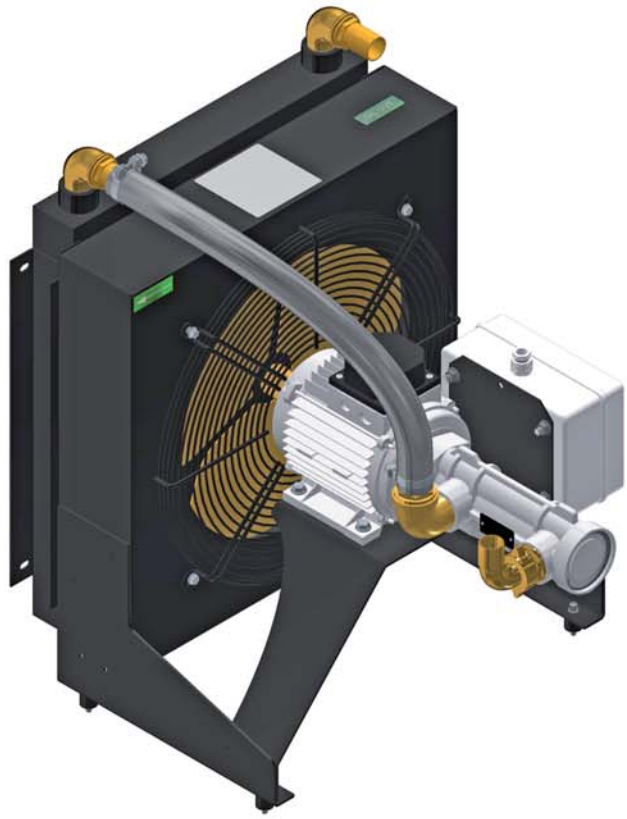
SEIM®
SCREW PUMPS
MADE IN
we know how!

LIFT
DIVISION

DIVISIONE LIFT - ELEVATOR DIVISION

NEG

AIR OIL COOLER
SCAMBIATORE DI CALORE ARIA OLIO



COME FUNZIONA
HOW IT WORKS

Lo scambiatore di calore può essere montato direttamente sulla centralina di alimentazione oppure posizionato in postazione remota. Quando la temperatura dell'olio nel serbatoio raggiunge il limite impostato, la pompa comincia a far ricircolare l'olio attraverso il radiatore.
Questo processo riduce la temperatura dell'olio a seconda delle condizioni del sito in cui è installato.

The Oil Cooler can be mounted directly to the power unit or located in a remote location.
When the oil temperature in the reservoir reaches the pre-set limit, the pump start to reticulate the oil through the radiator.
This process reduces the oil temperature depending on site conditions.

Caratteristiche generali

Gli scambiatori di calore aria-olio SEIM sono estremamente efficienti nello svolgere il compito di raffreddamento olio nei circuiti oleodinamici in cui sono installati.
Il cuore dello scambiatore è composto da una pompa a tre viti SEIM altamente affidabile e silenziosa.
L'olio viene raffreddato con aria prodotta da una ventola montata direttamente sull'albero sporgente del motore.

General features

SEIM air-oil heat exchanger units are extremely efficient in carrying out their intended task of cooling the oil in the oleodyamic circuits in which they are installed.
The heart of the unit consists of a SEIM triple screw pump, highly reliable and silent.
The oil is cooled using air produced by a helical fan mounted coaxially with the screw pump.

Caratteristiche tecniche

• alta capacità autoadescante, grazie alla pompa a viti
• bassa rumorosità, grazie al particolare disegno della ventola per 50 e 60 Hz e all'uso della pompa a viti
• OPTION: valvola di sicurezza sulla pompa (taratura std. valvola = 6 bar)

Main technical characteristics

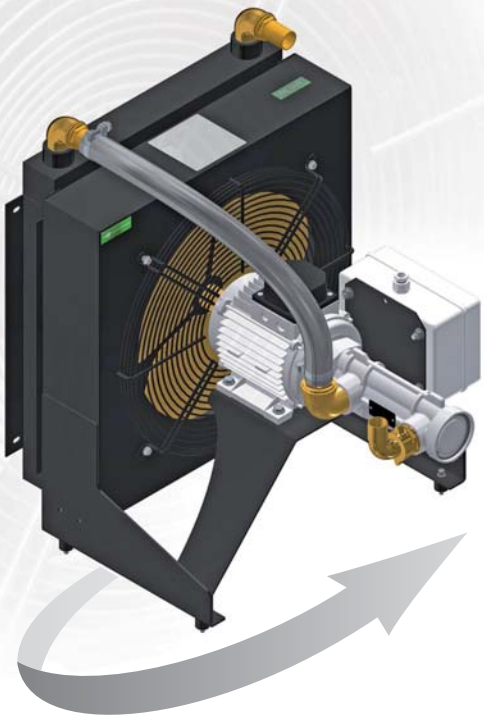
• high suction capability because of the screw pump
• low noise because of a special fan designed for 50 and 60Hz speeds and the use of a screw pump
• OPTION: safety relief valve of the pump (standard valve setting = 6 bar)

