (see fig.1) so as to ensure a natural flow of cooling air.

The exchangers is usually installed on oil tank return piping; it must also be protected from impacts and mechanical vibrations by supports and must be connected to the plant with flexible pipes.

Avoid subjecting the exchanger to sudden changes in flow, hammering and pulsations that can cause irreversible damage to the element.

We recommend installing a by-pass valve (see fig.2) to protect the exchanger from over-pressure generated when the plants is started up due to high oil viscosity.

Manutenzione

È buona norma prestare particolare attenzione alla pulizia della massa radiante per garantire un naturale ricambio d'aria, ed evitare una diminuzione dell'efficienza termica.

Pulizia lato olio

Per eseguire la pulizia lato olio, lo scambiatore dovrà essere smontato. Lo sporco può essere rimosso flussando in controcorrente un prodotto sgrassante, compatibile con alluminio. Effettuare un lavaggio con olio idraulico prima di ricollegare il prodotto all'impianto.

Pulizia lato aria

La pulizia lato aria può essere effettuata con aria compressa o acqua, con direzione del getto parallelo alle alette per non danneggiare. Lo sporco oleoso o grasso può essere rimosso con getto di vapore o acqua calda. Durante questa operazione, il motore elettrico non deve essere collegato alla tensione, e dovrà essere adeguatamente protetto.

Esempio di scelta dello scambiatore

Per effettuare la scelta dello scambiatore si procede come segue:

Potenza da dissipare : 6,5 [KW]
Portata olio ISO VG 32 : 12 [lpm]
Temperatura ingresso olio : 60 [°C]
Temperatura ambiente : 30 [°C]
Ventola azionata da motore elettrico 230/400V-50Hz.

Si calcola la potenza specificata di scambio espressa in KW/°C, conoscendo la potenza da dissipare e il ΔT (differenza tra la temperatura olio ingresso e la temperatura ambiente).

$$P = \frac{6.5 \text{ KW}}{60^\circ - 30^\circ} = 0.22 \text{ KW/}^\circ\text{C}$$

Nota la portata olio (12 lpm) e la potenza specifica di scambio (0.22 KW/°C) si procede alla ricerca del prodotto avvalendosi dei grafici riportati a catalogo, relativi ai singoli modelli.

Maintenance

You should be particularly carefully in cleaning the cooler element to guarantee a natural exchange of air, in order to prevent a reduction in thermal efficiency

Cleaning oil side

The exchanger should be dismantled to clean on the oil side. The dirt can be removed by flushing, in counter-current, de-greasing substance, compatible with aluminium. Wash with hydraulic oil before re-connecting the product to the plant.

Cleaning air side

Cleaning on the air side can be done using compressed air or water, directing the jet parallel to the fins so as not to damage them. Oily dirt or grease can be removed with a jet of steam or hot water. During this operation, the electric motor must be disconnected from the voltage supply, and must be adequately protected.

Example of how to choose a heat exchanger

Proceed with sizing the exchanger, with a knowledge of the data as the example below shows:

Power to dissipate : 6,5 [KW]
ISO VG 32 oil flow : 12 [lpm]
Oil input temperature : 60 [°C]
Ambient temperature : 30 [°C]
Fan operating with an electric motor 230/400V-50Hz.

You can then calculate the specific heat exchange power KW/°C if you know the power to dissipate and the ΔT (the difference between the oil input temperature and the ambient temperature).

$$P = \frac{6.5 \text{ KW}}{60^\circ - 30^\circ} = 0.22 \text{ KW/}^\circ\text{C}$$

Note the oil flow (12 lpm) and specific exchange power (0.22 KW/°C), product research is made by referring to the graph in the catalogue which is relevant to each model.

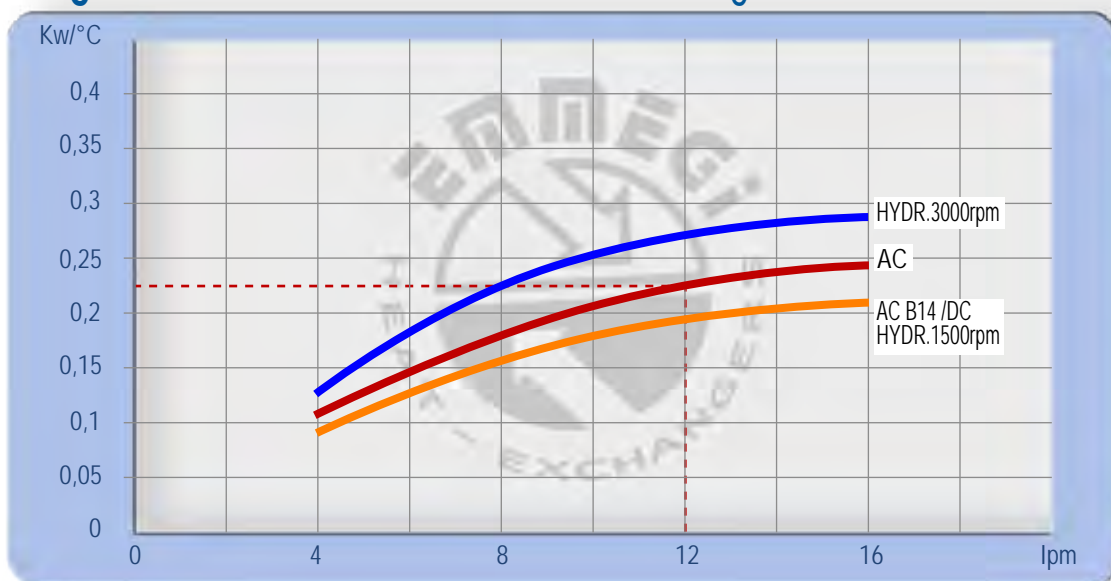
Dati tecnici Technical Data



| P/N | V | Hz | kW | A | rpm | ∅ Fan | dB(A) | (m³/h) | IP | lt | Kg |
|------------|-----------------------------------|----------|--------------|----------------------|--------------|-------|-------|--------|----|-----|----|
| 2Z3001 ### | 230AC | 50/60 | 0,23/0,35 | 1,1/1,55 | 2700/3000 | 300 | 78 | 2220 | 44 | 1,6 | 15 |
| 2Z3003 ### | 230-400 AC | 50/60 | 0,21/0,30 | 0,62-0,36/0,84-0,48 | 2580/2750 | 300 | 76 | 2500 | 44 | | 15 |
| 2Z3004 ### | 230-400 AC B14 265-460 AC B14 | 50 60 | 0,37 0,44 | 2,2-1,25 2,2-1,25 | 1370 1640 | 300 | 70 | 1850 | 55 | 20 | |
| 2Z3012 ### | 12 DC | / | 0,16 | 13,3 | 2660 | 305 | 80 | 1675 | 67 | 14 | |
| 2Z3024 ### | 24 DC | / | 0,18 | 7,4 | 2870 | 300 | 83 | 1880 | 67 | 14 | |
| 253056 ### | Prepared for Gr.2 hydraulic motor | | | | | 300 | | | / | 15 | |

Contattare EMMEGI Contact EMMEGI

Diagramma rendimento Performance diagram



Lo scambiatore selezionato risulta il modello:
DRAIN 2030K - 230/400 - 50Hz
cod. 2Z3003###.

The exchanger selected is the following model:
DRAIN 2030K - 230/400 - 50Hz
cod. 2Z3003###.

Per la completa identificazione dello scambiatore consultare la pagina "DENOMINAZIONE CODICE PRODOTTO". Nel caso non siano conosciuti tutti i dati, per la scelta prendere contatto **EMMEGI**.

For a complete description of the exchanger consult the "PRODUCT ORDERING CODE" page. If you do not know all the data required for selecting the model, contact **EMMEGI**.

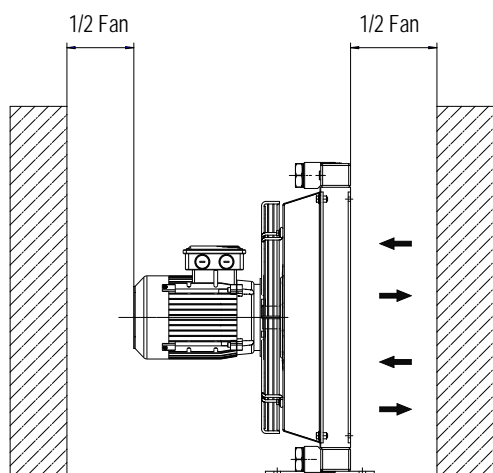


Fig.1

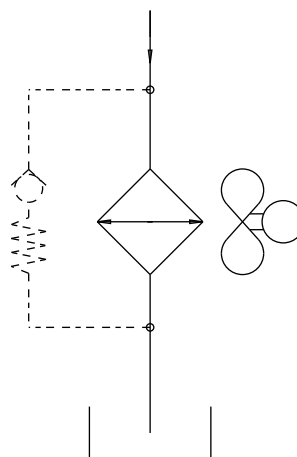
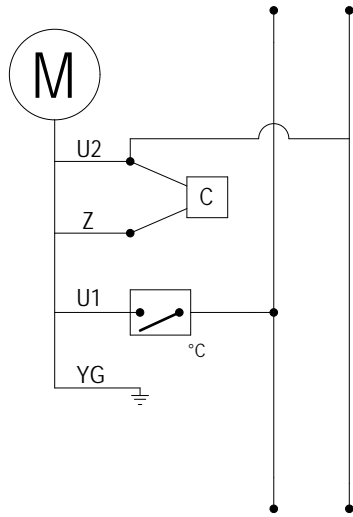


