

MANTA A: Motoevaporating units for indoor installation, equipped with scroll compressors and plate evaporator
Cooling Capacity: 24,2÷ 617,0 kW



MAIN FEATURES

- Motoevaporating unit.
- 33 models available, for a wide selection opportunity.
- Average step of 25kW.
- EER up to 3,21
- Scroll compressors.
- R410A Refrigerant charge.
- Plate type heat exchangers.
- Suitable for indoor installation.

MAIN BENEFITS

- Units equipped with two, three scroll compressors for refrigerant circuit to reach a high efficiency.
- Units with single and double refrigerant circuits.
- Availability of partial and total heat recovery system.
- Easily of maintenance.
- Eurovent Certification.

INDOOR INSTALLATION

The machines are designed for indoor installation.

REMOTE CONDENSER

The units are designed to be matched with remote condensers with axial fans (TEAM MATE series) or plug-fan (TEAM MATE PF series).

REDUCED NOISE EMISSION

The machines are characterized by a low sound level guaranteed by the containing structure.

DOMESTIC HOT WATER

On request is possible to install the system for the domestic hot water production.

WORKING LIMITS IN COOLING MODE

Evaporator chilled water outlet temperature: -12÷20°C
Ambient temperature: -10÷45°C



MAIN COMPONENTS

FRAMEWORK

- Base, self supporting frame and panelling in steel plate with protective surfaces treatment in compliance with UNI ISO 9227/ASTMB117 and ISO 7253, and painted with epoxy powders.
- Colour: RAL 9002

COMPRESSORS

- Orbiting spiral (SCROLL) hermetic compressors with spiral profile optimized for R410A refrigerant.
- ON / OFF capacity control (0 / 100% each compressor).
- 2-pole 3-phase electric motor with direct on line starting.
- Phase sequence electronic relay.
- Crankcase heater.
- Electric motor thermal protection via internal winding temperature sensors.
- Rubber supports.

EVAPORATOR

- Copper brazed plate type with cover plates, plates and connections in AISI 316 stainless steel:
 - With single refrigerant circuit for S version machines.
 - With double refrigerant circuit for D version machines.
- Anticondensate insulation made of polyurethane.
- Temperature sensors on water inlet and outlet.
- Differential water pressure switch for water flow control.

REFRIGERANT CIRCUIT

Components for each refrigerant circuit:

- Thermostatic expansion valve up to model T 150 P2 included.
- Electronic expansion valve from model T 170 P4 included. The valve allows high performance and system efficiency thanks to a timely and accurate response to changes in temperature and pressure. The expansion valve is equipped with energy reserve to allow the closure of the valve in the event of lack of power supply.
- Sight glass.
- Electromagnetic valve on liquid line up to model T 150 P2 included. The electromagnetic valve is not installed when the electronic expansion valve is present.
- Filter dryer on liquid line.
- Service valves on liquid line and gas discharge.
- Safety valves on high and low pressure side.
- Pressure transducers with indication, control and protection functions, on low and high refrigerant pressure.
- High pressure safety switch with manual reset.
- Liquid receiver with safety valve and service valve.
- Valves on gas delivery and liquid return for coupling to remote air cooled condenser.
- 0÷10V proportional signal to manage the condensing control system of the remote air cooled condenser.
- Refrigerant circuit with copper tubing with anticondensate insulation of the suction line.
- Plastic capillary hoses for pressure sensors connection.
- R410A refrigerant charge.

ELECTRICAL PANEL

In accordance with EN60204-1 norms, suitable for indoor installation complete with:

- Main switch with door lock safety.
- Magnetothermic switch or fuses for each compressor.
- Contactors for each load.
- Transformer for auxiliary circuit and microprocessor supply.
- Panel with machine controls.
- Power supply 400/3/50.

CONTROL SYSTEM

- MP.COM microprocessor system with graphic display for control and monitor of operating and alarms status. The system includes:
 - Voltage free contact for remote general alarm.
 - Main components hour-meter.
 - Nonvolatile "Flash" memory for data storage.
 - Menu with protection password.
 - LAN connection.

HYDRAULIC CONNECTIONS OF HEAT EXCHANGERS

- The heat exchangers' threaded hydraulic connections are available up to a diameter of 3 " included, and correspond to ISO 228/1 – G M.
- The pipes' threaded hydraulic connections are available up to a diameter of 3 " included, and correspond to ISO 7/1 – R.
- The hydraulic connections with flange (FL) are not supplied with counter flange.
- The hydraulic connections with grooved end are not supplied with flexible joint (optional accessory).

TO BE MATCHED WITH REMOTE CONDENSER

The units are designed to be matched with remote condensers with axial fans (TEAM MATE series) or plug-fan (TEAM MATE PF series).



