

Scambiatori Aria-olio Serie MG AIR

*Air-oil heat-exchangers
MG AIR Series*



EMMEGI





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.

Fluidi compatibili

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

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.

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 del 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 sovrapressione 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).

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.

Compatible fluids

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

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.

Installation

The exchanger 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 exchanger 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 danneggiarle. 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 : 19,5 [KW]
Portata olio ISO VG 32 : 90 [lpm]
Temperatura ingresso olio : 60 [°C]
Temperatura ambiente : 30 [°C]
Ventola azionata da motore elettrico 230/400V-50Hz.

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

$$P = \frac{19,5 \text{ KW}}{60^\circ - 30^\circ} = 0,65 \text{ KW/}^\circ\text{C}$$

Nota la portata olio (90 lpm) e la potenza specifica di scambio (0,65 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 : 19,5 [KW]
ISO VG 32 oil flow : 90 [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).

$$P = \frac{19,5 \text{ KW}}{60^\circ - 30^\circ} = 0,65 \text{ KW/}^\circ\text{C}$$

Note the oil flow (90 lpm) and specific exchange power (0,65 KW/°C), product research is made by referring to the graph in the catalogue which is relevant to each model.

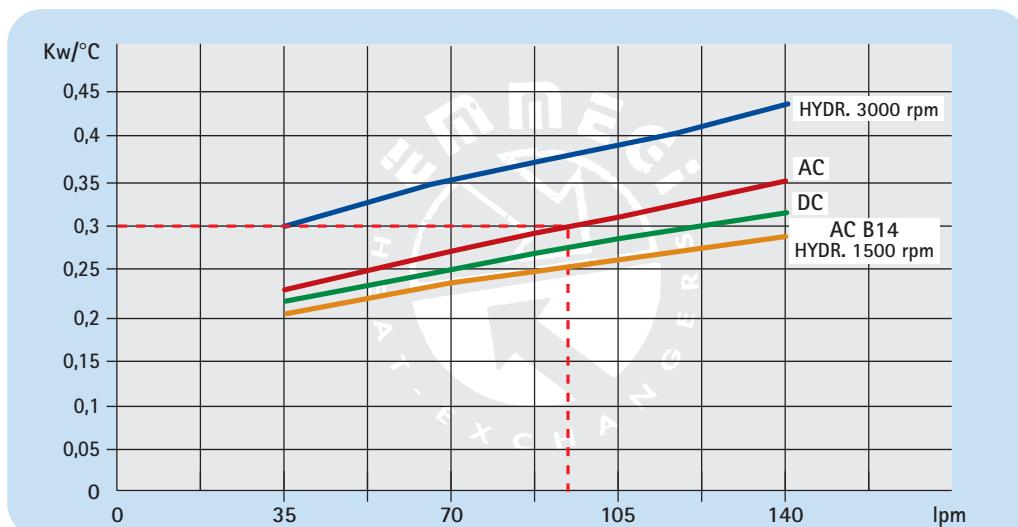
Dati tecnici Technical Data



P/N	V	Hz	kW	A	rpm	ø Fan	dB(A)	(m³/h)	IP	It	Kg
253001###	230 AC	50	0,189	0,85	2520	300	78	2220	44	1,6	15
253003###	230-400 AC	50/60	0,195	0,43	2600	300	76	2500	44		15
253004###	230-400 AC B14	50/60	0,370	1,03	1370	300	70	1850	55		20
253012###	12 DC	/	0,180	12,2	3000	305	80	1920	68		14
253024###	24 DC	/	0,180	6	3000	305	83	2100	68		14
253056###	Prepared for Gr.2 hydraulic motor				300	305	305	300	/		15

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Diagramma rendimento Performance diagram



Lo scambiatore selezionato risulta il modello:
MG AIR 2030K – 230/400V – 50Hz
cod. 253003###.

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**.

The exchanger selected is the following model:
MG AIR 2030K – 230/400V – 50Hz
cod. 253003###.

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**.

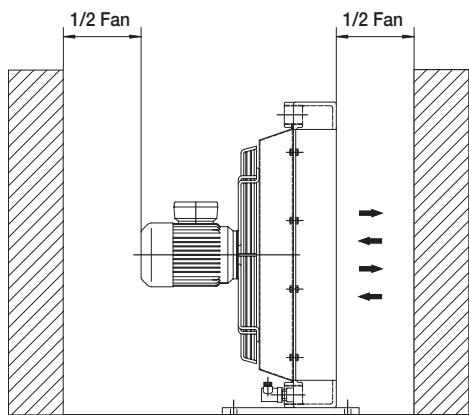


Fig.1

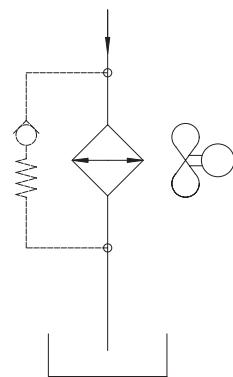
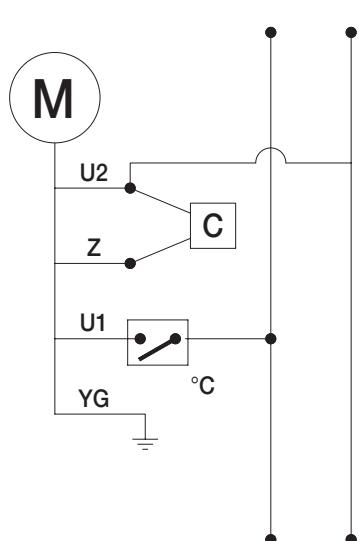


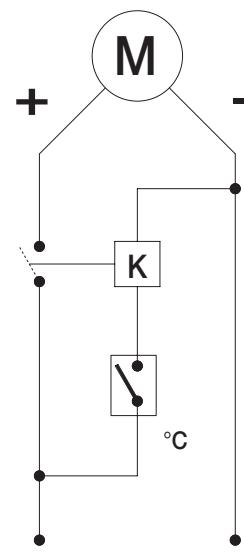
Fig.2

Collegamenti elettrici

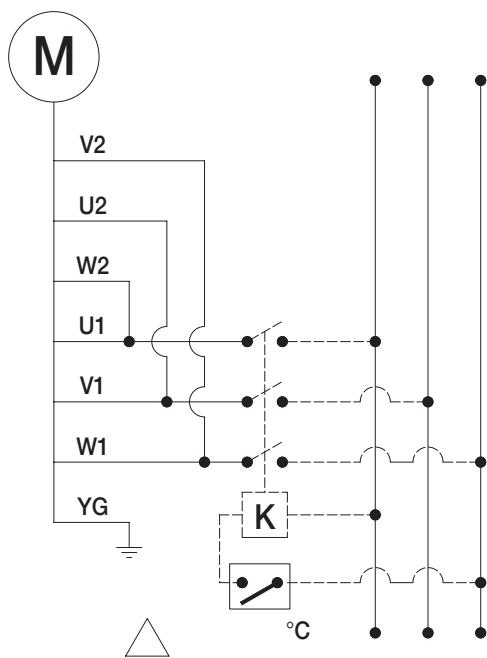
Electric Wiring



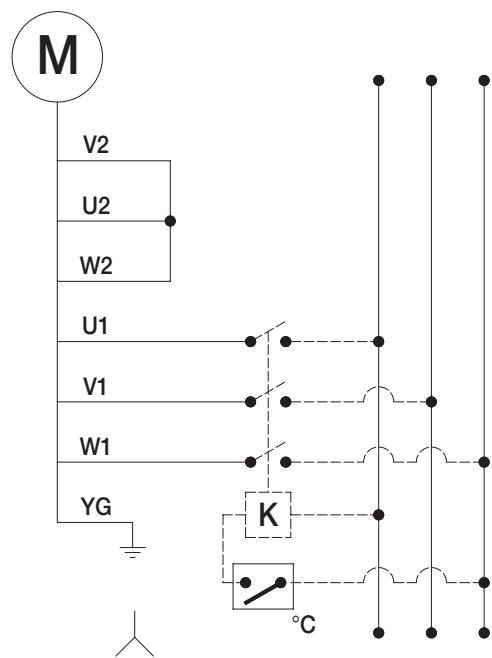
230V AC 1 PHASE



12-24V DC



230V AC 3 PHASE



400V AC 3 PHASE

°C = Termostato NA./Thermostat NO.

K = Relé/Relay

Modulo richiesta dati

Sheet for cooler selection

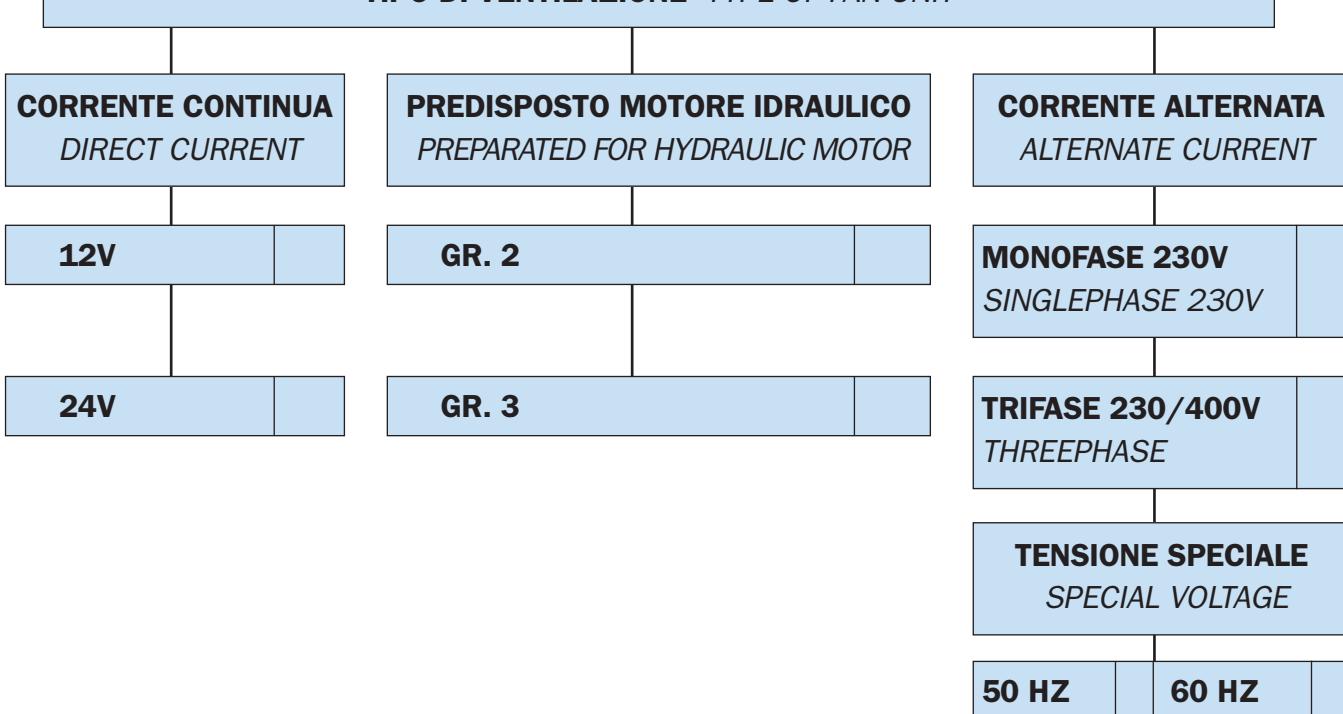


CLIENTE COMPANY	
RICHIEDENTE NAME	

ARIA-OLIO AIR-OIL

PORTATA OLIO OIL FLOW RATE	lpm	
POTENZA INSTALLATA TOTAL POWER	kW	
POTENZA DA DISSIPARE POWER TO BE DISSIPATED	kW	
TEMPERATURA INGRESSO OLIO OIL TEMPERATURE INLET	°C	
TEMPERATURA ARIA MAX MAX AMBIENT TEMPERATURE	°C	
VISCOSITÀ OLIO OIL VISCOSITY	cst	
PRESSIONE DI LAVORO WORKING PRESSURE	bar	

TIPO DI VENTILAZIONE TYPE OF FAN UNIT



Denominazione codice prodotto Aria-olio Serie 2000K

Ordering code

Air-oil 2000K Series

2 520 03 2 01

TIPO DI SISTEMA COOLER SERIES

520 (MG AIR 2020K)

TIPO DI MOTORIZZAZIONE FAN MOTOR TYPE

- 01 AC 230V 50 Hz
- 03 AC 230V-400V 50 Hz
- 04 AC 230V-400V 50-60 Hz (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 *Fixed thermostat* 40-28°
- 2 Termostato fisso *Fixed thermostat* 50-38°
- 3 Termostato fisso *Fixed thermostat* 60-48°
- 4 Termostato fisso *Fixed thermostat* 70-58°
- 5 Termostato fisso *Fixed thermostat* 80-68°
- 6 Termostato fisso *Fixed thermostat* 90-78°
- 8 Termostato regolabile *Adjustable thermostat* 0-90° (TC2)
- 9 Termostato regolabile collegato *Connected adjustable thermostat* 0-120° (TC2)

TIPO DI VENTILAZIONE VENTILATING TYPE

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

Serie K - K Series

- | | |
|-------|------------|
| 2005K | pag. 8-9 |
| 2010K | pag. 10-11 |
| 2015K | pag. 12-13 |
| 2020K | pag. 14-15 |
| 2024K | pag. 16-17 |
| 2030K | pag. 18-19 |
| 2040K | pag. 20-21 |
| 2050K | pag. 22-23 |



Serie K 2 Pass - 2 Pass K Series

- | | |
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| 2010K 2PASS | pag. 24-25 |
| 2015K 2PASS | pag. 26-27 |
| 2020K 2PASS | pag. 28-29 |
| 2024K 2PASS | pag. 30-31 |
| 2030K 2PASS | pag. 32-33 |
| 2040K 2PASS | pag. 34-35 |
| 2050K 2PASS | pag. 36-37 |

Serie 2KS - 2KS Series

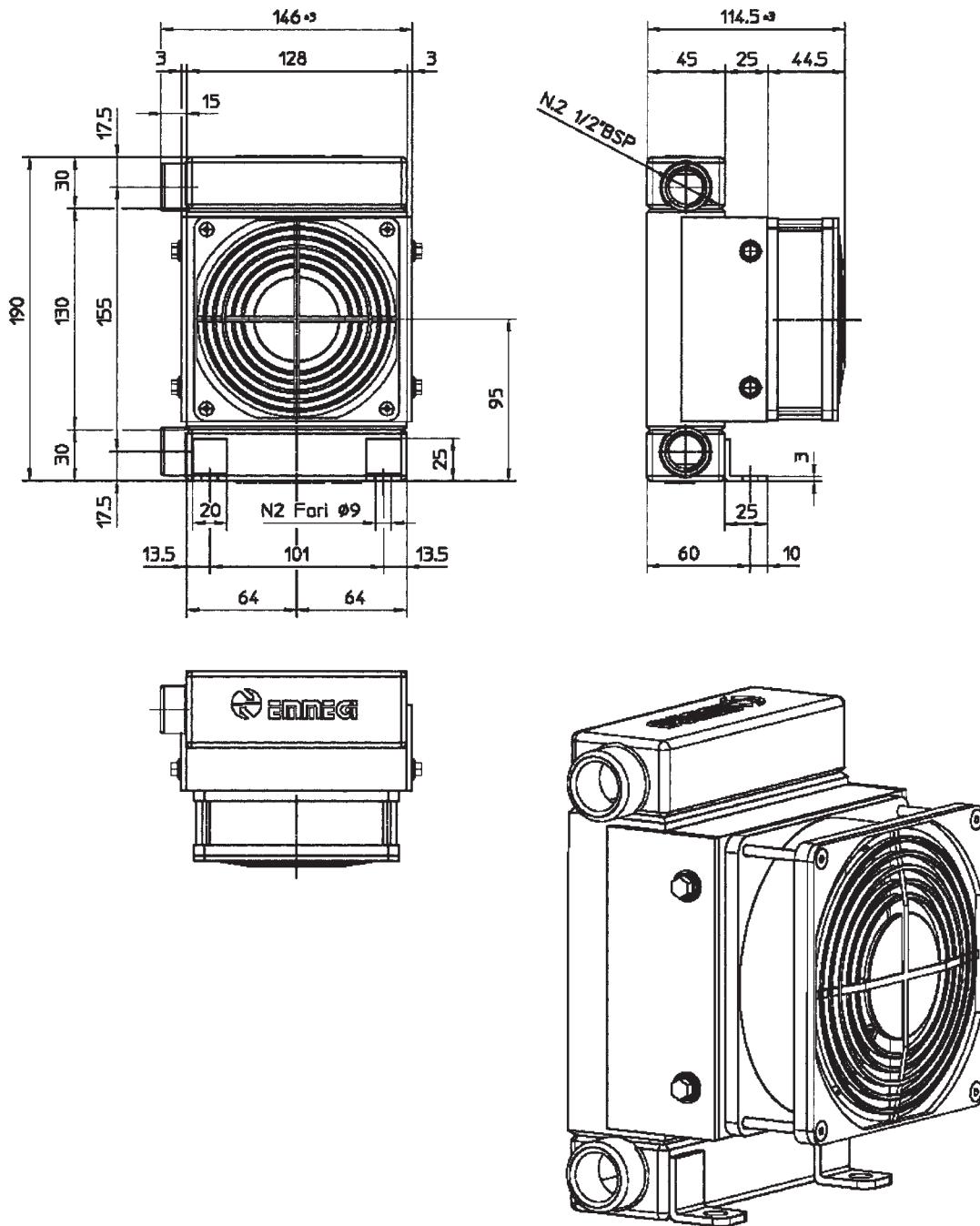
- | | |
|----------|------------|
| 2020 2KS | pag. 38-39 |
| 2024 2KS | pag. 40-41 |
| 2030 2KS | pag. 42-43 |
| 2040 2KS | pag. 44-45 |



Serie K By-Pass - By-Pass K Series

- | | |
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| 2020K By-Pass | pag. 48-49 |
| 2024K By-Pass | pag. 50-51 |
| 2030K By-Pass | pag. 52-53 |
| 2040K By-Pass | pag. 54-55 |

Dimensioni Dimensions



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

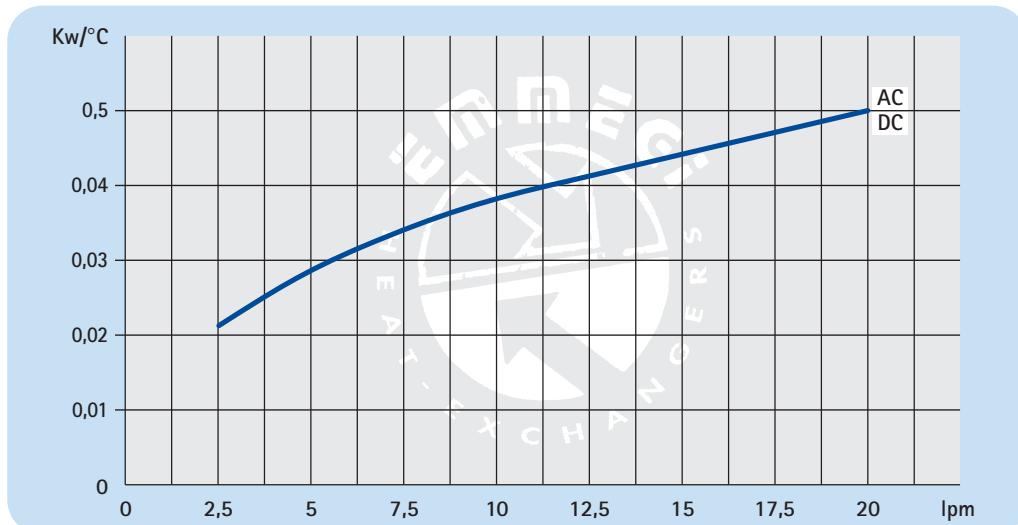
Dati tecnici Technical Data

P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
054240023050#	230 AC	50	0,019	0,12	2650	105	40/47	125	AC		
054240001200#	12 DC	/	0,005	0,4	3050	105	45/49	140	DC	0,3	
054240002400#	24 DC	/	0,005	0,2	3050	105	45/49	140	DC		3,2

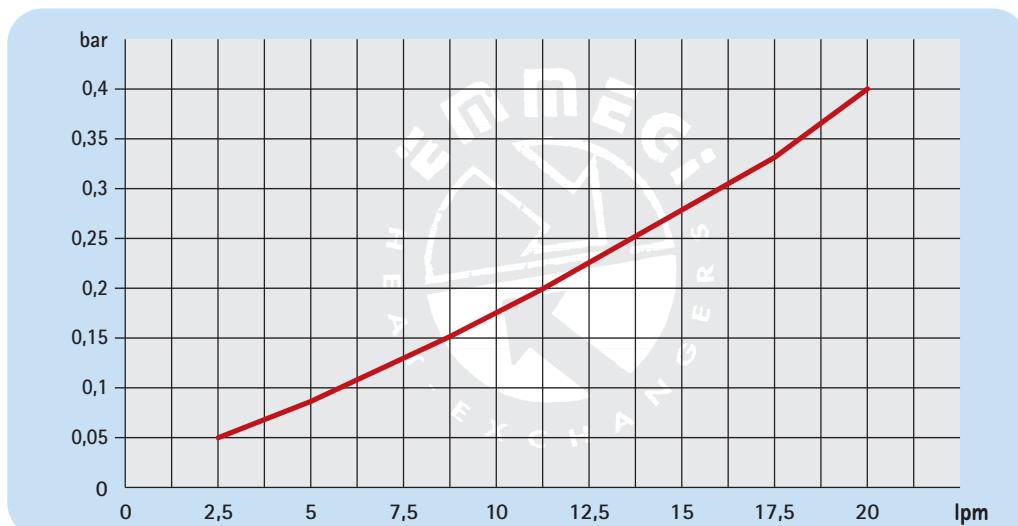


MG2005K

Diagramma rendimento Performance diagram



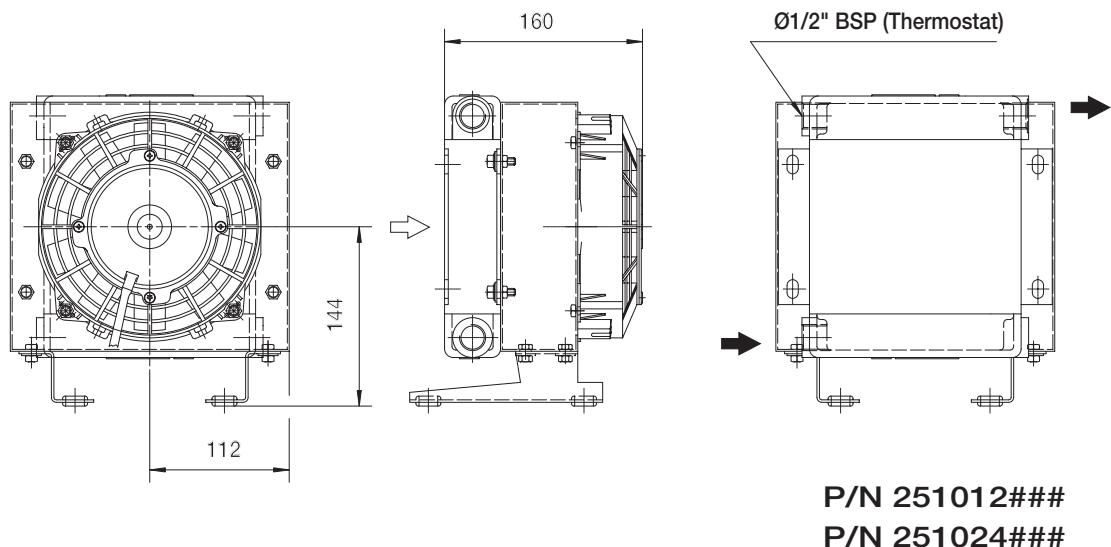
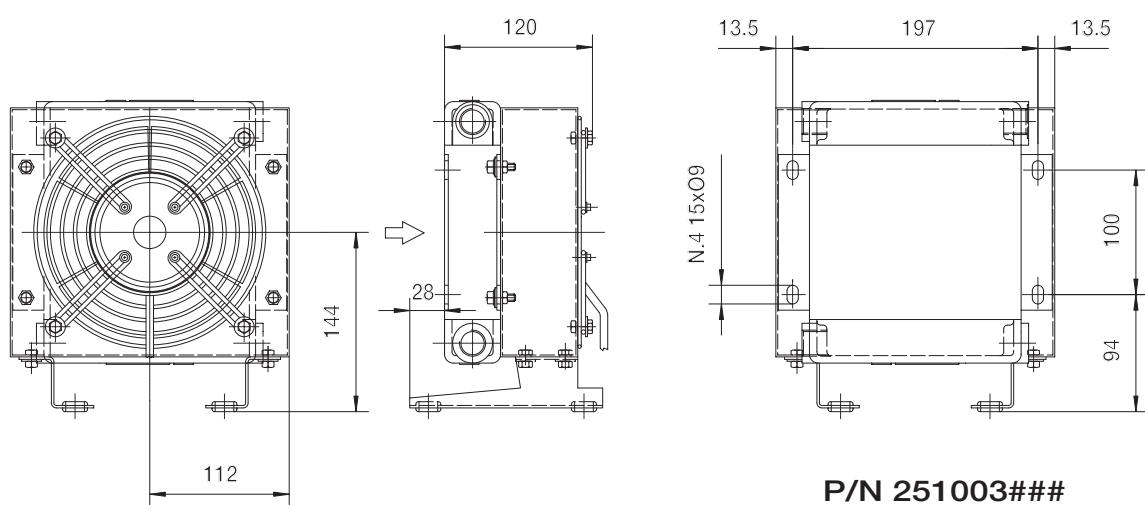
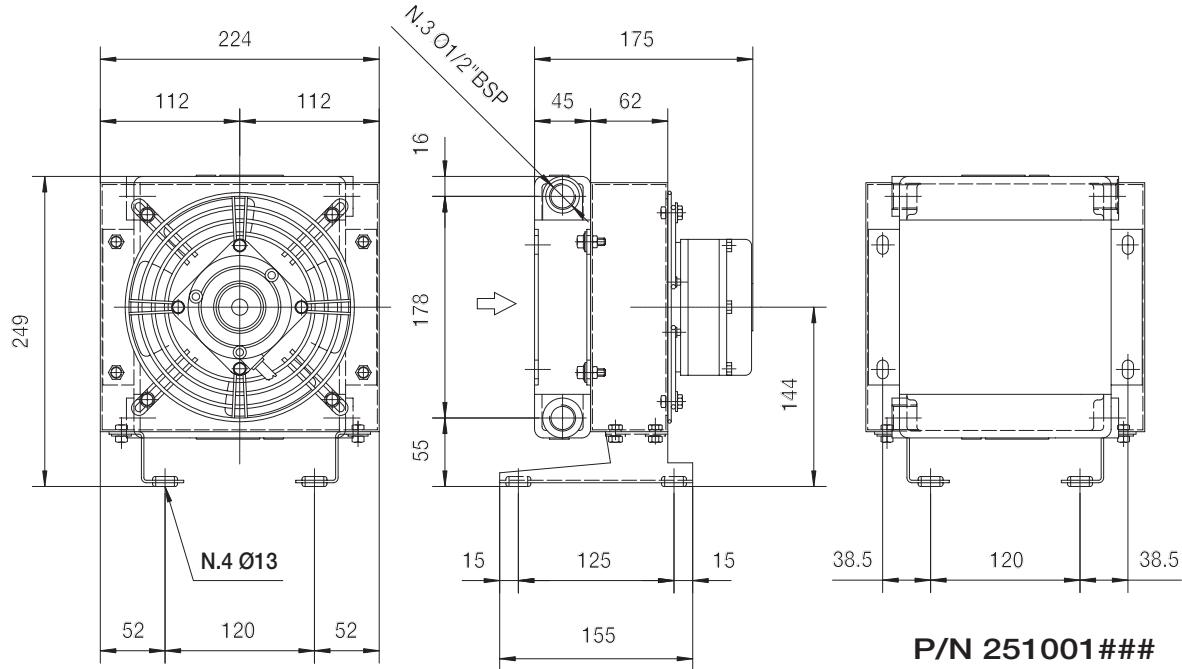
Perdite di carico Pressure drop