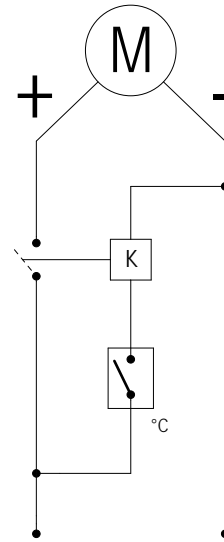
Fig.2

Collegamenti elettrici

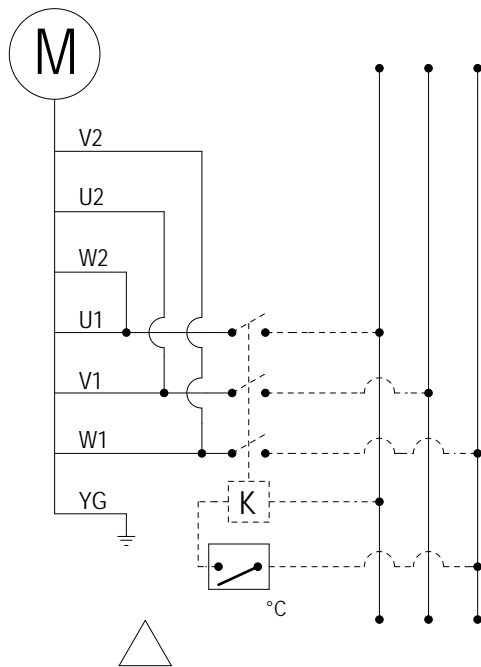
Electric Wiring



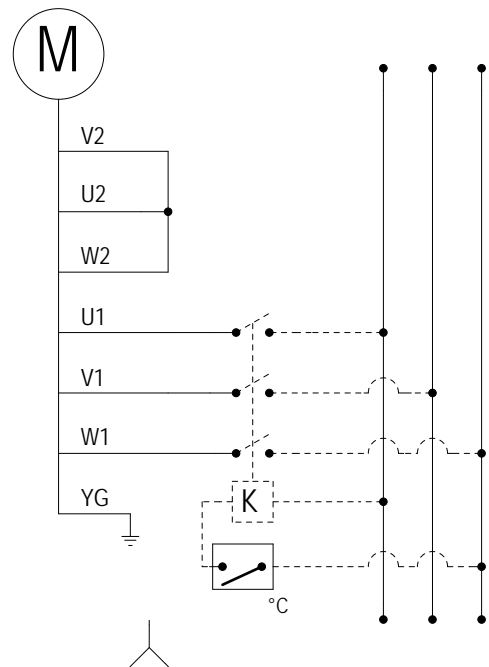
230V AC 1 PHASE



12-24V DC



230V AC 3 PHASE



400V AC 3 PHASE

°C = Termostato NA./Thermostat No.
K = Relè/Relay

Modulo richiesta dati

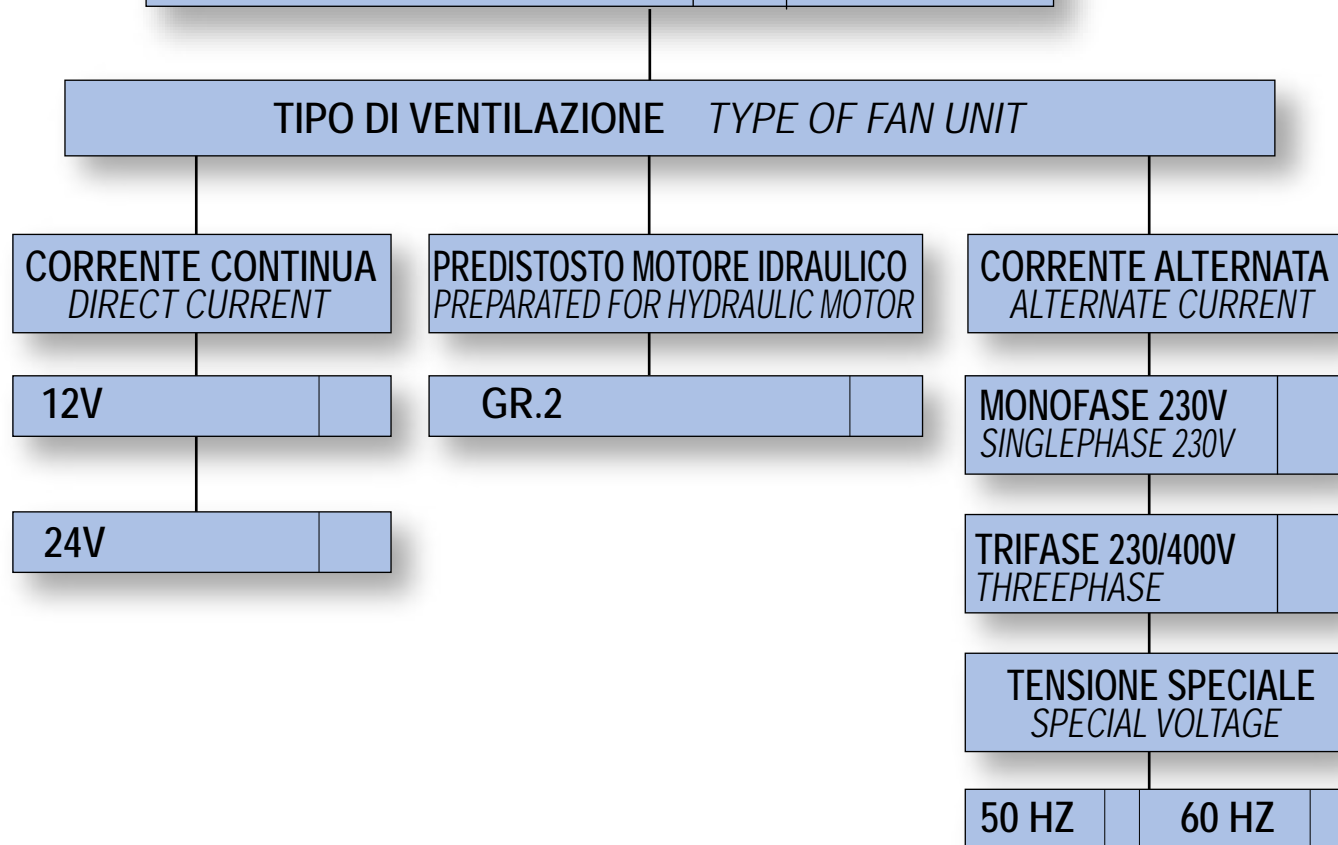
Sheet for cooler selection



| | |
|-------------------------|--|
| CLIENTE <i>COMPANY</i> | |
| RICHIEDENTE <i>NAME</i> | |

ARIA-OLIO *AIR-OIL*

| | | |
|---|-----|--|
| PORTATA OLIO <i>OIL FLOW RATE</i> | Imp | |
| POTENZA INSTALLATA <i>TOTAL POWER</i> | KW | |
| POTENZA DA DISSIPARE <i>POWE TO BE DISSIPATED</i> | KW | |
| TEMPERATURA INGRESSO OLIO <i>OIL TEMPERATURE INLET</i> | °C | |
| TEMPERATURA ARIA MAX <i>MAX AMBIENT TEMPERATURE</i> | °C | |
| VISCOSITÀ OLIO <i>OIL VISCOSITY</i> | cst | |
| PRESSIONE DI LAVORO <i>WORKING PRESSURE</i> | bar | |



2

Z24

03

2

01

TIPO DI SISTEMA *COOLER SERIES*

Z24 (*DRAIN 2024K*)

TIPO DI MOTORIZZAZIONE *FAN MOTOR TYPE*

- 01 AC 230V 50/60 Hz
- 03 AC 230V-400V 50/60Hz
- 04 AC 230V-400V-50Hz (B14) / AC 265V-460V- 60Hz (B14)
- 12 DC 12V
- 24 DC 24V
- 56 *Pred. per mot. idr. gr. 2* *Prep. for hydr. mot. gr. 2*

TERMOSTATI *THERMOSTATS*

- | | | | |
|---|---------------------------------|--|--------------|
| 1 | Termostato fisso | <i>Fixed thermostat</i> | 40-28° |
| 2 | Termostato fisso | <i>Fixed thermostat</i> | 50-38° |
| 3 | Termostato fisso | <i>Fixed thermostat</i> | 60-48° |
| 4 | Termostato fisso | <i>Fixed thermostat</i> | 70-58° |
| 5 | Termostato fisso | <i>Fixed thermostat</i> | 80-68° |
| 6 | Termostato fisso | <i>Fixed thermostat</i> | 90-78° |
| 8 | Termostato regolabile | <i>Adjustable thermostat</i> | 0-90° (TC2) |
| 9 | Termostato regolabile collegato | <i>Connected adjustable thermostat</i> | 0-120° (TC2) |

TIPO DI VENTILAZIONE *VENTILATING TYPE*

- 01 *Aspirante* *Suction air flow*
- 02 *Soffiante* *Blowing air flow*

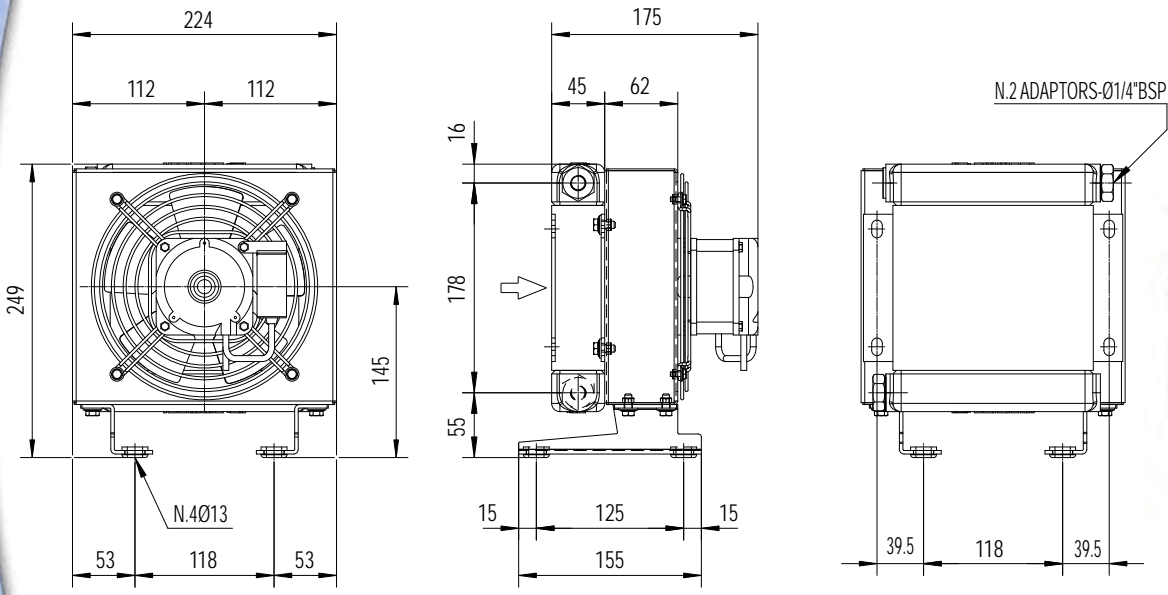
Serie DRAIN 2000K - *DRAIN 2000K Series*

| | |
|-------------|-------------|
| DRAIN 2010K | pag. 08- 09 |
| DRAIN 2015K | pag. 10 -11 |
| DRAIN 2020K | pag. 12 -13 |
| DRAIN 2024K | pag. 14 -15 |
| DRAIN 2030K | pag. 16 -17 |
| DRAIN 2040K | pag. 18 -19 |
| DRAIN 2050K | pag. 20 -21 |

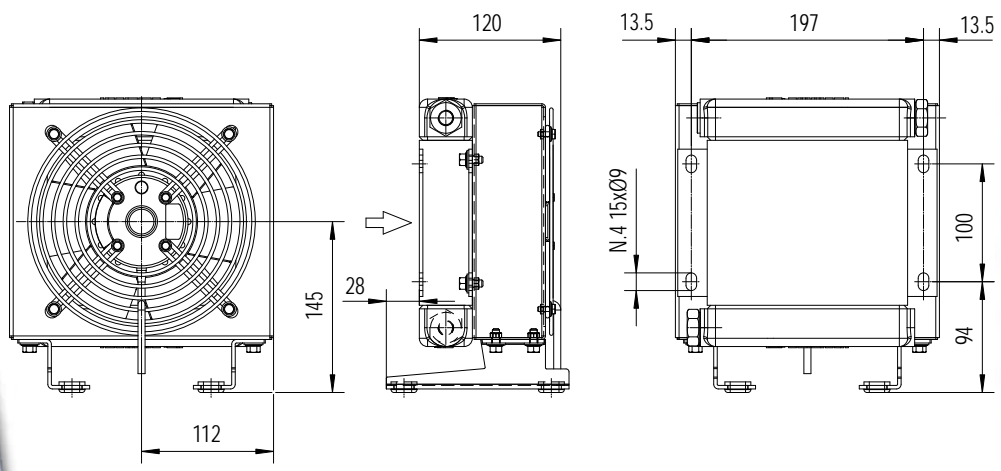


Dimensioni Dimensions

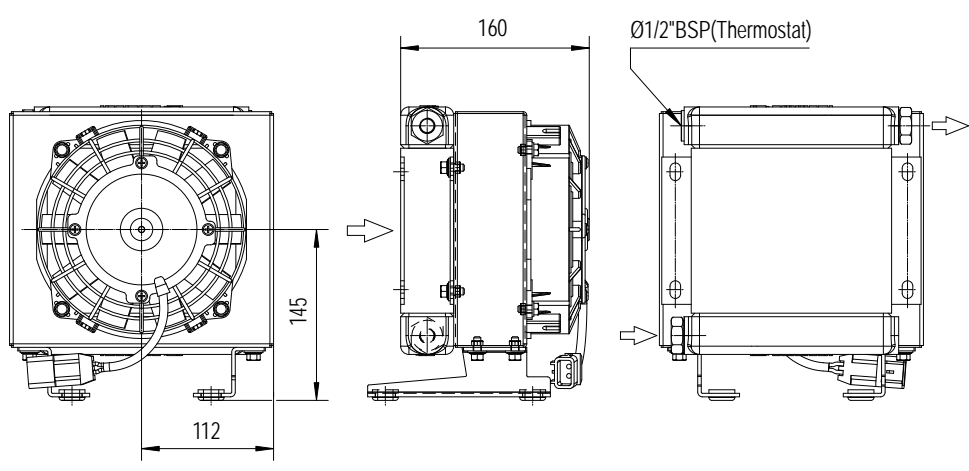
DRAIN 2010K



P/N 2Z1001###



P/N 2Z1003###



P/N 2Z1012###
P/N 2Z1024###

Le dimensioni di ingombro e le caratteristiche tecniche non sono impegnative
Over-all dimensions and technical characteristic are not binding

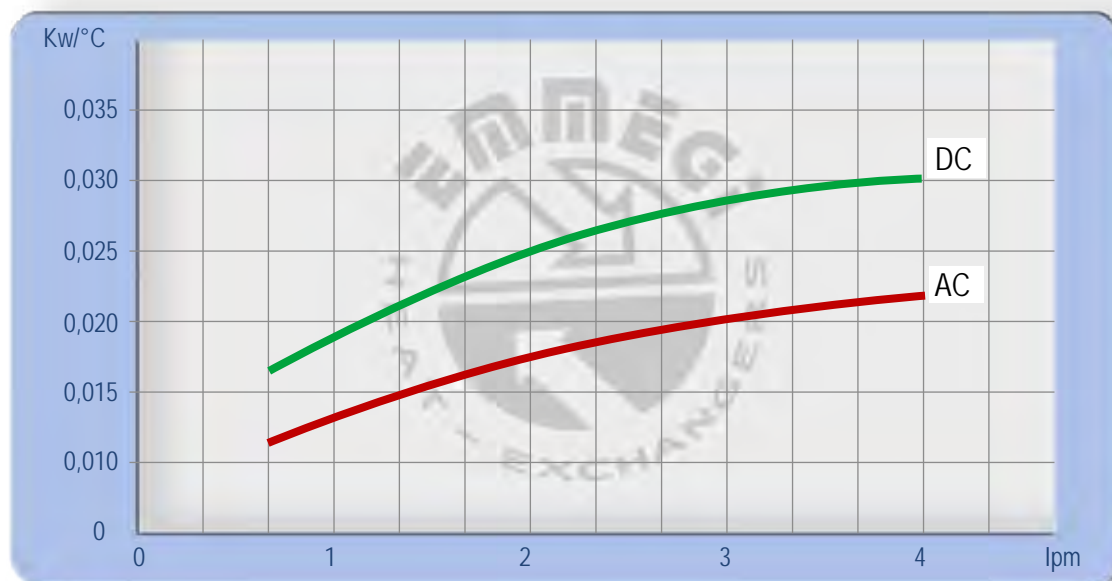
Dati tecnici Technical Data

| P/N | V | Hz | kW | A | rpm | ø Fan | dB(A) | (m³/h) | IP | lt | Kg |
|------------|------------|-------|-------------|-----------|-----------|-------|-------|--------|----|-----|----|
| 2Z1001 ### | 230AC | 50/60 | 0,010/0,047 | 0,21 | 2500 | 175 | 67 | 235 | 54 | 0.3 | 6 |
| 2Z1003 ### | 230-400 AC | 50/60 | 0,045/0,043 | 0,13-0,09 | 2740/3100 | 175 | 63 | 190 | 54 | | 6 |
| 2Z1012 ### | 12 DC | / | 0,06 | 5,2 | 3860 | 167 | 75 | 410 | 67 | | 5 |
| 2Z1024 ### | 24 DC | / | 0,06 | 2,3 | 4045 | 167 | 75 | 410 | 67 | | 5 |