TEAM MATE
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TEAM MATE PF
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OPTIONAL ACCESSORIES

MANTIA	T 27 P1	T 30 P1	T 33 P1	T 40 P1	T 40 P2	T 40 P2	T 48 P2	T 48 P2	T 54 P2	T 54 P2	T 60 P2
SIZE	S	S	S	S	S	D	S	D	S	D	S
	J4	J4	J4	J4	J7						
TEAM MATE remote condensers	•	•	•	•	•	•	•	•	•	•	•
TEAM MATE PF remote condensers	•	•	•	•	•	•	•	•	•	•	•
172 - Rubber support (kit)	•	•	•	•	•	•	•	•	•	•	•
118 - Kit brine A	•	•	•	•	•	•	•	•	•	•	•
119 - Kit brine B	•	•	•	•	•	•	•	•	•	•	•
Evaporator flexible joint with adapter pipe (solder type)	-	-	-	-	-	-	-	-	-	-	-
Evaporator flexible joint with adapter for flange connection	-	-	-	-	-	-	-	-	-	-	-
450 - Desuperheater	•	•	•	•	•	-	•	•	•	-	•
450 - Desuperheater	•	•	•	•	•	-	•	-	•	-	•
451 - 100% heat recovery	•	•	•	•	•	•	•	•	•	•	•
Total heat recovery flexible joint with adapter pipe (solder type)	-	-	-	-	-	-	-	-	-	-	-
Total heat recovery flexible joint with adapter for flange connection	-	-	-	-	-	-	-	-	-	-	-
220 - Electronic expansion valve	•	•	•	•	•	•	•	•	•	•	•
605 - Compr. power factor capacitor - 0,9	-	-	-	-	-	-	•	•	•	•	•
Ambient temperature sensor	•	•	•	•	•	•	•	•	•	•	•
919 - Clock card	•	•	•	•	•	•	•	•	•	•	•
923 - RC-Com MBUS/JBUS Serial board	•	•	•	•	•	•	•	•	•	•	•
926 - LON Serial board	•	•	•	•	•	•	•	•	•	•	•
931 - BACnet Ethernet - SNMP - TCP/IP Serial board	•	•	•	•	•	•	•	•	•	•	•
932 - BACnet MS/TP Serial board	•	•	•	•	•	•	•	•	•	•	•
942 - Serial card for GSM Modem	•	•	•	•	•	•	•	•	•	•	•
943 - Data Logger	•	•	•	•	•	•	•	•	•	•	•
889 - Master plant SEQUENCER	•	•	•	•	•	•	•	•	•	•	•
962 - Kit modem GSM	•	•	•	•	•	•	•	•	•	•	•
957 - Plantwatch without modem	•	•	•	•	•	•	•	•	•	•	•
930 - Remote graphic terminal kit	•	•	•	•	•	•	•	•	•	•	•

MANTIA	T 60 P2	T 70 P2	T 70 P2	T 90 P2	T 90 P2	T 120 P2	T 120 P2	T 150 P2	T 150 P2	T 170 P4	T 175 P3
SIZE	D	S	D	S	D	S	D	S	D	D	S
	J7	J7	J7	J7	J7	J7	J7	J8	J8	J8	J8
TEAM MATE remote condensers	•	•	•	•	•	•	•	•	•	•	•
TEAM MATE PF remote condensers	•	•	•	•	•	•	•	•	•	•	•
172 - Rubber support (kit)	•	•	•	•	•	•	•	•	•	•	•
118 - Kit brine A	•	•	•	•	•	•	•	•	•	•	•
119 - Kit brine B	•	•	•	•	•	•	•	•	•	•	•
Evaporator flexible joint with adapter pipe (solder type)	-	-	-	•	•	•	•	•	•	•	•
Evaporator flexible joint with adapter for flange connection	-	-	-	•	•	•	•	•	•	•	•
450 - Desuperheater	-	•	-	•	-	•	-	•	•	•	•
450 - Desuperheater	-	•	-	•	•	•	•	•	•	•	•
451 - 100% heat recovery	•	•	•	•	•	•	•	•	•	•	•
Total heat recovery flexible joint with adapter pipe (solder type)	-	-	-	•	•	•	•	•	•	•	•
Total heat recovery flexible joint with adapter for flange connection	-	-	-	•	•	•	•	•	•	•	•
220 - Electronic expansion valve	•	•	•	•	•	•	•	•	•	•	-
605 - Compr. power factor capacitor - 0,9	•	•	•	•	•	•	•	•	•	•	•
Ambient temperature sensor	•	•	•	•	•	•	•	•	•	•	•
919 - Clock card	•	•	•	•	•	•	•	•	•	•	•
923 - RC-Com MBUS/JBUS Serial board	•	•	•	•	•	•	•	•	•	•	•
926 - LON Serial board	•	•	•	•	•	•	•	•	•	•	•
931 - BACnet Ethernet - SNMP - TCP/IP Serial board	•	•	•	•	•	•	•	•	•	•	•
932 - BACnet MS/TP Serial board	•	•	•	•	•	•	•	•	•	•	•
942 - Serial card for GSM Modem	•	•	•	•	•	•	•	•	•	•	•
943 - Data Logger	•	•	•	•	•	•	•	•	•	•	•
889 - Master plant SEQUENCER	•	•	•	•	•	•	•	•	•	•	•
962 - Kit modem GSM	•	•	•	•	•	•	•	•	•	•	•
957 - Plantwatch without modem	•	•	•	•	•	•	•	•	•	•	•
930 - Remote graphic terminal kit	•	•	•	•	•	•	•	•	•	•	•

