

MASTER-INVERTER

The intelligent swimming pool heat pump!



NEW
DESIGN



MASTER INVERTER XS,
S and S+

MASTER INVERTER
M and XM



CONTROL YOUR HEAT PUMP IN SILENCE WITH THIS SWIMMING POOL HEAT PUMP WITH INTEGRATED FULL INVERTER TECHNOLOGY.

The **exclusive intelligent system** integrated into Master-Inverter heat pumps **regulates the output in relation to the water temperature but also takes into consideration the outside air temperature**. This guarantees heating performance at the best COP* level and **lowest noise level**.

e.g.: simplified operation of the Master-Inverter heat pump in SMART mode

	Power	COP	Noise levels
Cold air and cold water	high	standard	standard
Cold air and warm water	average	average	low
Warm air and warm water	minimum	maximum	minimum



MASTER INVERTER XL Tri

Features and benefits



SIMPLE AND INTUITIVE OPERATION

Color digital touch screen.

Three operating modes:

Heating, Cooling and Automatic.

[see p.10](#)



INTELLIGENT OPERATING MODE

PolySmart Control: the heat pump autoregulates its output depending on the water and air temperature.

[See p.11](#)

OPTIMAL PERFORMANCES



Optimal Twist: Titanium exchanger in a PVC housing, efficient and corrosion resistant.



2D Technology: inverter compressor, higher COP thanks to the Hz by Hz variable speed motor.



DC Brushless: variable speed fan motor ensures optimal performances.



EXCLUSIVE «LOW TEMPERATURE» SYSTEM

- Reverse-cycle defrosting,
- Preheating of the compressor housing,
- Antifreeze system for the evaporators condensation,
- Automatic piloting of the 'low temperature' system.



RECYCLED MATERIAL

Casing made from 70% recycled material and UV treated



LOW NOISE LEVELS

Noise reduction insulation on all panels and rotation speed of the compressor and fan automatically adjusted to reduce noise to the minimum.



CONNECTED SOLUTION

PolyConnect inside : wifi module and 4G card included allowing for remote control and supervision from our Technicenter

[See p.11](#)



INCLUDED ACCESSORIES : winter cover, 50 mm hydraulic connection kit, 4 «Silent block» anti-vibration pads, condensate drainage kit, multilingual user and maintenance manual.