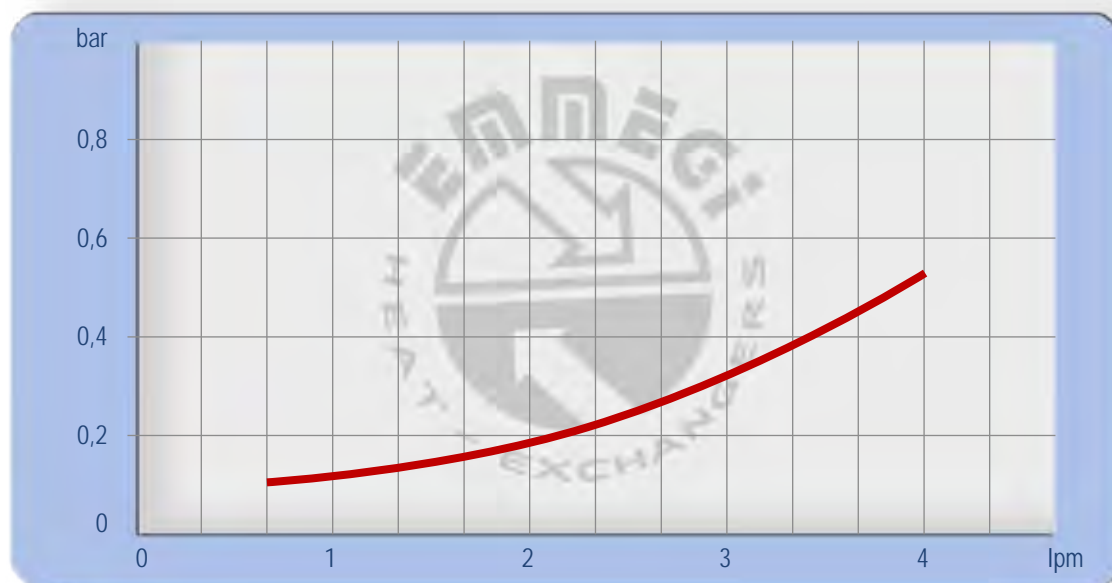


DRAIN 2010K

Diagramma rendimento Performance diagram



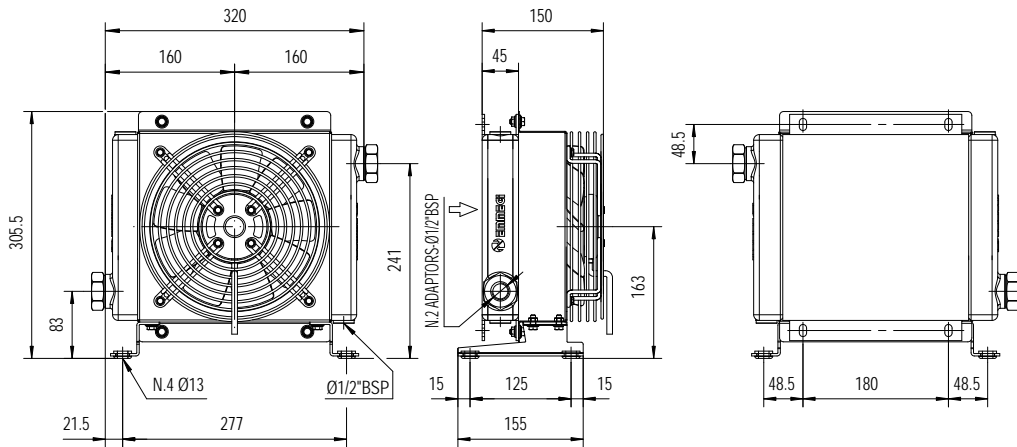
Perdite di carico Pressure drop (ISO VG 32)



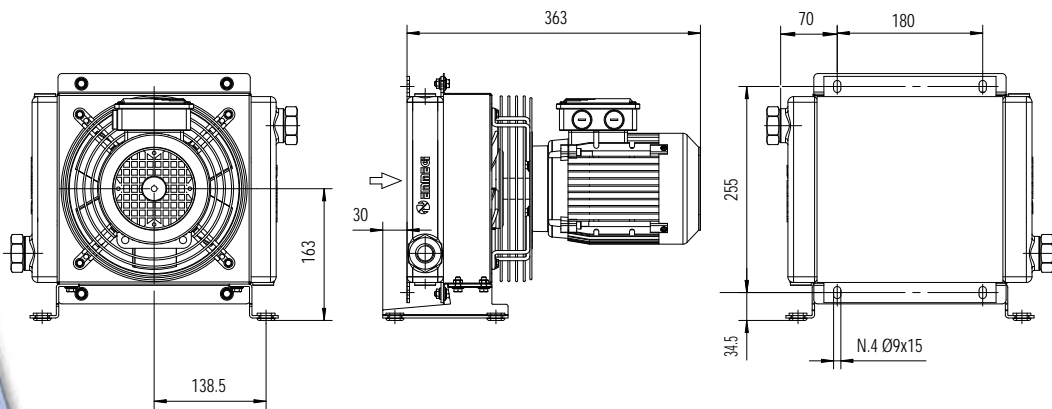
Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

| cst | 10 | 15 | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 200 | 300 |
|-----|-----|------|------|----|-----|-----|-----|-----|-----|-----|-----|
| F | 0,5 | 0,65 | 0,77 | 1 | 1,2 | 1,4 | 1,6 | 1,9 | 2,1 | 3,3 | 4,3 |

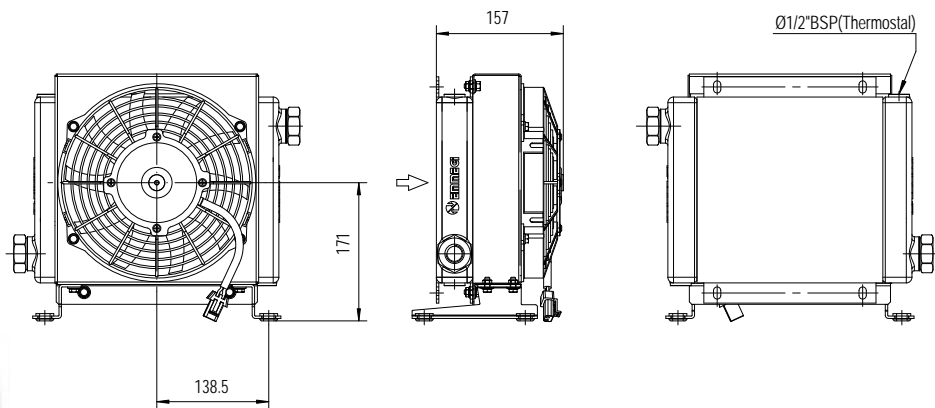
Dimensioni Dimensions



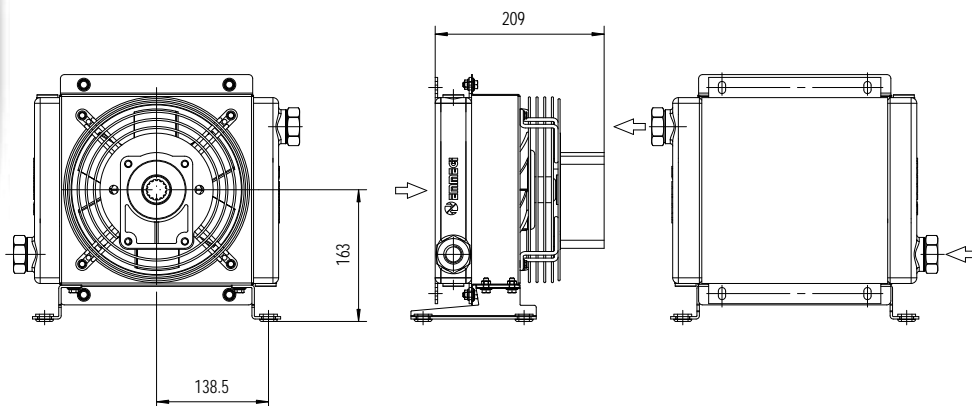
P/N 2Z1501###
P/N 2Z1503###



P/N 2Z1504###



P/N 2Z1512###
P/N 2Z1524###



P/N 2Z1556###

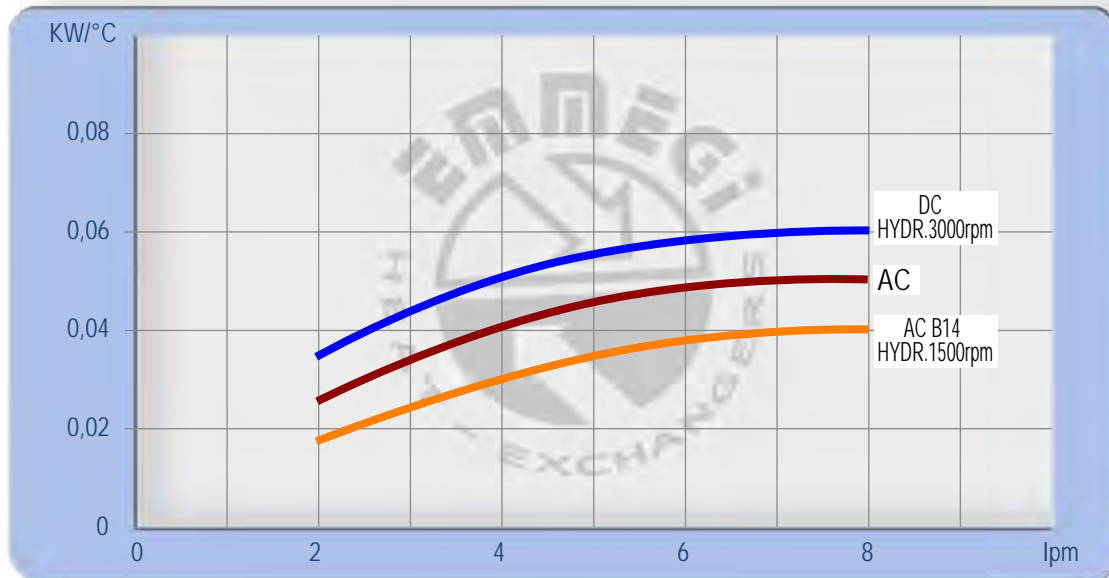
Le dimensioni di ingombro e le caratteristiche tecniche non sono impegnative
Over-all dimensions and technical characteristic are not binding