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



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Over-all dimensions and technical characteristic are not binding

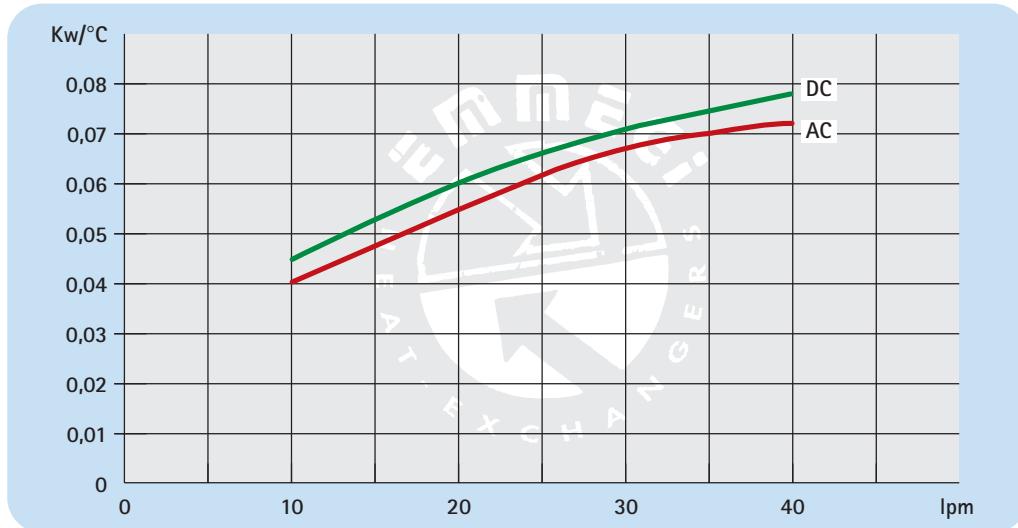
Dati tecnici Technical Data

P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
251001###	230 AC	50	0,047	0,21	2500	175	67	235	54	0,3	6
251003###	230-400 AC	50/60	0,045	0,12	2750	175	63	190	54		6
251012###	12 DC	/	0,08	4,5	4200	167	75	410	68		5
251024###	24 DC	/	0,08	2,3	4300	167	75	410	68		5

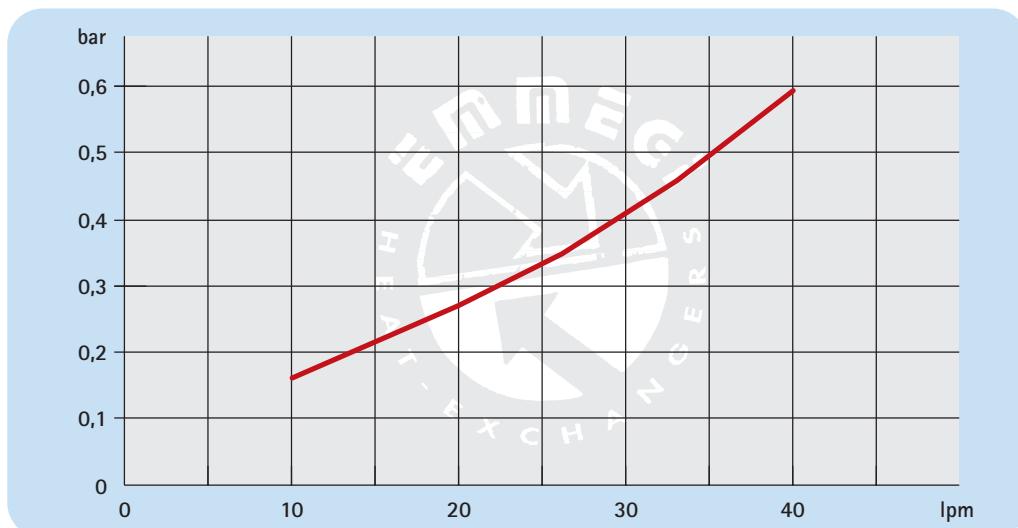


MG2010K

Diagramma rendimento Performance diagram



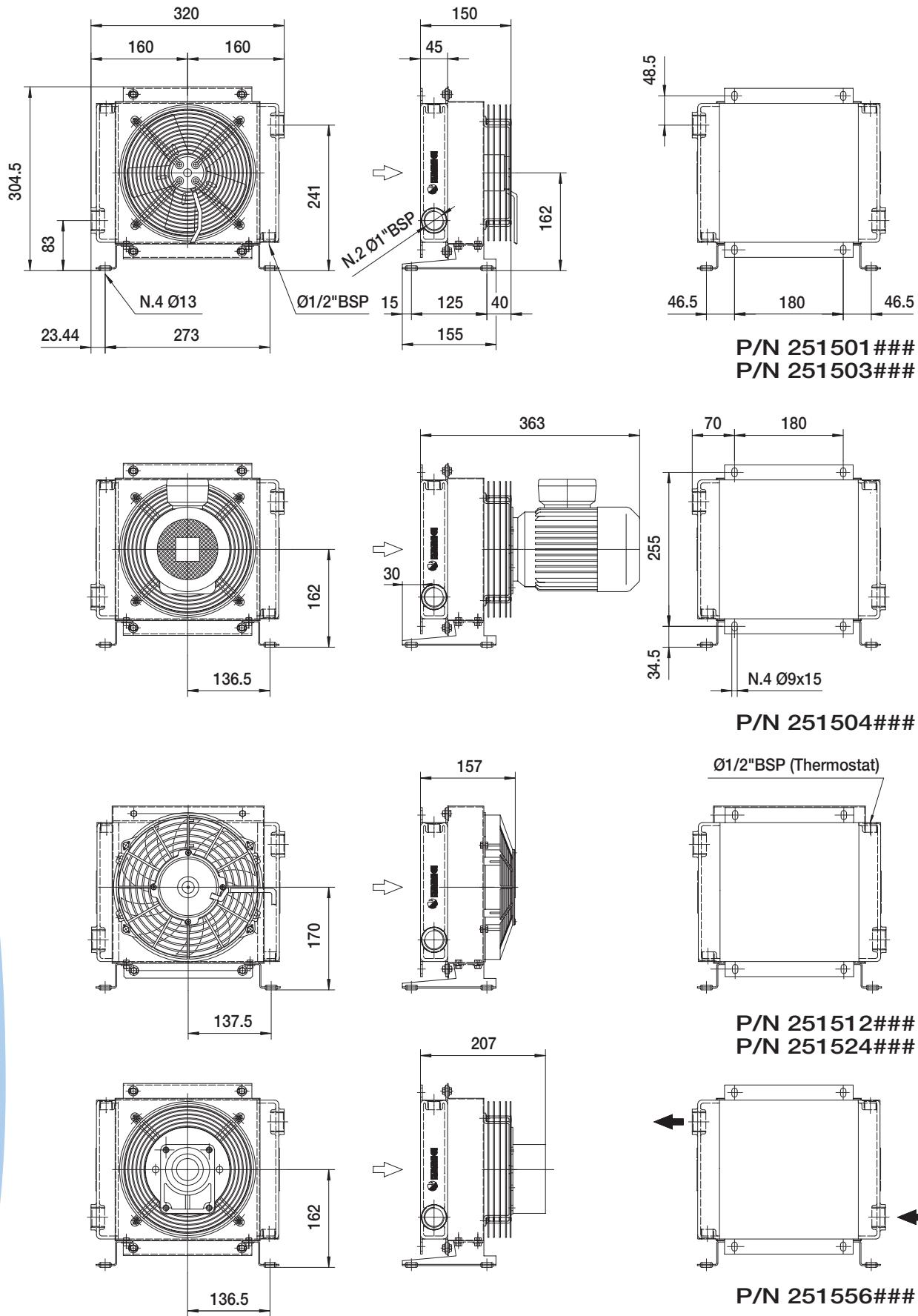
Perdite di carico Pressure drop (ISO VG 32)



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



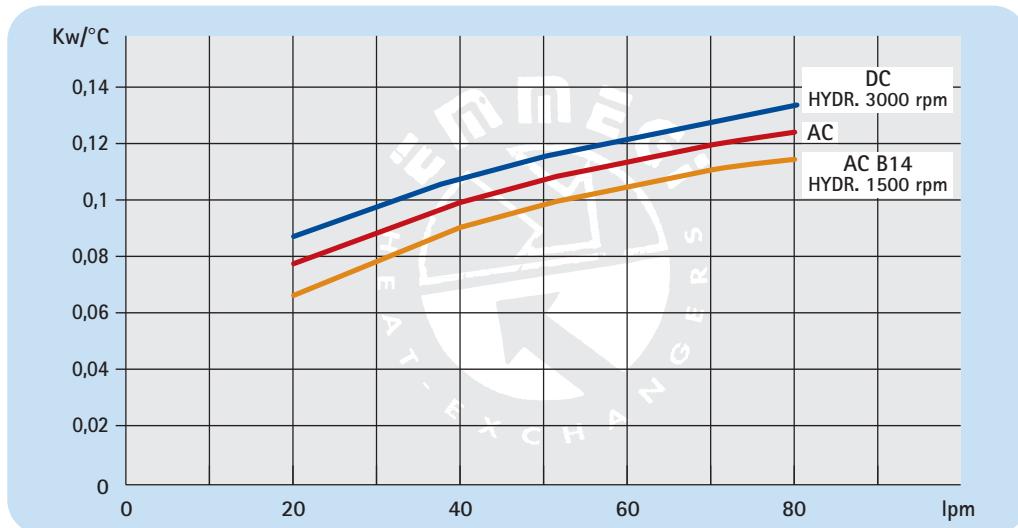
Le dimensioni di ingombro e le caratteristiche tecniche non sono impegnative
Over-all dimensions and technical characteristic are not binding

Dati tecnici Technical Data

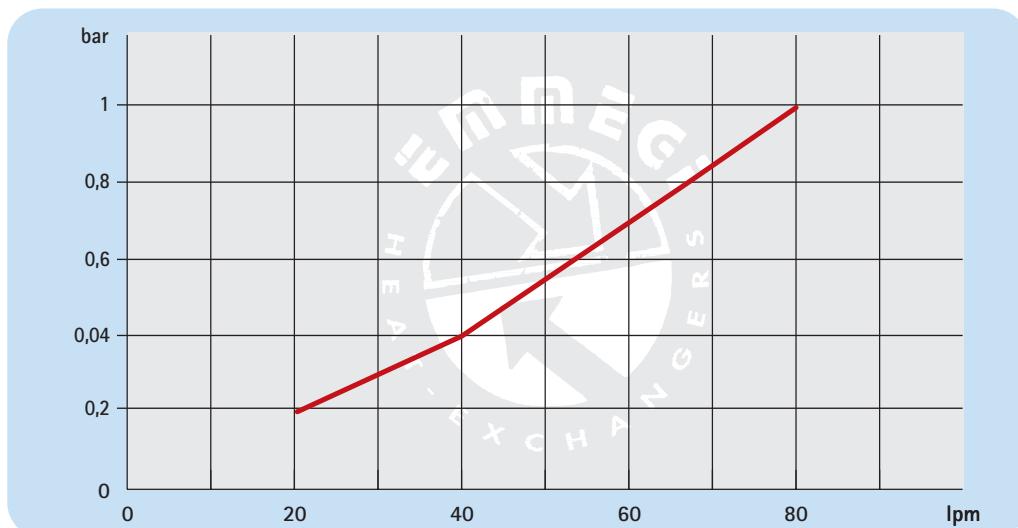
P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
251501###	230 AC	50	0,067	0,29	2770	200	68	700	44	0,5	7
251503###	230-400 AC	50/60	0,068	0,15	2600	200	69	720	44		7
251504###	230-400 AC B14	50/60	0,250	0,72	1350	200	61	415	55		10
251512###	12 DC	/	0,09	6,1	3100	225	72	880	68		6,5
251524###	24 DC	/	0,10	2,9	3000	225	73	865	68		6,5
251556###	Prepared for Gr.2 hydraulic motor				200	200	200	200	200		6

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Diagramma rendimento Performance diagram



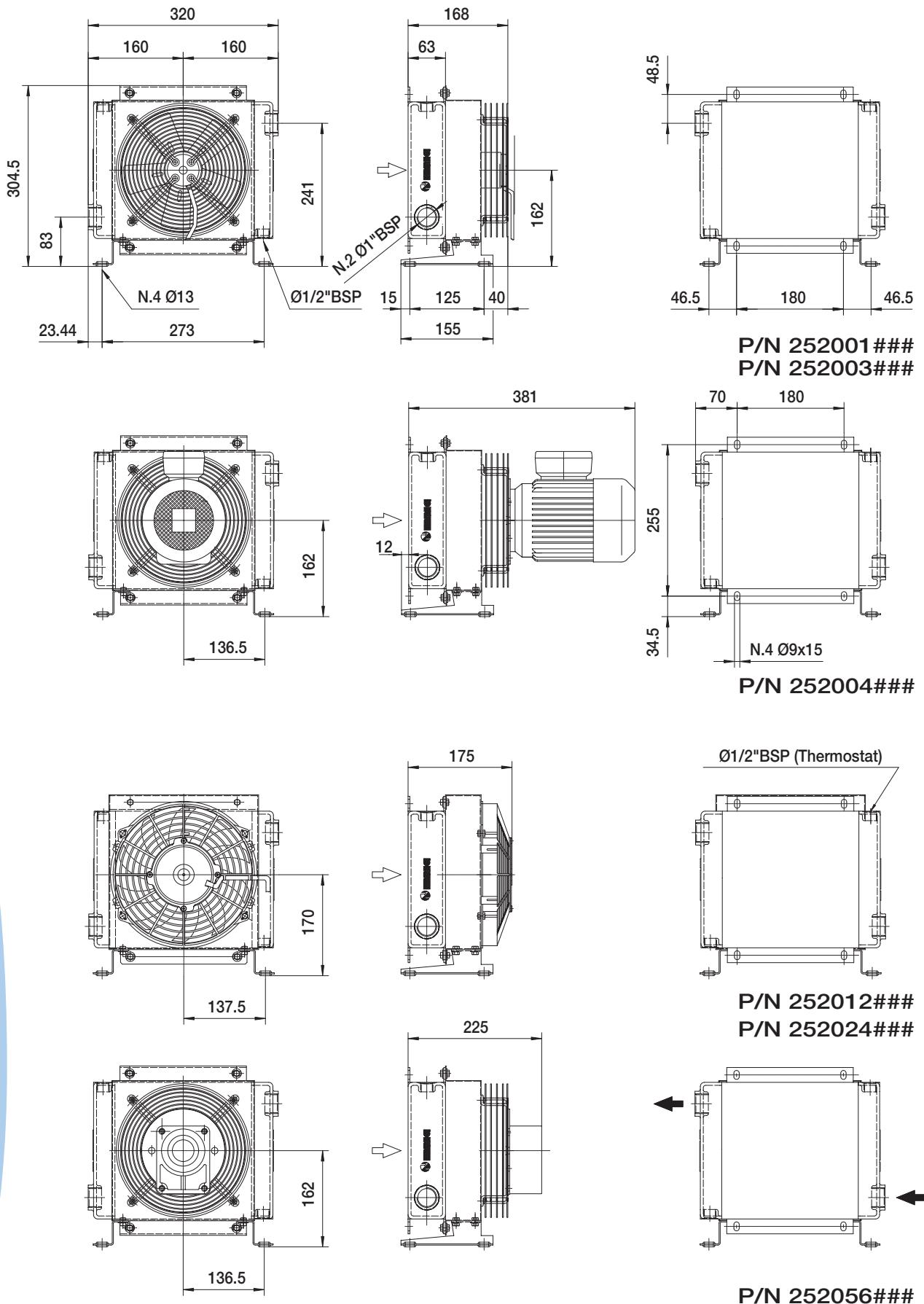
Perdite di carico Pressure drop (ISO VG 32)



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



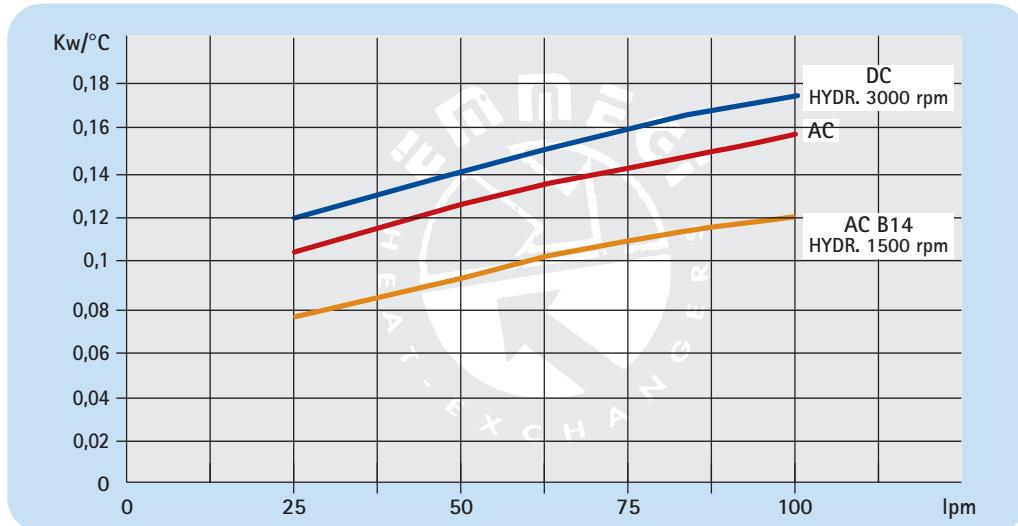
Le dimensioni di ingombro e le caratteristiche tecniche non sono impegnative
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Dati tecnici Technical Data

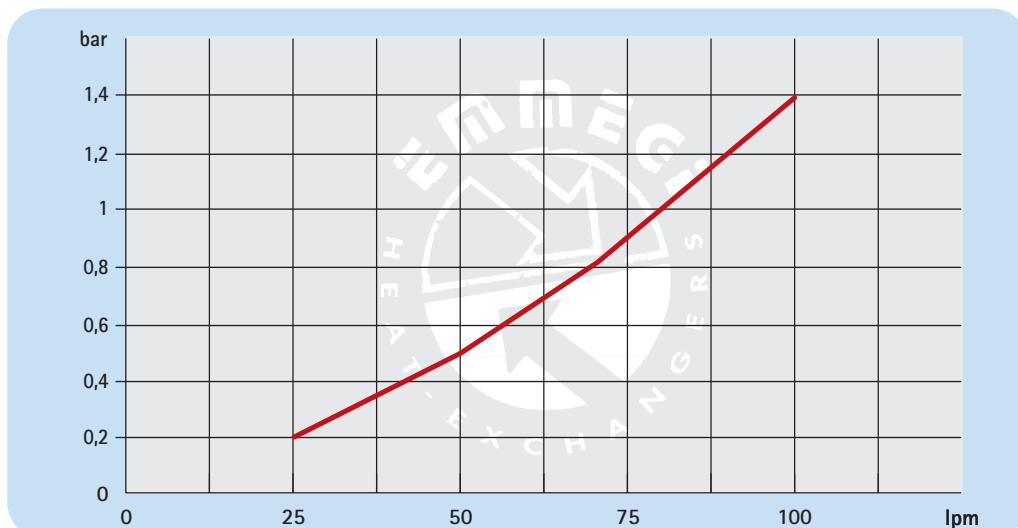
P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
252001###	230 AC	50	0,067	0,29	2770	200	68	675	44	0,7	8
252003###	230-400 AC	50/60	0,068	0,15	2600	200	68	645	44		8
252004###	230-400 AC B14	50/60	0,250	0,7	1350	200	64	390	55		11
252012###	12 DC	/	0,09	5,9	3100	225	72	795	68		7
252024###	24 DC	/	0,10	3,1	3000	225	72	785	68		7
252056###	Prepared for Gr.2 hydraulic motor				📞	200	📞	📞	/		7

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)



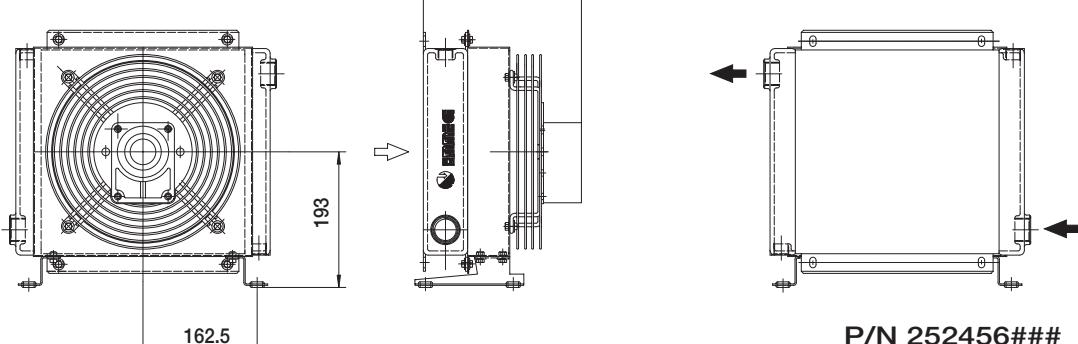
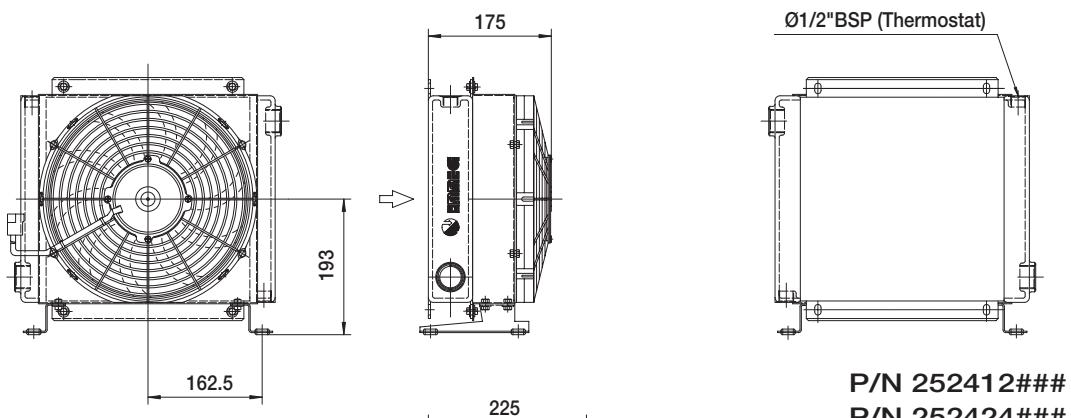
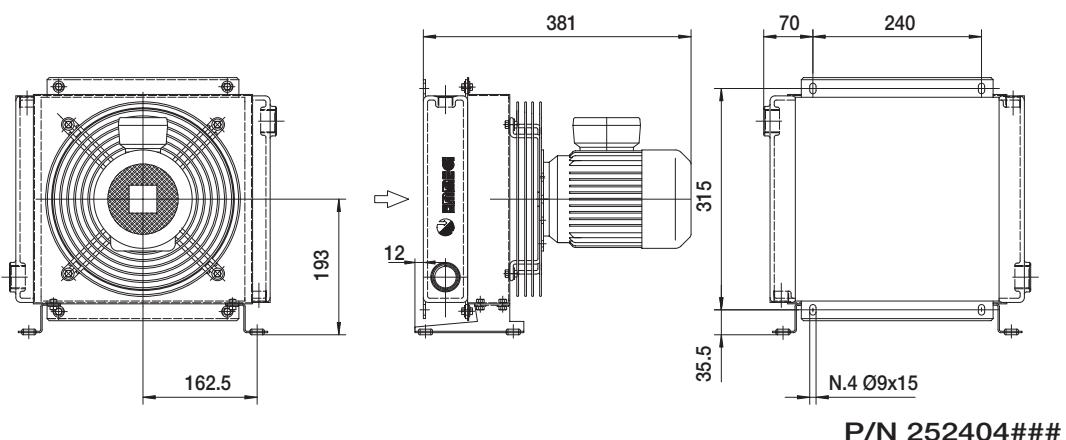
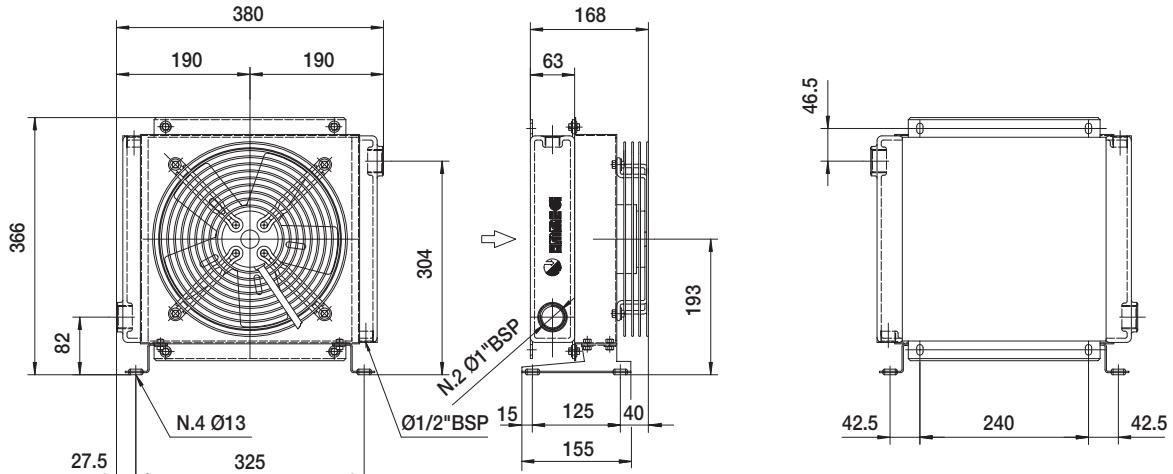
Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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