Technical specifications

1-PHASE MODEL	Master-Inverter XS	Master-Inverter S	Master-Inverter S+	Master-Inverter M	Master-Inverter XM	Master-Inverter L	Master-Inverter L+
SCOP acc. to EN 17645	7,5	8,9	8,3	7,3	7,0	7,8	7,0
Classification acc. to EN 17645	A	A	A	A	A	A	A
Recommended pool size*	35-45 m³	45-55 m³	55-70 m³	70-85 m³	85-105 m³	105-130 m³	130-160 m³
Air 26°C / Water 26°C / Humidity 80%							
Energy Output BOOST mode	9,3 kW	10,6 kW	13,1 kW	16,1 kW	20,4 kW	24,2 kW	27,8 kW
COP BOOST Mode	5,5	7,3	6,3	5,3	5,2	6,0	5,2
Energy Output SMART mode	9,3 ~ 3,5 kW	10,6 ~ 3,9 kW	13,1 ~ 4,2 kW	16,1 ~ 5,5 kW	20,4 ~ 6,5 kW	24,2 ~ 7,8 kW	27,8 ~ 10,5 kW
COP SMART Mode	5,5 ~ 10,8	7,33 ~ 10,8	6,3 ~ 11,2	5,3 ~ 10,8	5,2 ~ 10,1	6 ~ 10,8	5,2 ~ 10,1
Energy Output ECO-Silence mode	3,5 kW	3,9 kW	4,2 kW	5,5 kW	6,5 kW	7,8 kW	10,5 kW
COP ECO-Silence Mode	10,8	10,8	11,2	10,8	10,1	10,8	10,1
Air 15°C / Water 26°C / Humidity 70 R**							
Energy Output BOOST mode	6,6 kW	7,8 kW	9,8 kW	11,5 kW	14,8 kW	18,2 kW	22,9 kW
COP BOOST Mode	5,2	5,6	4,7	4,4	4,5	4,4	4,2
Energy Output SMART mode	6,6 ~ 3,2 kW	7,8 ~ 3,5 kW	9,8 ~ 3,7 kW	11,5 ~ 4,2 kW	14,8 ~ 4,9 kW	18,2 ~ 6,8 kW	22,9 ~ 8,1 kW
COP SMART Mode	5,2 ~ 6,7	5,6 ~ 7,1	4,7 ~ 7,1	4,4 ~ 6,7	4,5 ~ 6,6	4,4 ~ 6,7	4,2 ~ 6,5
Energy Output ECO-Silence mode	3,2 kW	3,5 kW	3,7 kW	4,2 kW	4,9 kW	6,8 kW	8,1 kW
COP ECO-Silence Mode	6,7	7,1	7,1	6,7	6,6	6,7	6,5
Air 7°C / Water 26°C / Humidity 90%							
Energy Output BOOST mode	3,6 kW	4,9 kW	7,9 kW	9,0 kW	11,7 kW	15,0 kW	17,6 kW
COP BOOST Mode	3,7	3,6	3,8	3,8	3,8	3,7	3,7
Air -7°C / Water 26°C / Humidity 0%							
Energy Output BOOST mode	3,4 kW	4,7 kW	5,5 kW	6,8 kW	8,3 kW	9,7 kW	12,0 kW
COP BOOST Mode	2,8	3,9	3,6	2,8	3,0	3,0	2,8
Noise level min-max (at 10m) CTIM certified acc. to EN ISO 3741 : 2010 ***	22 ~ 28 dB(a)	26 ~ 30 dB(a)	26 ~ 31 dB(a)	27 ~ 33 dB(a)	27 ~ 34 dB(a)	28 ~ 35 dB(a)	28 ~ 35 dB(a)
Noise level min-max (at 10m) acc. to EN ISO 3744 : 2010	21 ~ 25 dB(a)	23 ~ 26 dB(a)	23 ~ 28 dB(a)	25 ~ 30 dB(a)	25 ~ 30 dB(a)	26 ~ 31 dB(a)	26 ~ 32 dB(a)
Temperature working range	-15°C -> 38°C						
Installation							
Hydraulic connections	1,5" / 50 mm						
Power	230V / 1~+N / 50 Hz						
Circuit breaker and cable size (for 20 m)	C 10 A (3G 2,5 mm²)	C 16 A (3G 2,5 mm²)	C 16 A (3G 2,5 mm²)	C 20 A 3G 4 mm²)	C 20 A (3G 4 mm²)	C 25 A (3G 4 mm²)	C 32 A (3G 6 mm²)
Power Input Max (air 28°C)	1,8 kW	2,0 kW	2,4 kW	3,4 kW	4,1 kW	4,6 kW	6,0 kW
Minimum water flow	3 m³/h	3 m³/h	4 m³/h	5 m³/h	6 m³/h	8 m³/h	10 m³/h
Dimensions in mm (L x l x h)	980 x 419 x 584	980 x 419 x 584	980 x 419 x 584	1080 x 479 x 707	1080 x 479 x 707	1178 x 525 x 569	1178 x 525 x 569
Weight net (gross)	46 kg (58 kg)	48 kg (59 kg)	48 kg (59 kg)	62 kg (72 kg)	63 kg (80 kg)	93 kg (111 kg)	94 kg (111 kg)

* May to September with cover. ** Tests run with air temperature of 59°F, water inlet temperature of 78.8°F and water outlet temperature of 82.4°F in order to define the required water flow, heating capacity and consumption. In accordance with FPP recommendations (French Pool Federation). ***The BOOST and ECO mode noise levels at 10.9 yards are certified by the independent testing laboratory of Centre de Transfert de Technologie du Mans (CTTM) according to EN ISO 3741 : 2010.