• available accessory; - not available accessory

OPTIONAL ACCESSORIES

MANTAA	T 190 P4	T 200 P2	T 200 P2	T 220 P3	T 240 P4	T 290 P3	T 300 P4	T 340 P4	T 380 P4	T 460 P6	T 570 P6
	D J9	S J9	D J9	S J9	D J9	S J9	D J9	D J10	D J10	D J10	D J10
TEAM MATE remote condensers	•	•	•	•	•	•	•	•	•	•	•
TEAM MATE PF remote condensers	•	•	•	•	•	•	•	•	•	•	•
172 - Rubber support (kit)	•	•	•	•	•	•	•	•	•	•	•
118 - Kit brine A	•	•	•	•	•	•	•	•	•	•	•
119 - Kit brine B	•	•	•	•	•	•	•	•	•	•	•
Evaporator flexible joint with adapter pipe (solder type)	•	•	•	•	•	•	•	•	•	•	•
Evaporator flexible joint with adapter for flange connection	•	•	•	•	•	•	•	•	•	•	•
450 - Desuperheater	•	•	•	•	•	•	•	•	•	•	•
450 - Desuperheater	•	•	•	•	•	•	•	•	•	•	•
451 - 100% heat recovery	•	•	•	•	•	•	•	•	•	•	•
Total heat recovery flexible joint with adapter pipe (solder type)	•	•	•	•	•	•	•	•	•	•	•
Total heat recovery flexible joint with adapter for flange connection	•	•	•	•	•	•	•	•	•	•	•
220 - Electronic expansion valve	-	-	-	-	-	-	-	-	-	-	-
605 - Compr. power factor capacitor - 0,9	•	•	•	•	•	•	•	•	•	•	•
Ambient temperature sensor	•	•	•	•	•	•	•	•	•	•	•
919 - Clock card	•	•	•	•	•	•	•	•	•	•	•
923 - RC-Com MBUS/JBUS Serial board	•	•	•	•	•	•	•	•	•	•	•
926 - LON Serial board	•	•	•	•	•	•	•	•	•	•	•
931 - BACnet Ethernet - SNMP - TCP/IP Serial board	•	•	•	•	•	•	•	•	•	•	•
932 - BACnet MS/TP Serial board	•	•	•	•	•	•	•	•	•	•	•
942 - Serial card for GSM Modem	•	•	•	•	•	•	•	•	•	•	•
943 - Data Logger	•	•	•	•	•	•	•	•	•	•	•
889 - Master plant SEQUENCER	•	•	•	•	•	•	•	•	•	•	•
962 - Kit modem GSM	•	•	•	•	•	•	•	•	•	•	•
957 - Plantwatch without modem	•	•	•	•	•	•	•	•	•	•	•
930 - Remote graphic terminal kit	•	•	•	•	•	•	•	•	•	•	•

