

# i-HP

Air/water inverter heat pumps with axial fans



Efficienza energetica = A++  
Energy efficiency = A++

<p>Risparmio energetico rispetto ai concorrenti</p> <p><b>30%</b></p> <p>Energy savings compared to competitors</p>	<p><b>ESEER</b></p> <p><b>6,07</b></p>	<p>Acqua fino a Water up to</p> <p><b>65°C</b></p> <p>con resistenza with resistance</p>
<p><b>Hi-T</b></p> <p>Compatible Compatible</p>	<p><b>OK</b></p> <p>Conto termico 2.0</p>	<p>Fino al</p> <p><b>65%</b></p> <p>Recupero fiscale*</p>

POMPE DI CALORE

## VERSIONS

- i-HP** reversible inverter heat pump
- i-HP LT** reversible inverter heat pump with steam injection

## BUILDING FEATURES:

The series i-HP reaches high values of SEER and SCOP thanks to DC inverter scroll compressors, the EC fan exchangers and high efficiency. DC Inverter compressor can save till 25% of power input. The installation inside the unit of high efficiency DC inverter scroll compressors optimized for working under heavy conditions as a heat pump and to use of an economizer, allows to obtain a high level of comfort in low-energy consumes rooms even during the coldest season (until a temperature of -25°). The injection echnology involves injecting the refrigerant, in the vapour status, in the middle of the compression process to implement significantly the capacity and efficiency of the compressor improve the performances of this system compared to all conventional gas compression technologies. With this kind of unit it is possible to produce hot water up to 60°C even with very low outside temperatures. The heat pumps are particularly suitable to be combined with radiating panels heating systems or for applications where a top efficiency heating mode is needed.

## ACCESSORIES

- IM** Protection module
- FANO** DC fan
- C11** EC brushless circulator
- C12** Predisposition for external pump with shut-off valve
- C13** Auto adaptive circulator
- C16** AC inverter pump
- KA** Antifreeze kit
- GI** Plant management module
- SL** Silencing
- SSL** Super silencing
- Hi-T/ Hi-T2** Multifunction touch screen remote controller
- AG** Rubber shock absorbers
- TR2** Anti-corrosion fanguard treatment
- SAS** Sanitary water probe
- DSFR** Sequence control device, phase failure + Minimum and Maximum voltage relay
- Plug-in WiFi** WiFi module to connect the unit to a local WiFi network
- RFC** Remote fancoil control (Hi-T control required)
- i-CR** Remote wall controller
- RP** Metallic guards for condenser

**V.415 control board**

New control logic and display interface installed on all new Maxa units generation i-HP 0135-0250F-0270 (from July on the entire i-HP range). Allows rapid maintenance with parameter and firmware updates from USB device. By the implementation of new logics it permit the increase of memory.



**The EC technology**

The EC technology at the core of our most efficient motors and fans allows efficiency of up to 90%, saves energy at a very high level, significantly extends service life and makes our products almost maintenance-free. These values pay off not only for the environment, but every cent also pays off for the user! All the products, even those for which EC technology does not make sense from an application viewpoint, feature the greatest possible connection of economy and ecology.



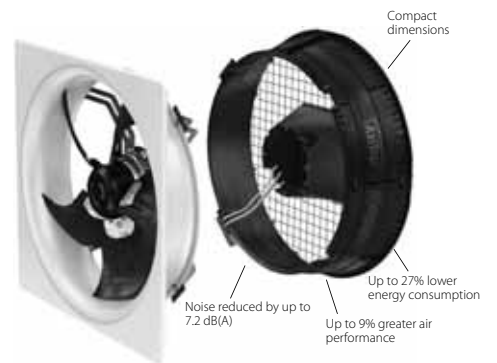
**Thermoacoustic insulation (SL version)**

The innovating thermo-acoustic shell allows a noise reduction up to 10% at specific compressor rotation frequencies. The special multi-layer structure generates a thermal insulation which reduces, at very low outside temperatures, the heat losses of 2% compared to a standard insulation.