Dati tecnici Technical Data

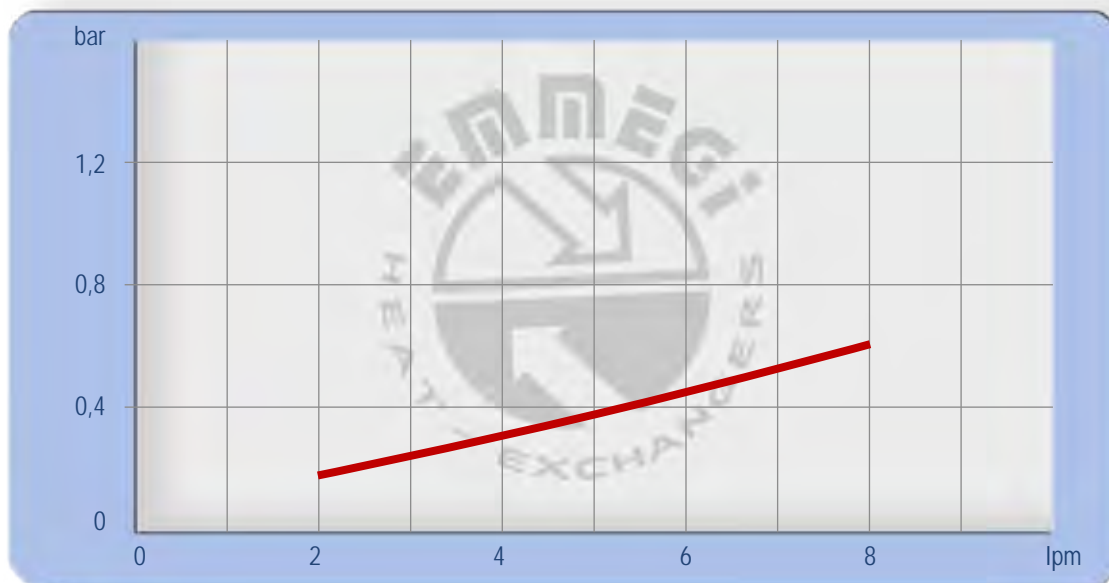
| P/N | V | Hz | KW | A | rpm | ø Fan | dB(A) | (m³/h) | IP | lt | Kg |
|------------|-----------------------------------|-------|-------------|-----------|-----------|-------|-------|--------|----|-----|-----|
| 2Z1501 ### | 230AC | 50/60 | 0,050/0,061 | 0,24-0,28 | 2740/3120 | 200 | 68 | 700 | 44 | 0,5 | 7 |
| 2Z1503 ### | 230-400 AC | 50/60 | 0,068/0,070 | 0,17-0,13 | 2600/2900 | 200 | 69 | 720 | 44 | | 7 |
| 2Z1504 ### | 230-400 AC B14 265-460 AC B14 | 50 | 0,25 | 1,7- 1 | 1340 | 200 | 61 | 415 | 55 | 0,5 | 10 |
| | | 60 | 0,30 | 1,7- 1 | 1610 | | | | | | |
| 2Z1512 ### | 12 DC | / | 0,08 | 6,4 | 2770 | 225 | 72 | 790 | 67 | | 6,5 |
| 2Z1524 ### | 24 DC | / | 0,09 | 3,9 | 2900 | 225 | 73 | 865 | 67 | | 6,5 |
| 2Z1556 ### | Prepared for Gr.2 hydraulic motor | | | | | 200 | | | / | | 6 |

Contattare EMMEGI Contact EMMEGI

Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)



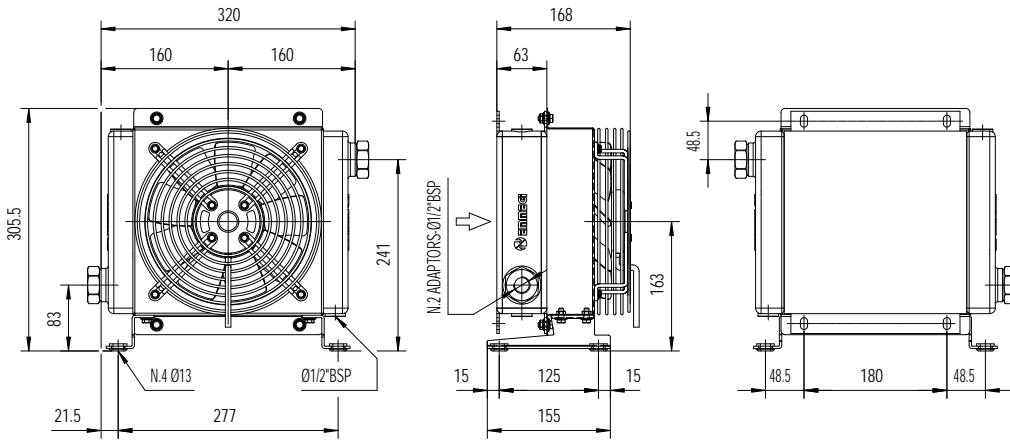
Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

| cst | 10 | 15 | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 200 | 300 |
|-----|-----|------|------|----|-----|-----|-----|-----|-----|-----|-----|
| F | 0,5 | 0,65 | 0,77 | 1 | 1,2 | 1,4 | 1,6 | 1,9 | 2,1 | 3,3 | 4,3 |

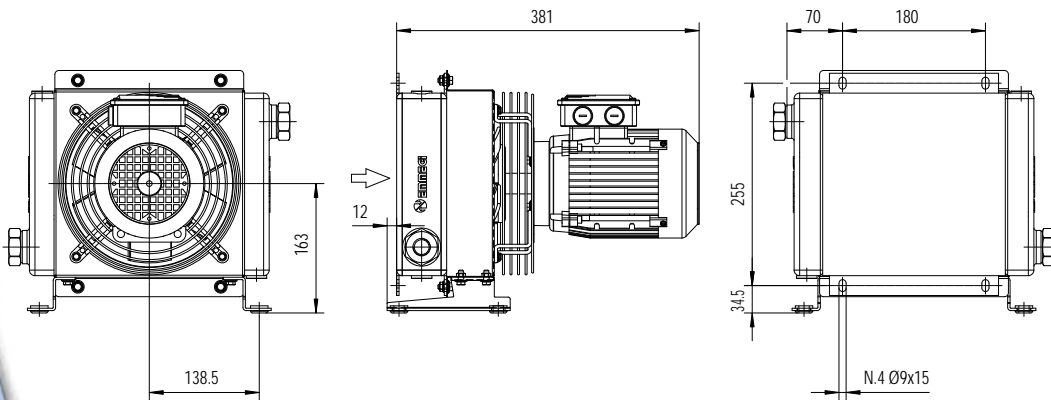


DRAIN 2015K

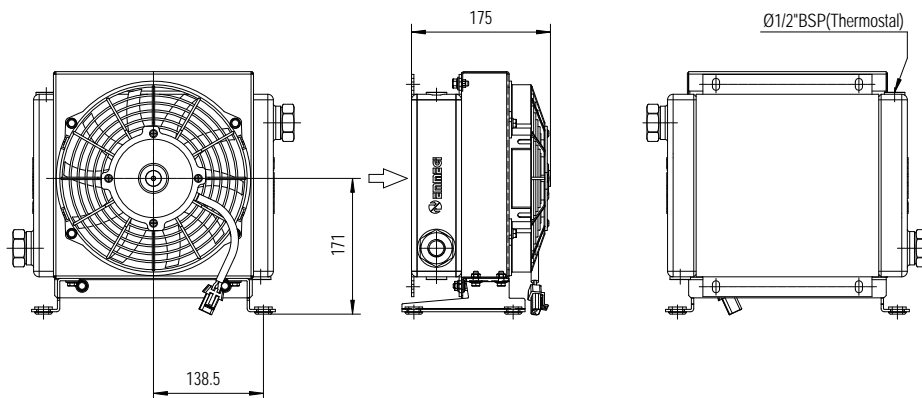
Dimensioni Dimensions



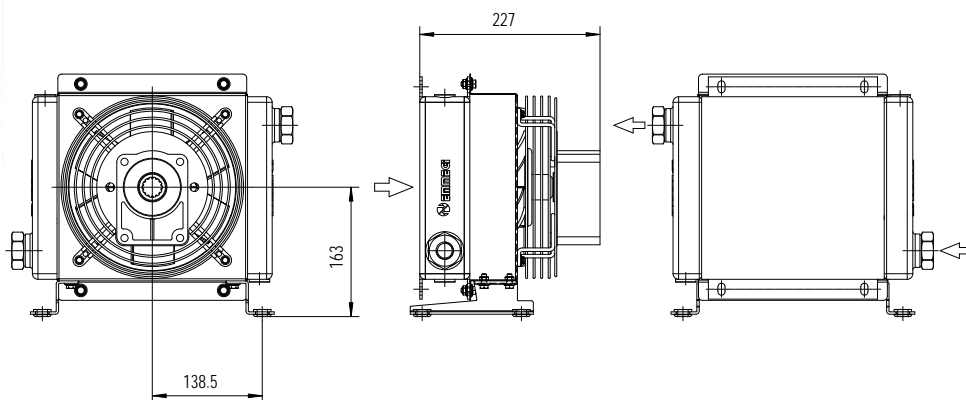
P/N 2Z2001###
P/N 2Z2003###



P/N 2Z2004###



P/N 2Z2012###
P/N 2Z2024###



P/N 2Z2056###

Le dimensioni di ingombro e le caratteristiche tecniche non sono impegnative
Over-all dimensions and technical characteristic are not binding

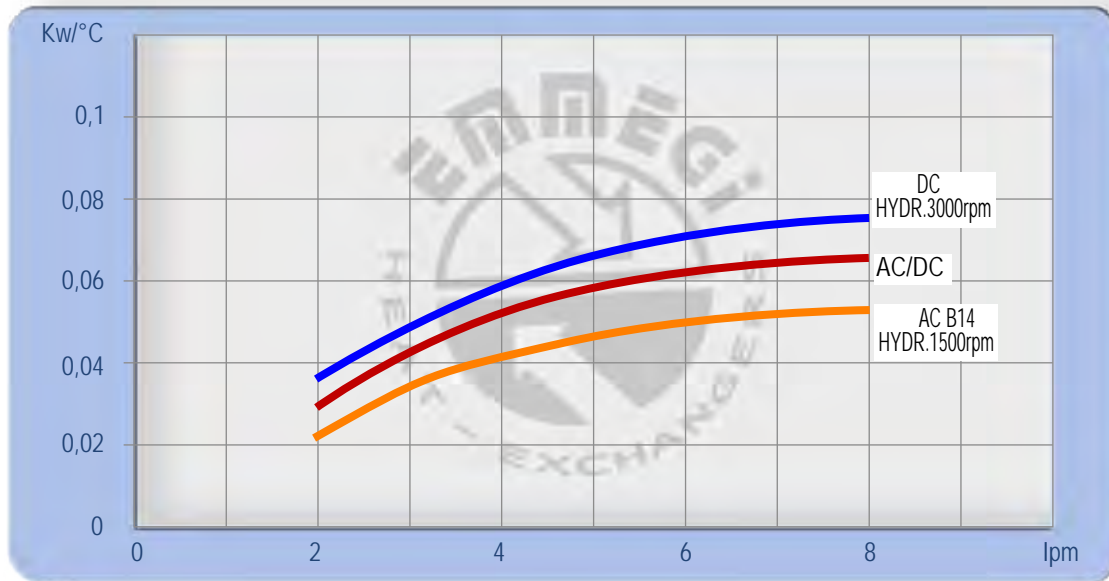
DRAIN 2020K

Dati tecnici Technical Data

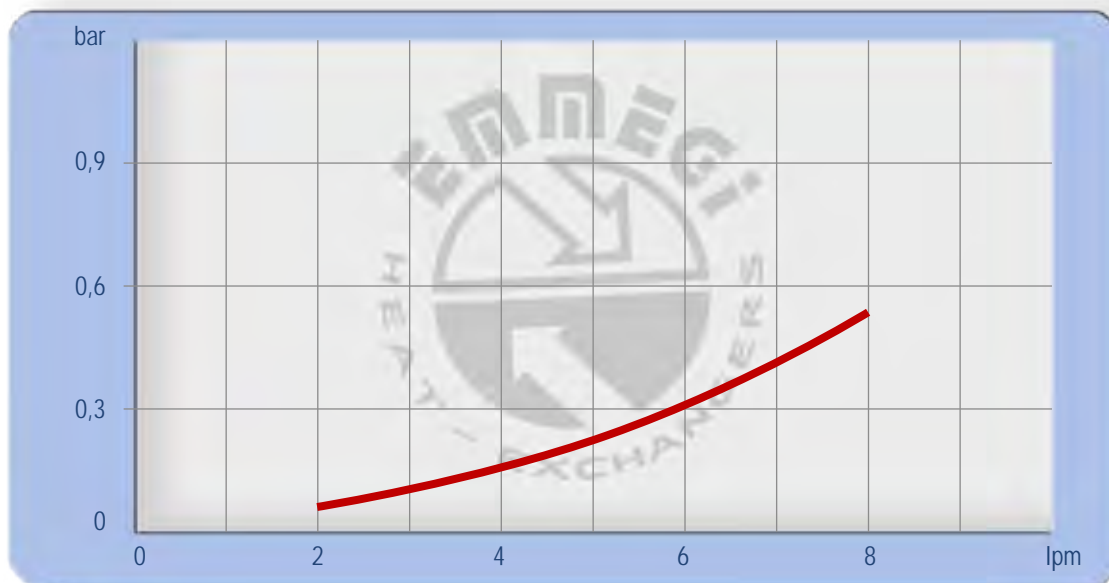
| P/N | V | Hz | kW | A | rpm | ∅ Fan | dB(A) | (m³/h) | IP | It | Kg |
|------------|-----------------------------------|-------|------------|-----------|-----------|-------|-------|--------|----|-----|----|
| 2Z2001 ### | 230AC | 50/60 | 0,05/0,061 | 0,24-0,28 | 2740/3120 | 200 | 68 | 675 | 44 | 0,7 | 8 |
| 2Z2003 ### | 230-400 AC | 50/60 | 0,068/0,07 | 0,17-0,13 | 2600/2900 | 200 | 68 | 645 | 44 | | 8 |
| 2Z2004 ### | 230-400 AC B14 | 50 | 0,25 | 1,7- 1 | 1340 | 200 | 64 | 390 | 55 | | 11 |
| | 265-460 AC B14 | 60 | 0,30 | 1,7- 1 | 1610 | | | | | | 7 |
| 2Z2012 ### | 12 DC | / | 0,08 | 6,4 | 2770 | 225 | 72 | 720 | 67 | | 7 |
| 2Z2024 ### | 24 DC | / | 0,09 | 3,9 | 2900 | 225 | 72 | 750 | 67 | | 7 |
| 2Z2056 ### | Prepared for Gr.2 hydraulic motor | | | | | 200 | | | / | 7 | |