• available accessory; - not available accessory

TECHNICAL DATA MANTA A

MANTA A		T 27 P1	T 30 P1	T 33 P1	T 40 P1	T 40 P2	T 40 P2	T 48 P2	T 48 P2	
SIZE		S	S	S	S	S	D	S	D	
		J4	J4	J4	J4	J7	J7	J7	J7	
STANDARD	Cooling capacity (1)	kW	24,2	26,5	31,0	36,0	41,6	41,3	48,7	48,4
	Unit power input (*)	kW	8,4	9,9	10,6	12,3	14,4	14,2	16,7	16,7
	Evaporator water flow rate	m ³ /h	4,2	4,6	5,3	6,2	7,2	7,1	8,4	8,3
	Evaporator pressure drop	kPa	42	39	38	30	37	22	37	22
	Compressors		scroll	scroll						
	Quantity	n.	1	1	1	1	2	2	2	2
	Capacity steps	n.	1	1	1	1	2	2	2	2
	Refrigerant		R410A	R410A						
	Total refrigerant charge (optional excluded)	kg	5,2	5,2	5,3	5,6	6,0	10,1	8,7	10,4
	Gas circuits	n.	1	1	1	1	1	2	1	2
	Power supply	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
	Max unit operating current (FLA)	A	22	25	31	34	42	42	44	44
	Unit starting current (LRA)	A	118	118	140	173	132	132	140	140
	EER (1) (*)	kW/kW	2,89	2,68	2,92	2,93	2,89	2,91	2,92	2,90
	Sound power level [Lw] (2)	dB(A)	65,4	66,4	67,4	68,8	68,9	68,9	68,9	68,9
	Average sound pressure level [Lp _m] (3)	dB(A)	50,0	51,0	52,0	53,0	53,0	53,0	53,0	53,0
	Net weight	kg	240	245	250	285	410	420	415	425
	Hydraulic connections									
	Evaporator IN/OUT - ISO228/1-G M	Ø	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2"
	Evaporator IN/OUT - OD	Ø mm	--	--	--	--	--	--	--	--
Refrigerant connection										
Liquid return - ODS	n x Ø	1 x 16	1 x 16	1 x 16	1 x 16	1 x 16	2 x 16	1 x 22	2 x 16	
Gas delivery - ODS	n x Ø	1 x 18	1 x 18	1 x 18	1 x 18	1 x 18	2 x 18	1 x 22	2 x 18	
TEAM MATE	REMOTE CONDENSER - Quantity	n.	1	1	1	1	2	1	2	
	Series TEAM MATE STD	Mod.	M 35	M 35	M 45	M 50	M 60	M 30	M 70	M 35
	Nominal power input	kW	0,5	0,5	0,8	1,1	1,1	0,5	1,1	0,5
	Max operating current	A	2,9	2,9	3,6	5,7	5,7	2,9	5,7	2,9
	Power supply (**)	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
OPTIONAL	Partial heat recovery (4)									
	Heating capacity	kW	8,9	9,7	11,4	13,2	15,3	--	17,9	--
	Total heat recovery (5)									
Heating capacity	kW	32,9	37,1	42,0	48,6	55,3	54,9	65,0	64,4	
TEAM MATE LNO	MANTA A + TEAM MATE LNO									
	Cooling capacity (1)	kW	24,7	27,2	31,3	36,9	41,9	41,4	50,3	49,4
	Unit power input	kW	8,1	9,5	10,5	11,8	14,2	14,2	15,9	16,1
	EER (1) (*)	kW/kW	2,83	2,68	2,74	2,90	2,77	2,74	2,92	2,84
	REMOTE CONDENSER - Quantity	n.	1	1	1	1	1	2	1	2
	Series TEAM MATE STD	Mod.	M 45	M 45	M 50	M 70	M 70	M 35	M 95	M 45
	Nominal power input	kW	0,7	0,7	0,9	0,9	0,9	0,5	1,4	0,7
Power supply (**)	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	
TEAM MATE ELN	MANTA A + TEAM MATE ELN									
	Cooling capacity (1)	kW	24,0	26,3	30,4	36,0	40,6	40,1	49,0	48,1
	Unit power input	kW	8,5	10,0	10,9	12,4	14,9	14,9	16,5	16,9
	EER (1) (*)	kW/kW	2,66	2,49	2,61	2,74	2,59	2,56	2,78	2,67
	REMOTE CONDENSER - Quantity	n.	1	1	1	1	1	2	1	2
	Series TEAM MATE STD	Mod.	M 45	M 45	M 50	M 70	M 70	M 35	M 95	M 45
	Nominal power input	kW	0,6	0,6	0,8	0,8	0,8	0,4	1,1	0,6
Power supply (**)	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	
TEAM MATE PF STD	MANTA A + TEAM MATE PF STD									
	Cooling capacity (1)	kW	23,9	26,9	30,9	34,8	41,6	41,9	48,7	47,9
	Unit power input	kW	8,5	9,6	10,7	13,1	14,4	13,9	16,7	16,9
	EER (1) (*)	kW/kW	2,43	2,50	2,59	2,43	2,51	2,54	2,55	2,46
	REMOTE CONDENSER - Quantity	n.	1	1	1	1	1	2	1	2
	Series TEAM MATE STD	Mod.	T 33	T 38	T 44	T 44	T 58	T 33	T 69	T 33
	External static pressure	Pa	50	50	50	50	50	50	50	50
Nominal power input	kW	1,3	1,1	1,2	1,2	2,2	1,3	2,4	1,3	
Power supply (**)	V/Ph/Hz	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	
TEAM MATE PF LNO	MANTA A + TEAM MATE PF LNO									
	Cooling capacity (1)	kW	24,6	28,5	31,8	35,9	41,8	41,9	49,6	49,2
	Unit power input	kW	8,1	8,8	10,2	12,4	14,3	13,9	16,2	16,2
	EER (1) (*)	kW/kW	2,75	2,80	2,74	2,60	2,64	2,72	2,70	2,76
	REMOTE CONDENSER - Quantity	n.	1	1	1	1	1	2	1	2
	Series TEAM MATE STD	Mod.	T 44	T 58	T 58	T 58	T 69	T 38	T 86	T 44
	External static pressure	Pa	36	36	36	36	36	36	36	36
Nominal power input	kW	0,8	1,4	1,4	1,4	1,5	0,7	2,2	0,8	
Power supply (**)	V/Ph/Hz	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	
TEAM MATE PF ELN	MANTA A + TEAM MATE PF ELN									
	Cooling capacity (1)	kW	23,8	27,8	31,0	34,9	40,4	40,8	48,2	47,6
	Unit power input	kW	8,6	9,1	10,6	13,0	15,1	14,5	17,0	17,1
	EER (1) (*)	kW/kW	2,62	2,79	2,71	2,52	2,52	2,64	2,64	2,64
	REMOTE CONDENSER - Quantity	n.	1	1	1	1	1	2	1	2
	Series TEAM MATE STD	Mod.	T 44	T 58	T 58	T 58	T 69	T 38	T 86	T 44
	External static pressure	Pa	25	25	25	25	25	25	25	25
Nominal power input	kW	0,5	0,8	0,8	0,8	0,9	0,5	1,3	0,5	
Power supply (**)	V/Ph/Hz	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	