MG2020K

Dimensioni Dimensions



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

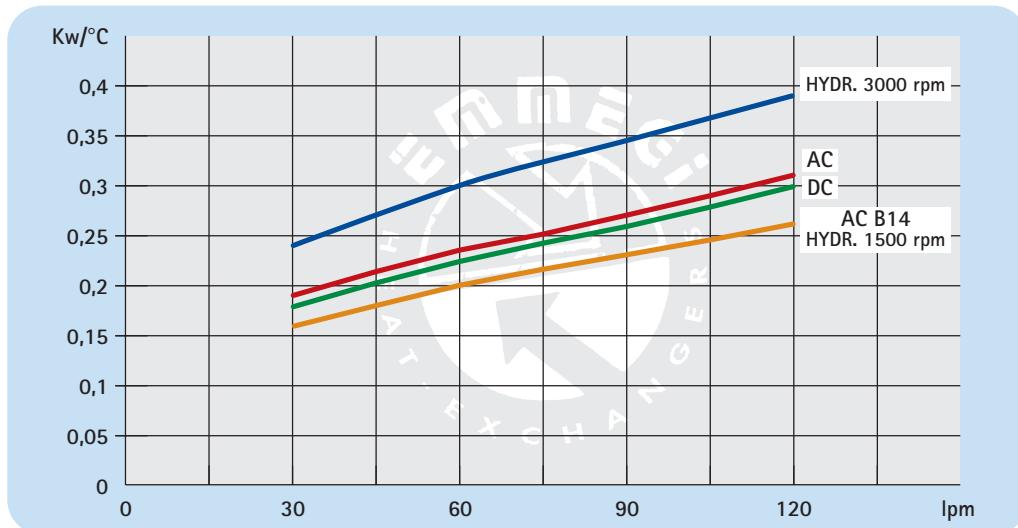
Dati tecnici Technical Data



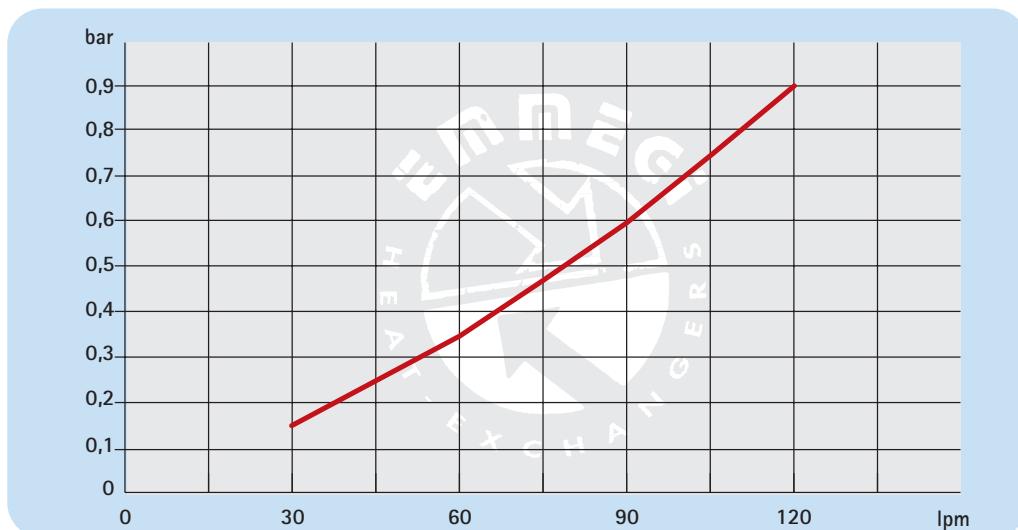
P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
252401###	230 AC	50	0,108	0,48	2525	250	72	1350	44	1	11
252403###	230-400 AC	50/60	0,105	0,22	2500	250	72	1300	44		11
252404###	230-400 AC B14	50/60	0,250	0,71	1450	250	64	1000	55		16
252412###	12 DC	/	0,110	7,1	3000	280	72	1180	68		10
252424###	24 DC	/	0,110	3,8	3000	280	74	1280	68		10
252456###	Prepared for Gr.2 hydraulic motor				250	250	250	250	/		10

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Diagramma rendimento Performance diagram



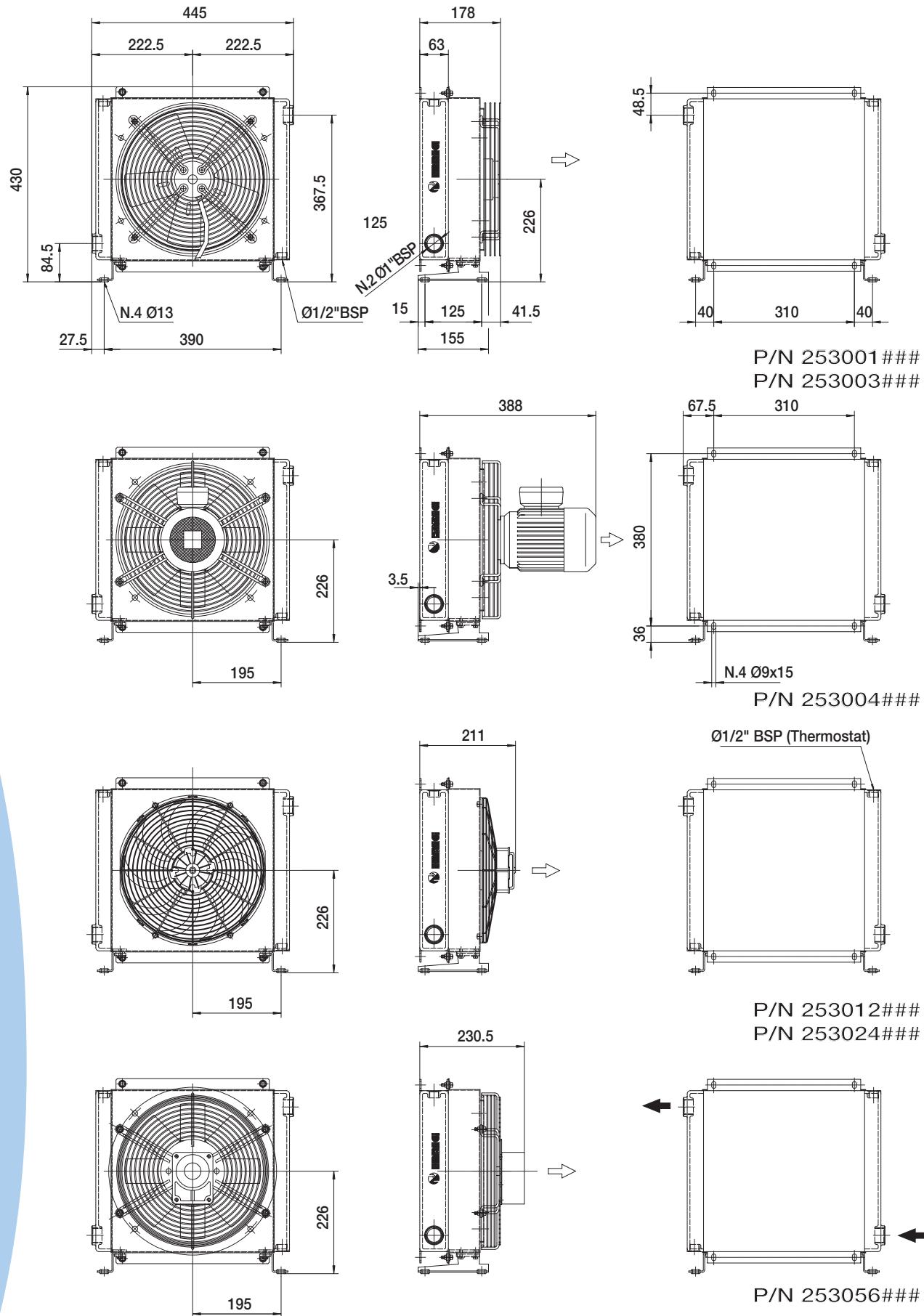
Perdite di carico Pressure drop (ISO VG 32)



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



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

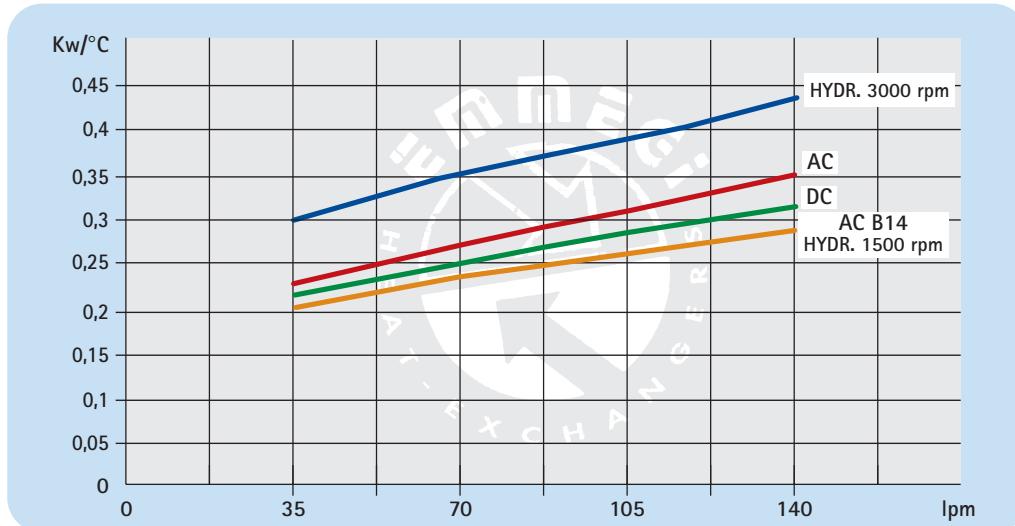
Dati tecnici Technical Data



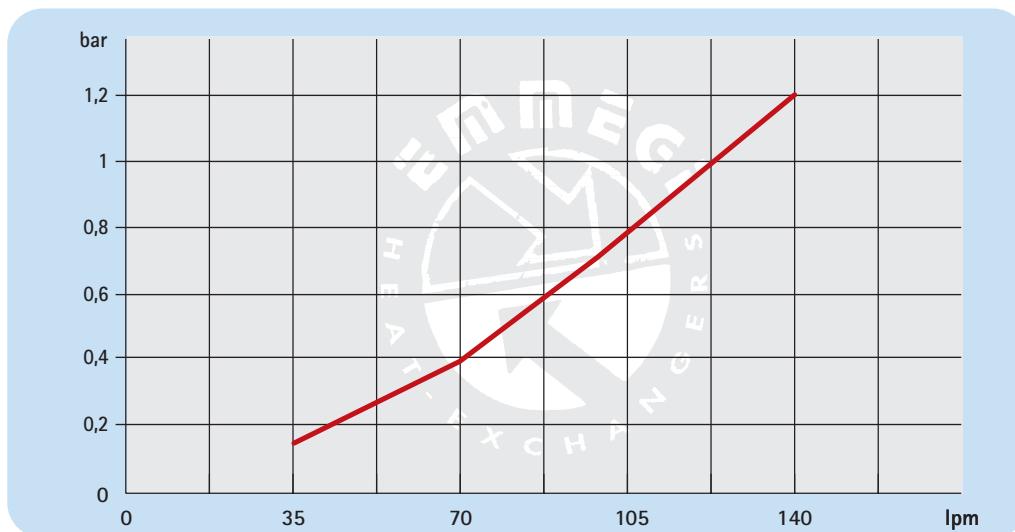
P/N	V	Hz	kW	A	rpm	ø Fan	dB(A)	(m³/h)	IP	It	Kg
253001###	230 AC	50	0,189	0,85	2520	300	78	2220	44	1,6	15
253003###	230-400 AC	50/60	0,195	0,43	2600	300	76	2500	44		15
253004###	230-400 AC B14	50/60	0,370	1,03	1370	300	70	1850	55		20
253012###	12 DC	/	0,180	12,2	3000	305	80	1920	68		14
253024###	24 DC	/	0,180	6	3000	305	83	2100	68		14
253056###	Prepared for Gr.2 hydraulic motor				300	300	300	300	/		15

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Diagramma rendimento Performance diagram



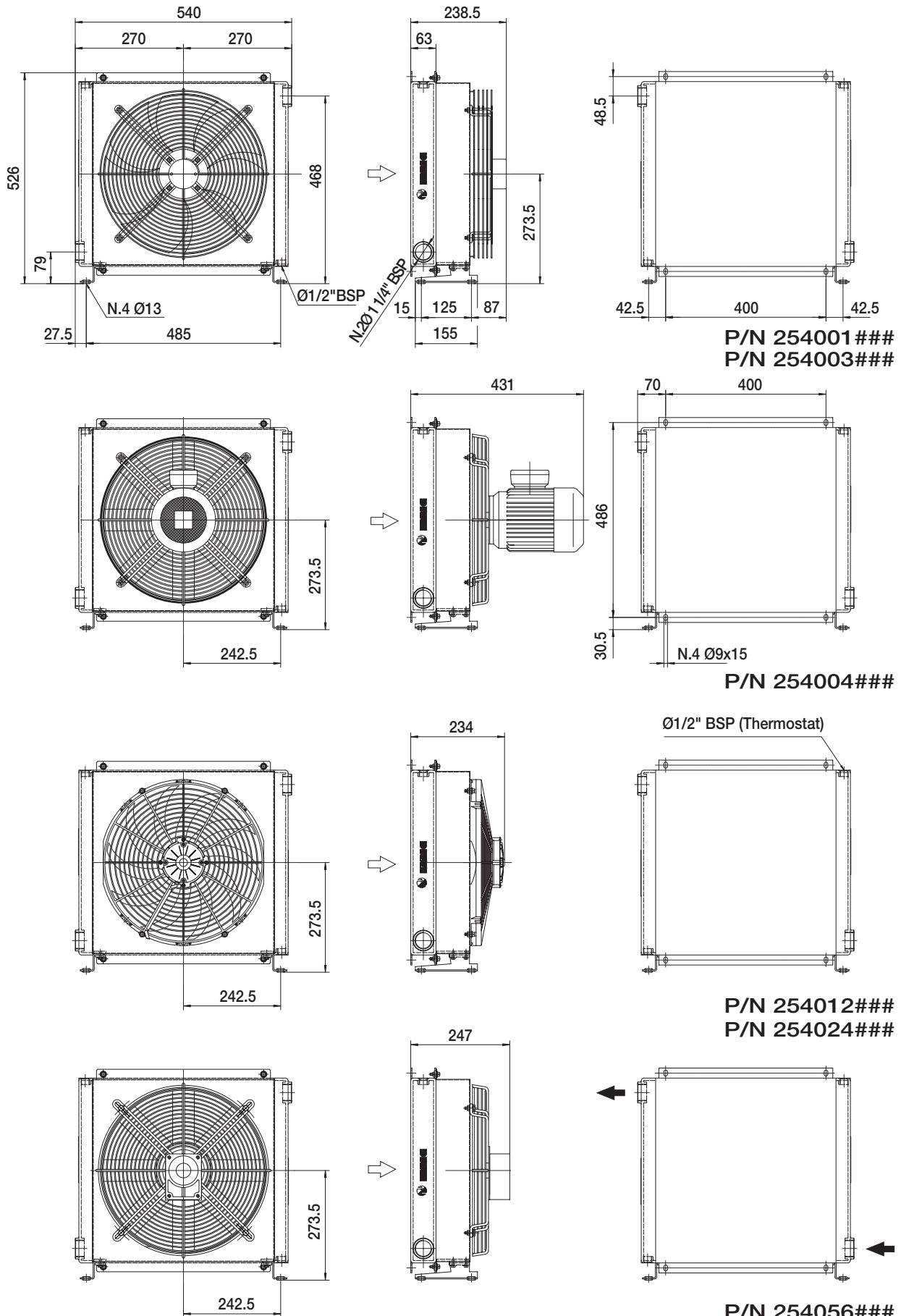
Perdite di carico Pressure drop (ISO VG 32)



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

Dimensioni Dimensions



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

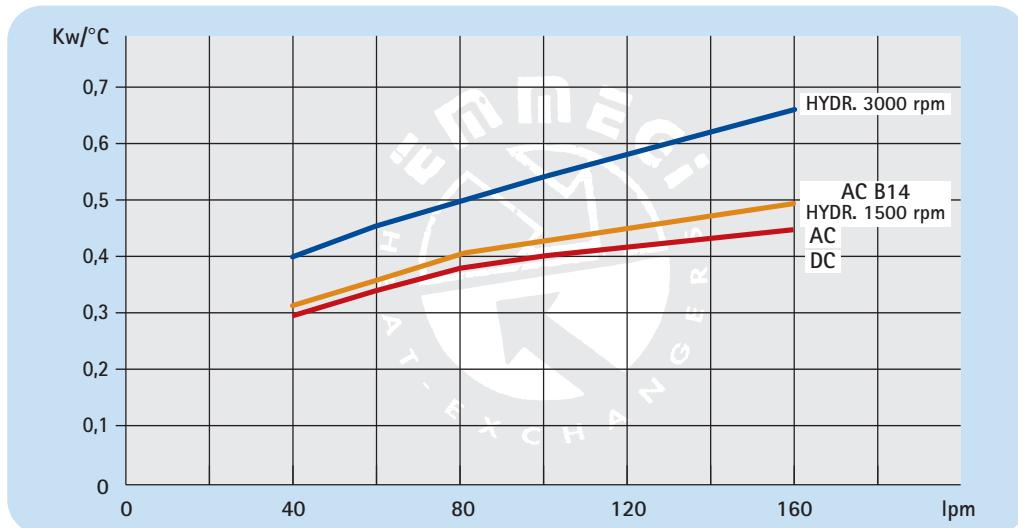
Dati tecnici Technical Data



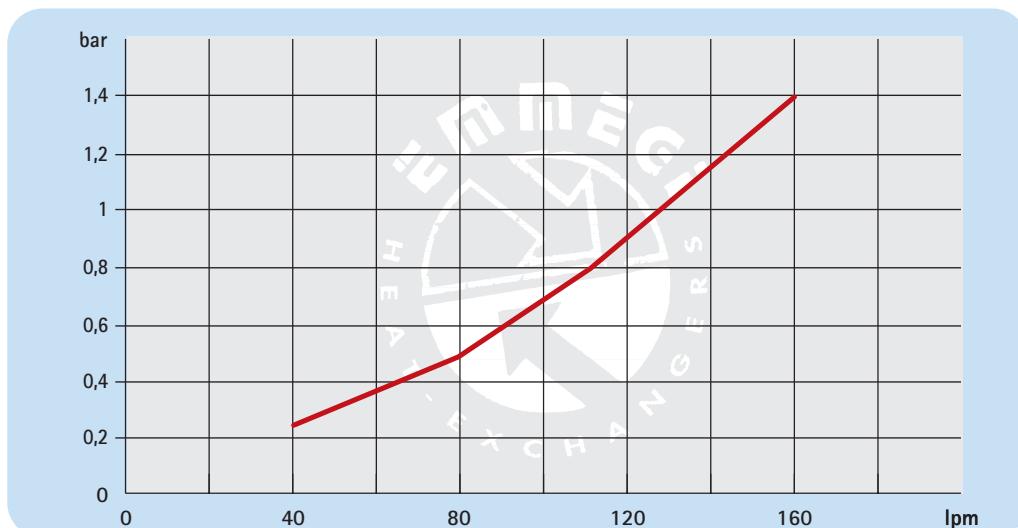
P/N	V	Hz	kW	A	rpm	ø Fan	dB(A)	(m³/h)	IP	It	Kg
254001###	230 AC	50	0,32	1,25	1260	400	71	3200	54	2,7	21
254003###	230-400 AC	50/60	0,20	0,5	1400	400	71	3200	54		21
254004###	230-400 AC B14	50/60	0,55	1,52	1400	400	77	3740	55		25
254012###	12 DC	/	0,21	13,8	2500	385	76	3000	68		20
254024###	24 DC	/	0,21	8,2	2500	385	79	3370	68		20
254056###	Prepared for Gr.2 hydraulic motor				400	400	400	400	/		19

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Diagramma rendimento Performance diagram



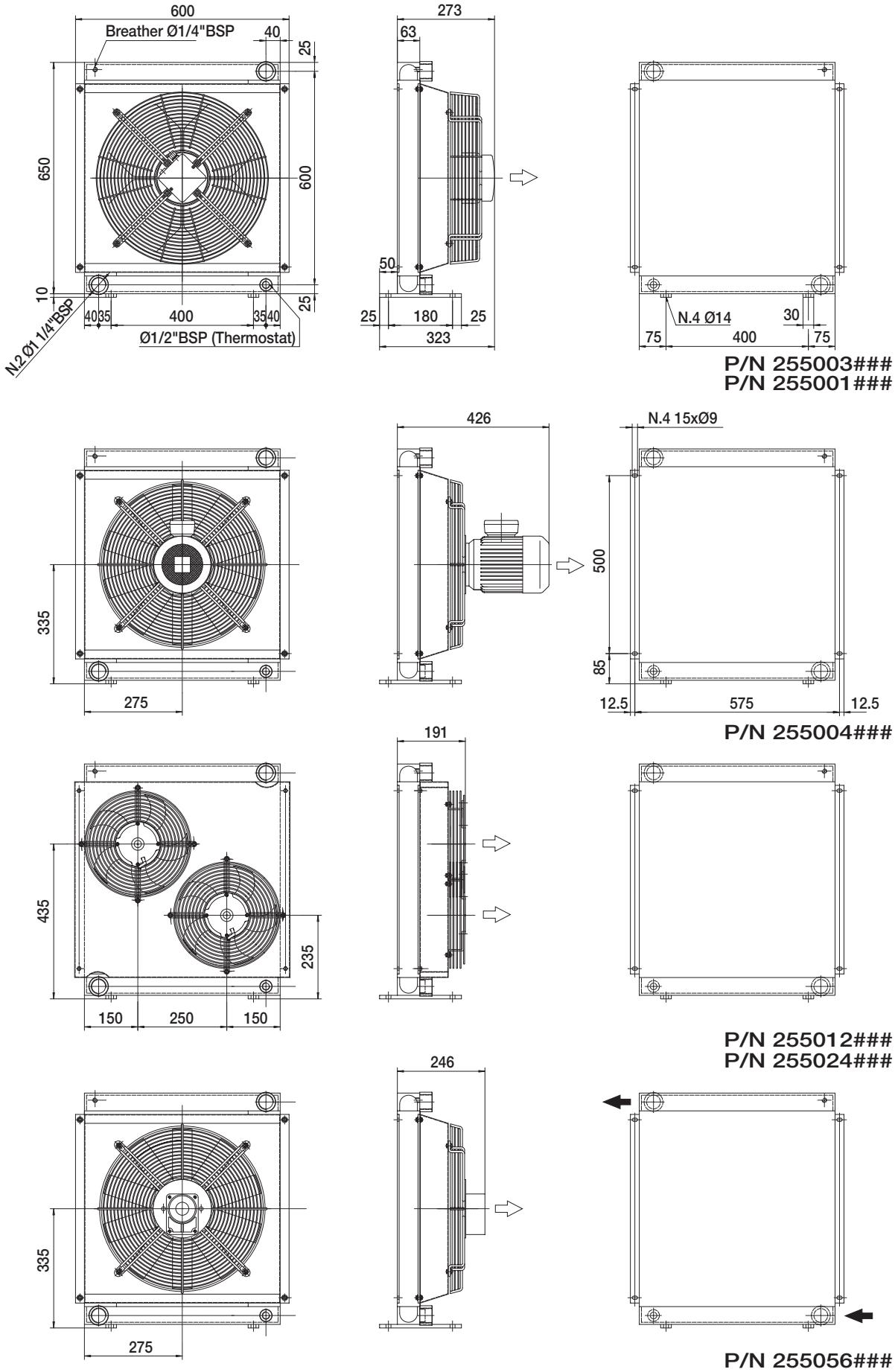
Perdite di carico Pressure drop (ISO VG 32)



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

Dimensioni Dimensions



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

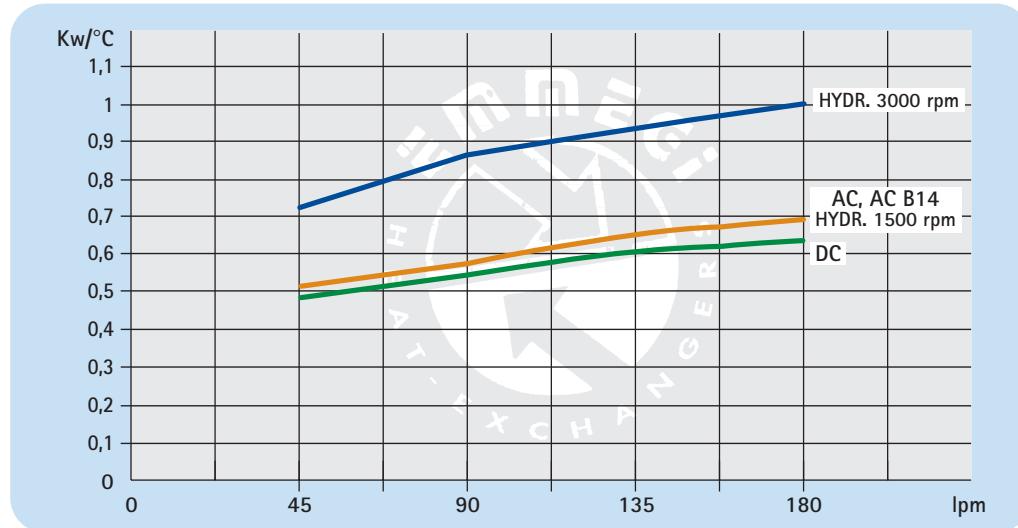
Dati tecnici Technical Data

P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
255003###	230-400 AC	50/60	0,43	0,9	1340	450	76	5000	54	5	27
255004###	230-400 AC B14	50/60	0,75	1,88	1450	450	79	5200	55		30
255012###	12 DC	/	0,15	9,5	3100	280	76	2000	68		24
255024###	24 DC	/	0,15	5,6	3100	280	79	2000	68		24
255056###	Prepared for Gr.2 hydraulic motor			📞	450	📞	📞	/			23

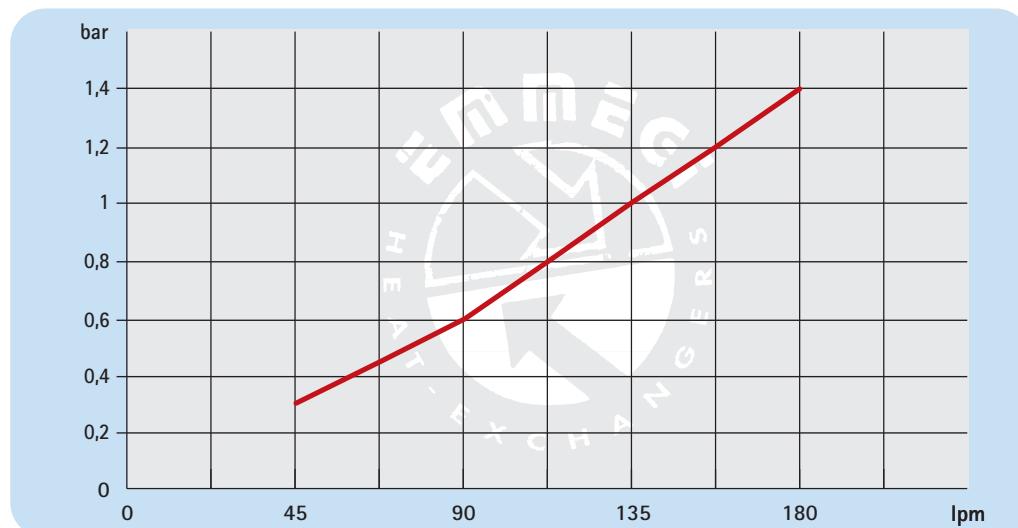
Per il 12-24V i dati sono riferiti al singolo ventilatore For 12-24 V the data refers to each ventilator

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)