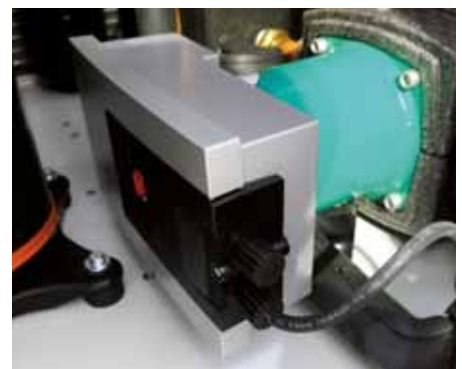
**Diffuser (SSL version)**

The diffuser structure improves the air flow efficiency and allows a fan speed reduction, lowering the the acoustic pressure by up to 7.2 dB(A) and energy consumption by up to 27% with unchanged airflow. That could lead to a saving up to hundreds of euro in energy costs per fan per year. Alternatively, you could make use of the greater efficiency to boost air performance by up to 9% with comparable energy consumption.



**New circulating pumps**

More than 90% of the current wet rotor pumps currently in the market, soon could not be sell anymore due to the entry into force of the Ecodesign directive which imposes restrictive requirements on the energy efficiency. In the future will be installed only EC high efficiency pumps with very low energy consumption; the transition to this new pumps generation therefore guarantees a certain future and an immediate economic advantage. The adopted pumps (optional) have an ECM technology synchronous motor, with maximum efficiency and high starting torque, unblocking automatic function, full protection and error communication.

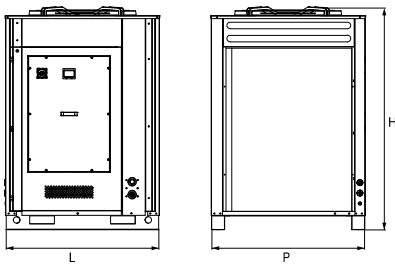


## 0250F: What's new in Maxa

The **i-HP 0250** is a full inverter, both compressors are inverters, with a working range of 30 - 80 Hz. This requires a minimum of 30 Hz (1 compressor to idle) up to a maximum of 160 Hz (2 compressors at most). Depending on the outside temperature, the maximum capacity is modulated appropriately in order to increase the efficiency.

**i-HP 0250F** has an on-off 50 Hz fixed compressor and an inverter with 20% higher capacity than inverters of size 0250, with a working range of 36 to 96 Hz (20% more than 30 and 80 Hz). This involves a minimum of 36Hz (1 inverter compressor at idle) up to a maximum of 146 Hz = 50Hz + 96Hz (on-off compressor and inverter compressor at most). Again, depending on the outside temperature, the maximum capacity is modulated appropriately in order to increase efficiency.

The substantial difference lies in a higher capacity of the i-HP 0250 than 0250F to efficiently cover all the stated work range, especially in the most extreme conditions (eg high summer temperatures and low winter temperatures).



Dimensioni - Dimensions		0125	0135	0250F	0250	0260	0270
L	mm	1198	1198	1198	1198	1198	1198
P	mm	1198	1198	1198	1198	1198	1198
H	mm	1673	1673	1745	1745	1745	1745
H (SSL)	mm	1906	1906	1906	1906	1906	1906
Peso versione standard Standard version weight	kg	355	382	428	428	454	465