1. Referred to chilled water temperature 12/7°C; ambient temperature 35°C.

2. Sound power level [Lw] according to ISO EN 9614 - 2

3. Average sound pressure level [Lp_m] 1m far according to ISO EN 3744.

4. Referred to chilled water temperature 12/7°C; ambient temperature 35°C and recovery hot water temperature 40/45°C.

5. Referred to chilled water temperature 12/7°C and recovery hot water temperature 40/45°C.

(*) The value includes the remote condenser

(**) The remote condenser has separated power supply

(***) Remote condensers not available for this model. Value are referred to 45°C condensation temperature

TECHNICAL DATA MANTA A

MANTA A		T 54 P2	T 54 P2	T 60 P2	T 60 P2	T 70 P2	T 70 P2	T 90 P2	T 90 P2		
SIZE		S	D	S	D	S	D	S	D		
SIZE		J7	J7	J7	J7	J7	J7	J7	J7		
STANDARD	Cooling capacity (1)	kW	57,7	53,2	61,3	60,7	71,2	73,3	92,5	94,3	
	Unit power input (*)	kW	18,0	19,7	20,9	21,1	25,5	24,6	32,6	31,6	
	Evaporator water flow rate	m³/h	9,9	9,2	10,5	10,4	12,2	12,6	15,9	16,2	
	Evaporator pressure drop	kPa	41	20	35	22	40	23	36	23	
	Compressors		scroll								
	Quantity	n.	2	2	2	2	2	2	2	2	
	Capacity steps	n.	2	2	2	2	2	2	2	2	
	Refrigerant		R410A								
	Total refrigerant charge (optional excluded)	kg	9,7	10,4	9,7	10,4	10,1	11,4	14,6	18,9	
	Gas circuits	n.	1	2	1	2	1	2	1	2	
	Power supply	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	
	Max unit operating current (FLA)	A	50	50	62	62	68	68	80	80	
	Unit starting current (LRA)	A	143	143	171	171	207	207	265	265	
	EER (1) (*)	kW/kW	3,21	2,70	2,93	2,88	2,79	2,98	2,84	2,98	
	Sound power level [Lw] (2)	dB(A)	69,9	69,9	70,9	70,9	71,9	71,9	76,9	76,9	
	Average sound pressure level [LpM] (3)	dB(A)	54,0	54,0	55,0	55,0	56,0	56,0	61,0	61,0	
	Net weight	kg	420	430	420	440	425	450	666	695	
	Hydraulic connections										
	Evaporator IN/OUT - ISO228/1-G M	Ø	2"	2"	2"	2"	2"	2"	--	--	
	Evaporator IN/OUT - OD	Ø mm	--	--	--	--	--	--	76,1	76,1	
Refrigerant connection											
Liquid return - ODS	n x Ø	1 x 22	2 x 16	1 x 22	2 x 16	1 x 22	2 x 16	1 x 22	2 x 22		
Gas delivery - ODS	n x Ø	1 x 22	2 x 18	1 x 22	2 x 18	1 x 22	2 x 18	1 x 28	2 x 22		
TEAM MATE	REMOTE CONDENSER - Quantity	n.	1	2	1	2	1	2	1	2	
	Series TEAM MATE STD	Mod.	M 95	M 35	M 95	M 45	M 95	M 50	M 130	M 70	
	Nominal power input	kW	1,6	0,5	1,6	0,8	1,6	1,1	2,1	1,1	
	Max operating current	A	8,5	2,9	8,5	3,6	8,5	5,7	11,4	5,7	
	Power supply (**)	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	
OPTIONAL	Partial heat recovery (4)										
	Heating capacity	kW	21,2	--	22,5	--	26,1	--	33,9	--	
	Total heat recovery (5)										
Heating capacity	kW	74,0	72,9	82,3	82,5	95,9	96,9	124,0	123,0		
TEAM MATE LNO	MANTA A + TEAM MATE LNO										
	Cooling capacity (1)	kW	56,6	54,6	61,1	61,3	73,4	73,1	96,9	96,9	
	Unit power input	kW	18,6	18,9	21,0	20,9	24,2	24,7	30,2	30,3	
	EER (1) (*)	kW/kW	2,84	2,70	2,73	2,70	2,82	2,75	2,95	2,94	
	REMOTE CONDENSER - Quantity	n.	1	2	1	2	1	2	1	2	
	Series TEAM MATE STD	Mod.	M 95	M 45	M 110	M 50	M 130	M 60	T 185	M 95	
	Nominal power input	kW	1,4	0,7	1,4	0,9	1,8	0,9	2,7	1,4	
	Power supply (**)	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	400-3-50+N	230/1/50	
	TEAM MATE ELN	MANTA A + TEAM MATE ELN									
		Cooling capacity (1)	kW	54,9	52,8	59,3	59,7	71,6	70,9	94,9	94,8
Unit power input		kW	19,5	19,9	22,0	21,7	25,3	25,9	31,3	31,4	
EER (1) (*)		kW/kW	2,66	2,51	2,57	2,57	2,67	2,59	2,83	2,82	
REMOTE CONDENSER - Quantity		n.	1	2	1	2	1	2	1	2	
Series TEAM MATE STD		Mod.	M 95	M 45	M 110	M 50	M 130	M 60	T 185	M 95	
Nominal power input		kW	1,1	0,6	1,1	0,8	1,5	0,8	2,2	1,1	
Power supply (**)		V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	400-3-50+N	230/1/50	
TEAM MATE PF STD		MANTA A + TEAM MATE PF STD									
		Cooling capacity (1)	kW	57,0	54,1	60,5	60,5	76,2	70,7	95,0	94,3
	Unit power input	kW	18,4	19,2	21,4	21,2	22,6	26,1	31,2	31,7	
	EER (1) (*)	kW/kW	2,62	2,52	2,45	2,55	2,54	2,47	2,46	2,58	
	REMOTE CONDENSER - Quantity	n.	1	2	1	2	1	2	1	2	
	Series TEAM MATE STD	Mod.	T 86	T 38	T 86	T 44	T 144	T 44	T 144	T 69	
	External static pressure	Pa	50	50	50	50	50	50	50	50	
	Nominal power input	kW	3,3	1,1	3,3	1,2	7,4	1,2	7,4	2,4	
	Power supply (**)	V/Ph/Hz	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	
	TEAM MATE PF LNO	MANTA A + TEAM MATE PF LNO									
Cooling capacity (1)		kW	59,4	57,2	63,2	62,3	75,0	73,1	92,9	95,8	
Unit power input		kW	17,1	17,5	19,9	20,3	23,3	24,7	32,4	30,9	
EER (1) (*)		kW/kW	2,87	2,82	2,69	2,70	2,68	2,66	2,50	2,72	
REMOTE CONDENSER - Quantity		n.	1	2	1	2	1	2	1	2	
Series TEAM MATE STD		Mod.	T 114	T 58	T 114	T 58	T 144	T 58	T 144	T 86	
External static pressure		Pa	36	36	36	36	36	36	36	36	
Nominal power input		kW	3,6	1,4	3,6	1,4	4,7	1,4	4,7	2,2	
Power supply (**)		V/Ph/Hz	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	
TEAM MATE PF ELN		MANTA A + TEAM MATE PF ELN									
	Cooling capacity (1)	kW	58,1	55,9	61,7	60,7	73,2	70,9	89,8	93,4	
	Unit power input	kW	17,8	18,2	20,7	21,2	24,3	25,9	34,1	32,1	
	EER (1) (*)	kW/kW	2,92	2,81	2,71	2,65	2,71	2,57	2,44	2,69	
	REMOTE CONDENSER - Quantity	n.	1	2	1	2	1	2	1	2	
	Series TEAM MATE STD	Mod.	T 114	T 58	T 114	T 58	T 144	T 58	T 144	T 86	
	External static pressure	Pa	25	25	25	25	25	25	25	25	
	Nominal power input	kW	2,1	0,8	2,1	0,8	2,8	0,8	2,8	1,3	
	Power supply (**)	V/Ph/Hz	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	380-480/3/50-60	