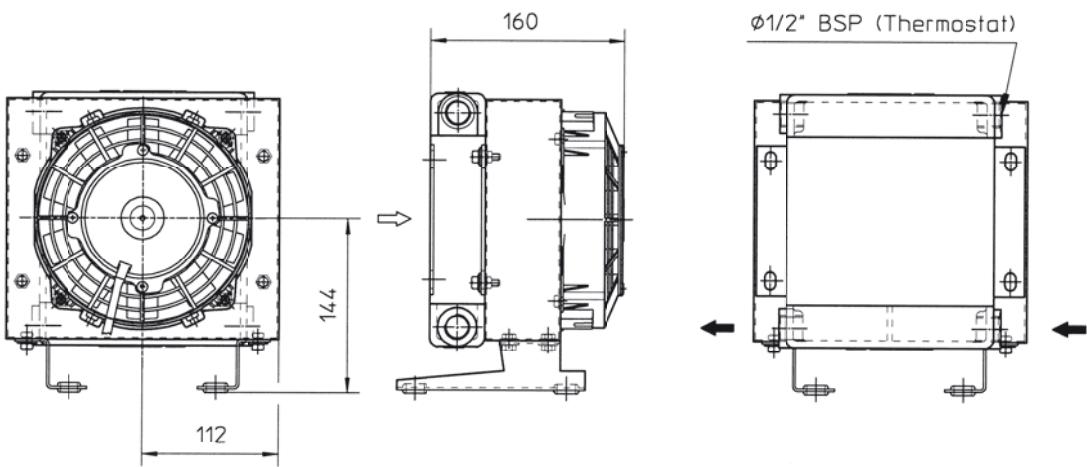
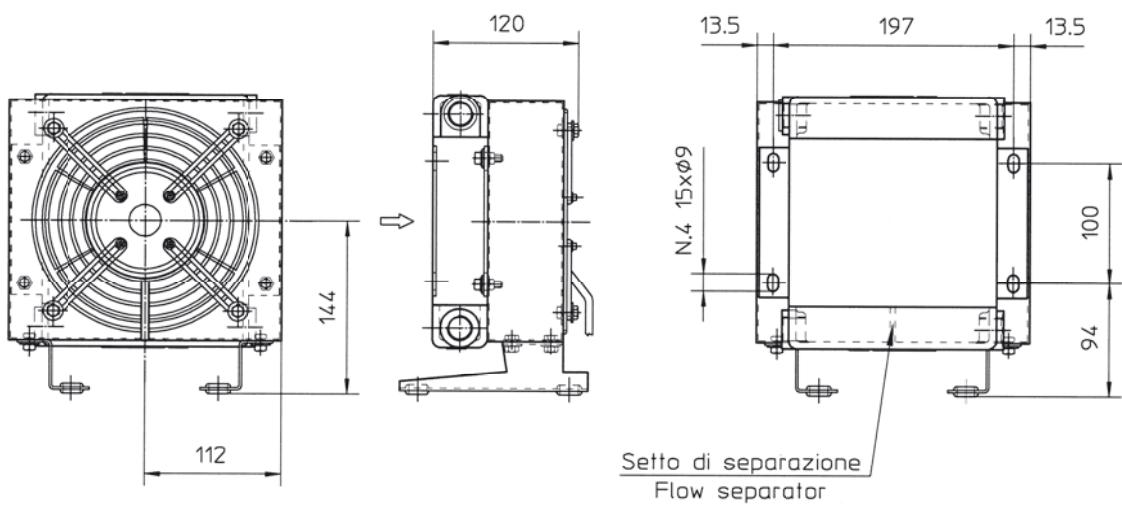
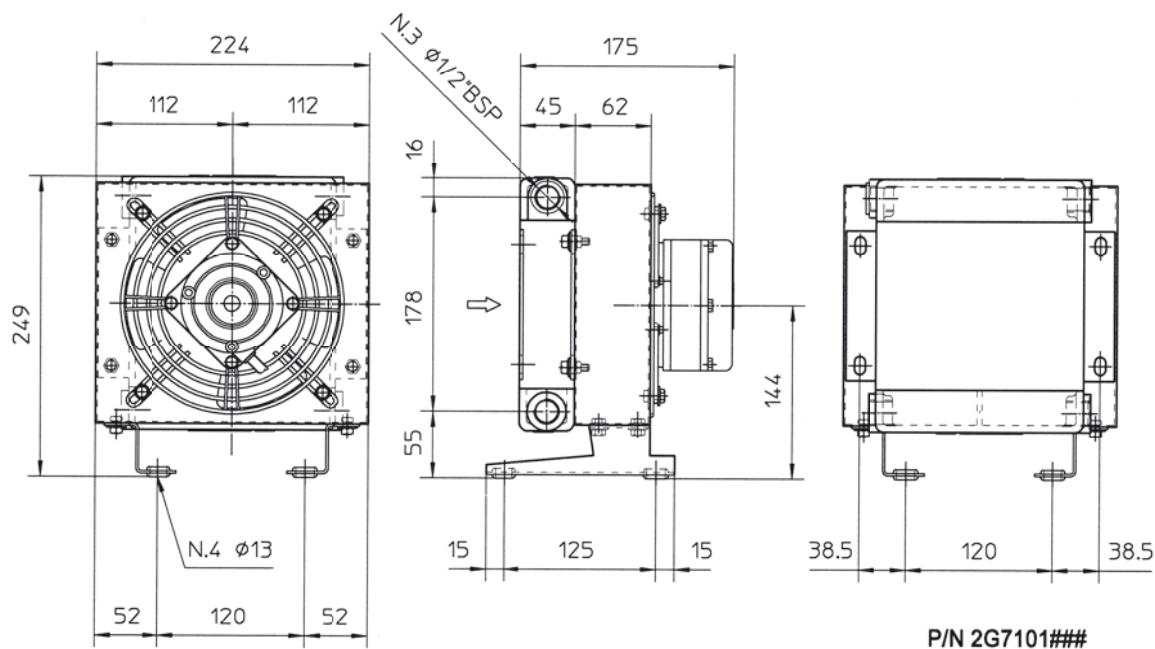
Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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



MG2050K

Dimensioni Dimensions



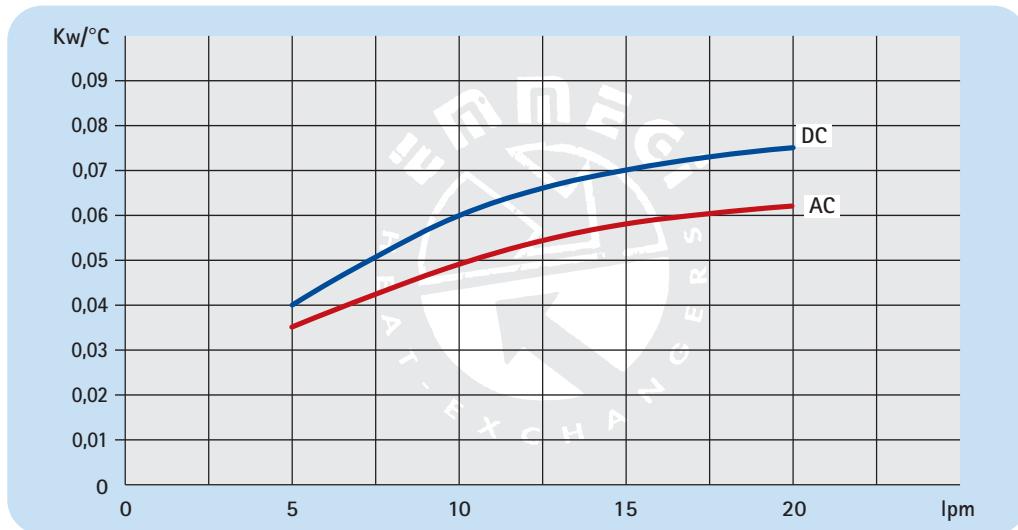
Le dimensioni di ingombro e le caratteristiche tecniche non sono impegnative
Over-all dimensions and technical characteristic are not binding

Dati tecnici Technical Data

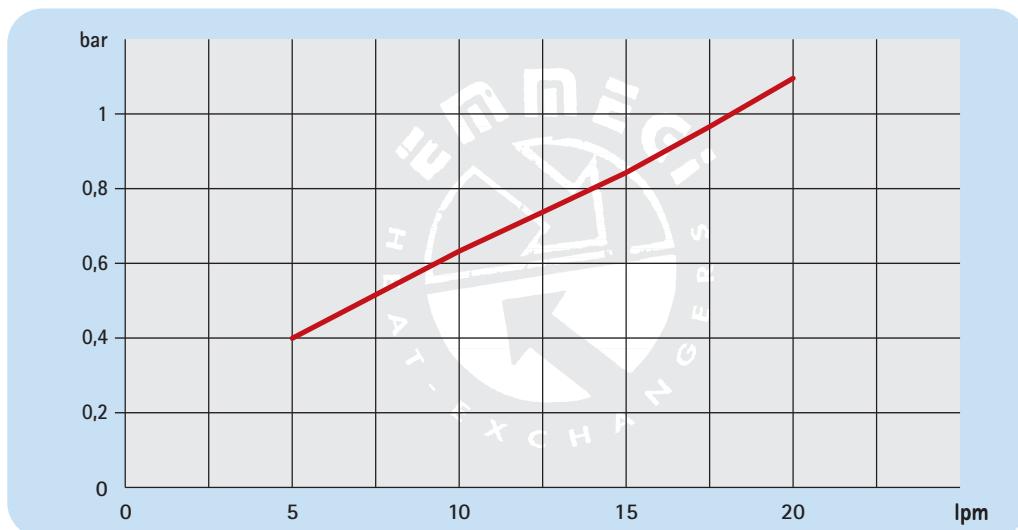


P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
2G7101###	230 AC	50	0,047	0,21	2500	175	67	235	54	0,3	6
2G7103###	230-400 AC	50/60	0,045	0,12	2750	175	63	190	54		6
2G7112###	12 DC	/	0,08	4,5	4200	167	75	410	68		5
2G7124###	24 DC	/	0,08	2,3	4300	167	75	410	68		5

Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

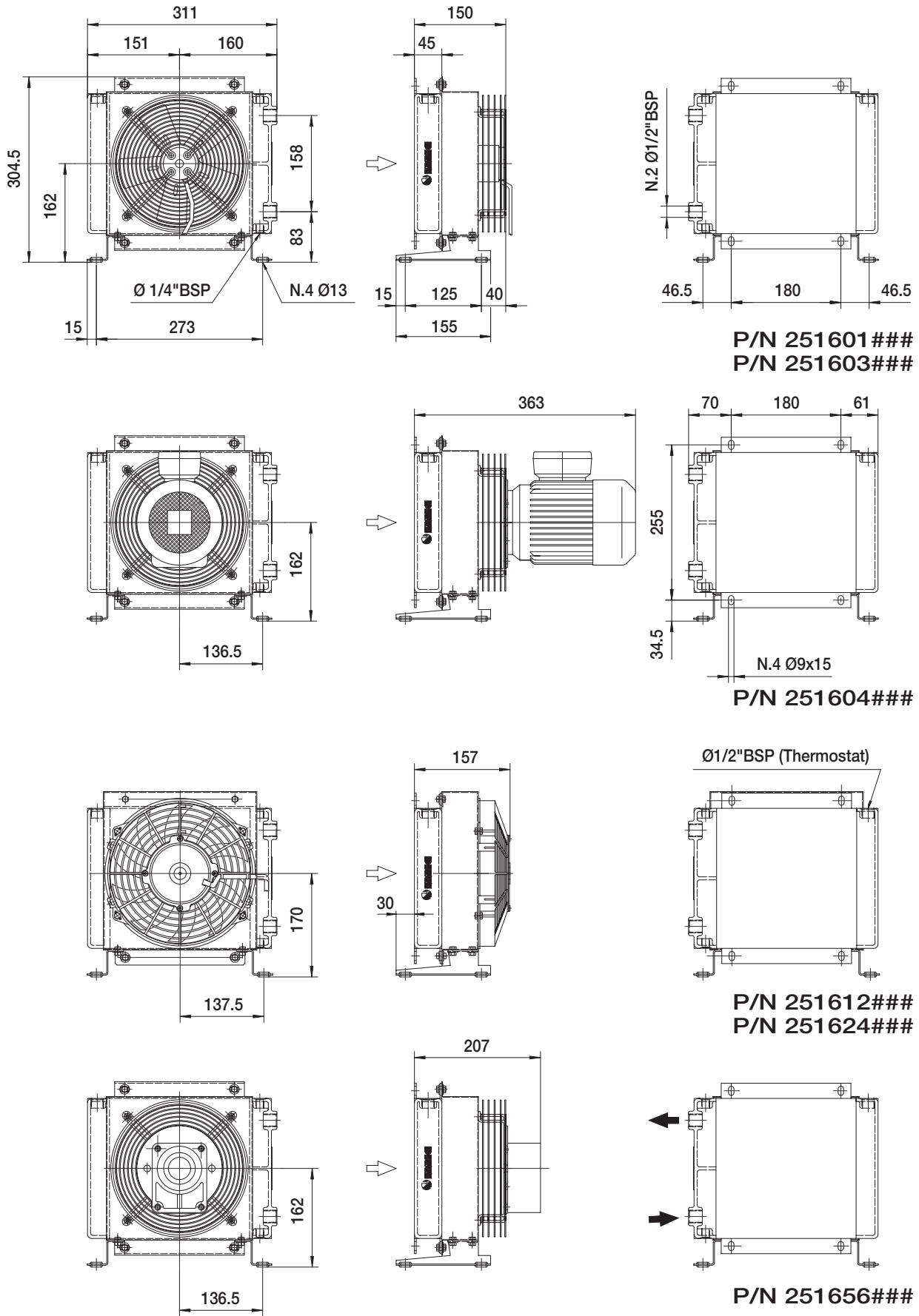


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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

M G 2010 K 2 PASS

Dimensioni Dimensions



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

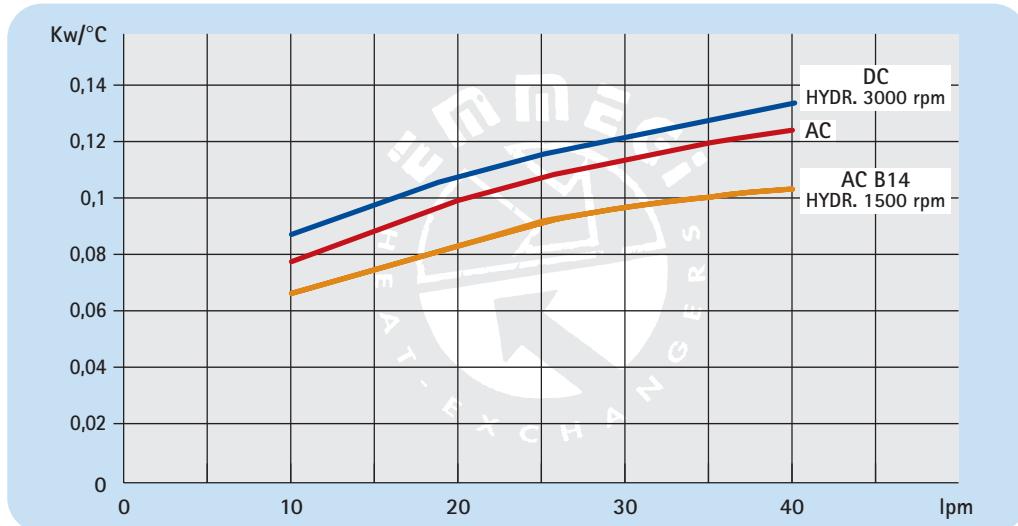
Dati tecnici Technical Data



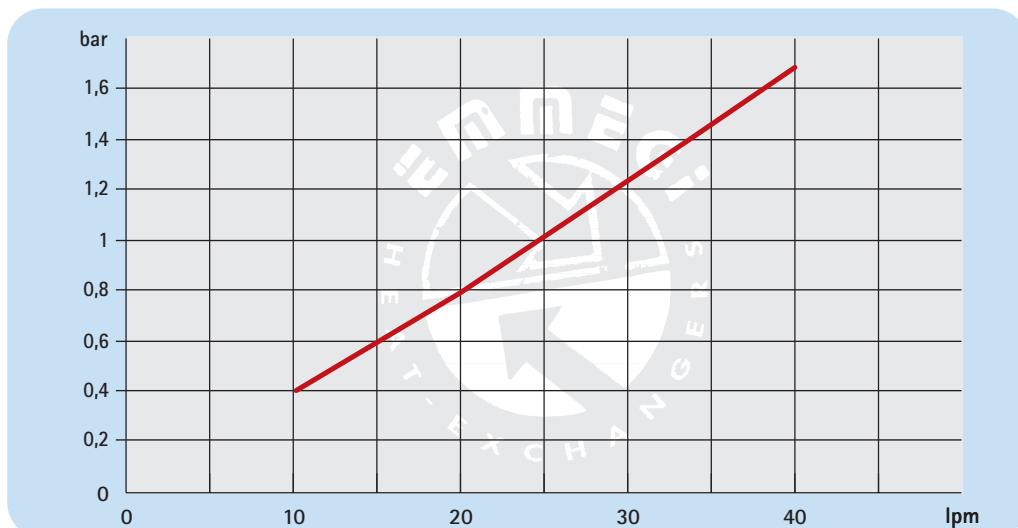
P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
251601###	230 AC	50	0,067	0,29	2770	200	68	700	44	0,5	7
251603###	230-400 AC	50/60	0,068	0,15	2600	200	69	720	44		7
251604###	230-400 AC B14	50/60	0,250	0,72	1350	200	61	415	55		10
251612###	12 DC	/	0,09	6,1	3100	225	72	880	68		6,5
251624###	24 DC	/	0,10	2,9	3000	225	73	865	68		6,5
251656###	Prepared for Gr.2 hydraulic motor				200	200	200	200	/		6

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

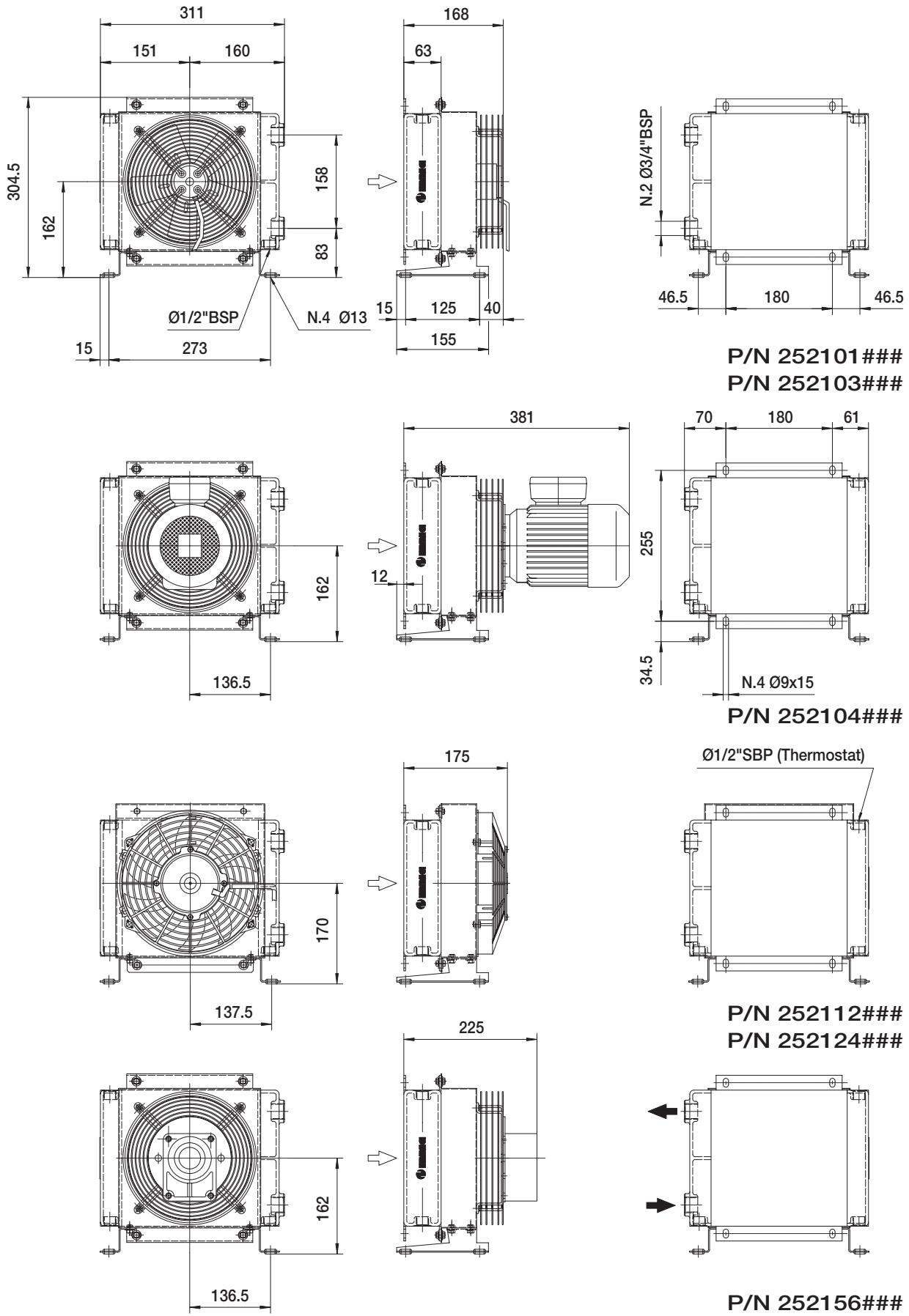


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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

MG2015K 2PASS

Dimensioni Dimensions



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

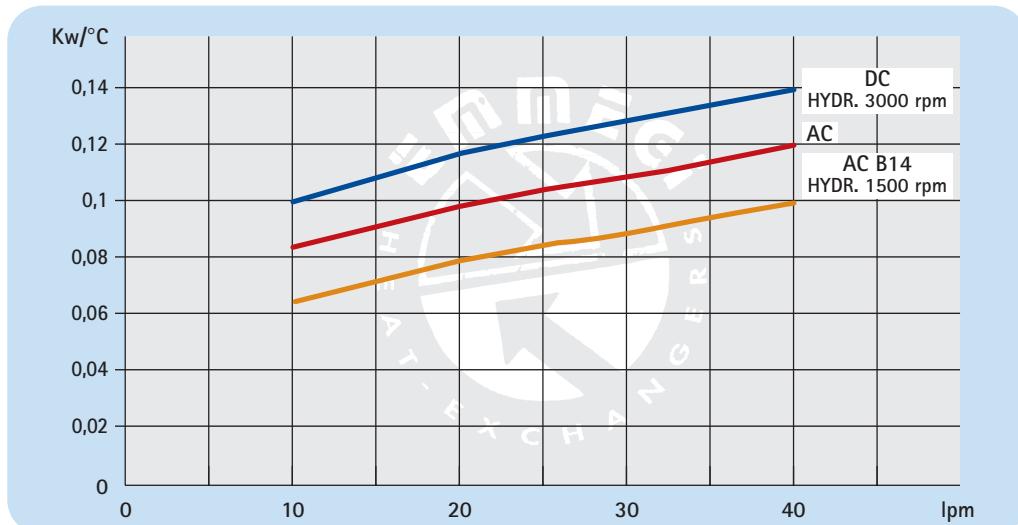
Dati tecnici Technical Data



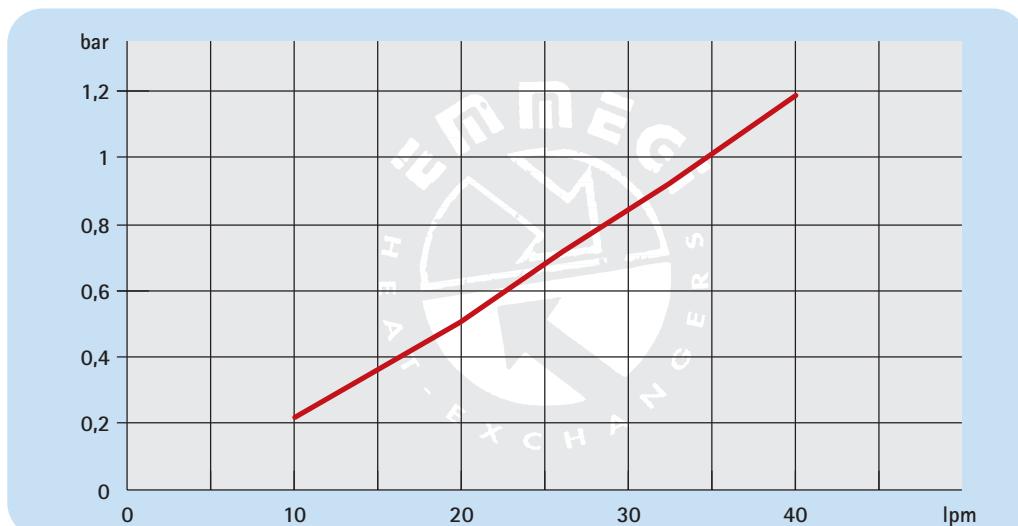
P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
252101###	230 AC	50	0,067	0,29	2770	200	68	675	44	0,7	8
252103###	230-400 AC	50/60	0,068	0,15	2600	200	68	645	44		8
252104###	230-400 AC B14	50/60	0,250	0,7	1350	200	64	390	55		11
252112###	12 DC	/	0,09	5,9	3100	225	72	795	68		7
252124###	24 DC	/	0,10	3,1	3000	225	72	785	68		7
252156###	Prepared for Gr.2 hydraulic motor				📞	200	📞	📞	/		7

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

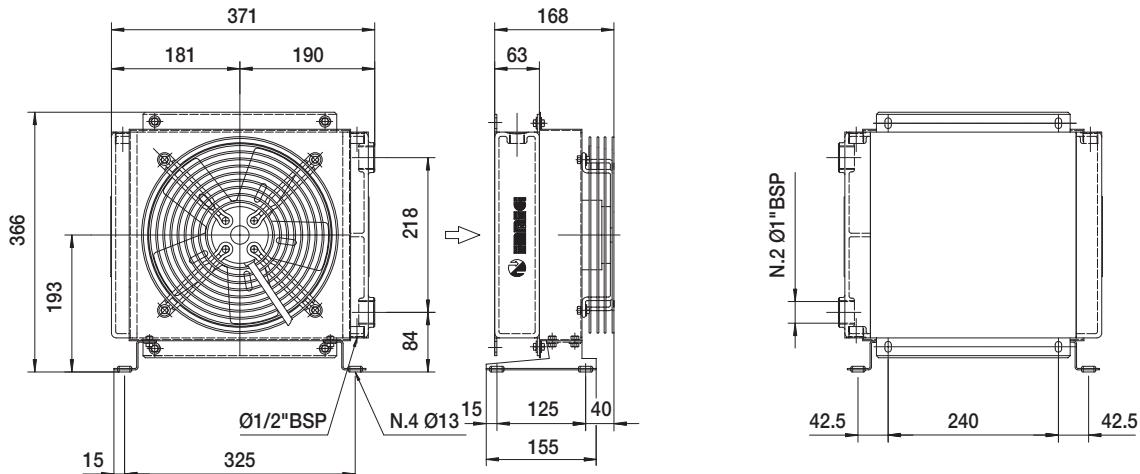


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

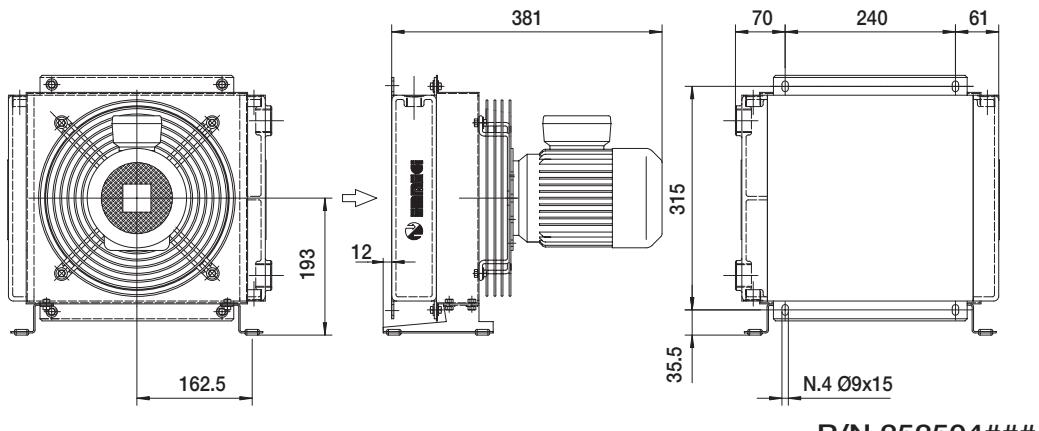
cst	10	15	20	30	40	50	60	80	100	200	300
F	0,5	0,65	0,77	1	1,2	1,4	1,6	1,9	2,1	3,3	4,3