### i-HP

### 0125

### 0135

### 0250F

### i-HP

(1) Pot. frigorifera / Cooling capacity / Puissance frigorifique	kW	30,65 (33,5*)	36,37 (39,3*)	49,32 (51,8*)	kW	Kühlleistung / Pot. frigorifica / Capacitate de racire (1)
(1) Pot. assorbita / Power input / Puiss. absorbée	kW	6,62	8,91	12,06	kW	Leistungsaufnahme / Pot. absorbida / Put. absorbida (1)
(1) E.E.R.	W/W	4,63	4,08	4,09	W/W	E.E.R. (1)
(2) Pot. frigorifera / Cooling capacity / Puissance frigorifique	kW	21,15 (23,1*)	27,04 (29,1*)	36,36 (38,3*)	kW	Kühlleistung / Pot. frigorifica / Capacitate de racire (2)
(2) Pot. assorbita / Power input / Puiss. absorbée	kW	6,35	8,96	12,45	kW	Leistungsaufnahme / Pot. absorbida / Put. absorbida (2)
(2) E.E.R.	W/W	3,33	3,02	2,92	W/W	E.E.R. (2)
(2) SEER	W/W	3,98	4,00	3,95	W/W	SEER (2)
(8) ESEER	W/W	5,34	5,32	4,98	W/W	ESEER (8)
(3) Pot. calorifica / Heating capacity / Puissance calorifique	kW	24,57 (27,1*)	32,65 (35,3*)	48,25 (51,2*)	kW	Heizleistung / Potencia calorifica / Capacitate de incalzire (3)
(3) Pot. assorbita / Power input / Puiss. absorbée	kW	5,47	7,89	11,42	kW	Leistungsaufnahme / Pot. absorbida / Put. absorbida (3)
(3) C.O.P.	W/W	4,49	4,14	4,22	W/W	C.O.P. (3)
(4) Pot. calorifica / Heating capacity / Puissance calorifique	kW	22,05 (24,4*)	32,33 (35,1*)	41,07 (43,5*)	kW	Heizleistung / Potencia calorifica / Capacitate de incalzire (4)
(4) Pot. assorbita / Power input / Puiss. absorbée	kW	6,33	9,80	12,07	kW	Leistungsaufnahme / Pot. absorbida / Put. absorbida (4)
(4) C.O.P.	W/W	3,49	3,30	3,40	W/W	C.O.P. (4)
(6) SCOP	W/W	3,83	3,82	3,82	W/W	SCOP (6)
** Efficienza energetica / Energy efficiency / Efficacité énergétique		A+				Energieeffizienz / Eficiencia Energética / Eficiencia Energética **
		A++				
Tipò compressore / Compressor type / Compresseur type		Dc Inverter	Dc Inverter	Dc Inverter +On-Off		Verdichter Typ / Compresor tipo / Tip compresor
(7) Press. sonora / Sound pressure / Pression sonore	dB(A)	42,1	45,6	48,5	dB(A)	Geräuschentwicklung / Nivel de ruido / Nivel de zgomot (7)
(7) Press. sonora / Sound pressure / Pression sonore (SL)	dB(A)	40,3	43,8	46,5	dB(A)	(SL)Geräuschentwicklung / Nivel de ruido / Nivel de zgomot (7)
(7) Press. sonora / Sound pressure / Pression sonore (SSL)	dB(A)	39,4	42,9	45,6	dB(A)	(SSL)Geräuschentwicklung / Nivel de ruido / Nivel de zgomot (7)
Temp. esterna / Outdoor temp / Tem. extérieure	°C	-15/+46			°C	Außentemperatur / Temp. esterna / Temp. externa