1. Referred to chilled water temperature 12/7°C; ambient temperature 35°C.
 2. Sound power level [Lw] according to ISO 9614 - 2
 3. Average sound pressure level [LpM] 1m far according to ISO EN 3744.
 4. Referred to chilled water temperature 12/7°C; ambient temperature 35°C and recovery hot water temperature 40/45°C.
 5. Referred to chilled water temperature 12/7°C and recovery hot water temperature 40/45°C.
 (*) The value includes the remote condenser
 (**) The remote condenser has separated power supply
 (***) Remote condensers not available for this model. Value are referred to 45°C condensation temperature

TECHNICAL DATA MANTA A

MANTA A		T 120 P2	T 120 P2	T 150 P2	T 150 P2	T 170 P4	T 175 P3	T 190 P4	T 200 P2	
SIZE		S	D	S	D	D	S	D	S	
		J7	J7	J8	J8	J8	J8	J9	J9	
STANDARD	Cooling capacity (1)	kW	120,0	118,0	152,0	149,0	176,0	175,0	194,0	192,0
	Unit power input (*)	kW	39,2	39,1	51,4	51,9	56,9	59,8	66,3	66,6
	Evaporator water flow rate	m ³ /h	20,5	20,3	26,1	25,6	30,3	30,1	33,4	33,0
	Evaporator pressure drop	kPa	40	31	37	33	33	44	25	34
	Compressors		scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll
	Quantity	n.	2	2	2	2	4	2	4	2
	Capacity steps	n.	2	2	2	2	4	3	4	2
	Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Total refrigerant charge (optional excluded)	kg	22,0	26,6	22,8	28,3	22,7	24,9	29,0	27,0
	Gas circuits	n.	1	2	1	2	2	1	2	1
	Power supply	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
	Max unit operating current (FLA)	A	97	97	131	131	148	146	160	164
	Unit starting current (LRA)	A	321	321	375	375	333	369	345	466
	EER (1) (*)	kW/kW	3,06	3,02	2,96	2,87	3,09	2,93	2,93	2,88
	Sound power level [Lw] (2)	dB(A)	80,1	80,1	81,0	81,0	81,0	82,8	81,0	81,0
	Average sound pressure level [Lp _m] (3)	dB(A)	64,0	64,0	64,0	64,0	64,0	65,8	64,0	64,0
	Net weight	kg	715	725	940	955	1055	1070	1215	990
	Hydraulic connections									
Evaporator IN/OUT - ISO228/1-G M	Ø	--	--	--	--	--	--	--	--	
Evaporator IN/OUT - OD	Ø mm	76,1	76,1	76,1	76,1	76,1	76,1	88,9	88,9	
Refrigerant connection										
Liquid return - ODS	n x Ø	1 x 28	2 x 22	1 x 35	2 x 22	2 x 28	1 x 35	2 x 28	1 x 35	
Gas delivery - ODS	n x Ø	1 x 28	2 x 22	1 x 35	2 x 22	2 x 28	1 x 35	2 x 28	1 x 35	
TEAM MATE	REMOTE CONDENSER - Quantity	n.	1	2	1	2	2	1	2	1
	Series TEAM MATE STD	Mod.	T 185	M 95	T 210	M 110	M 130	T 250	M 130	T 250
	Nominal power input	kW	3,2	1,6	3,2	1,6	2,1	4,2	2,1	4,2
	Max operating current	A	17,1	8,5	17,1	8,5	11,4	22,8	11,4	22,8
Power supply (**)	V/Ph/Hz	400/3/50+N	230/1/50	400/3/50+N	230/1/50	230/1/50	400/3/50+N	230/1/50	400/3/50+N	
OPTIONAL	Partial heat recovery (4)									
	Heating capacity	kW	43,9	--	55,8	54,7	64,7	64,2	71,4	70,5
	Total heat recovery (5)									
Heating capacity	kW	156,0	155,0	204,0	202,0	233,0	235,0	265,0	262,0	
MANTA A + TEAM MATE LNO										
TEAM MATE LNO	Cooling capacity (1)	kW	120,0	118,0	153,0	154,0	176,0	174,0	205,0	191,0
	Unit power input	kW	39,0	39,3	50,7	49,4	56,9	60,2	61,3	67,1