Contattare EMMEGI Contact EMMEGI

Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)



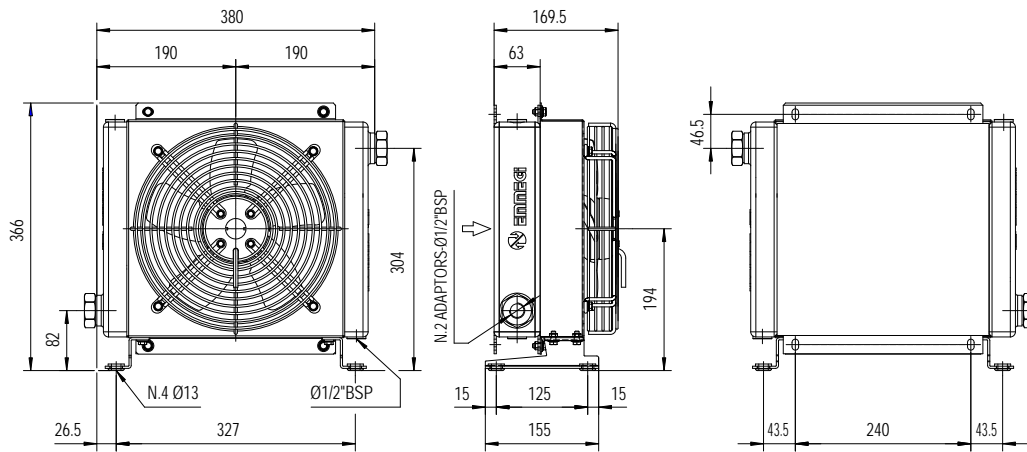
Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

| cst | 10 | 15 | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 200 | 300 |
|-----|-----|------|------|----|-----|-----|-----|-----|-----|-----|-----|
| F | 0,5 | 0,65 | 0,77 | 1 | 1,2 | 1,4 | 1,6 | 1,9 | 2,1 | 3,3 | 4,3 |

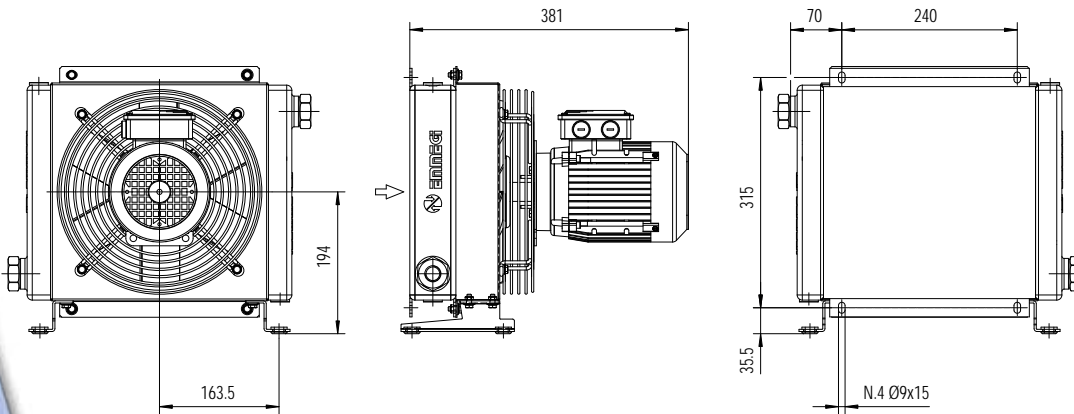


DRAIN 2020K

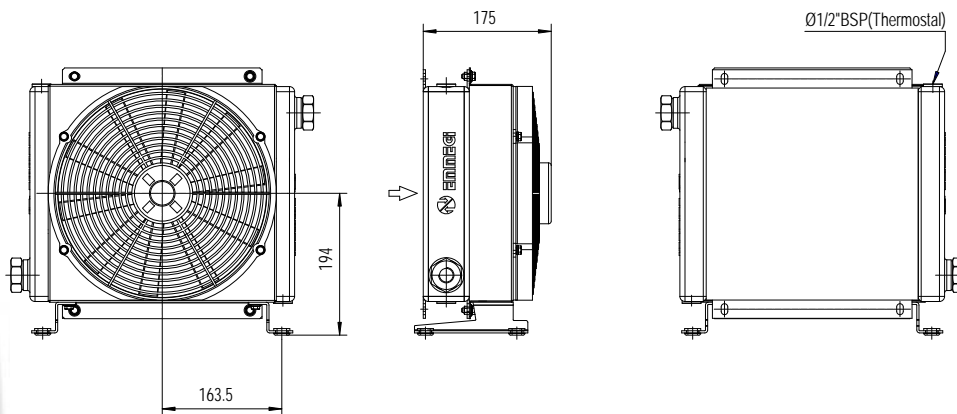
Dimensioni Dimensions



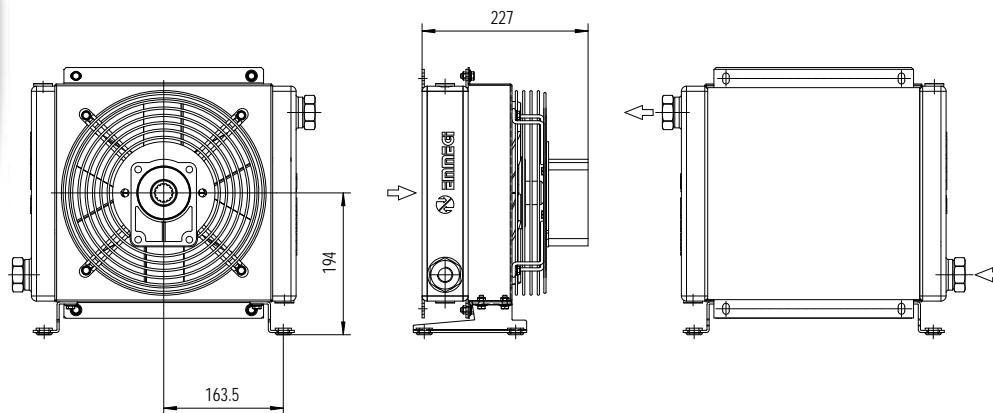
P/N 2Z2401###
P/N 2Z2403###



P/N 2Z2404###



P/N 2Z2412###
P/N 2Z2424###



P/N 2Z2456###

Le dimensioni di ingombro e le caratteristiche tecniche non sono impegnative
Over-all dimensions and technical characteristic are not binding

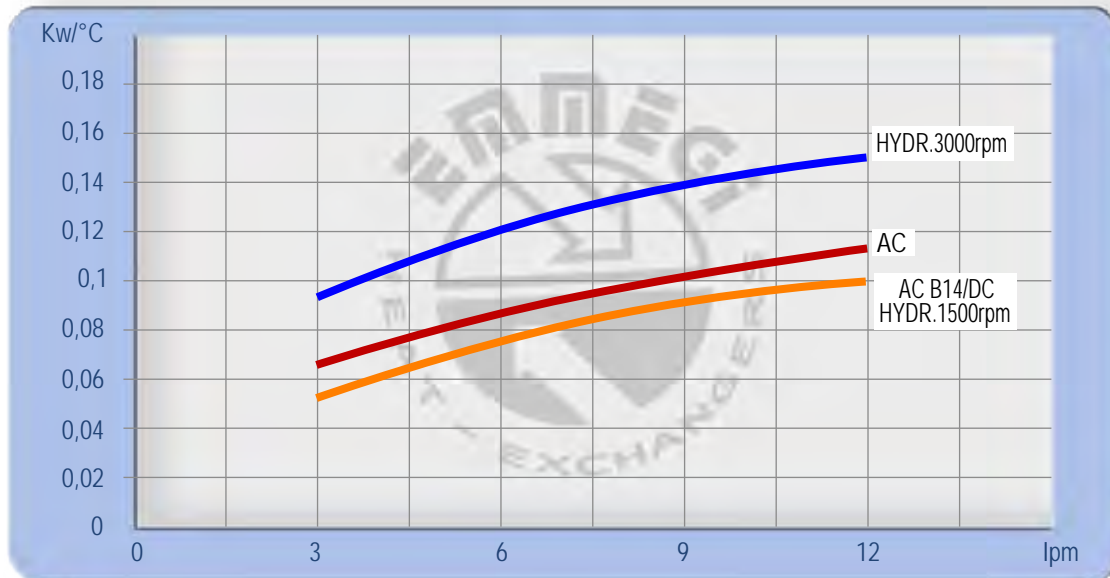
DRAIN 2024K

Dati tecnici Technical Data

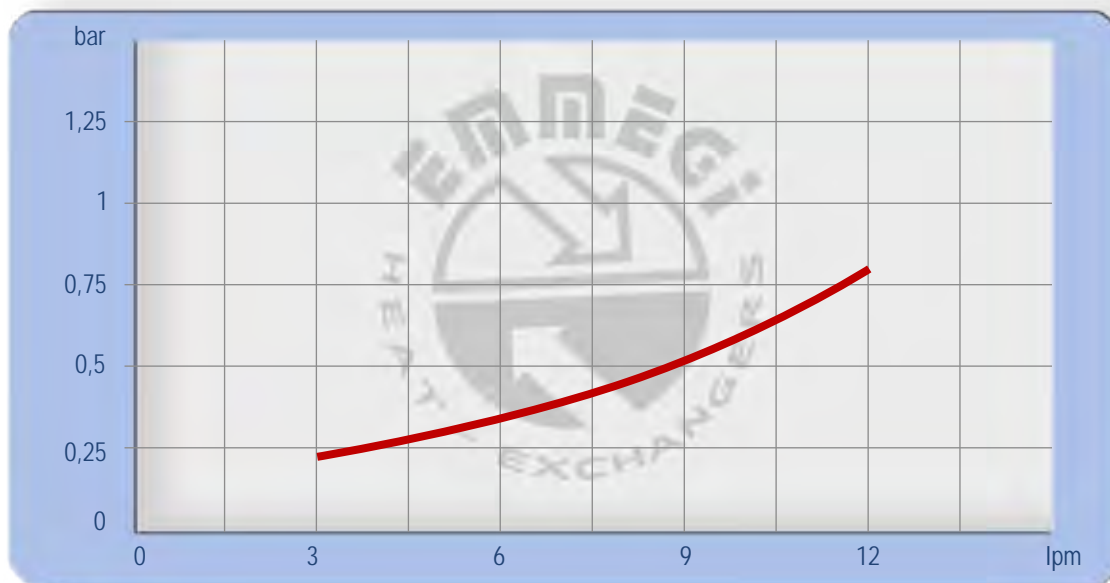
| P/N | V | Hz | kW | A | rpm | ∅ Fan | dB(A) | (m³/h) | IP | lt | Kg |
|------------|-----------------------------------|-------|-------------|-----------|-----------|-------|-------|--------|----|----|----|
| 2Z2401 ### | 230AC | 50/60 | 0,115/0,150 | 0,51/0,66 | 2450/2600 | 250 | 72 | 1350 | 44 | | 11 |
| 2Z2403 ### | 230-400 AC | 50/60 | 0,105/0,145 | 0,19/0,23 | 2500/2650 | 250 | 72 | 1300 | 44 | | 11 |
| 2Z2404 ### | 230-400 AC B14 265-460 AC B14 | 50 | 0,25 | 1,7- 1 | 1340 | 250 | 64 | 1000 | 55 | 1 | 16 |
| | | 60 | 0,30 | 1,7- 1 | 1610 | | | | | | |
| 2Z2412 ### | 12 DC | / | 0,09 | 7,5 | 2710 | 280 | 72 | 950 | 67 | | 10 |
| 2Z2424 ### | 24 DC | / | 0,10 | 4,3 | 2765 | 280 | 74 | 1030 | 67 | | 10 |
| 2Z2456 ### | Prepared for Gr.2 hydraulic motor | | | | | 250 | | | / | | 10 |

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Diagramma rendimento Performance diagram