**i-HP**

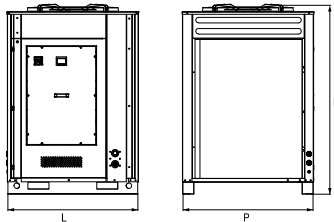
**0250**

**0260**

**0270**

**i-HP**

(1) Pot. frigorifera / Cooling capacity / Puissance frigorifique	kW	49,32 (51,8*)	57,14 (60,6*)	70,76 (72,2*)	kW	Kühlleistung / Pot. frigorifica / Capacitate de racire (1)
(1) Pot. assorbita / Power input / Puiss. absorbée	kW	12,06	17,07	18,62	kW	Leistungsaufnahme / Pot. absorbida / Put. absorbita (1)
(1) E.E.R.	W/W	4,09	4,06	3,80	W/W	E.E.R. (1)
(2) Pot. frigorifera / Cooling capacity / Puissance frigorifique	kW	36,36 (38,3*)	42,97 (45,6*)	53,40 (55,0*)	kW	Kühlleistung / Pot. frigorifica / Capacitate de racire (2)
(2) Pot. assorbita / Power input / Puiss. absorbée	kW	12,45	13,75	17,25	kW	Leistungsaufnahme / Pot. absorbida / Put. absorbita (2)
(2) E.E.R.	W/W	2,92	3,12	3,10	W/W	E.E.R. (2)
(5) SEER	W/W	4,03	4,16	4,05	W/W	SEER (5)
(8) ESEER	W/W	5,04	6,07	5,37	W/W	ESEER (8)
(3) Pot. calorifica / Heating capacity / Puissance calorifique	kW	48,25 (51,2*)	52,04 (55,1*)	65,20 (66,5*)	kW	Heizleistung / Potencia calorifica / Capacitate de incalzire (3)
(3) Pot. assorbita / Power input / Puiss. absorbée	kW	11,42	12,64	16,1	kW	Leistungsaufnahme / Pot. absorbida / Put. absorbita (3)
(3) C.O.P.	W/W	4,22	4,12	4,05	W/W	C.O.P. (3)
(4) Pot. calorifica / Heating capacity / Puissance calorifique	kW	41,07 (43,5*)	49,33 (52,3*)	60,45 (62,25*)	kW	Heizleistung / Potencia calorifica / Capacitate de incalzire (4)
(4) Pot. assorbita / Power input / Puiss. absorbée	kW	12,07	15,15	18,90	kW	Leistungsaufnahme / Pot. absorbida / Put. absorbita (4)
(4) C.O.P.	W/W	3,40	3,26	3,20	W/W	C.O.P. (4)
(6) SCOP	W/W	3,82	4,00	3,82	W/W	SCOP (6)
** Efficienza energetica / Energy efficiency / Efficacité énergétique		A+				Energieeffizienz / Eficiencia Energética / Eficiència Energética **
		A++				
Typo compressore / Compressor type / Compresseur type		2 Dc Inverter	2 Dc Inverter	2 Dc Inverter		Verdichter Typ / Compresor tipo / Tip compresor
(7) Press. sonora / Sound pressure / Pression sonore	dB(A)	48,5	50,3	50,9	dB(A)	Geräuschentwicklung / Nivel de ruido / Nivel de zgomot (7)
(7) Press. sonora / Sound pressure / Pression sonore (SL)	dB(A)	46,5	48,5	49,1	dB(A)	(SL)Geräuschentwicklung / Nivel de ruido / Nivel de zgomot (7)
(7) Press. sonora / Sound pressure / Pression sonore (SSL)	dB(A)	45,6	47,6	48,3	dB(A)	(SSL)Geräuschentwicklung / Nivel de ruido / Nivel de zgomot (7)
Temp. esterna / Outdoor temp / Tem. extérieure	°C	-15/+46			°C	Außentemperatur / Temp. esterna / Temp. externa



Dimensioni - Dimensions		<b>0125</b>	<b>0235</b>	<b>0250</b>
L	mm	1198	1198	1198
P	mm	1198	1198	1198
H	mm	1673	1673	1745
H (SSL)	mm	1906	1906	1906
Peso versione LT LT version weight	kg	371	440	448