MG2020K 2PASS

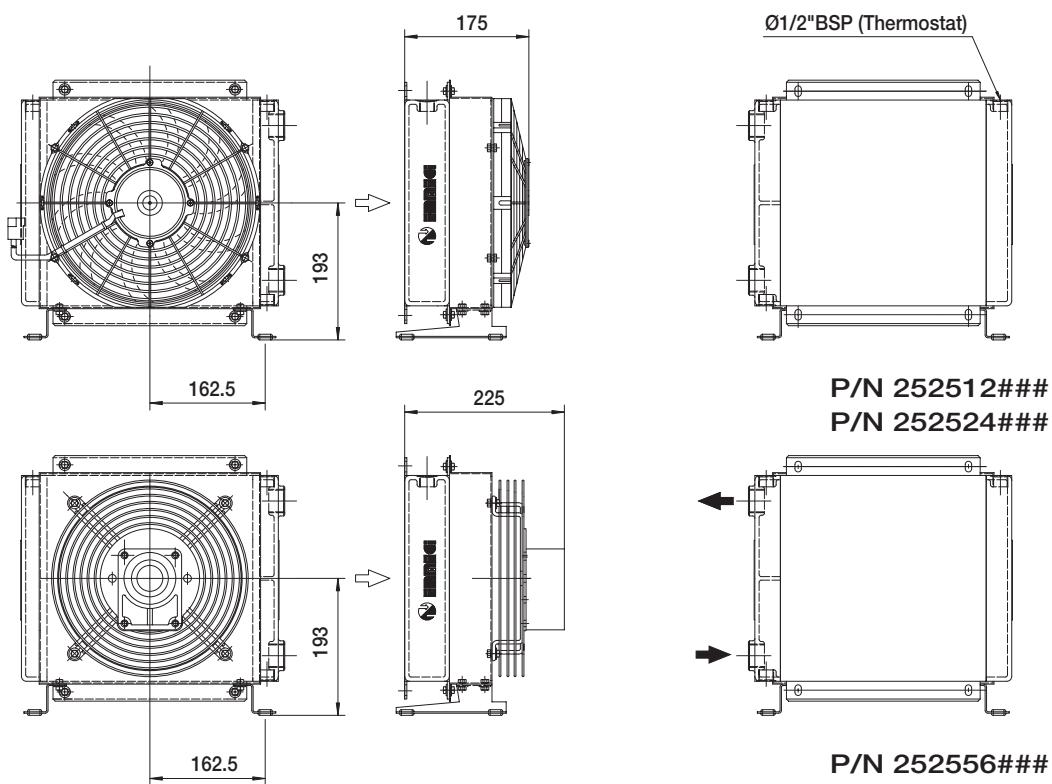
Dimensioni Dimensions



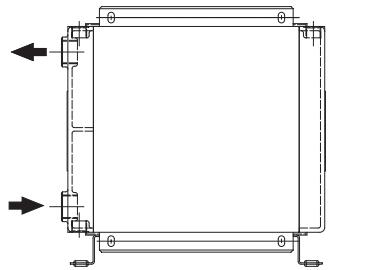
P/N 252501###
P/N 252503###



P/N 252504###



P/N 252512###
P/N 252524###



P/N 252556###

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

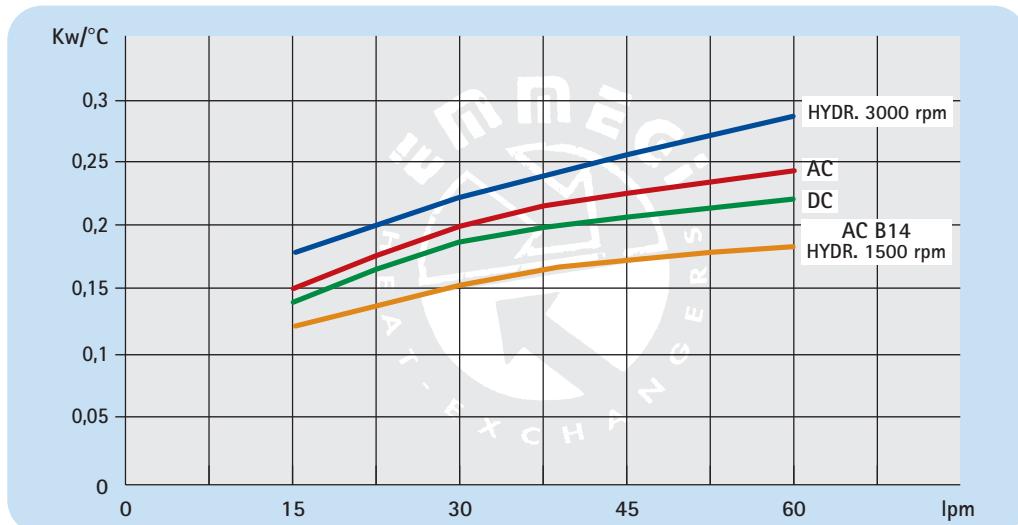
Dati tecnici Technical Data



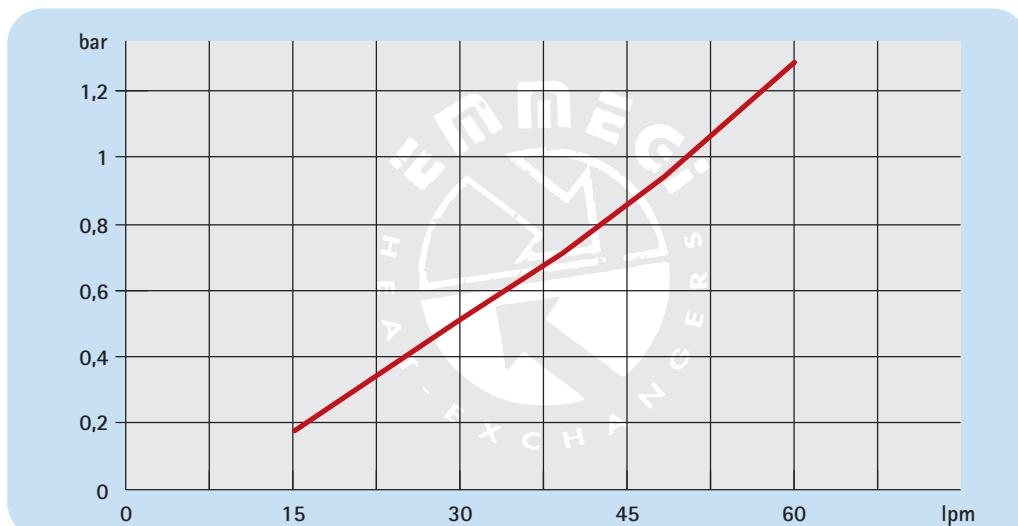
P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
252501###	230 AC	50	0,108	0,48	2525	250	72	1350	44	1	11
252503###	230-400 AC	50/60	0,105	0,22	2500	250	72	1300	44		11
252504###	230-400 AC B14	50/60	0,250	0,71	1450	250	64	1000	55		16
252512###	12 DC	/	0,110	7,1	3000	280	72	1180	68		10
252524###	24 DC	/	0,110	3,8	3000	280	74	1280	68		10
252556###	Prepared for Gr.2 hydraulic motor				250	250	250	250	/		10

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

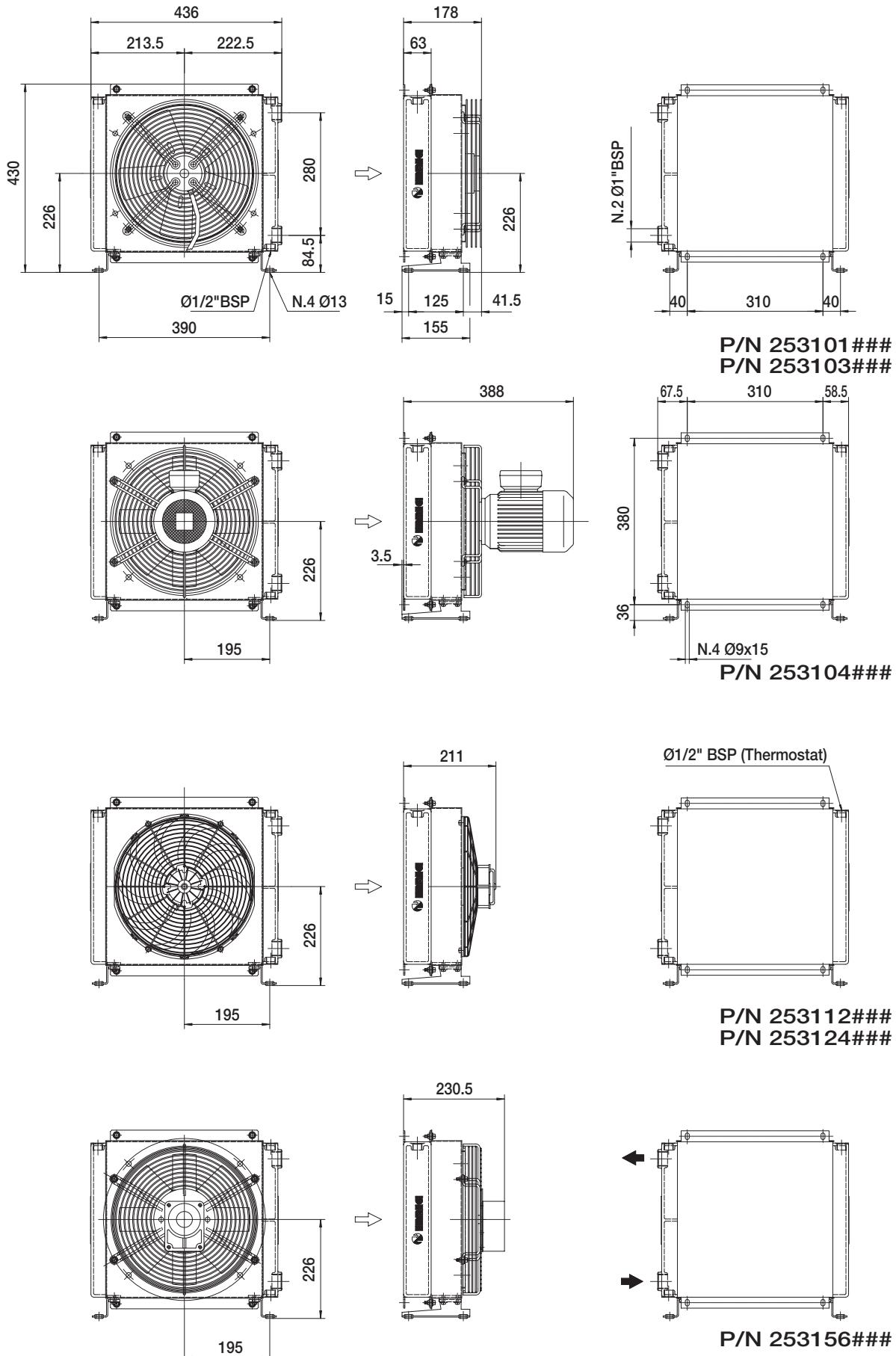


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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

MG2024K 2PASS

Dimensioni Dimensions



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

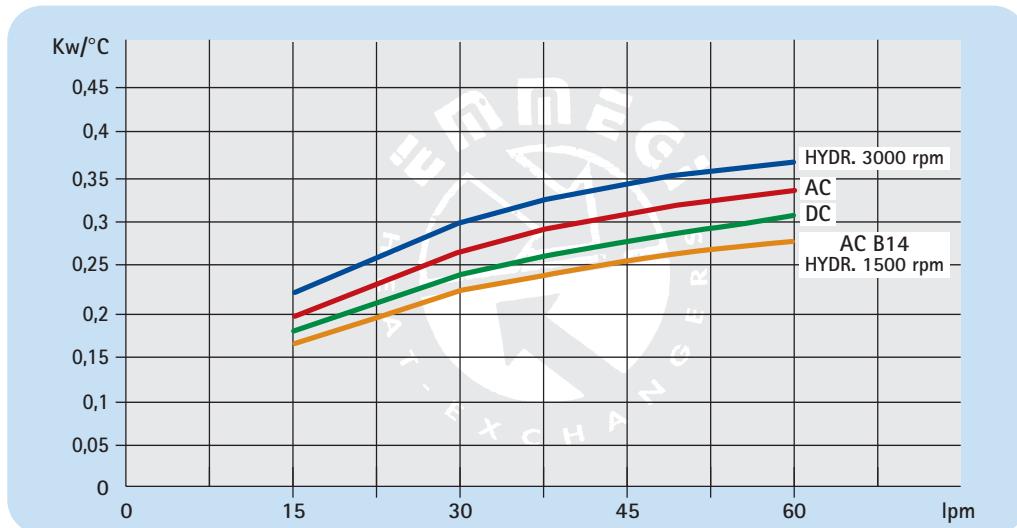
Dati tecnici Technical Data



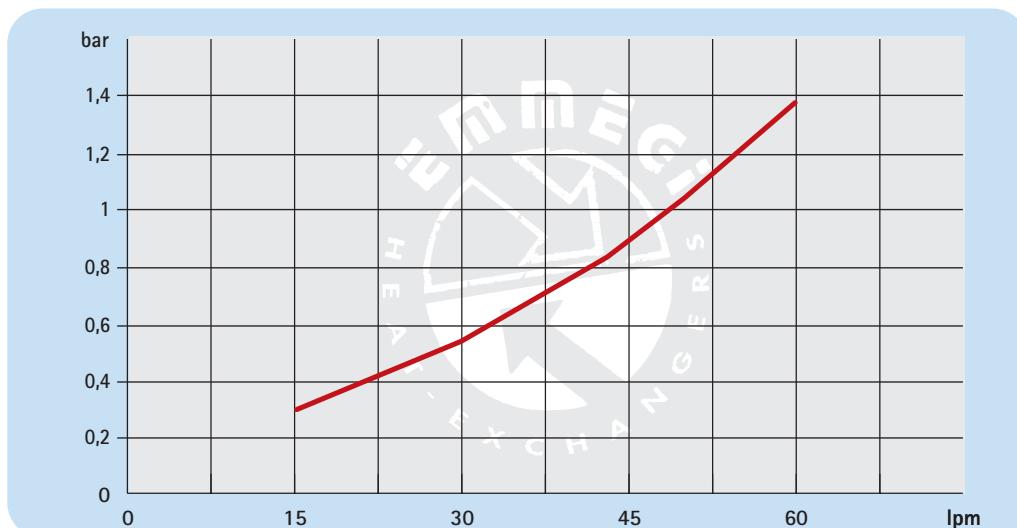
P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
253101###	230 AC	50	0,189	0,85	2520	300	78	2220	44	1,6	15
253103###	230-400 AC	50/60	0,195	0,43	2600	300	76	2500	44		15
253104###	230-400 AC B14	50/60	0,370	1,03	1370	300	70	1850	55		20
253112###	12 DC	/	0,180	/	3000	305	80	1920	68		14
253124###	24 DC	/	0,180	/	3000	305	83	2100	68		14
253156###	Prepared for Gr.2 hydraulic motor				300	305	83		/		15

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

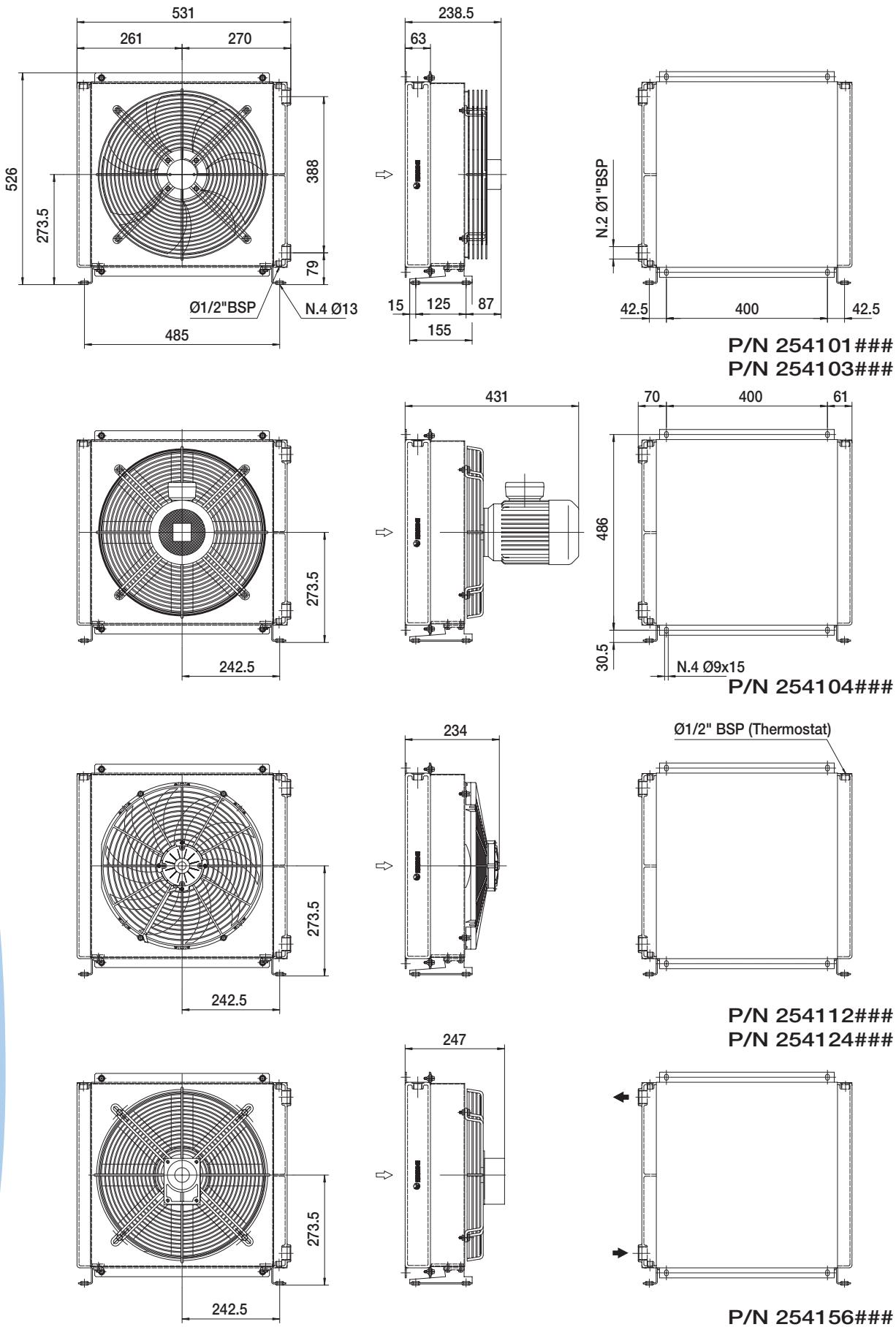


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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

MG2030K 2PASS

Dimensioni Dimensions



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

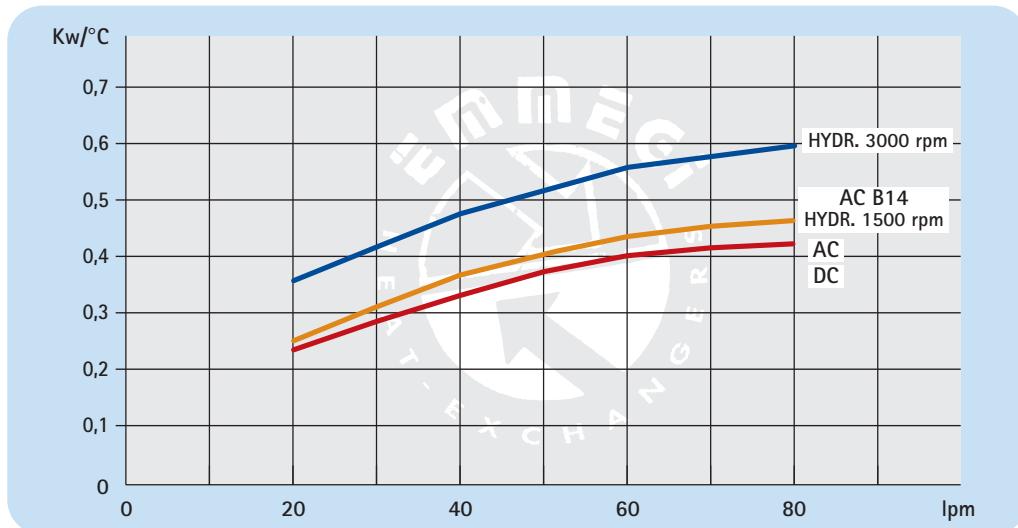
Dati tecnici Technical Data



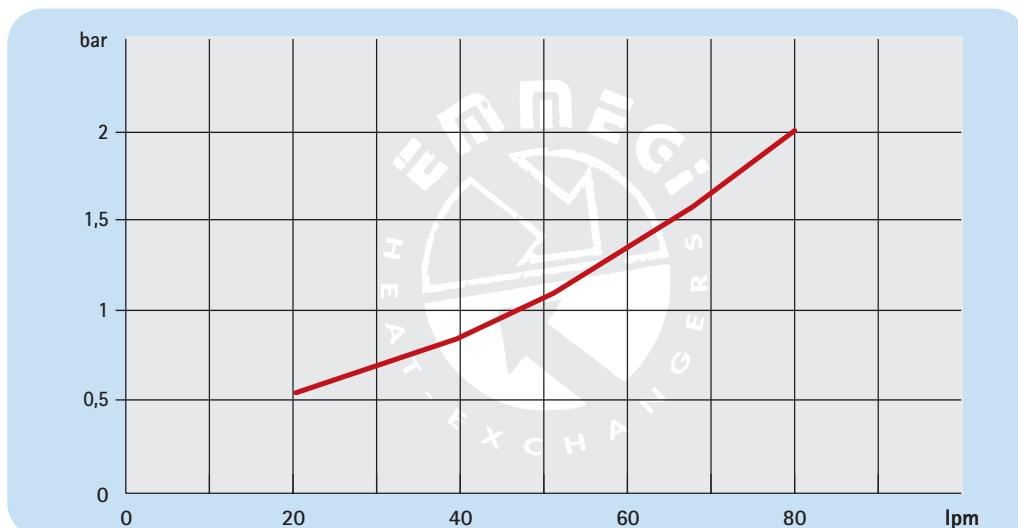
P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
254101###	230 AC	50	0,32	1,25	1260	400	71	3200	54	2,7	21
254103###	230-400 AC	50/60	0,20	0,5	1400	400	71	3200	54		21
254104###	230-400 AC B14	50/60	0,55	1,52	1400	400	77	3740	55		25
254112###	12 DC	/	0,21	13,8	2500	385	76	3000	68		20
254124###	24 DC	/	0,21	8,2	2500	385	79	3370	68		20
254156###	Prepared for Gr.2 hydraulic motor				400	400	400	400	/		19

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)



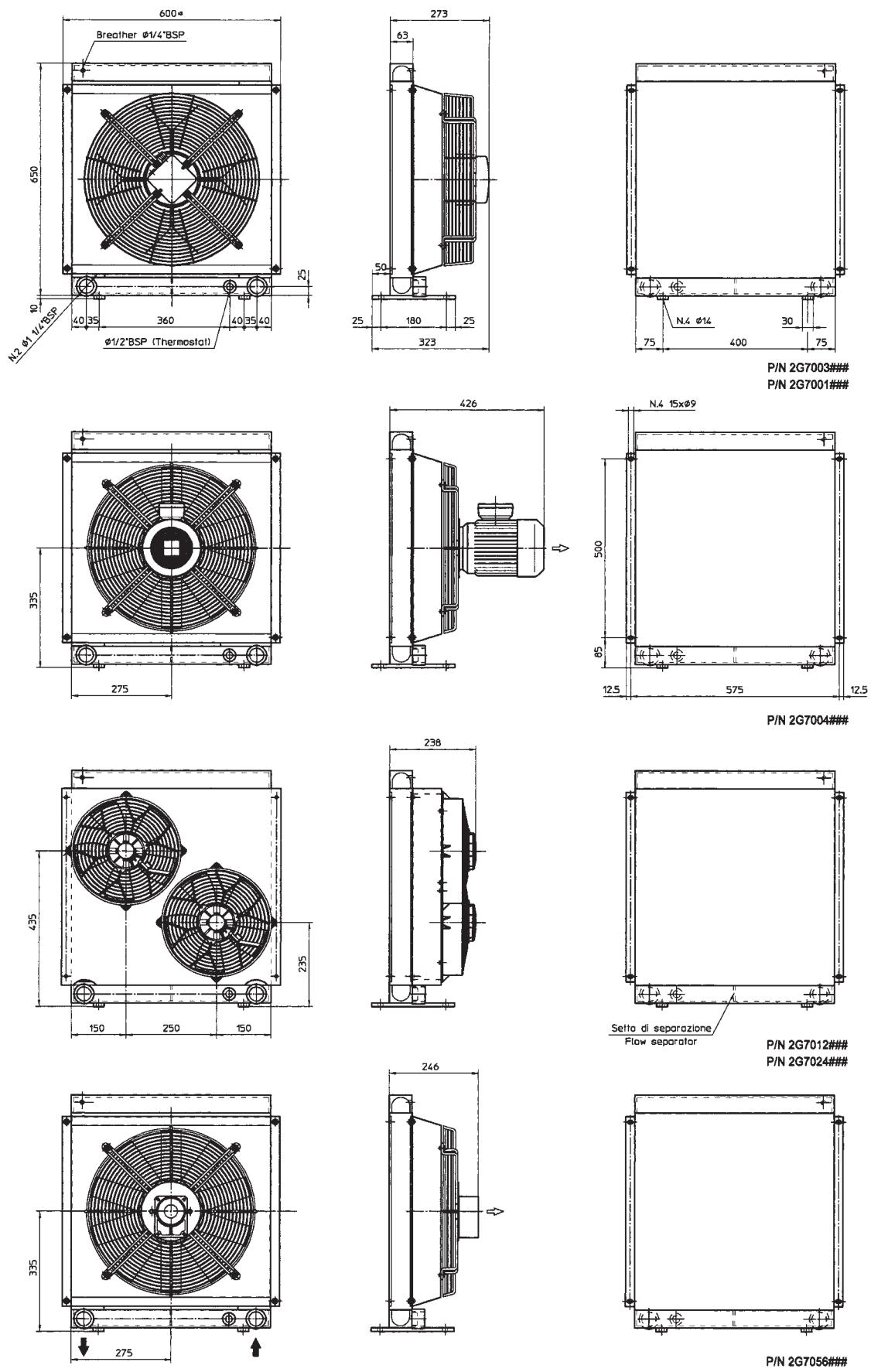
Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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