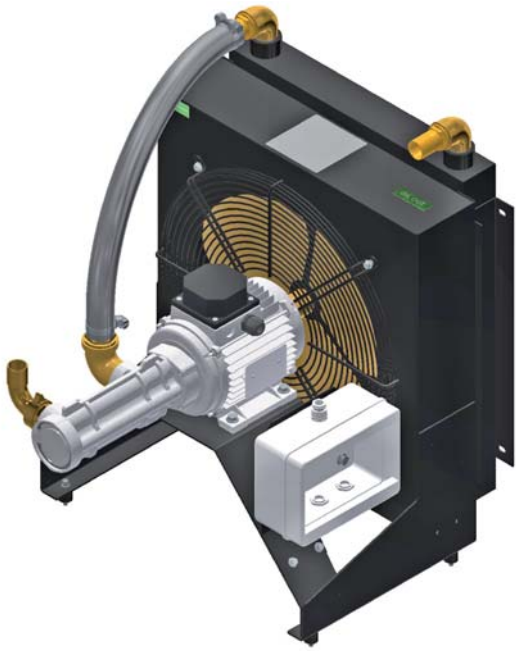
SCAMBIATORE DI CALORE TIPO NEG

NEG Air-oil cooler

SIZES NEG

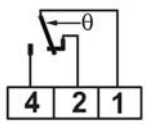
03 | 04 | 06 |10 | 14 | 20

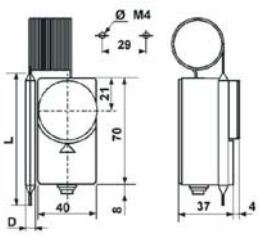




TERMOSTATO
THERMOSTAT







Tipo	L	D
C04A2	105	6

Termostato a capillare e bulbo, scala 10 90°C
380V - 15 A - IP40
lunghezza capillare 1 metro
contatto NO (e NC)

Thermostat with probe
380V - 15 A - IP40
capillary lengh 1 m
contact NO (and NC)

ACCESSORI DISPONIBILI

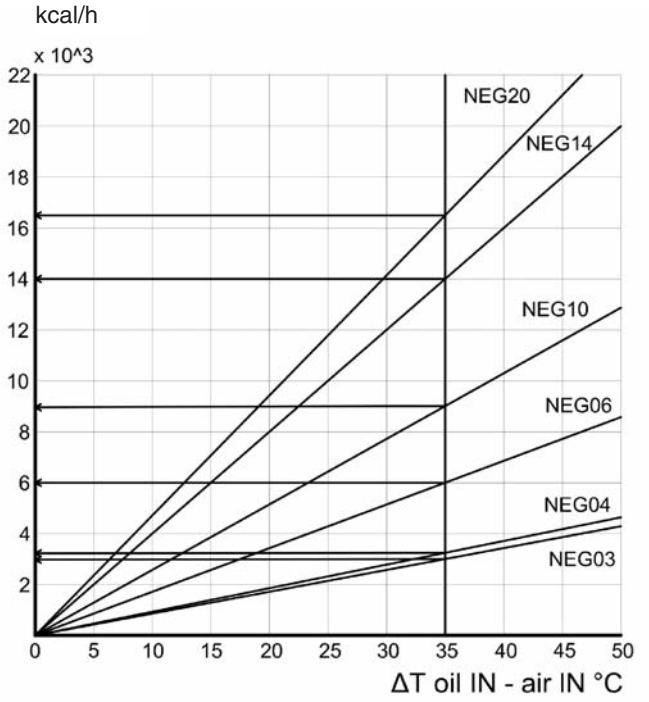
- **quadro elettrico**
- **tubo**
- **raccordi per collegamenti idraulici**
- **antivibranti**
- **protezione termica motore**
- **termostato regolabile**

ACCESSORIES ALSO AVAILABLE

- ***electrical panel***
- ***flexible hoses***
- ***nipples to connect the hoses to the hydraulic power pack***
- ***shock absorbers***
- ***motor protection***
- ***adjustable thermostat***

DIAGRAMMA DI SCAMBIO TERMICO / *THERMAL EXCHANGE DIAGRAM*

Performances NEG range (Kcal/h)



I valori indicati nel diagramma sono riferiti ad olio idraulico con viscosità cinematica di 32 cSt **e temperatura ambiente di prova pari a 20°C**

The values indicated in the diagram refer to hydraulic oil with a Kinematic viscosity of 32 cSt ***and an ambient temperature during testing of 20°C***