**i-HP LT Con iniezione di vapore**

**0125**

**0235**

**0250**

**With steam injection i-HP LT**

(1) Pot. frigorifera / Cooling capacity / Puissance frigorifique	kW	30,67	36,37	47,56	kW	Kühlleistung / Pot. frigorifica / Capacitate de racire (1)
(1) Pot. assorbita / Power input / Puiss. absorbée	kW	7,34	8,91	12,52	kW	Leistungsaufnahme / Pot. absorbida / Put. absorbita (1)
(1) E.E.R.	W/W	4,18	4,08	3,83	W/W	E.E.R. (1)
(2) Pot. frigorifera / Cooling capacity / Puissance frigorifique	kW	22,50	26,90	37,6	kW	Kühlleistung / Pot. frigorifica / Capacitate de racire (2)
(2) Pot. assorbita / Power input / Puiss. absorbée	kW	7,26	9,1	12,83	kW	Leistungsaufnahme / Pot. absorbida / Put. absorbita (2)
(2) E.E.R.	W/W	3,10	2,96	2,93	W/W	E.E.R. (2)
(2) SEER	W/W	3,93	4,04	3,91	W/W	SEER (2)
(8) ESEER	W/W	5,28	5,47	5,30	W/W	ESEER (8)
(3) Pot. calorifica / Heating capacity / Puissance calorifique	kW	25,80	32,50	49,26	kW	Heizleistung / Potencia calorifica / Capacitate de incalzire (3)
(3) Pot. assorbita / Power input / Puiss. absorbée	kW	6,17	7,98	12,93	kW	Leistungsaufnahme / Pot. absorbida / Put. absorbita (3)
(3) C.O.P.	W/W	4,18	4,07	3,81	W/W	C.O.P. (3)
(4) Pot. calorifica / Heating capacity / Puissance calorifique	kW	25,65	32,50	47,29	kW	Heizleistung / Potencia calorifica / Capacitate de incalzire (4)
(4) Pot. assorbita / Power input / Puiss. absorbée	kW	7,27	9,97	14,40	kW	Leistungsaufnahme / Pot. absorbida / Put. absorbita (4)
(4) C.O.P.	W/W	3,53	3,26	3,28	W/W	C.O.P. (4)
(6) SCOP	W/W	4,02	4,03	3,82	W/W	SCOP (6)
** Efficienza energetica / Energy efficiency / Efficacité énergétique		A+				Energieeffizienz / Eficiencia Energética / Eficiència Energética **
		A++				
Typo compressore / Compressor type / Compresseur type		DC Inverter	2 Dc Inverter	2 Dc Inverter		Verdichter Typ / Compresor tipo / Tip compresor
(7) Press. sonora / Sound pressure / Pression sonore	dB(A)	42,1	45,6	48,5	dB(A)	Geräuschentwicklung / Nivel de ruido / Nivel de zgomot (7)
(7) Press. sonora / Sound pressure / Pression sonore (SL)	dB(A)	40,3	43,8	46,5	dB(A)	(SL)Geräuschentwicklung / Nivel de ruido / Nivel de zgomot (7)
(7) Press. sonora / Sound pressure / Pression sonore (SSL)	dB(A)	39,4	42,9	45,6	dB(A)	(SSL)Geräuschentwicklung / Nivel de ruido / Nivel de zgomot (7)
Temp. esterna / Outdoor temp / Tem. extérieure	°C	-25/+46			°C	Außentemperatur / Temp. esterna / Temp. externa

Preliminary data

Performances refer to the following conditions:

(1) Cooling: ambient air temperature 35 °C; ing./usc. temperature water: 23/18 °C.

(2) Cooling: ambient air temperature 35 °C; ing./usc. temperature water: 12/7 °C.

(3) Heating: ambient air temperature 7 °C B.S. 6 °C b.u.; Water Temp ing./usc. 30/35 °C.

(4) Heating: ambient air temperature 7 °C B.S. 6 °C b.u.; Water Temp ing./usc. 40/45 °C.

(5) Cooling: temperature ing./usc. water: 7/12 °C.

(6) Heating: average climatic conditions; T<sub>biv</sub> = -7 °C; Water Temp ing./usc. 30/35 °C.

(7) Sound pressure level measured in free field conditions at 10 m from the unit, according to ISO 3744.

(8) The values of ESEER are calculated with water temperature of 18°C and air 35°C.

\*\* Water 35°C/55°C.