MG2040K 2PASS

MIG2050K 2PASS

Dimensioni Dimensions



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

Dati tecnici Technical Data

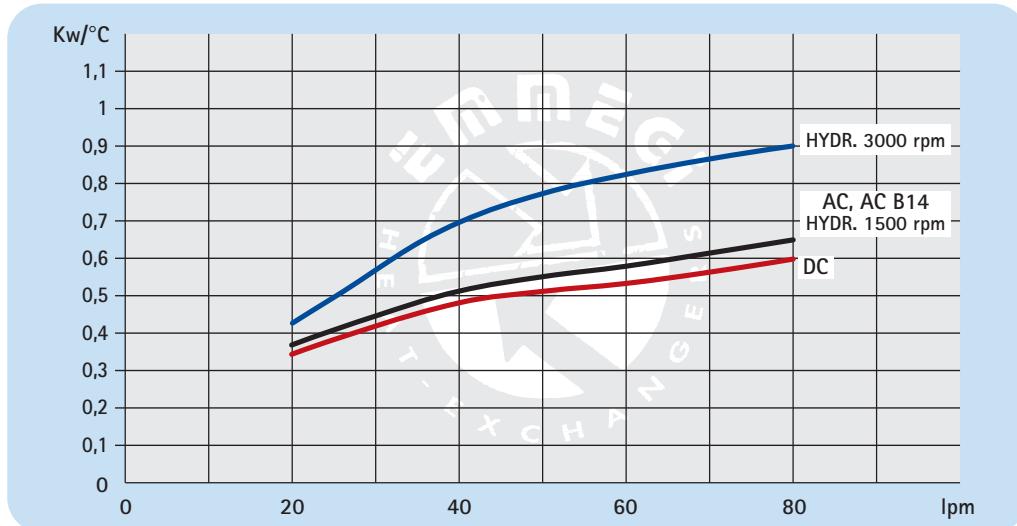


P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
2G7003###	230-400 AC	50/60	0,43	0,9	1340	450	76	5000	54	5	27
2G7004###	230-400 AC B14	50/60	0,75	1,88	1450	450	79	5200	55		30
2G7012###	12 DC	/	0,15	9,5	3100	280	76	2000	68		24
2G7024###	24 DC	/	0,15	5,6	3100	280	79	2000	68		24
2G7056###	Prepared for Gr.2 hydraulic motor				450	450	76	2000	/		23

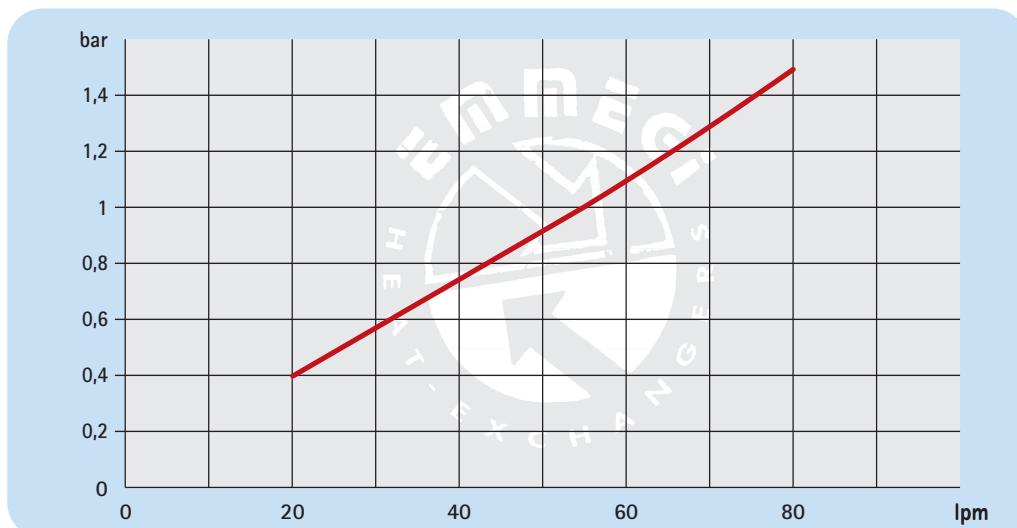
Per il 12-24V i dati sono riferiti al singolo ventilatore For 12-24V the data refers to each ventilator

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

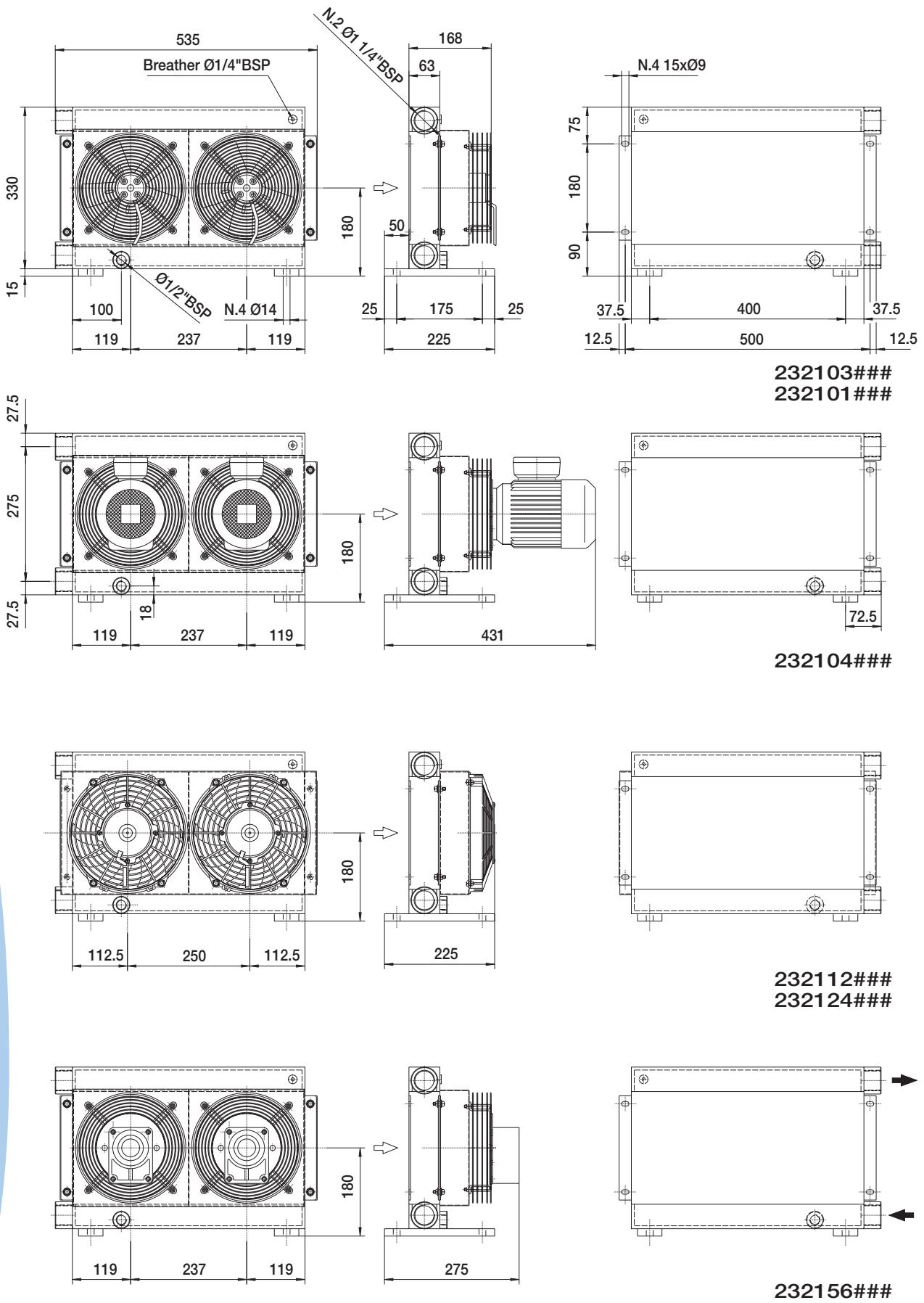


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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

MG2050K 2PASS

Dimensioni Dimensions



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

Dati tecnici Technical Data

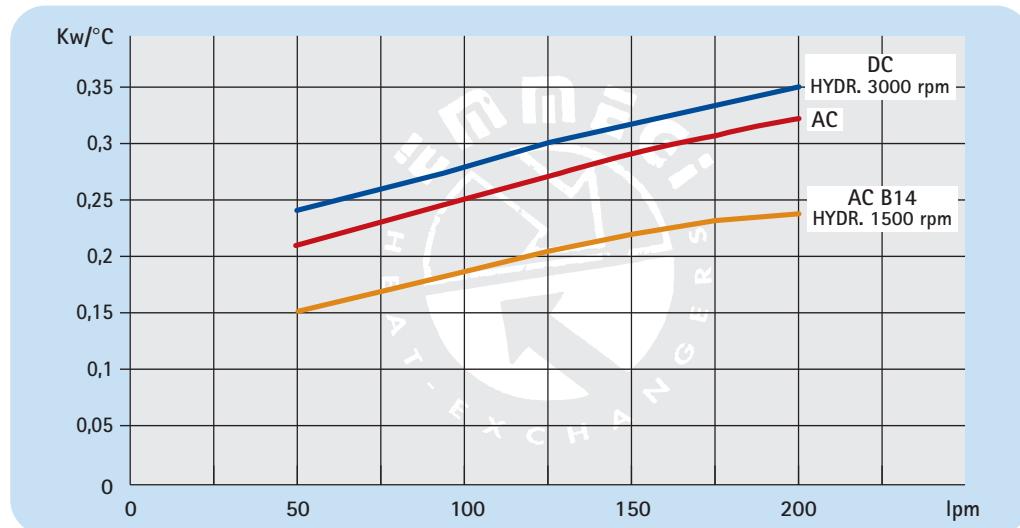


P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
232101###	230 AC	50	0,067	0,29	2770	200	71	675	44	1,4	17
232103###	230-400 AC	50/60	0,068	0,15	2800	200	71	645	44		17
232104###	230-400 AC B14	50/60	0,250	0,7	1350	200	67	390	55		23
232112###	12 DC	/	0,09	5,9	3100	225	75	795	68		15
232124###	24 DC	/	0,10	3,1	3000	225	75	785	68		15
232156###	Prepared for Gr.2 hydraulic motor				200	200	75	785	/		14

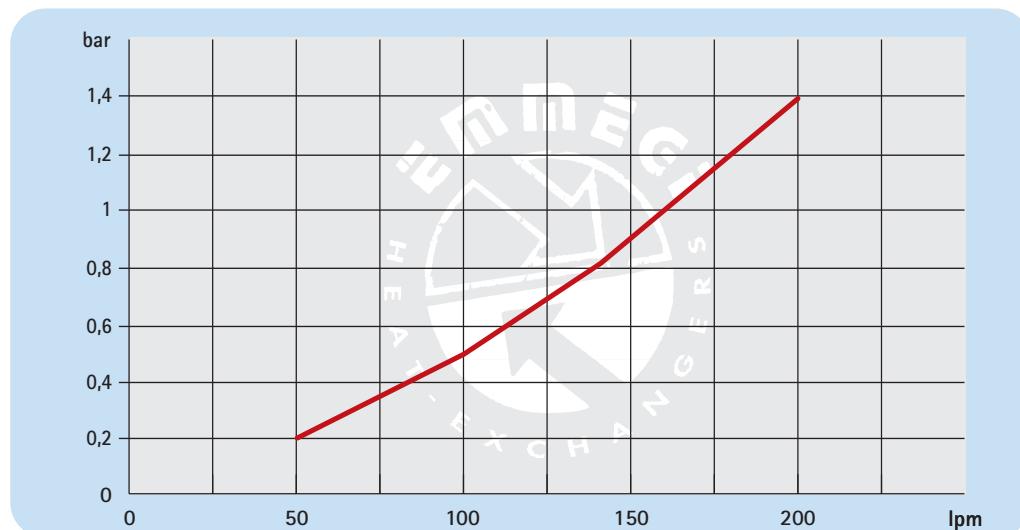
I dati tecnici sopra riportati sono riferiti al singolo ventilatore *The data refers to each ventilator*

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

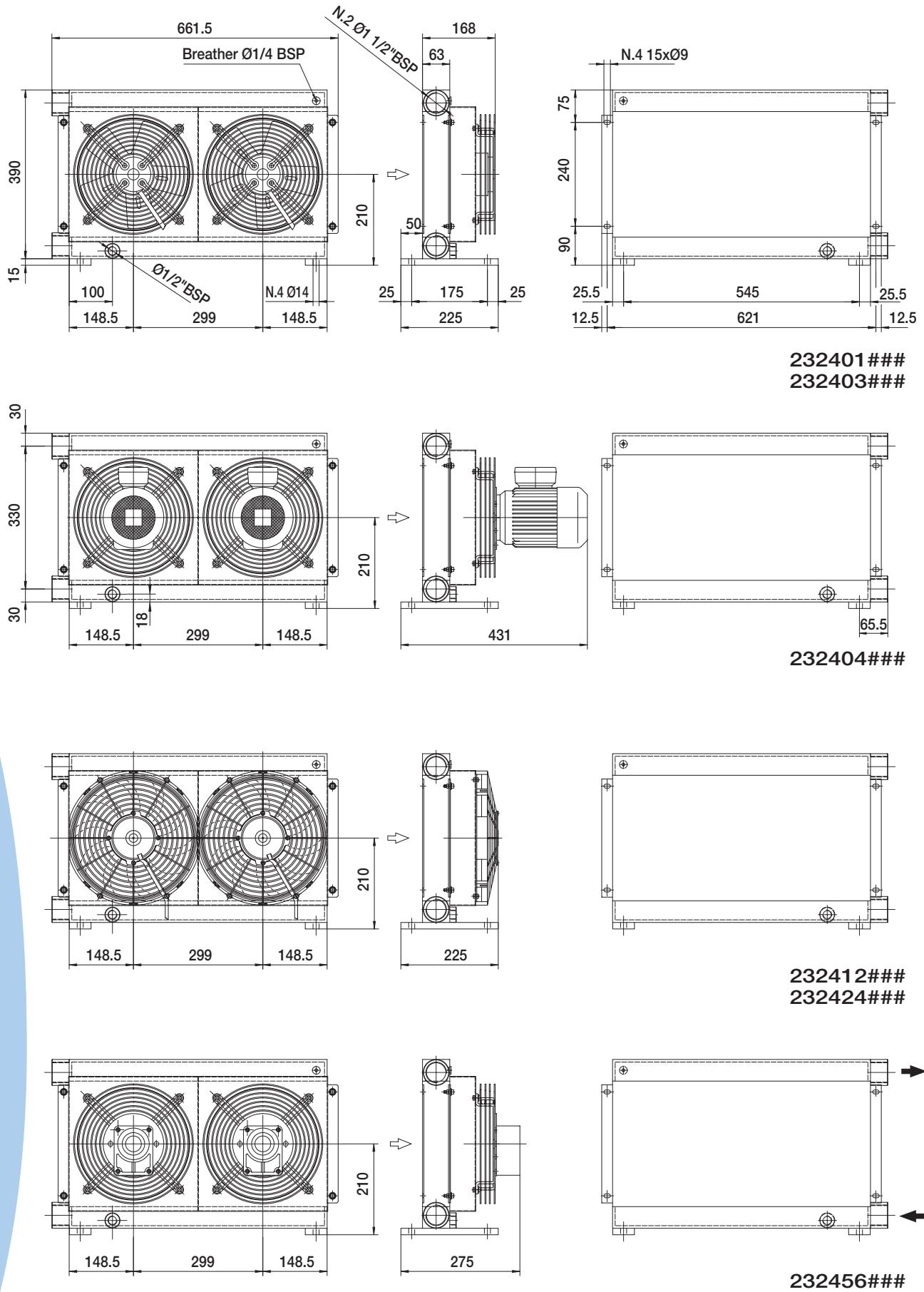


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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

MG20202KS

Dimensioni Dimensions



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

Dati tecnici Technical Data

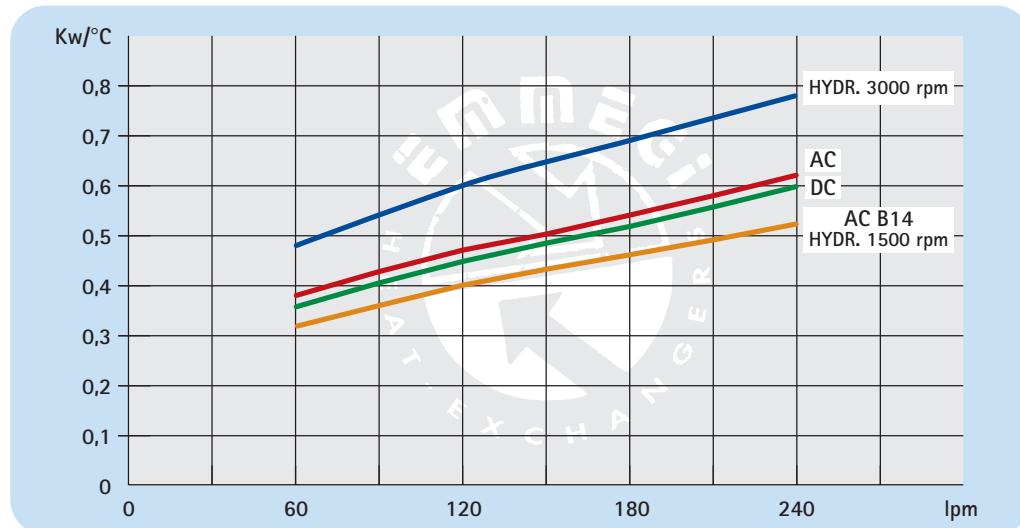


P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
232401###	230 AC	50	0,108	0,48	2525	250	75	1350	44	2	23
232403###	230-400 AC	50/60	0,105	0,22	2670	250	75	1300	44		23
232404###	230-400 AC B14	50/60	0,250	0,71	1450	250	67	1000	55		34
232412###	12 DC	/	0,110	7,1	3000	280	75	1180	68		21
232424###	24 DC	/	0,110	3,8	3000	280	77	1280	68		21
232456###	Prepared for Gr.2 hydraulic motor				250	250	250	250	/		20

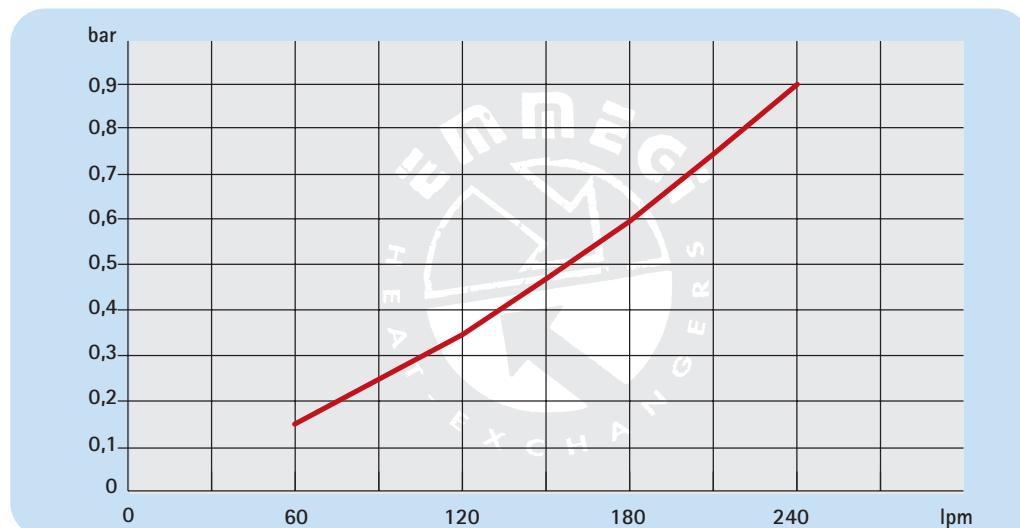
I dati tecnici sopra riportati sono riferiti al singolo ventilatore *The data refers to each ventilator*

📞 Contattare EMMEGI Contact EMMEGI

Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

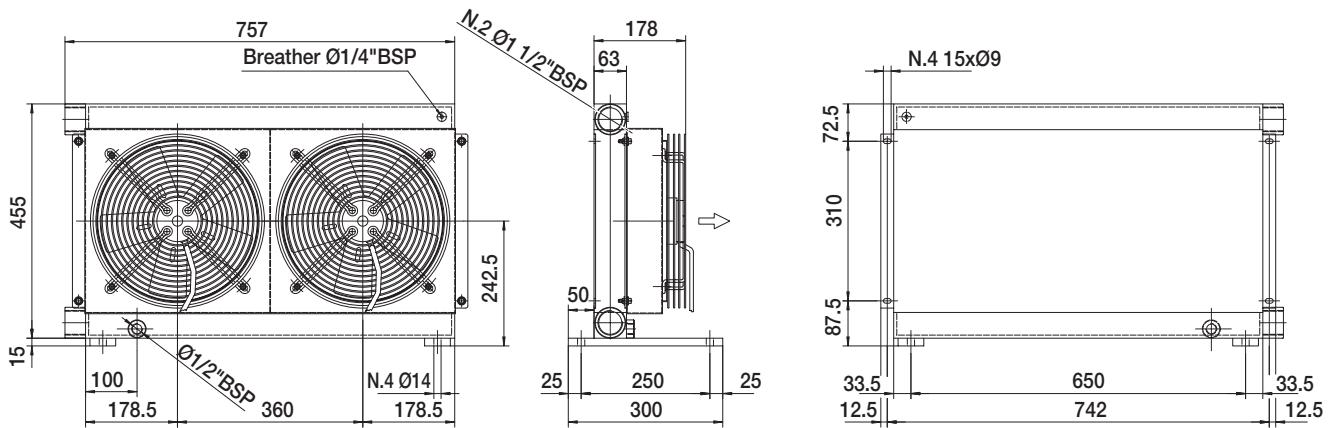


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

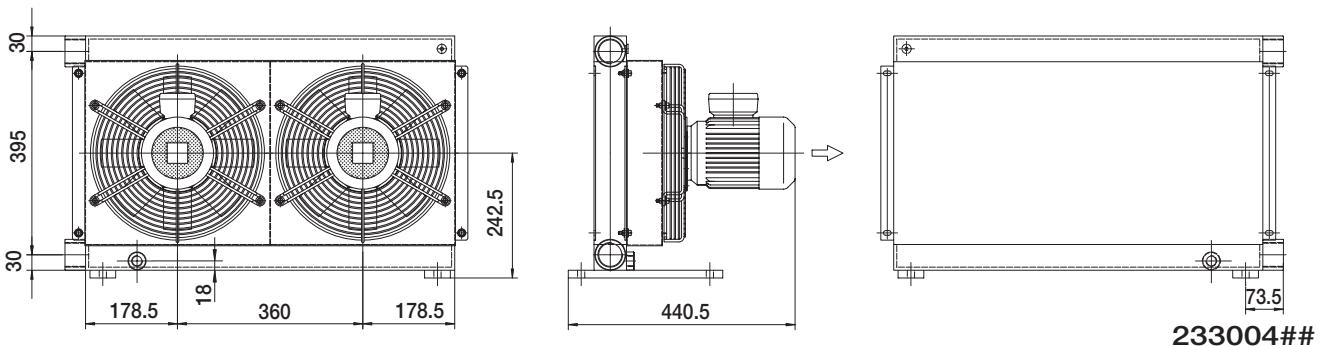
cst	10	15	20	30	40	50	60	80	100	200	300
F	0,5	0,65	0,77	1	1,2	1,4	1,6	1,9	2,1	3,3	4,3

MG20242KS

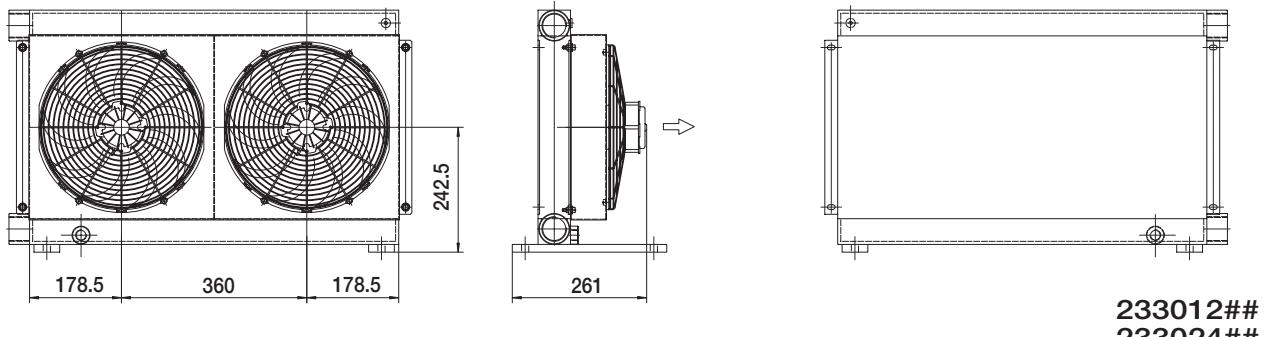
Dimensioni Dimensions



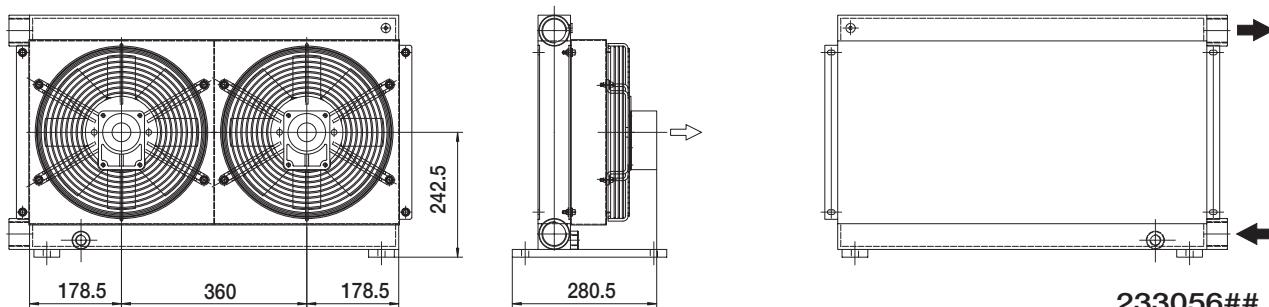
233001##
233003##



233004##



233012##
233024##



233056##

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

Dati tecnici Technical Data

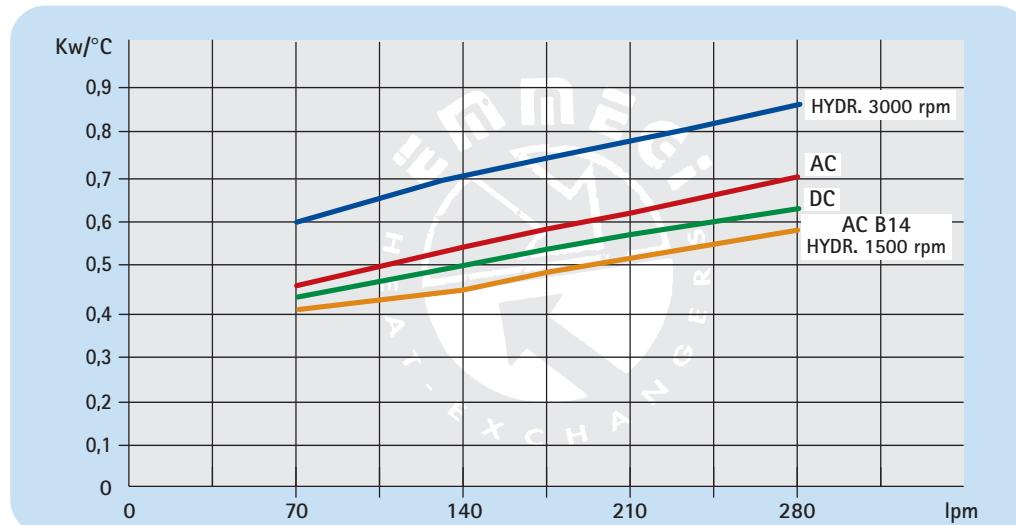


P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
233001###	230 AC	50	0,189	0,85	2520	300	81	2220	44	3,2	31
233003###	230-400 AC	50/60	0,195	0,43	2600	300	79	2500	44		31
233004###	230-400 AC B14	50/60	0,370	1,03	1370	300	73	1850	55		42
233012###	12 DC	/	0,180	/	3000	305	83	1920	68		29
233024###	24 DC	/	0,180	/	3000	305	86	2100	68		29
233056###	Prepared for Gr.2 hydraulic motor			📞	300	📞	📞	/			30