ΔT= T olio IN - T aria IN
T oil IN - T air IN



Caratteristiche funzionali / Operating features

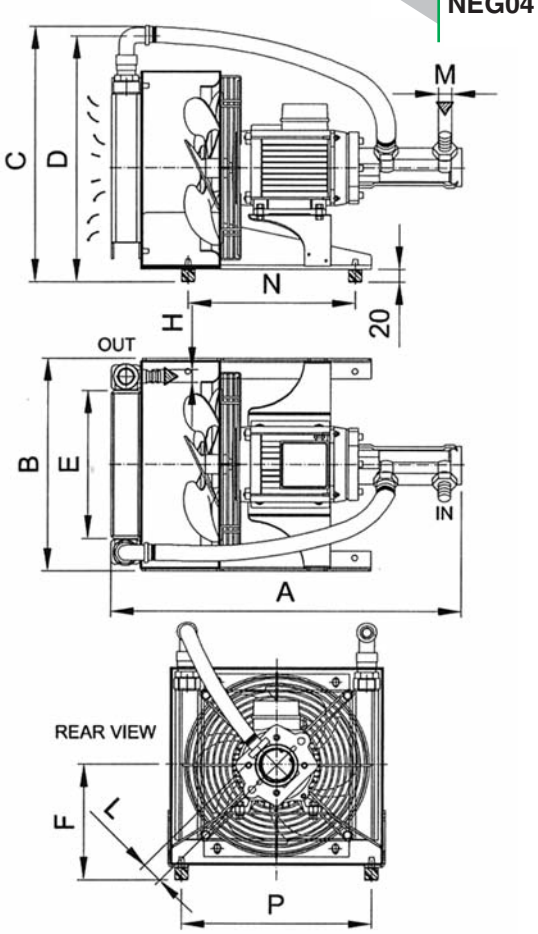
		NEG#03		NEG#04		NEG#06		NEG#10		NEG#14		NEG#20	
Resa termica con dT = 35 °C (Temperature ambiente 20°C) Duty dT = 35 °C (ambient temperature 20°C)	kW (*) kCal/h (*) BTU (*)	3,49 3000 11900		3,8 3300 13035		6,98 6000 23810		10,5 9000 35550		16,28 14000 55556		19,2 16500 65556	
		50 Hz	**60 Hz**	**50 Hz**	**60 Hz**	**50 Hz**	**60 Hz**	**50 Hz**	**60 Hz**	**50 Hz**	**60 Hz**	**50 Hz**	**60 Hz**
Portata pompa - Pump flow rate	l/min USGPM	25 6,6	30 7,9	13,5 3,6	16 4,3	30 7,9	36 9,5	38 10	45,5 12	55 14,5	66 17,4	85 22,5	100 26,5
Portata ventola - Fan capacity	m³/h (*) CFM(*)	600 353		550 326		1300 764		1300 764		2500 1471		2500 1471	
		50 Hz	**60 Hz**	**50 Hz**	**60 Hz**	**50 Hz**	**60 Hz**	**50 Hz**	**60 Hz**	**50 Hz**	**60 Hz**	**50 Hz**	**60 Hz**
Regime di azionamento - Running speed	giri RPM	2800	3300	1500	1800	1400	1680	1400	1680	1400	1700	1420	1700
Livello medio di rumosità - Average noise level	dB(A)	70		68		68		68		71		71	
Peso - Weight	DaN LBS	17 37		20 40		35 77		35 77		55 121		55 121	
Temperatura olio MIN-MAX - MIN-MAX oil temp	°C °F	20-70 68-150		20-70 68-150		20-70 68-150		20-70 68-150		20-70 68-150		20-70 68-150	
Pressione massima ammissibile - Max admitted pressure	bar PSI	4 58		4 58		4 58		4 58		4 58		4 58	
NpsH richiesto- Required NpSH	bar PSI	-0,4 -5,8		-0,4 -5,8		-0,4 -5,8		-0,4 -5,8		-0,4 -5,8		-0,4 -5,8	

* Per le caratteristiche funzionali diverse da quelle sopra indicate, contattare il nostro ufficio vendite