3-PHASE MODEL	Master-Inverter M Tri	Master-Inverter XM Tri	Master-Inverter L Tri	Master-Inverter L+Tri	Master-Inverter XL Tri
SCOP acc. to EN 17645	7,3	7,0	7,8	7,0	9,1
Classification acc. to EN 17645	A	A	A	A	A
Recommended pool size*	70-85 m³	85-105 m³	105-130 m³	130-160 m³	160-190 m³
Air 26°C / Water 26°C / Humidity 80%					
Energy Output BOOST mode	16,1 kW	20,4 kW	24,2 kW	27,8 kW	35,6 kW
COP BOOST Mode	5,3	5,2	6,0	5,2	5,6
Energy Output SMART mode	16,1 ~ 5,5 kW	20,4 ~ 6,5 kW	24,2 ~ 7,8 kW	27,8 ~ 10,5 kW	35,6 ~ 12,8 kW
COP SMART Mode	5,3 ~ 10,8	5,2 ~ 10,1	6 ~ 10,8	5,2 ~ 10,1	5,6 ~ 13
Energy Output ECO-Silence mode	5,5 kW	6,5 kW	7,8 kW	10,5 kW	12,8 kW
COP ECO-Silence Mode	10,8	10,1	10,8	10,1	13,0
Air 15°C / Water 26°C /Humidity 70 R**					
Energy Output BOOST mode	11,5 kW	14,8 kW	18,2 kW	22,9 kW	28,0 kW
COP BOOST Mode	4,4	4,5	4,4	4,2	4,7
Energy Output SMART mode	11,5 ~ 4,2 kW	14,8 ~ 4,9 kW	18,2 ~ 6,8 kW	22,9 ~ 8,1 kW	28 ~ 9,6 kW
COP SMART Mode	4,4 ~ 6,7	4,5 ~ 6,6	4,4 ~ 6,7	4,2 ~ 6,5	4,7 ~ 6,7
Energy Output ECO-Silence mode	4,2 kW	4,9 kW	6,8 kW	8,1 kW	9,6 kW
COP ECO-Silence Mode	6,7	6,6	6,7	6,5	6,7
Air 7°C / Water 26°C / Humidity 90%					
Energy Output BOOST mode	9,0 kW	11,7 kW	15,0 kW	17,6 kW	23,3 kW
COP BOOST Mode	3,8	3,8	4,2	3,69	4,2
Air -7°C / Water 26°C / Humidity 0%					
Energy Output BOOST mode	5,8 kW	8,3 kW	9,7 kW	12,0 kW	14,7 kW
COP BOOST Mode	2,8	3	2,98	2,81	2,9
Noise level min-max (at 10m) CTTM certified acc. to EN ISO 3741 : 2010 ***	27 ~ 33 dB(a)	27 ~ 33 dB(a)	28 ~ 34 dB(a)	28 ~ 34 dB(a)	35 ~ 41 dB(a)
Noise level min-max (at 10m) acc. to EN ISO 3744 : 2010	25 ~ 30 dB(a)	25 ~ 30 dB(a)	26 ~ 31 dB(a)	26 ~ 32 dB(a)	32 ~ 38 dB(a)
Temperature working range	-15°C -> 38°C				
Installation					
Hydraulic connections	1,5'' / 50 mm				
Power	400 V / 3~+N / 50 Hz				
Circuit breaker and cable size (for 20 m)	3P +N C16 (5G 2,5 mm²)	3P +N C16 (5G 2,5 mm²)	3P +N C20 (5G 2,5 mm²)	3P +N C20 (5G 2,5 mm²)	3P +N C20 (5G 2,5 mm²)
Power Input Max (air 28°C)	3,4 kW	4,1 kW	4,6 kW	6,0 kW	6,9 kW
Minimum water flow	5 m³/h	6 m³/h	8 m³/h	10 m³/h	12 m³/h
Dimensions in mm (L x l x h)	1080 x 479 x 707	1080 x 479 x 707	1178 x 525 x 569	1178 x 525 x 569	1167 x 498 x 1171
Weight net (gross)	62 kg (72 kg)	63 kg (80 kg)	93 kg (111 kg)	94 kg (111 kg)	123 kg (143 kg)

* May to September with cover. ** Tests run with air temperature of 59°F, water inlet temperature of 78.8°F and water outlet temperature of 82.4°F in order to define the required water flow, heating capacity and consumption. In accordance with FPP recommendations (French Pool Federation). ***The BOOST and ECO mode noise levels at 10.9 yards are certified by the independent testing laboratory of Centre de Transfert de Technologie du Mans (CTTM) according to EN ISO 3741 : 2010.