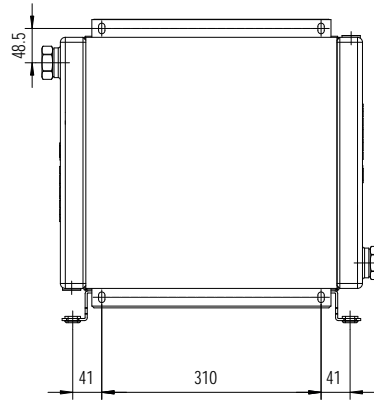
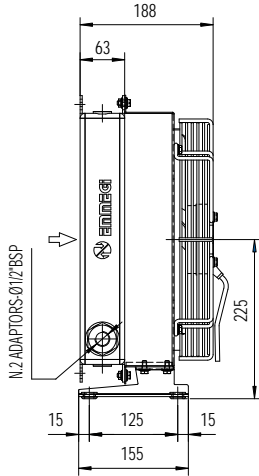
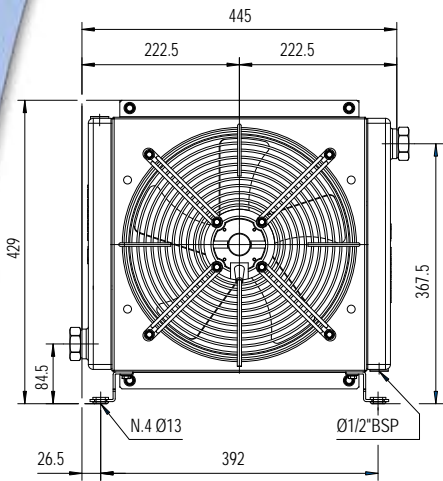
Perdite di carico Pressure drop (ISO VG 32)



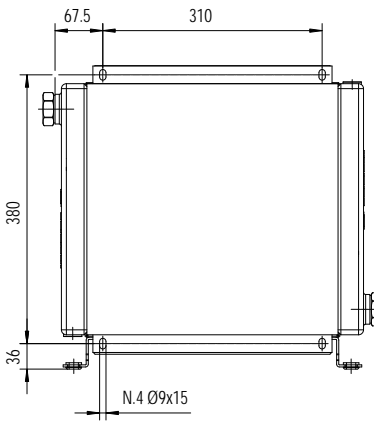
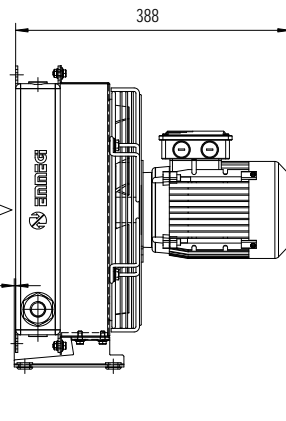
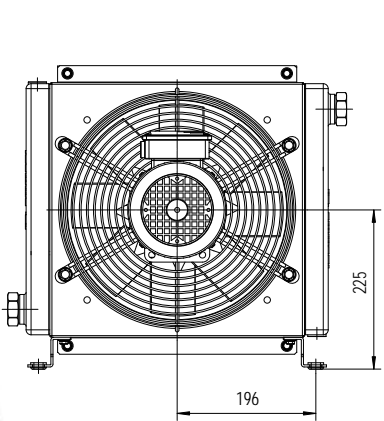
Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

| cst | 10 | 15 | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 200 | 300 |
|-----|-----|------|------|----|-----|-----|-----|-----|-----|-----|-----|
| F | 0,5 | 0,65 | 0,77 | 1 | 1,2 | 1,4 | 1,6 | 1,9 | 2,1 | 3,3 | 4,3 |

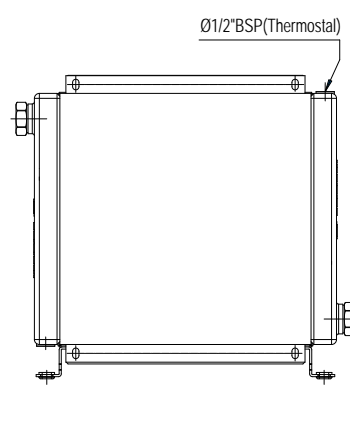
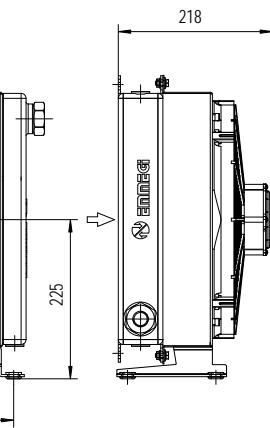
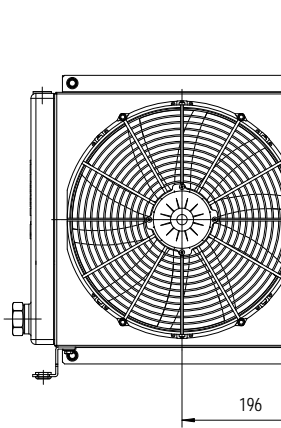
Dimensioni Dimensions



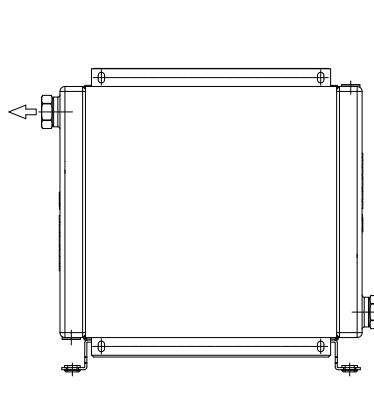
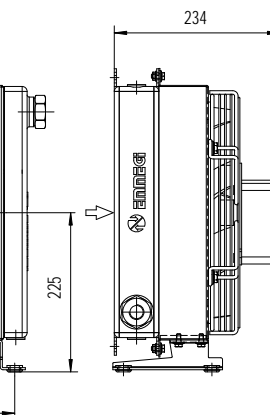
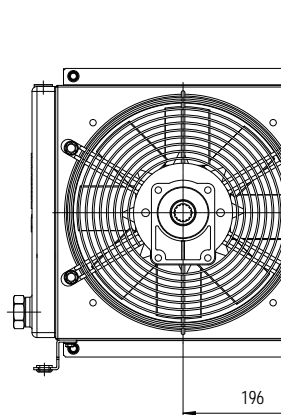
P/N 2Z3001###
P/N 2Z3003###



P/N 2Z3004###



P/N 2Z3012###
P/N 2Z3012###



P/N 2Z3056###

Le dimensioni di ingombro e le caratteristiche tecniche non sono impegnative
Over-all dimensions and technical characteristic are not binding

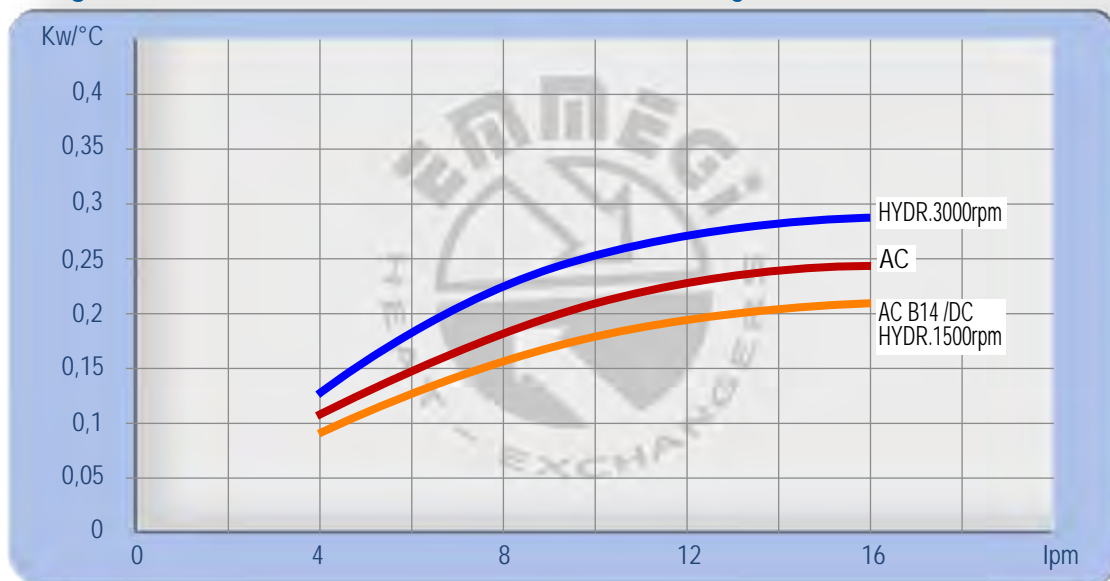
DRAIN 2030K

Dati tecnici Technical Data

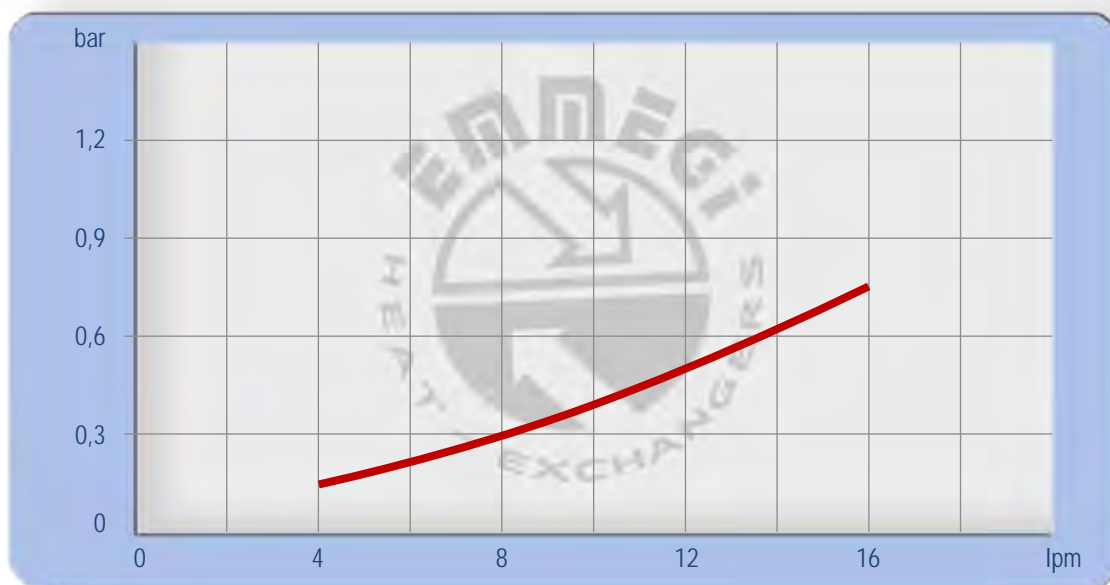
| P/N | V | Hz | kW | A | rpm | ∅ Fan | dB(A) | (m³/h) | IP | lt | Kg |
|------------|-----------------------------------|-------|-----------|---------------------|-----------|-------|-------|--------|----|-----|----|
| 2Z3001 ### | 230AC | 50/60 | 0,23/0,35 | 1,1/1,55 | 2700/3000 | 300 | 78 | 2220 | 44 | 1,6 | 15 |
| 2Z3003 ### | 230-400 AC | 50/60 | 0,21/0,30 | 0,62-0,36/0,84-0,48 | 2580/2750 | 300 | 76 | 2500 | 44 | | 15 |
| 2Z3004 ### | 230-400 AC B14 | 50 | 0,37 | 2,2-1,25 | 1370 | 300 | 70 | 1850 | 55 | | 20 |
| | 265-460 AC B14 | 60 | 0,44 | 2,2-1,25 | 1640 | | | | | | |
| 2Z3012 ### | 12 DC | / | 0,16 | 13,3 | 2660 | 305 | 80 | 1675 | 67 | | 14 |
| 2Z3024 ### | 24 DC | / | 0,18 | 7,4 | 2870 | 305 | 83 | 1880 | 67 | | 14 |
| 2Z3056 ### | Prepared for Gr.2 hydraulic motor | | | | | 300 | | | / | 15 | |

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)



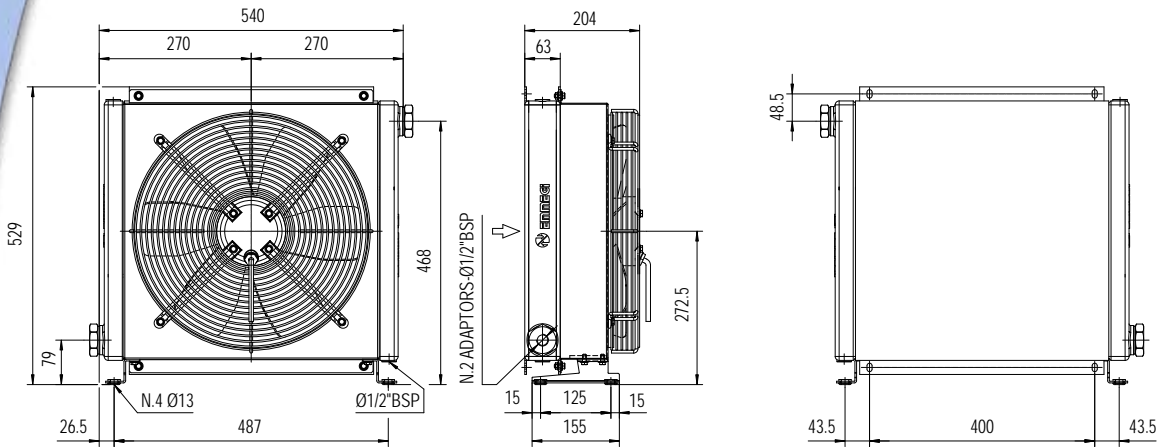
Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

| cst | 10 | 15 | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 200 | 300 |
|-----|-----|------|------|----|-----|-----|-----|-----|-----|-----|-----|
| F | 0,5 | 0,65 | 0,77 | 1 | 1,2 | 1,4 | 1,6 | 1,9 | 2,1 | 3,3 | 4,3 |