** For different functional characteristics, please contact our sales department*

DIMENSIONI DI INGOMBRO
Dimensions

NEG03
NEG04



NEG06
NEG10
NEG14
NEG20

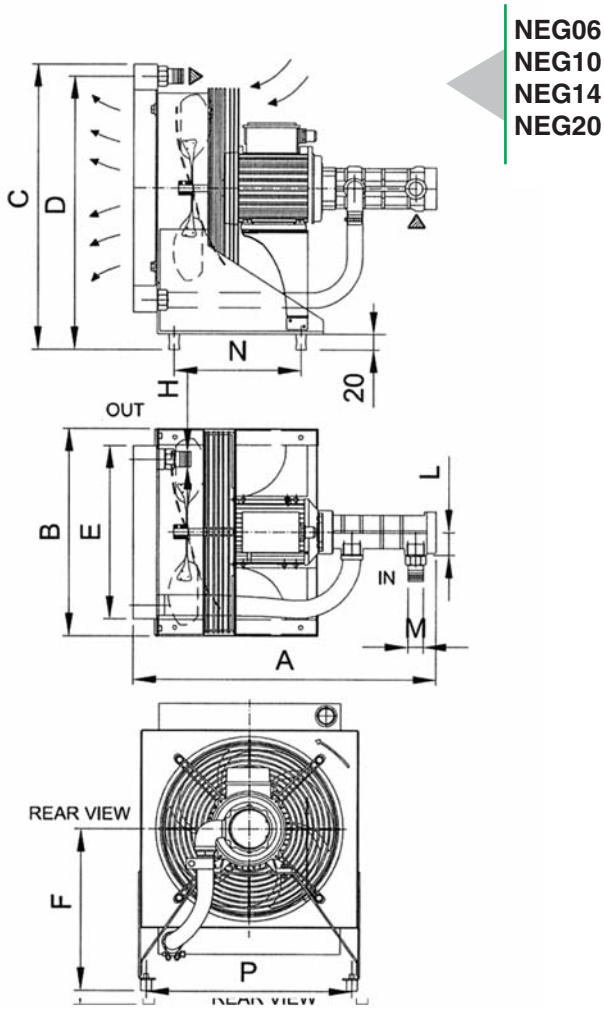


TABELLA DIMENSIONALE (MM) / *DIMENSIONAL CHART (MM)*

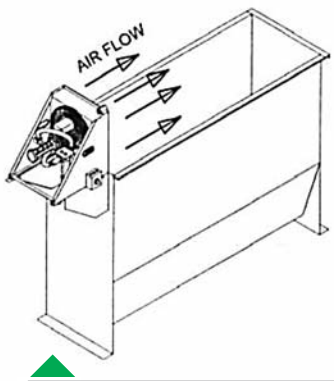
MODELLO *SIZE*	Kcal/h T 35°C at 20°C ambient	A	B	C	D	E	F	H	L	M	N	P
NEG#03	3000	500	317	360	342	184	170	3/4"	33	3/4"	200	240
NEG#04	3300	536	331	400	385	230	200	3/4"	33	3/4"	255	290
NEG#06	6000	578	410	536	513	335	303	1" GAS	44	1" GAS	240	380
NEG#10	9000	578	410	536	513	335	303	1" GAS	44	1" GAS	240	380
NEG#14	14000	637	536	695	675	475	340	1" GAS	44	1 1/4" GAS	273	479
NEG#20	16500	637	536	695	675	475	340	1" GAS	44	1 1/4" GAS	273	479

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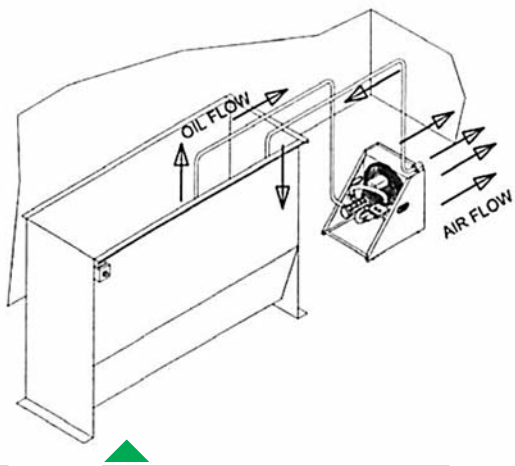
INSTALLAZIONE TIPICA
Typical Installation

Lo scambiatore può essere montato in posizione orizzontale o verticale seguendo i principali schemi indicati di seguito.
Per ulteriori dettagli richiedere il manuale uso e manutenzione SEIM.

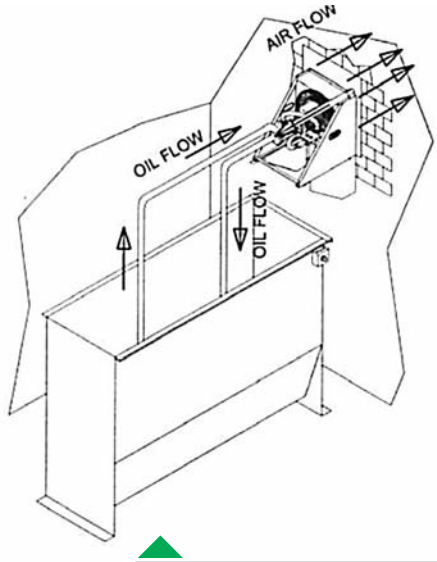
The heat exchanger can be installed horizontally or vertically following the sketch showed here below.
For more details ask for SEIM instruction manual.