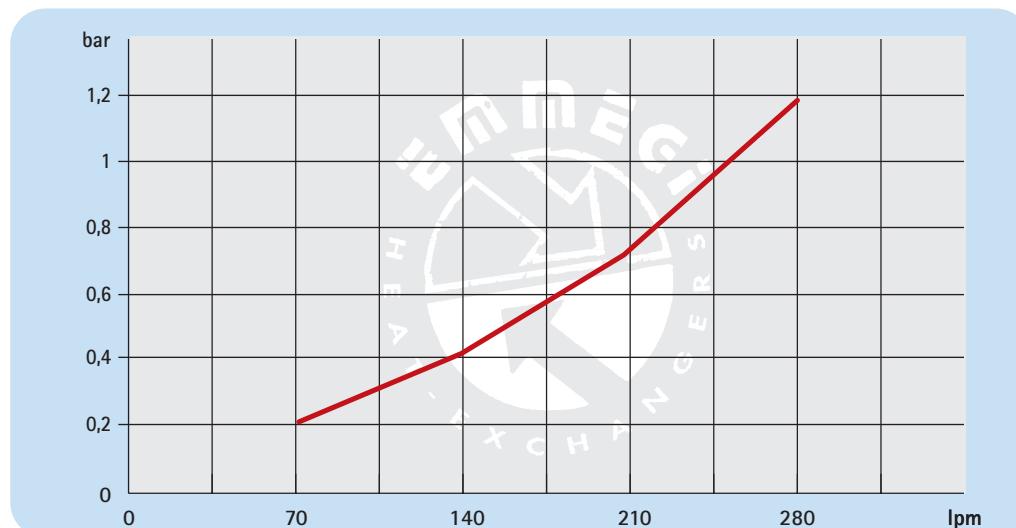
I dati tecnici sopra riportati sono riferiti al singolo ventilatore *The data refers to each ventilator*

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

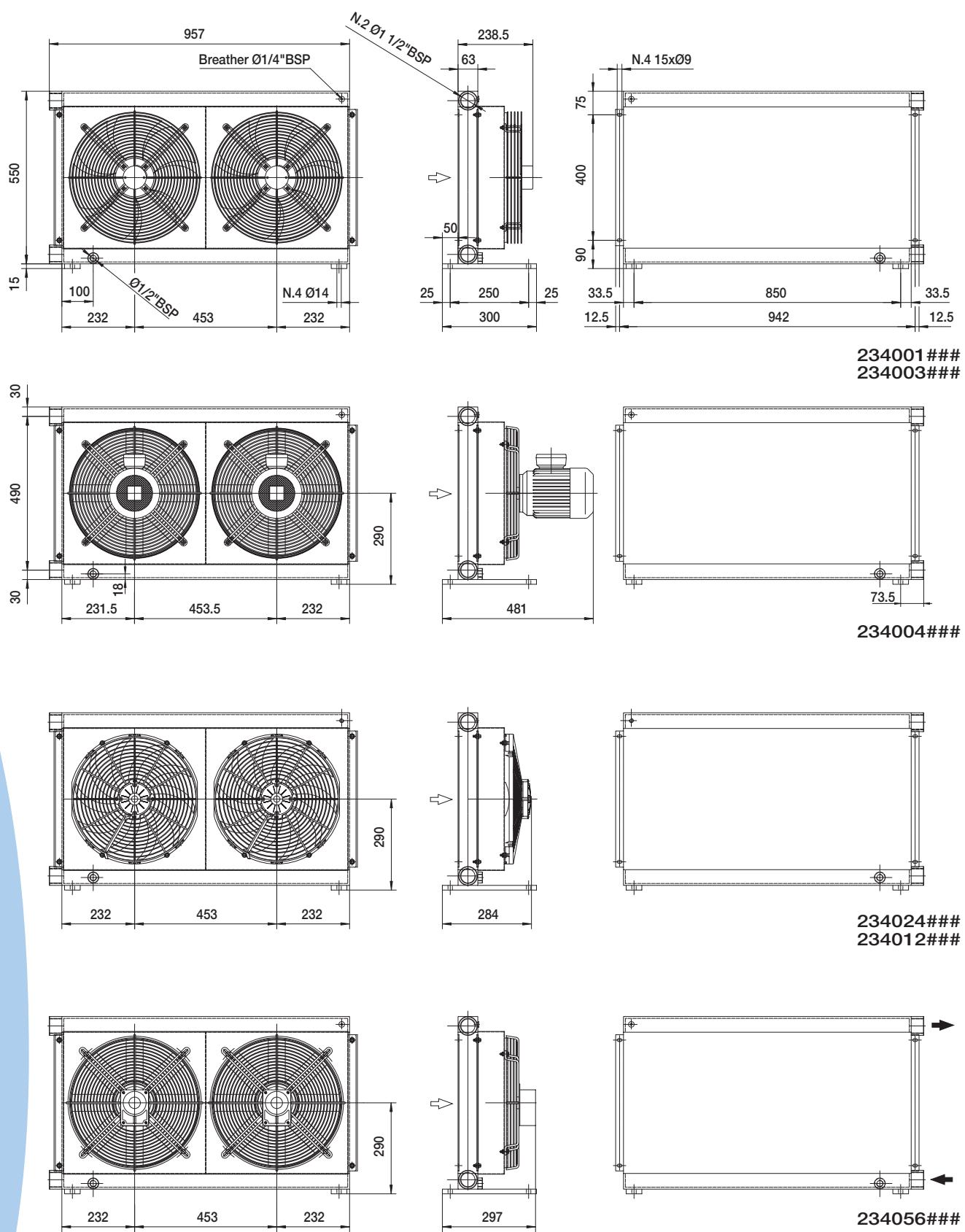


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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

MG20302KS

Dimensioni Dimensions



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

Dati tecnici Technical Data

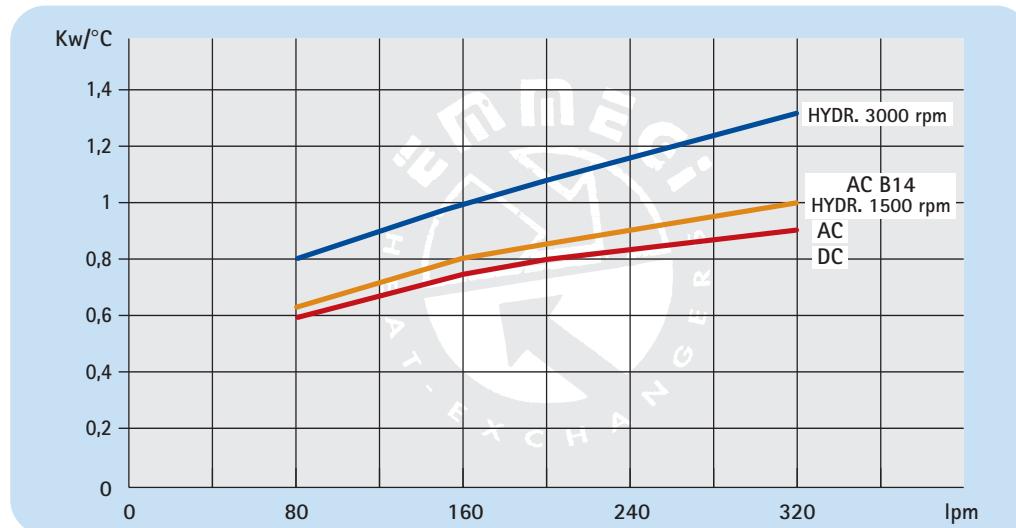


P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
234001###	230 AC	50	0,32	1,25	1260	400	74	3200	54	5,4	42
234003###	230-400 AC	50/60	0,20	0,5	1400	400	74	3200	54		42
234004###	230-400 AC B14	50/60	0,55	1,52	1400	400	80	3740	55		50
234012###	12 DC	/	0,21	13,8	2500	385	79	3000	68		41
234024###	24 DC	/	0,21	8,2	2500	385	82	3370	68		41
234056###	Prepared for Gr.2 hydraulic motor				400	400	400	400	/		39

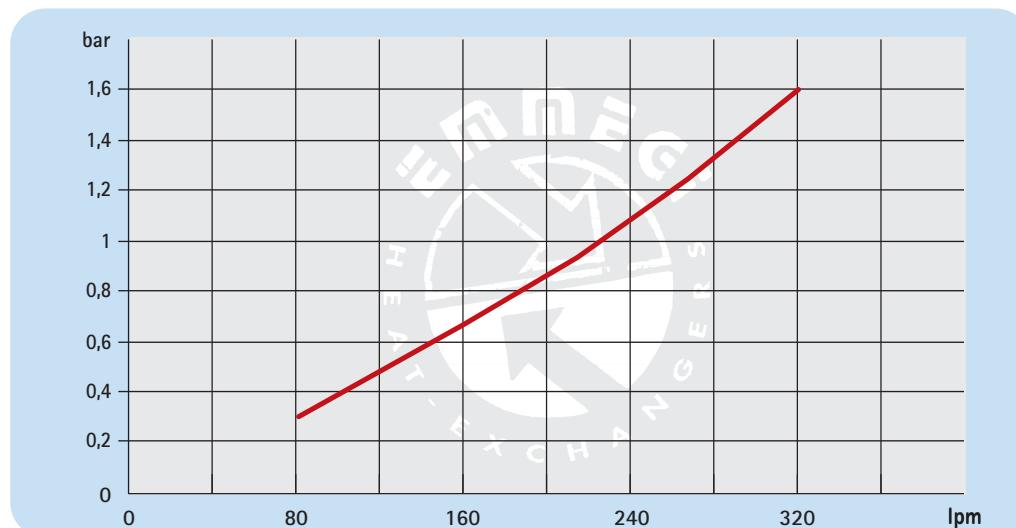
I dati tecnici sopra riportati sono riferiti al singolo ventilatore *The data refers to each ventilator*

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

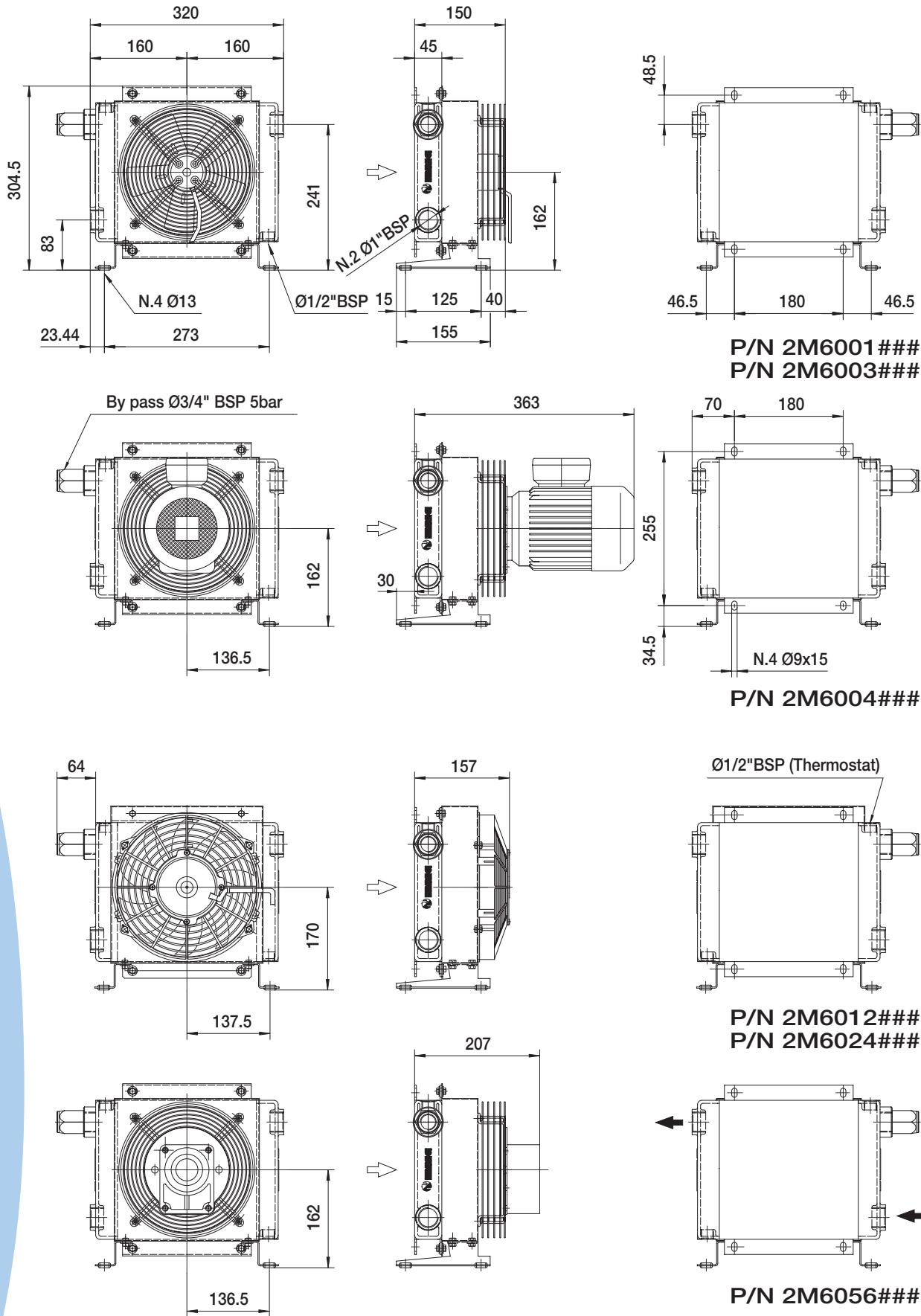


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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

MG20402KS

Dimensioni Dimensions



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

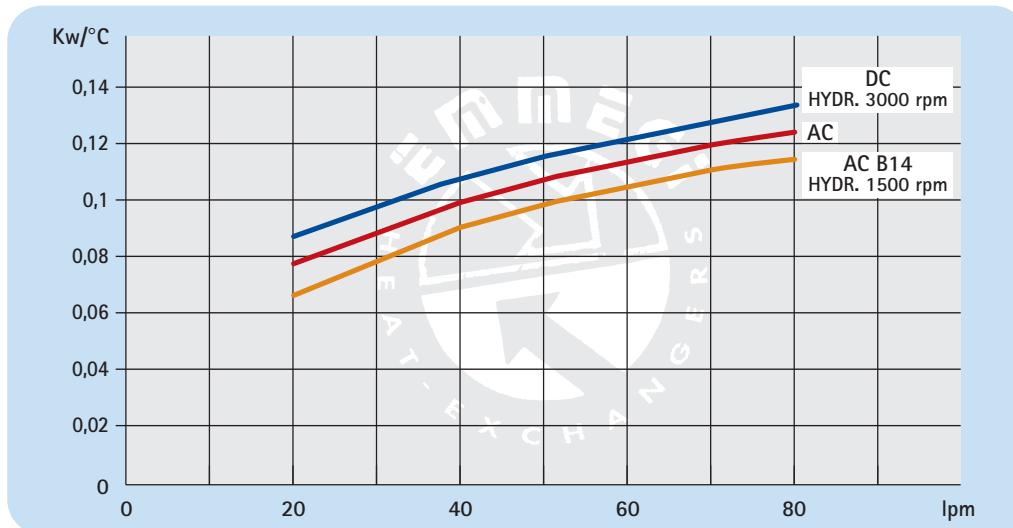
Dati tecnici Technical Data



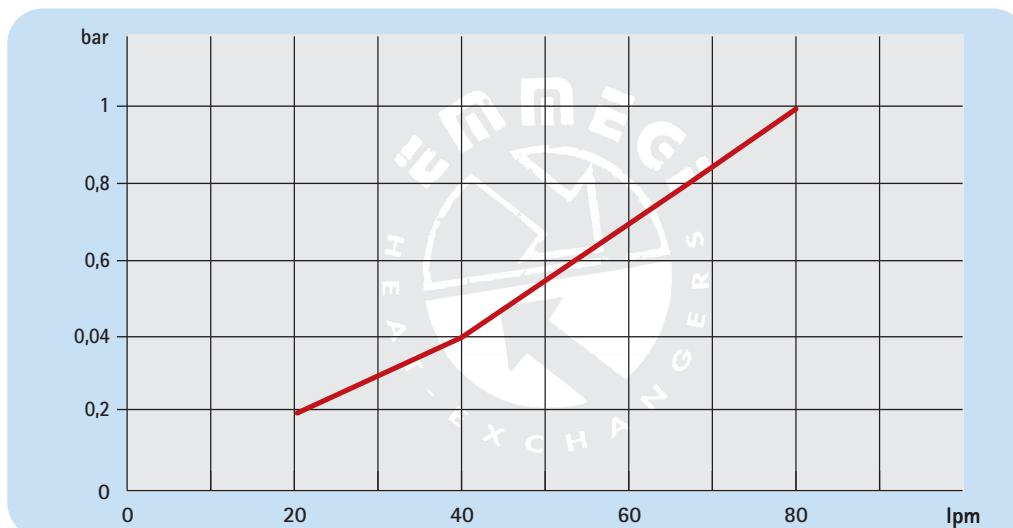
P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
2M6001###	230 AC	50	0,067	0,29	2770	200	68	700	44	0,5	7
2M6003###	230-400 AC	50/60	0,068	0,15	2600	200	69	720	44		7
2M6004###	230-400 AC B14	50/60	0,250	0,72	1350	200	61	415	55		10
2M6012###	12 DC	/	0,09	6,1	3100	225	72	880	68		6,5
2M6024###	24 DC	/	0,10	2,9	3000	225	73	865	68		6,5
2M6056###	Prepared for Gr.2 hydraulic motor				200	200	200	200	/		6

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

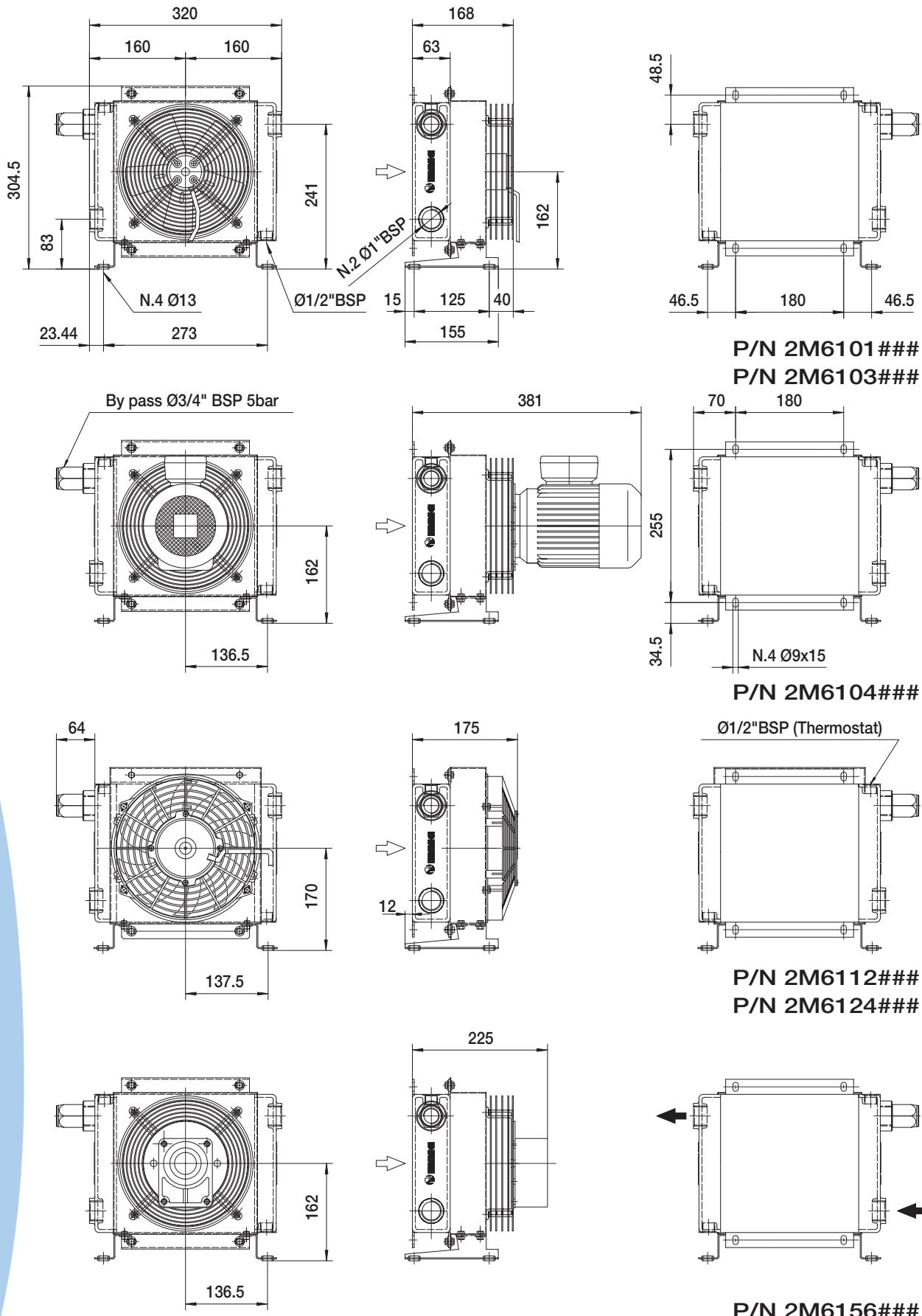


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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

MG2015K BY-PASS

Dimensioni Dimensions



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

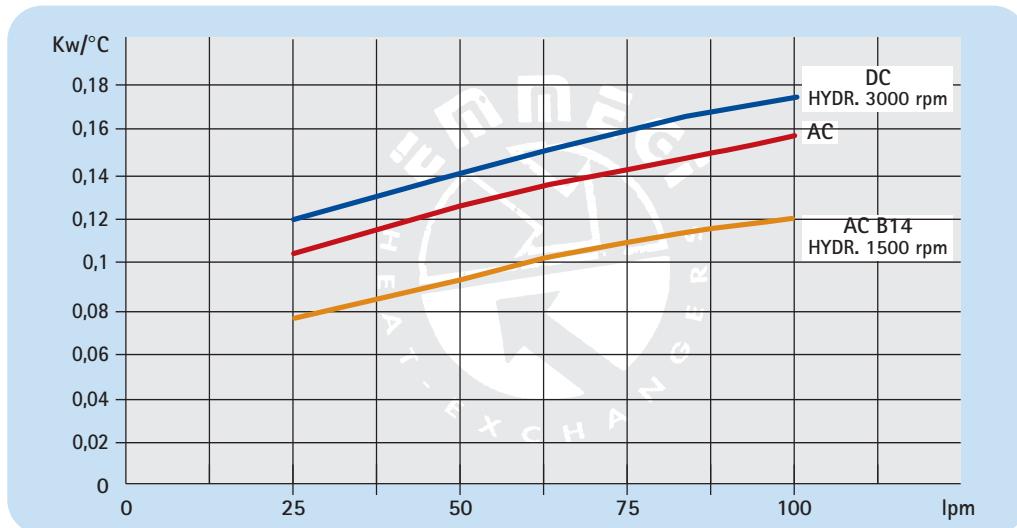
Dati tecnici Technical Data



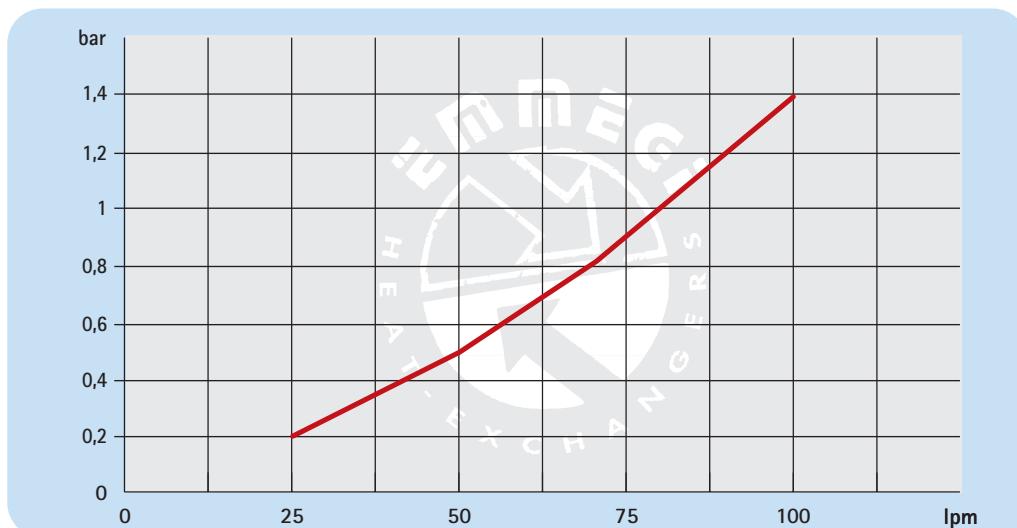
P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
2M6101###	230 AC	50	0,067	0,29	2770	200	68	675	44	0,7	8
2M6103###	230-400 AC	50/60	0,068	0,15	2600	200	68	645	44		8
2M6104###	230-400 AC B14	50/60	0,250	0,7	1350	200	64	390	55		11
2M6112###	12 DC	/	0,09	5,9	3100	225	72	795	68		7
2M6124###	24 DC	/	0,10	3,1	3000	225	72	785	68		7
2M6156###	Prepared for Gr.2 hydraulic motor				200	200	200	200	200		7

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)