	EER (1) (*)	kW/kW	2,88	2,81	2,82	2,91	2,91	2,73	3,07	2,70
	REMOTE CONDENSER - Quantity	n.	1	2	1	2	2	1	2	1
	Series TEAM MATE STD	Mod.	T 210	M 110	T 250	M 140	M 140	T 280	T 185	T 280
	Nominal power input	kW	2,7	1,4	3,6	1,8	1,8	3,6	2,7	3,6
Power supply (**)	V/Ph/Hz	400/3/50+N	230/1/50	400/3/50+N	230/1/50	230/1/50	400/3/50+N	400/3/50+N	400/3/50+N	
MANTA A + TEAM MATE ELN										
TEAM MATE ELN	Cooling capacity (1)	kW	117,0	115,0	150,0	150,0	171,0	169,0	200,0	185,0
	Unit power input	kW	40,6	40,9	52,8	51,6	59,6	63,0	63,5	70,8
	EER (1) (*)	kW/kW	2,73	2,67	2,69	2,75	2,73	2,56	2,94	2,51
	REMOTE CONDENSER - Quantity	n.	1	2	1	2	2	1	2	1
	Series TEAM MATE STD	Mod.	T 210	M 110	T 250	M 140	M 140	T 280	T 185	T 280
	Nominal power input	kW	2,2	1,1	3,0	1,5	1,5	3,0	2,2	3,0
Power supply (**)	V/Ph/Hz	400/3/50+N	230/1/50	400/3/50+N	230/1/50	230/1/50	400/3/50+N	400/3/50+N	400/3/50+N	
MANTA A + TEAM MATE PF STD										
TEAM MATE PF STD	Cooling capacity (1)	kW	114,0	117,0	163,0	154,0	177,0	186,0	200,0	209,0
	Unit power input	kW	42,1	39,9	46,0	49,1	56,4	54,0	63,4	58,5
	EER (1) (*)	kW/kW	2,30	2,51	3,54	2,55	2,62	3,44	2,56	3,57
	REMOTE CONDENSER - Quantity	n.	1	2	-- (***)	2	2	-- (***)	2	-- (***)
	Series TEAM MATE STD	Mod.	T 144	T 86	-- (***)	T 114	T 114	-- (***)	T 144	-- (***)
	External static pressure	Pa	50	50	-- (***)	50	50	-- (***)	50	-- (***)
	Nominal power input	kW	7,4	3,3	-- (***)	5,6	5,6	-- (***)	7,4	-- (***)
	Power supply (**)	V/Ph/Hz	380-480/3/50-60	380-480/3/50-60	-- (***)	380-480/3/50-60	380-480/3/50-60	-- (***)	380-480/3/50-60	-- (***)
MANTA A + TEAM MATE PF LNO										
TEAM MATE PF LNO	Cooling capacity (1)	kW	126,0	121,0	163,0	154,0	177,0	186,0	195,0	209,0
	Unit power input	kW	36,0	37,5	46,0	49,2	56,5	54,0	65,8	58,5
	EER (1) (*)	kW/kW	3,50	2,71	3,54	2,63	2,69	3,44	2,59	3,57
	REMOTE CONDENSER - Quantity	n.	-- (***)	2	-- (***)	2	2	-- (***)	2	-- (***)
	Series TEAM MATE STD	Mod.	-- (***)	T 114	-- (***)	T 144	T 144	-- (***)	T 144	-- (***)
	External static pressure	Pa	-- (***)	36	-- (***)	36	36	-- (***)	36	-- (***)
	Nominal power input	kW	-- (***)	3,6	-- (***)	4,7	4,7	-- (***)	4,7	-- (***)
	Power supply (**)	V/Ph/Hz	-- (***)	380-480/3/50-60	-- (***)	380-480/3/50-60	380-480/3/50-60	-- (***)	380-480/3/50-60	-- (***)
MANTA A + TEAM MATE PF ELN										
TEAM MATE PF ELN	Cooling capacity (1)	kW	126,0	119,0	163,0	150,0	172,0	186,0	188,0	209,0
	Unit power input	kW	36,0	38,8	46,0	51,2	59,1	54,0	69,5	58,5
	EER (1) (*)	kW/kW	3,50	2,77	3,54	2,64	2,66	3,44	2,51	3,57
	REMOTE CONDENSER - Quantity	n.	-- (***)	2	-- (***)	2	2	-- (***)	2	-- (***)
	Series TEAM MATE STD	Mod.	-- (***)	T 114	-- (***)	T 144	T 144	-- (***)	T 144	-- (***)
	External static pressure	Pa	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)
	Nominal power input	kW	-- (***)	2,1	-- (***)	2,8	2,8	-- (***)	2,8	-- (***)
	Power supply (**)	V/Ph/Hz	-- (***)	380-480/3/50-60	-- (***)	380-480/3/50-60	380-480/3/50-60	-- (***)	380-480/3/50-60	-- (***)