MONTAGGIO DIRETTO
DIRECT MOUNTING



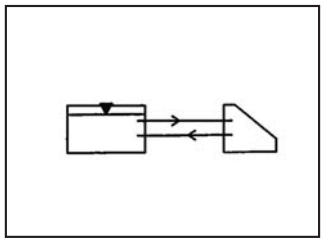
MONTAGGIO A PAVIMENTO
FLOOR MOUNTING

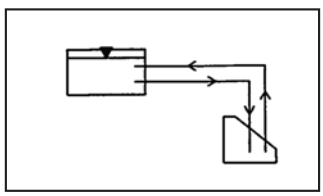


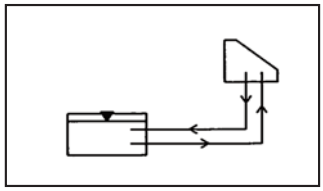
MONTAGGIO A MURO
REMOTE MOUNTING

LUNGHEZZE (MT) E DIAMETRI TUBI (INCHES) / *LENGHTS (MT) AND DIAMETER OF PIPES (INCHES)*

		Ø tubo / *pipe*				
		3/4"	1"	1 1/4"	1 1/2"	2"
A	NEG#03 NEG#04	3	5	10	(*)	(*)
	NEG#06 NEG#10	-				
	NEG#14	-	2.5	5	10	(*)
	NEG#20	-	2.5	5	10	(*)
B	NEG#03 NEG#04	7	9	13	(*)	(*)
	NEG#06 NEG#10	-				
	NEG#14	-	6.5	9	(*)	(*)
	NEG#20	-	6.5	9	(*)	(*)
C	NEG#03 NEG#04	-	-	6	(*)	(*)
	NEG#06 NEG#10	-				
	NEG#14	-	-	-	6	(*)
	NEG#20	-	-	-	6	(*)







Metri di sviluppo linea di aspirazione:

Calcolati su viscosità tipica cSt e max 75 cSt.
Per ogni curva aperta togliere 2 m di tubo.
Per ogni curva stretta togliere 3 m di tubo.

Suction line development lenght:

Calculated for a typical viscosity of 75 cSt.
For every wide elbow take away 2 meters of pipe.
For every close elbow take away 3 meters of pipe.

(*) 10-50 m: consultare SEIM - *10-50 m: contact SEIM*

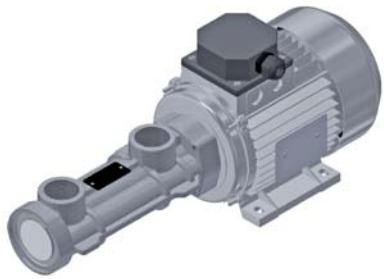
- Lunghezza dei tubi in funzione della posizione dello scambiatore e del diametro del tubo
- *Length of the pipe depending on the heat exchanger's position and on the pipe diameter*

SCAMBIATORE DI CALORE - VERSIONE SPLIT

Oil Cooler – Split Version

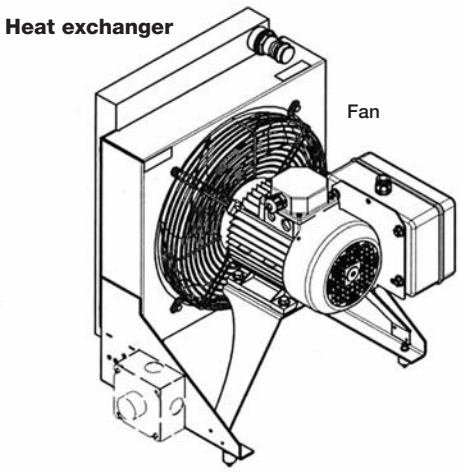
Versione adatta ad installazioni remote con lunghezze tubi tra centralina e scambiatori 10 - 50 metri.
Version suitable for remote installations with pipe lenght between power - pack and cooler 10 - 50 m.