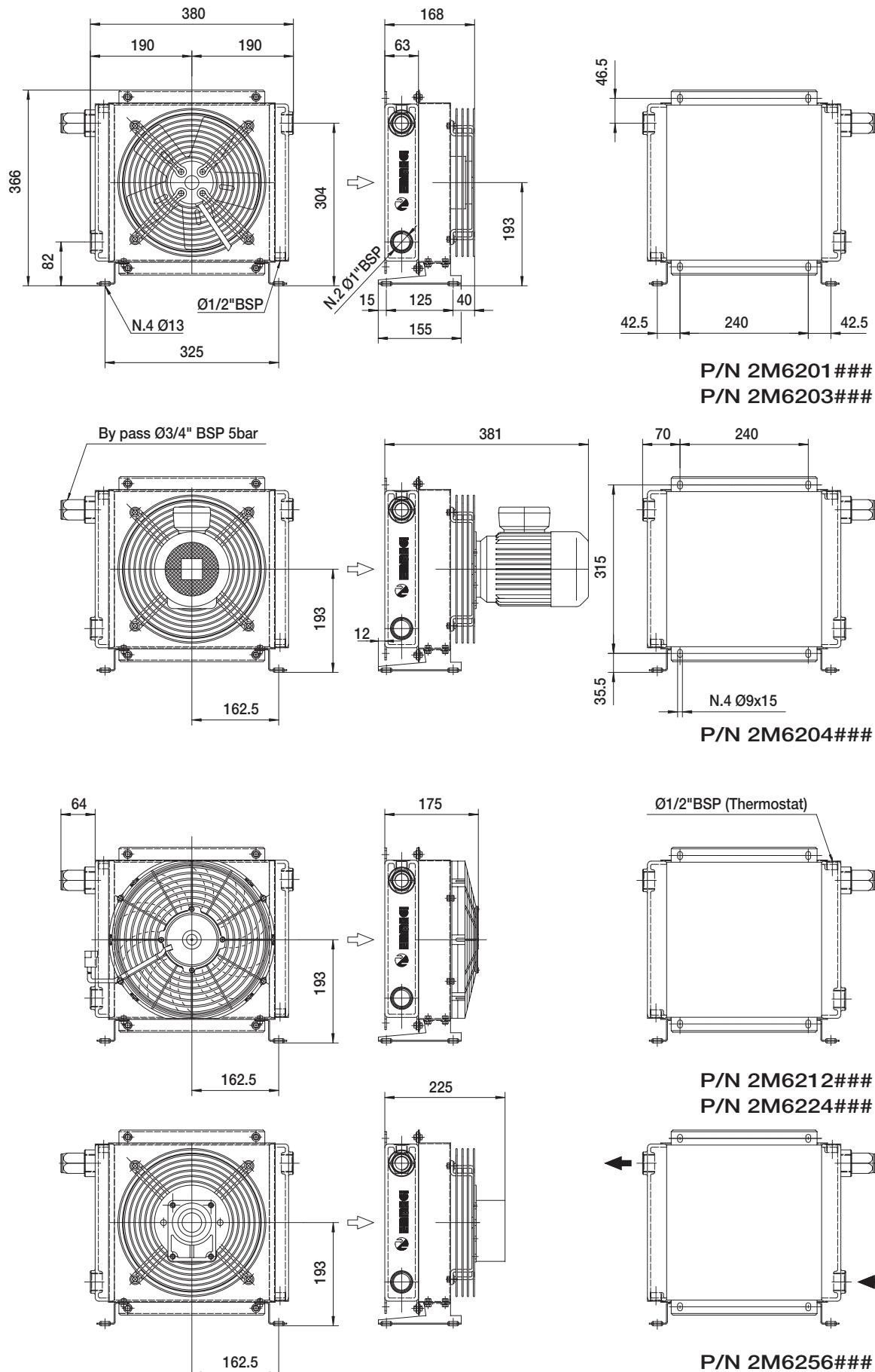
Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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

MG2020K BY-PASS

MIG2024K BY-PASS

Dimensioni Dimensions



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

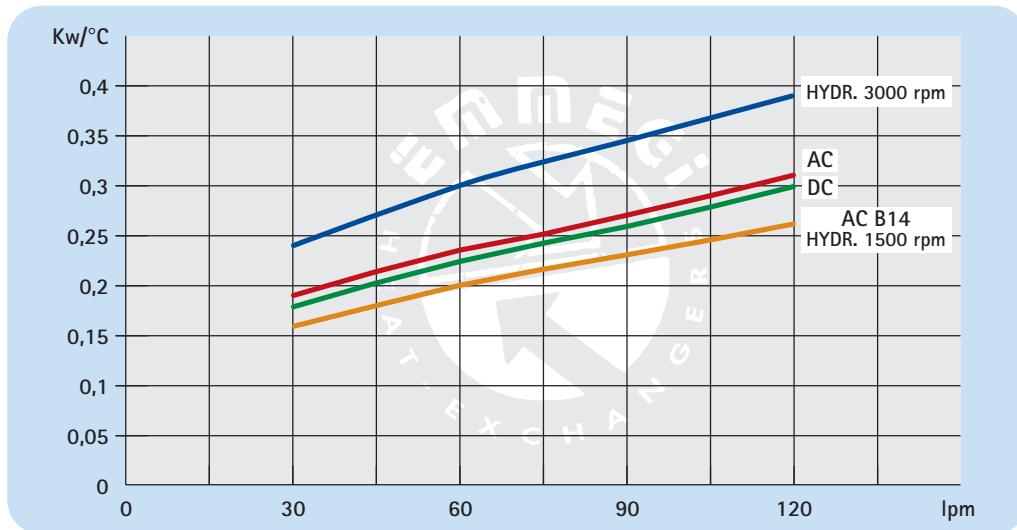
Dati tecnici Technical Data



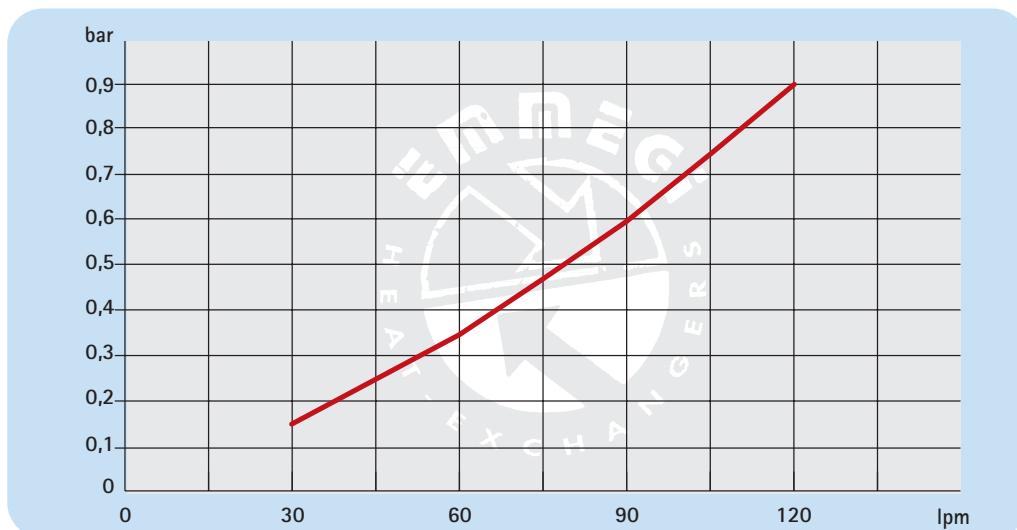
P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
2M6201###	230 AC	50	0,108	0,48	2525	250	72	1350	44	1	11
2M6203###	230-400 AC	50/60	0,105	0,22	2500	250	72	1300	44		11
2M6204###	230-400 AC B14	50/60	0,250	0,71	1450	250	64	1000	55		16
2M6212###	12 DC	/	0,110	7,1	3000	280	72	1180	68		10
2M6224###	24 DC	/	0,110	3,8	3000	280	74	1280	68		10
2M6256###	Prepared for Gr.2 hydraulic motor				250	250	250	250	/		10

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

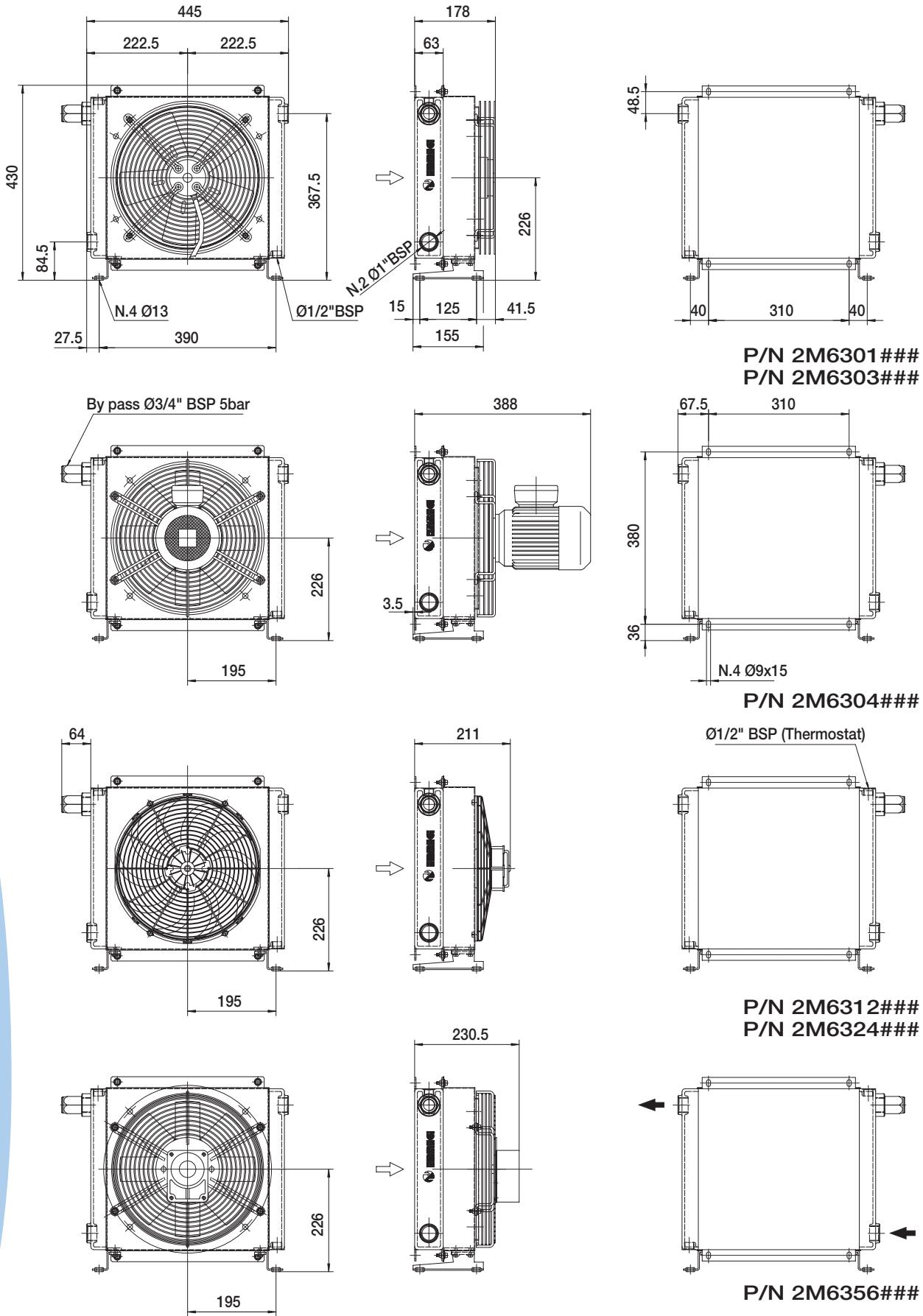


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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

MG2024K BY-PASS

Dimensioni Dimensions



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

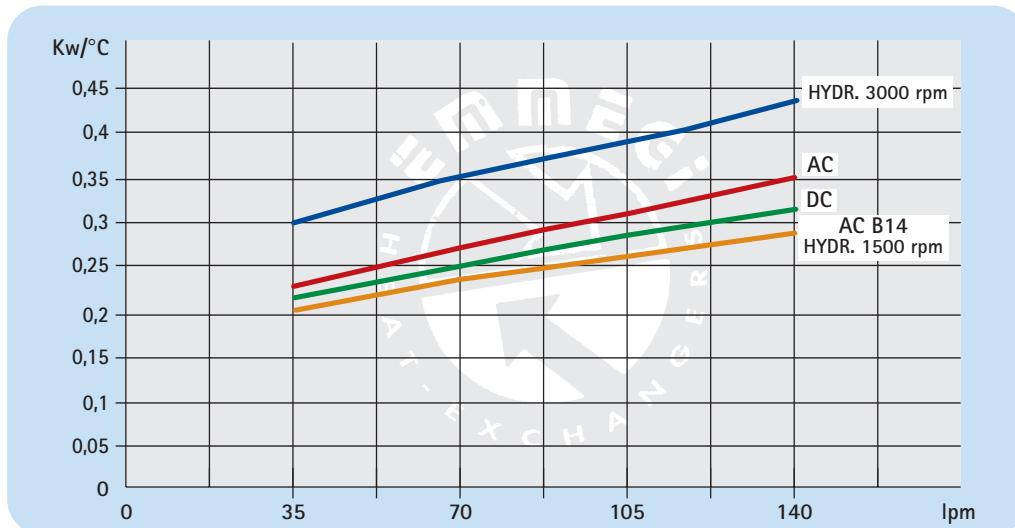
Dati tecnici Technical Data



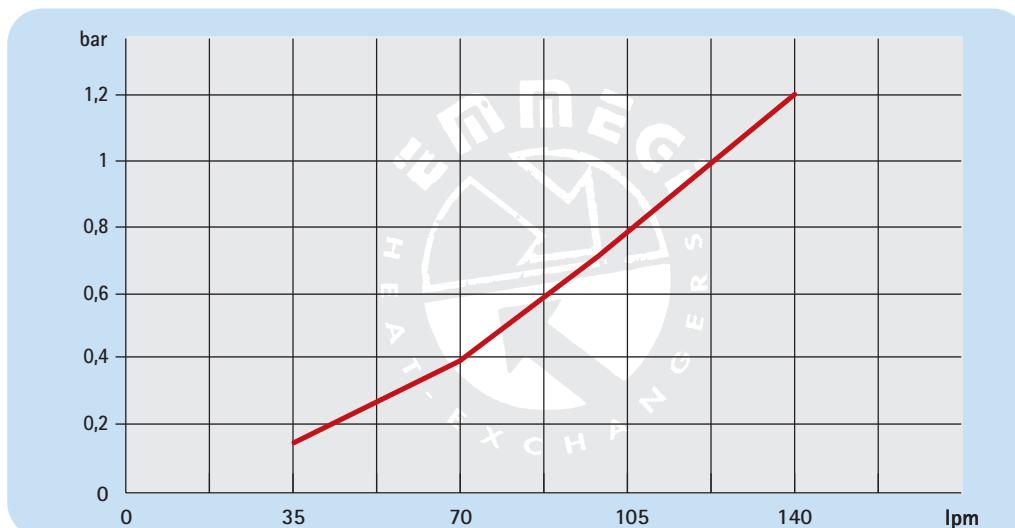
P/N	V	Hz	kW	A	rpm	Ø Fan	dB(A)	(m³/h)	IP	It	Kg
2M6301###	230 AC	50	0,189	0,85	2520	300	78	2220	44	1,6	15
2M6303###	230-400 AC	50/60	0,195	0,43	2600	300	76	2500	44		15
2M6304###	230-400 AC B14	50/60	0,370	1,03	1370	300	70	1850	55		20
2M6312###	12 DC	/	0,180	/	3000	305	80	1920	68		14
2M6324###	24 DC	/	0,180	/	3000	305	83	2100	68		14
2M6356###	Prepared for Gr.2 hydraulic motor			📞	300	📞	📞	/			15

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

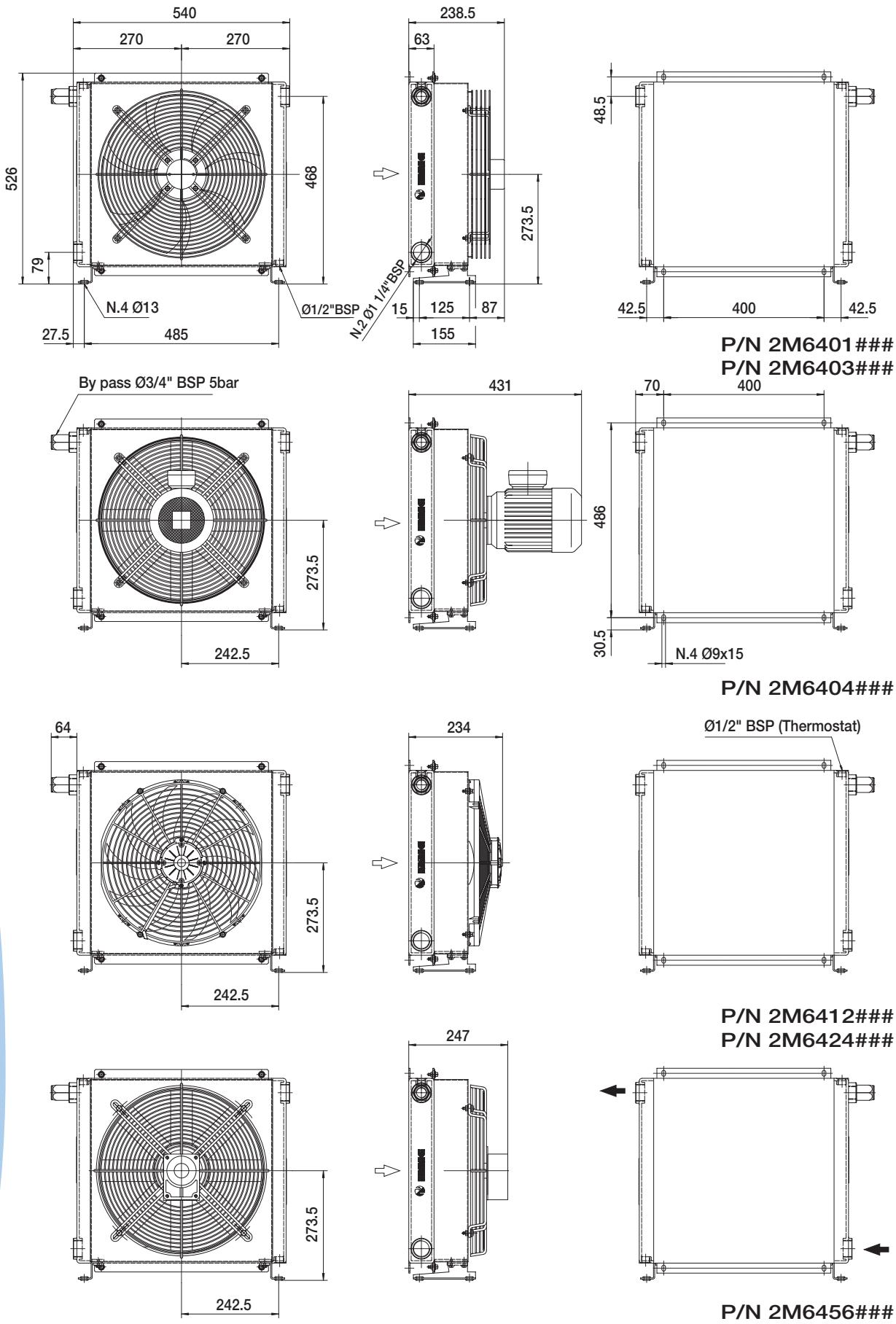


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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

MG2030K BY-PASS

Dimensioni Dimensions



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

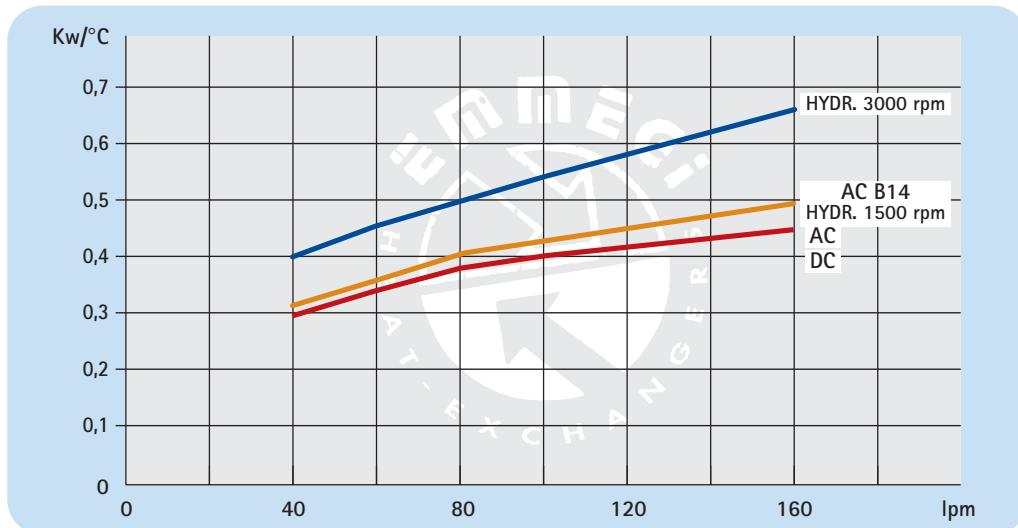
Dati tecnici Technical Data



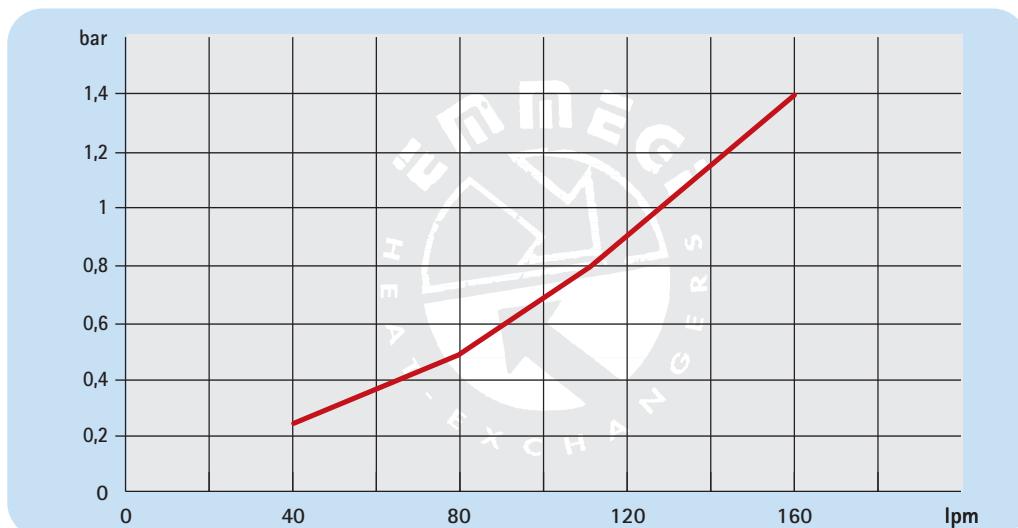
P/N	V	Hz	kW	A	rpm	ø Fan	dB(A)	(m³/h)	IP	It	Kg
2M6401###	230 AC	50	0,32	1,25	1260	400	71	3200	54	2,7	21
2M6403###	230-400 AC	50/60	0,20	0,5	1400	400	71	3200	54		21
2M6404###	230-400 AC B14	50/60	0,55	1,52	1400	400	77	3740	55		25
2M6412###	12 DC	/	0,21	13,8	2500	385	76	3000	68		20
2M6424###	24 DC	/	0,21	8,2	2500	385	79	3370	68		20
2M6456###	Prepared for Gr.2 hydraulic motor				400	400	400	400	/		19

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Diagramma rendimento Performance diagram



Perdite di carico Pressure drop (ISO VG 32)

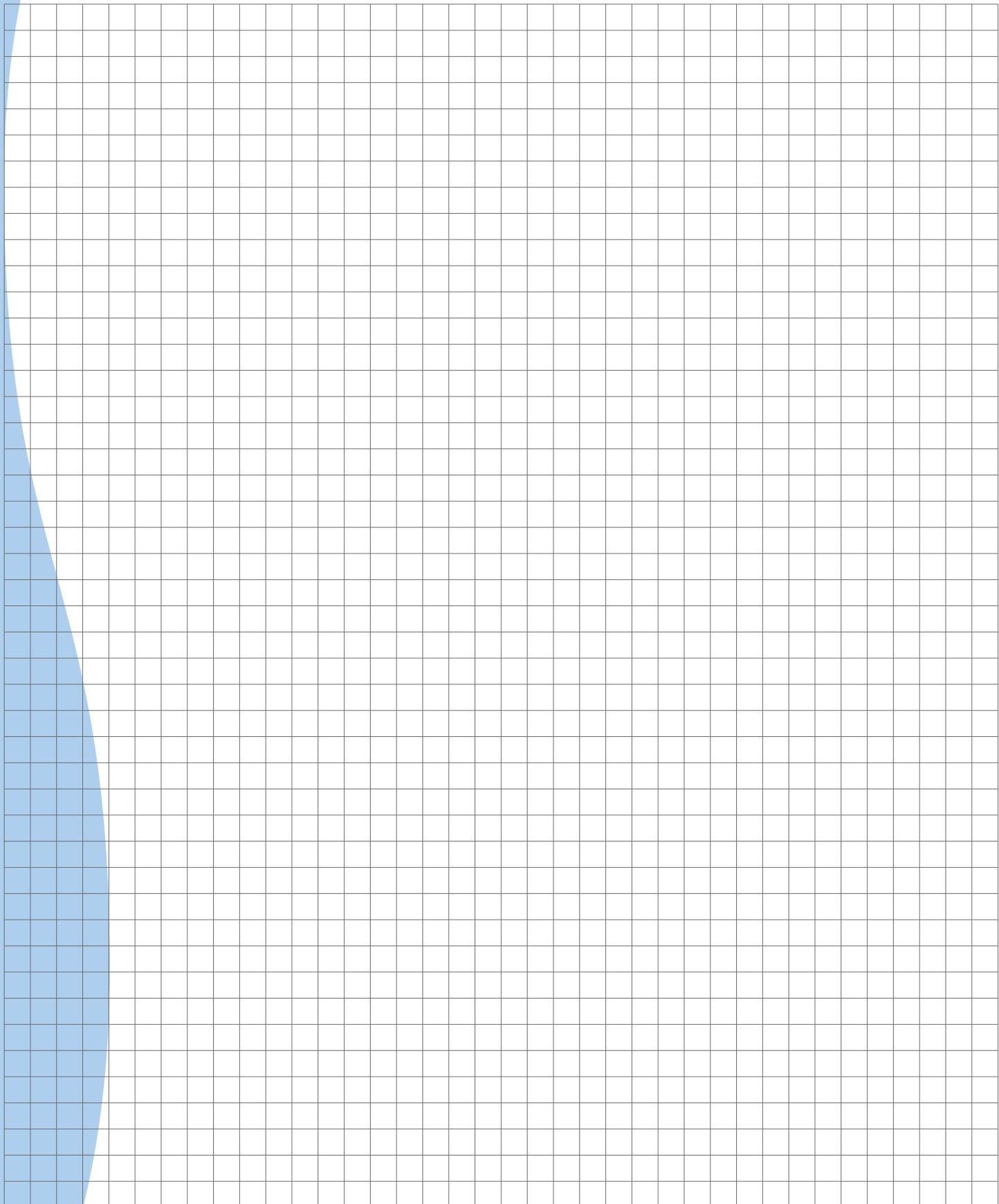


Fattore di correzione - F - (perdite di carico) Correction factor - F - (Pressure drop)

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

MIG 2040K BY-PASS

Note Notes



- Alla ricerca di un continuo miglioramento del prodotto, **EMMEGI srl** si riserva il diritto di apportare modifiche ai dati e alle caratteristiche illustrate nel catalogo.
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