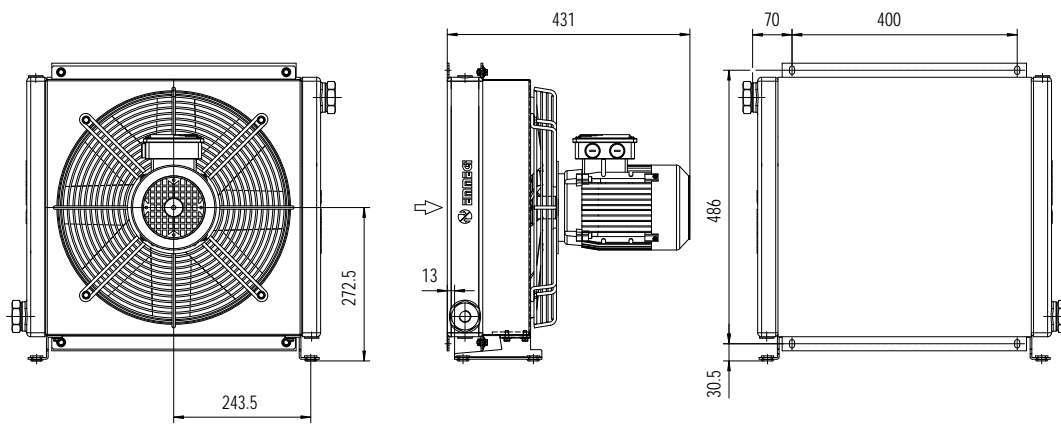


DRAIN 2030K

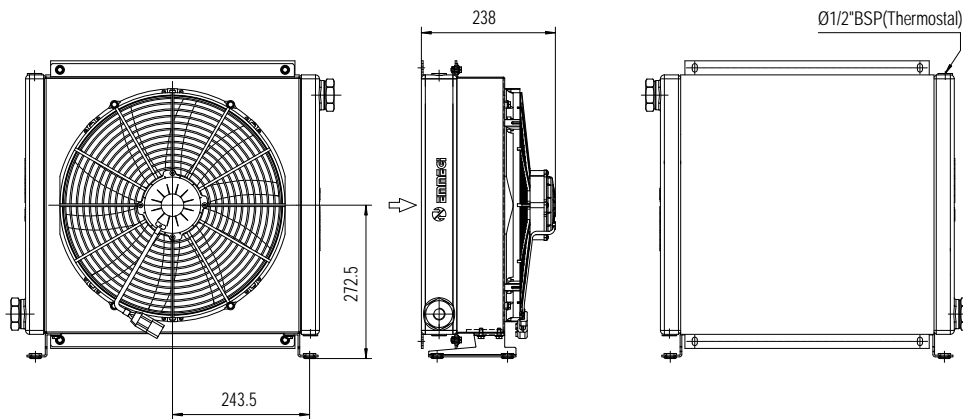
Dimensioni Dimensions



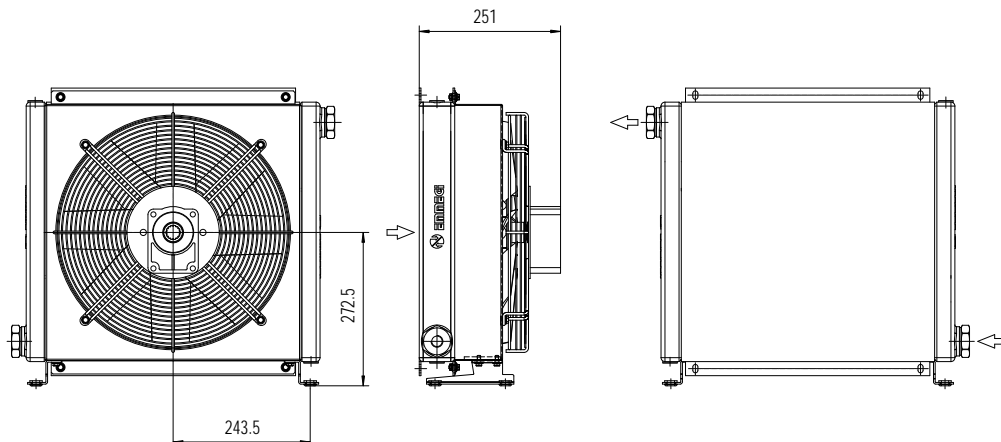
P/N 2Z4001###
P/N 2Z4003###



P/N 2Z4004###



P/N 2Z4012###
P/N 2Z4024###



P/N 2Z4056###

Le dimensioni di ingombro e le caratteristiche tecniche non sono impegnative
Over-all dimensions and technical characteristic are not binding

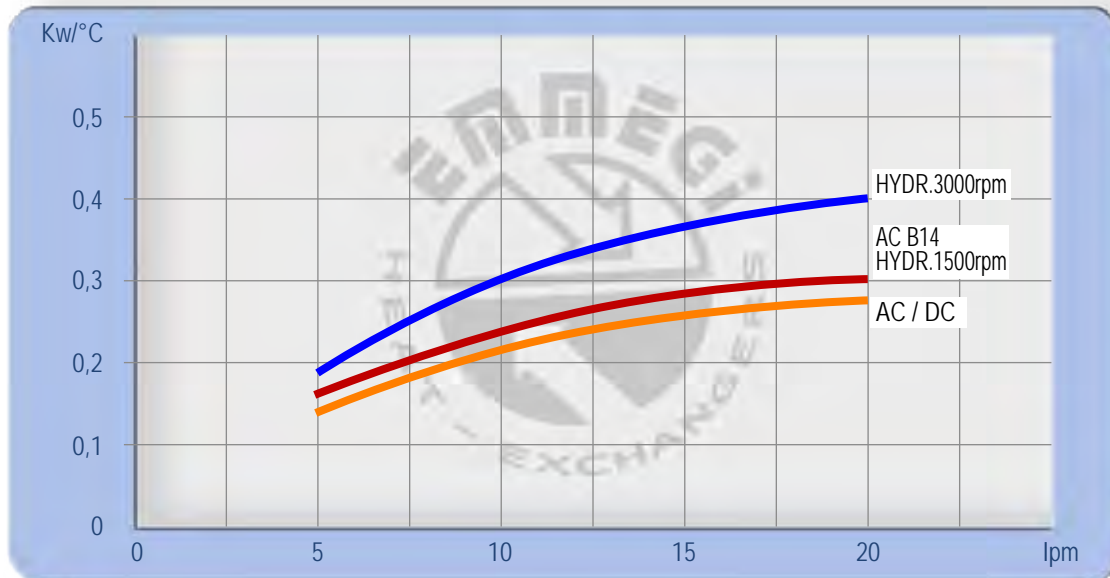
DRAIN 2040K

Dati tecnici Technical Data

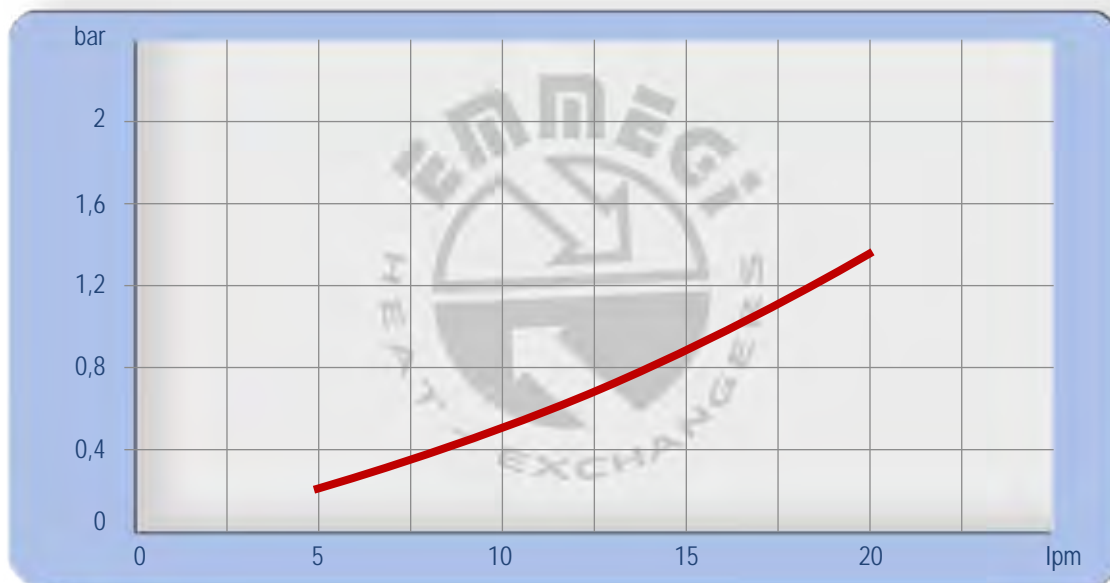
| P/N | V | Hz | kW | A | rpm | ∅ Fan | dB(A) | (m³/h) | IP | lt | Kg | | |
|------------|-----------------------------------|-------|-------------|-----------|-----------|-------|-------|--------|----|-----|-----|----|----|
| 2Z4001 ### | 230AC | 50 | 0,16/0,24 | 0,73/1,06 | 1430/1700 | 400 | 71 | 3200 | 54 | 2,7 | 21 | | |
| 2Z4003 ### | 230-400 AC | 50/60 | 0,135/0,185 | 0,44/0,39 | 1450/1690 | 400 | 71 | 3200 | 54 | | 21 | | |
| 2Z4004 ### | 230-400 AC B14 | 50 | 0,55 | 2,9-1,7 | 1400 | 400 | 77 | 3740 | 55 | | 2,7 | 25 | |
| | 265-460 AC B14 | 60 | 0,66 | 2,9-1,7 | 1680 | | | | | | | | |
| 2Z4012 ### | 12 DC | / | 0,22 | 19,2 | 2310 | 385 | 76 | 2770 | 67 | | | | 20 |
| 2Z4024 ### | 24 DC | / | 0,23 | 9,3 | 2380 | 385 | 79 | 2910 | 67 | | | | 20 |
| 2Z4056 ### | Prepared for Gr.2 hydraulic motor | | | | | 400 | | | / | 19 | | | |

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)



Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

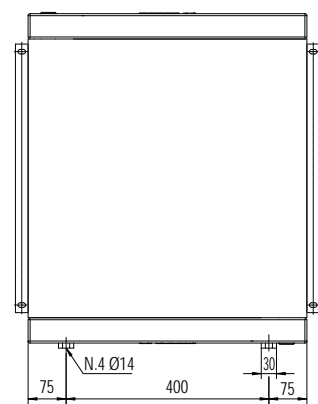
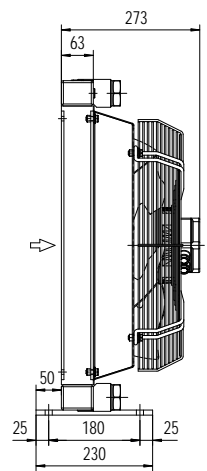
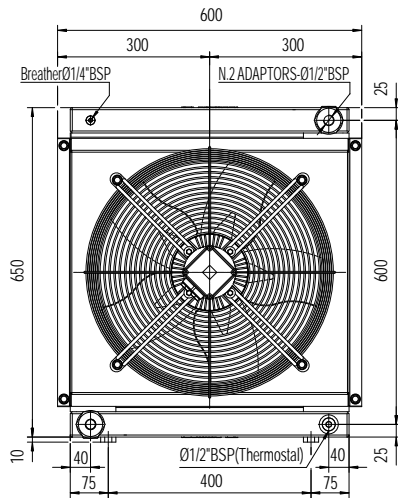
| cst | 10 | 15 | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 200 | 300 |
|-----|-----|------|------|----|-----|-----|-----|-----|-----|-----|-----|
| F | 0,5 | 0,65 | 0,77 | 1 | 1,2 | 1,4 | 1,6 | 1,9 | 2,1 | 3,3 | 4,3 |