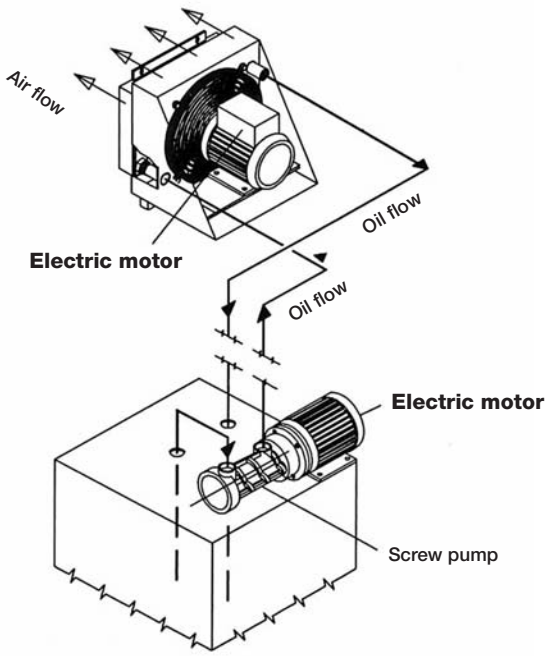




INSTALLAZIONE TIPICA - VERSIONE SPLIT

Typical Installation - Split Version





CARATTERISTICHE FUNZIONALI
Operating features

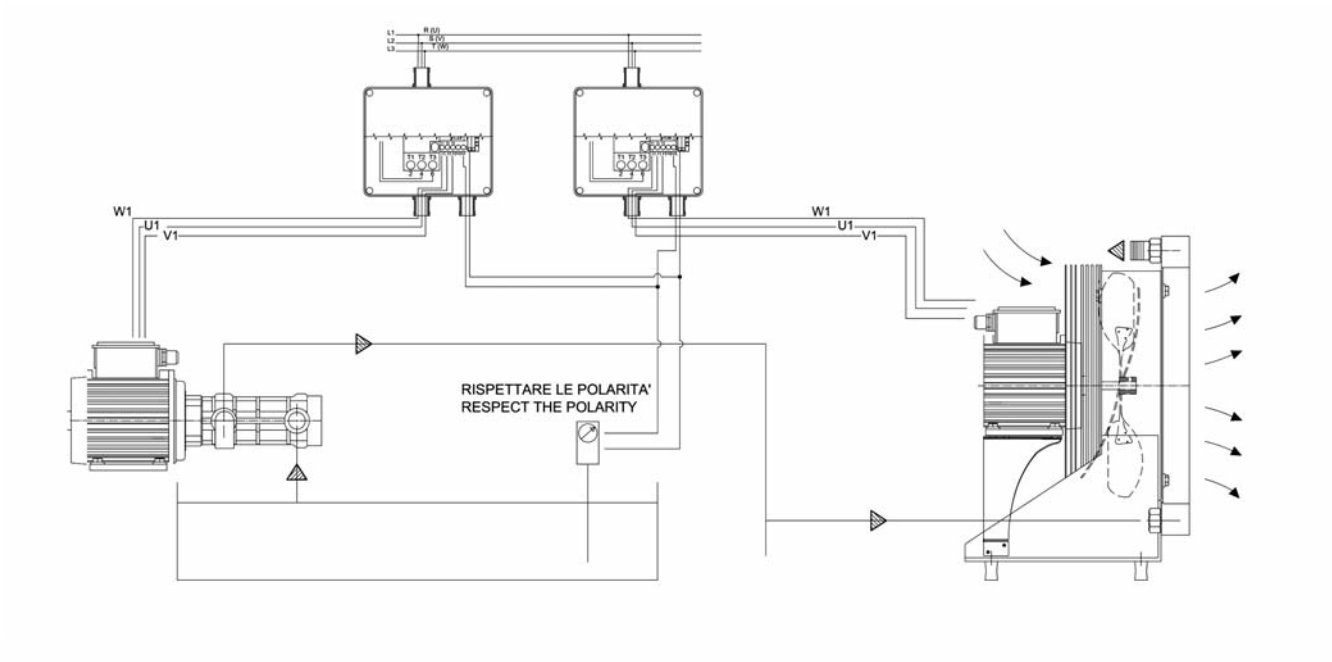
CARATTERISTICHE FUNZIONALI VERSIONE SPLIT / FUNCTIONAL CHARACTERISTICS SPLIT VERSION

Portata circolante / *Delivery flow*	30 to 66l/min (7,9 to 17,4 USGPM)
Portata aria / *Air flow*	1300 to 2500 m^3 /h (764 CFM - 1471 CFM)
Pressione massima olio * *Max oil pressure**	Up to 6 bar (87 psi)
Temperarura olio ammissibile *Oil admissible temperature*	20 to 90 °C (68 to 194 °F) Per differenti valori contattare SEIM - *For different values contact SEIM*
Velocità di funzionamento pompa *Pump working speed*	From 1450 to 1750 rpm
Livello medio di rumorosità (unità di raffreddamento) *Average noise level (cooling unit)*	67 - 71 dB(A) at 2900 rpm *67 - 71 dB(A) at 2900 rpm*
Filtrazione raccomandata *Recommended filtration*	ISO 4406 19 / 16 - NAS 10
voltaggi disponibili / *Available voltage*	50 Hz 400 - 230 - 440 three-phase 230 mono-phase
	60 Hz 380 - 220 - 480 - 575 -460 - 440 three-phase 220 mono-phase