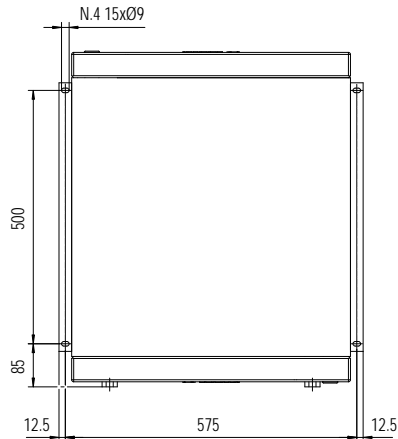
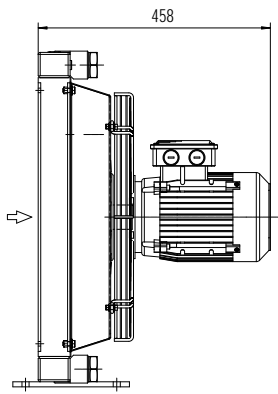
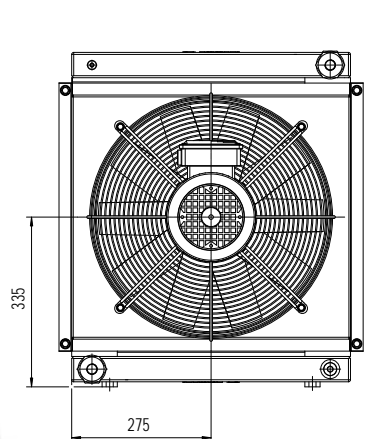
DRAIN 2040K

Dimensioni Dimensions

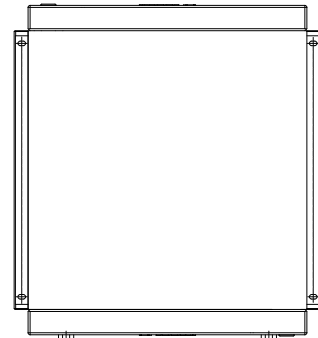
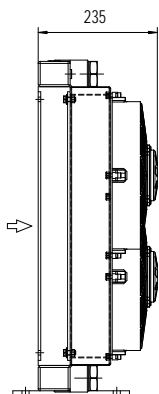
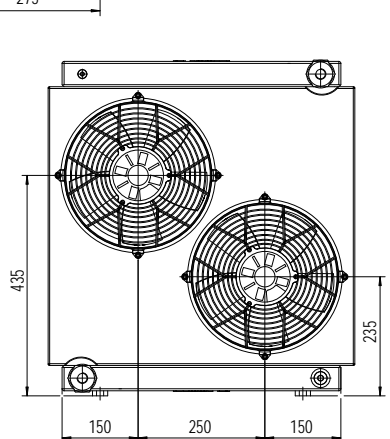
DRAIN 2050K



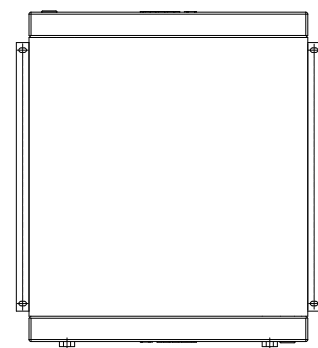
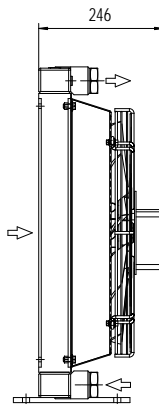
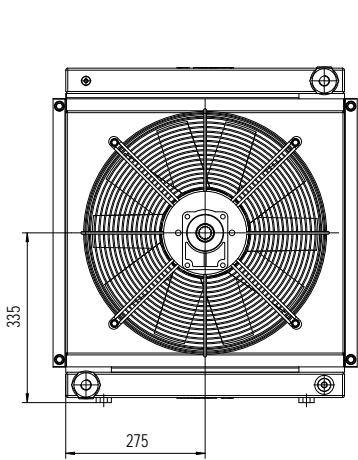
P/N 2Z5001###
P/N 2Z5003###



P/N 2Z5004###



P/N 2Z5012###
P/N 2Z5024###



P/N 2Z5056###

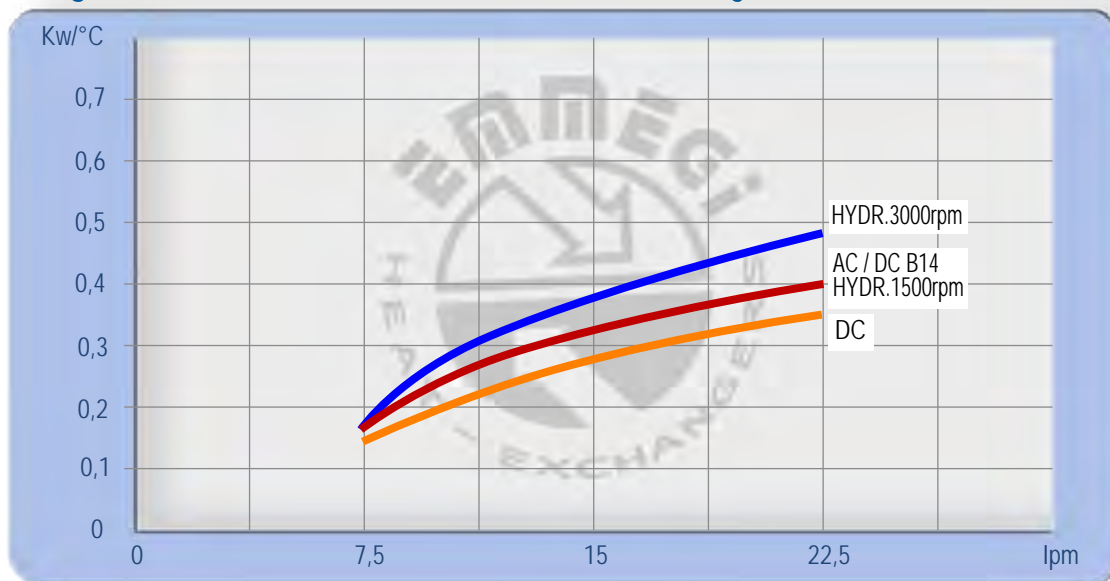
Le dimensioni di ingombro e le caratteristiche tecniche non sono impegnative
Over-all dimensions and technical characteristic are not binding

Dati tecnici Technical Data

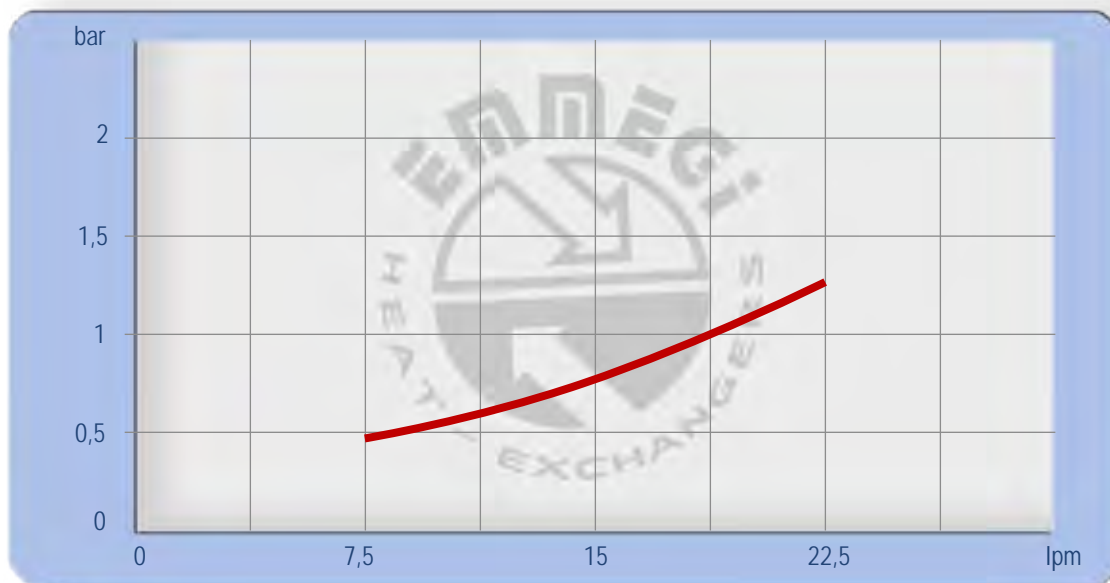
| P/N | V | Hz | kW | A | rpm | ø Fan | dB(A) | (m³/h) | IP | lt | Kg |
|------------|-----------------------------------|-------|-----------|-----------|-----------|-------|-------|----------|----|----|----|
| 2Z5003 ### | 230-400 AC | 50/60 | 0,52/0,66 | 1,9/1,1 | 1420/1600 | 450 | 76 | 5000 | 54 | 5 | 27 |
| 2Z5004 ### | 230-400 AC B14 | 50 | 0,75 | 3,0-1,7 | 1410 | 450 | 79 | 5200 | 55 | | 30 |
| | 265-460 AC B14 | 60 | 0,90 | 2,6-1,5 | 1720 | | | | 67 | | 24 |
| 2Z5012 ### | 12 DC | / | 0,13 (2x) | 11,0 (2x) | 2340 | 280 | 76 | 1720(2x) | 67 | | 24 |
| 2Z5024 ### | 24 DC | / | 0,15 (2x) | 6,2 (2x) | 2600 | 280 | 79 | 1750(2x) | 67 | | 24 |
| 2Z5056 ### | Prepared for Gr.2 hydraulic motor | | | | | 450 | | | / | 23 | |

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

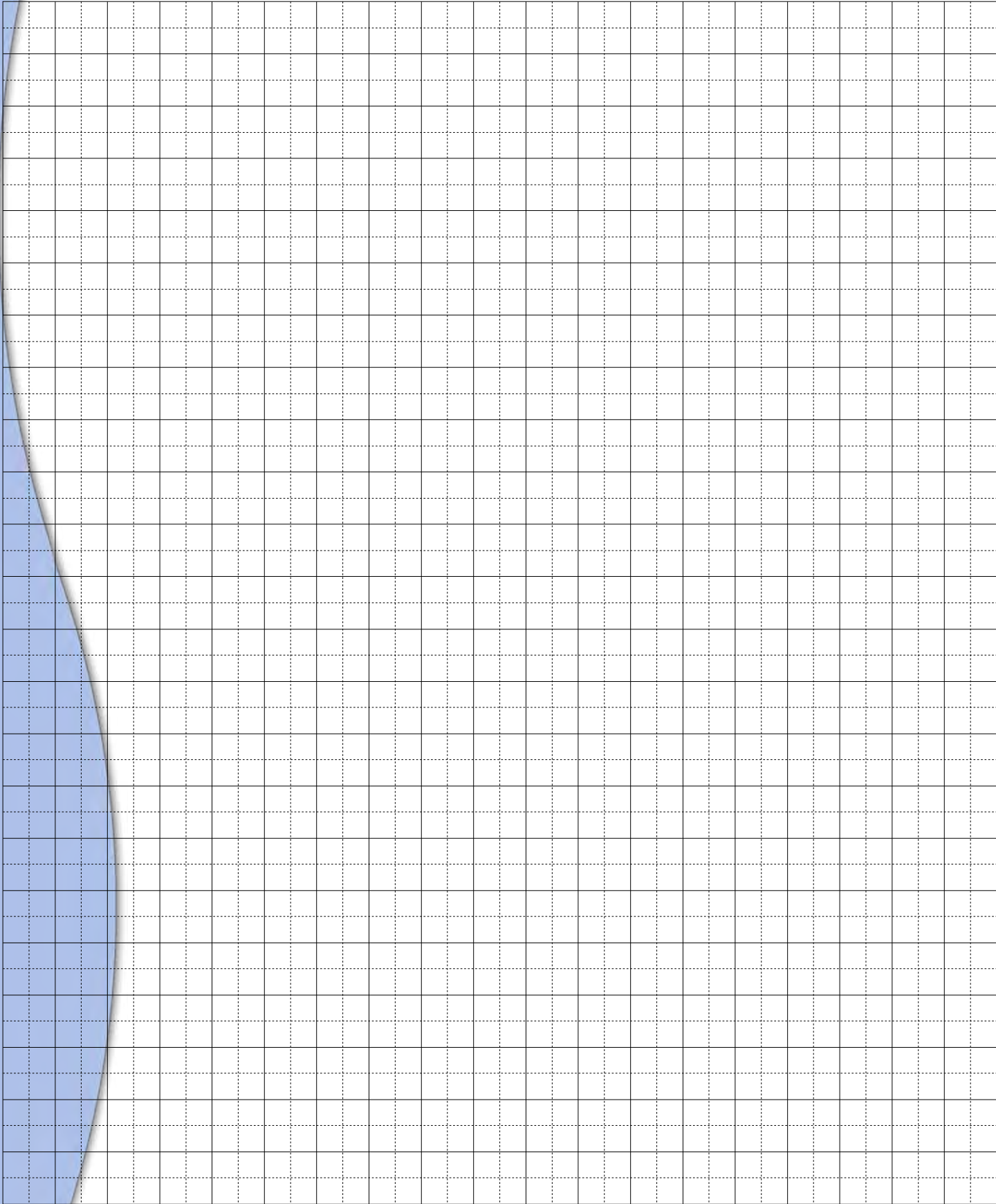


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

| cst | 10 | 15 | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 200 | 300 |
|-----|-----|------|------|----|-----|-----|-----|-----|-----|-----|-----|
| F | 0,5 | 0,65 | 0,77 | 1 | 1,2 | 1,4 | 1,6 | 1,9 | 2,1 | 3,3 | 4,3 |



DRAIN 2050K



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