* Riduzione dei limiti di pressione applicabili dovuti a viscosità di azionamento - **Reduced pressure limits apply due to fluid viscosity and driving speed.*
Per richieste di caratteristiche differenti, contatta il dipartimento commerciale SEIM - *For different functional characteristics, please contact our sales department.*

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SCAMBIATORE SPLIT / QUADRETTI ELETTRICI - SCHEMA DI COLLEGAMENTO
SPLIT COOLER / ELECTRIC BOARD - CONNECTION SCHEME



DIMENSIONI DI INGOMBRO
Dimensions

Scambiatore SPLIT / *SPLIT Oil Cooler*

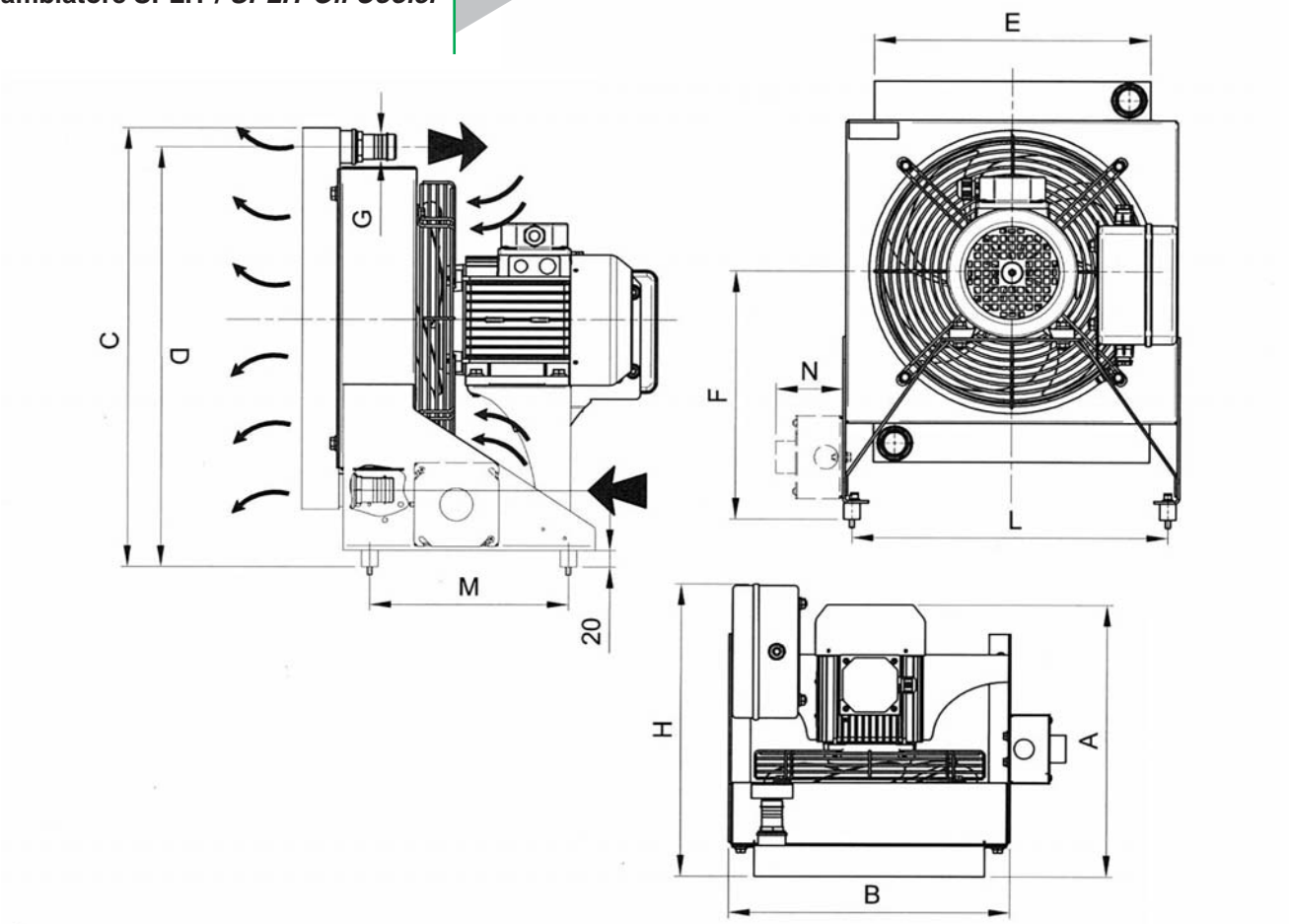


TABELLA DIMENSIONALE SPLIT (MM) / *SPLIT DIMENSIONAL CHART (MM)*

MODELLO *SIZE*	Kcal/h T 35°C at 20°C ambient	A	B	C	D	E	F	G	H	L	M	N
SPLIT#06	6000	400	410	536	513	335	303	1" GAS	430	380	240	81
SPLIT#10	9000	400	410	536	513	335	303	1" GAS	430	380	240	81
SPLIT#14	14000	460	530	690	655	457	320	1" GAS	490	479	273	81

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DIMENSIONI DI INGOMBRO
Dimensions

Motopompa SPLIT / *SPLIT Motorpump*

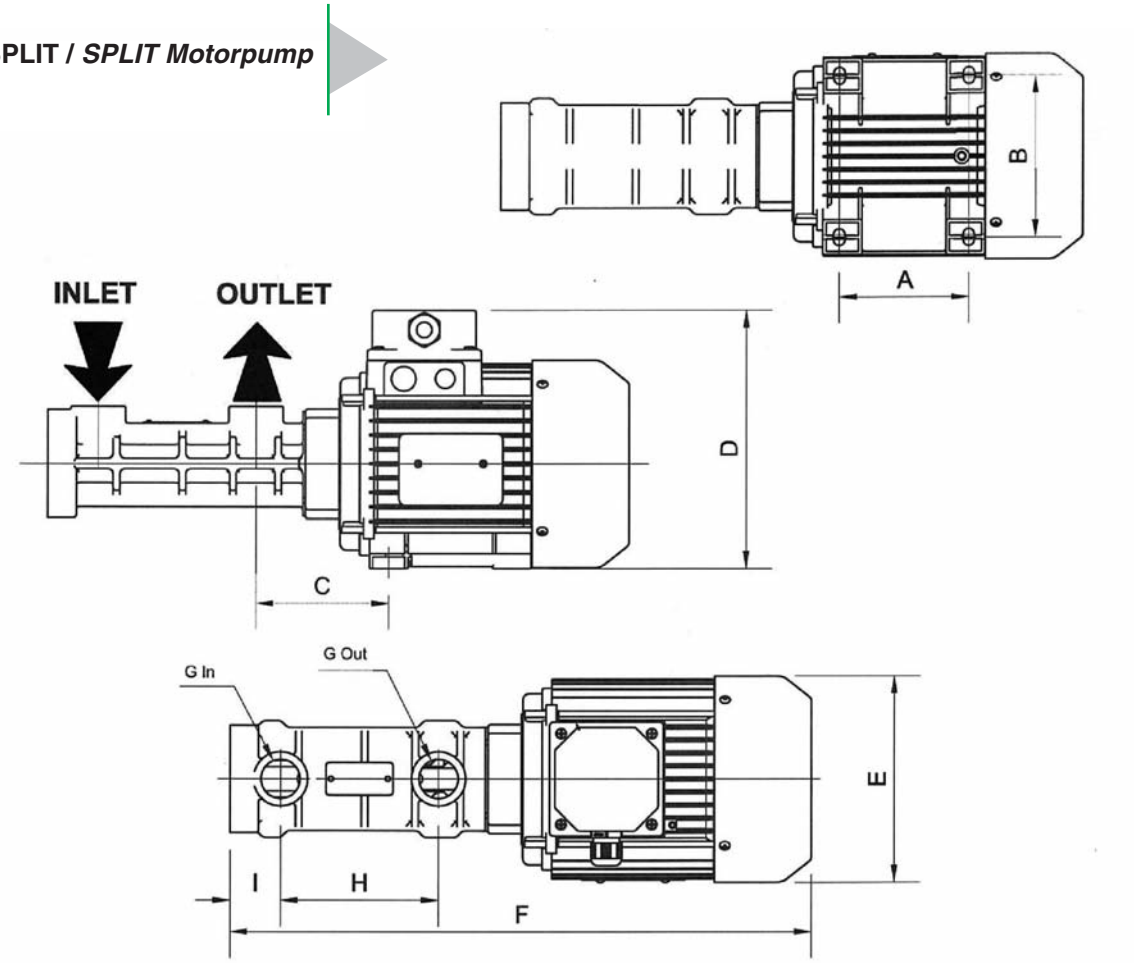


TABELLA DIMENSIONALE MOTOPOMPA SPLIT (MM) / *MOTORPUMP SPLIT DIMENSIONAL CHART (MM)*

RIF. MOTOPOMPA *REF. MOTORPUMP*	A	B	C	D	E	F	G (in)	G (out)	H	I	RIF. SPLIT *REF. SPLIT OIL COOLER*
MP 032#2A	100	125	102,6	198	159	449	1"	1"	122	39	SPLIT#06
MP 032#2B	100	125	102,6	198	159	449	1"	1"	122	39	SPLIT#10
MP 040#2A	100	125	107,6	198	159	476	1" 1/4	1" 1/4	140	43	SPLIT#14

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