1. Referred to chilled water temperature 12/7°C; ambient temperature 35°C.
2. Sound power level [Lw] according to ISO EN 9614 - 2
3. Average sound pressure level [Lp_m] 1m far according to ISO EN 3744.
4. Referred to chilled water temperature 12/7°C; ambient temperature 35°C and recovery hot water temperature 40/45°C.
5. Referred to chilled water temperature 12/7°C and recovery hot water temperature 40/45°C.

(*) The value includes the remote condenser

(**) The remote condenser has separated power supply

(***) Remote condensers not available for this model. Value are referred to 45°C condensation temperature

TECHNICAL DATA MANTA A

MANTA A		T 200 P2	T 220 P3	T 240 P4	T 290 P3	T 300 P4	T 340 P4	T 380 P4	T 460 P6	
SIZE		D	S	D	S	D	D	D	D	
		J9	J9	J9	J9	J9	J10	J10	J10	
STANDARD	Cooling capacity (1)	kW	192,0	228,0	242,0	311,0	299,0	349,0	378,0	491,0
	Unit power input (*)	kW	67,4	80,3	78,5	87,7	103,0	115,0	133,0	138,0
	Evaporator water flow rate	m³/h	32,9	39,1	41,5	53,4	51,3	60,0	65,0	84,3
	Evaporator pressure drop	kPa	39	39	49	43	54	55	48	55
	Compressors		scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll
	Quantity	n.	2	3	4	3	4	4	4	6
	Capacity steps	n.	2	3	4	3	4	4	4	6
	Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Total refrigerant charge (optional excluded)	kg	30,9	27,7	32,7	31,4	48,3	49,4	55,3	56,7
	Gas circuits	n.	2	1	2	1	2	2	2	2
	Power supply	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
	Max unit operating current (FLA)	A	164	197	246	194	262	295	328	393
	Unit starting current (LRA)	A	466	441	584	418	507	597	630	637
	EER (1) (*)	kW/kW	2,85	2,84	3,08	3,55	2,90	3,03	2,84	3,56
	Sound power level [Lw] (2)	dB(A)	81,0	82,8	84,1	82,8	84,1	84,5	84,5	86,3
	Average sound pressure level [Lpm] (3)	dB(A)	64,0	65,8	67,0	65,8	67,0	67,0	67,0	68,8
	Net weight	kg	1015	1205	1430	1265	1455	1515	1580	2027
	Hydraulic connections									
	Evaporator IN/OUT - ISO228/1-G M	Ø	--	--	--	--	--	--	--	--
	Evaporator IN/OUT - OD	Ø mm	88,9	88,9	88,9	88,9	88,9	88,9	88,9	88,9
Refrigerant connection										
Liquid return - ODS	n x Ø	2 x 28	1 x 35	2 x 28	1 x 42	2 x 35	2 x 35	2 x 35	2 x 35	
Gas delivery - ODS	n x Ø	2 x 28	1 x 42	2 x 28	1 x 42	2 x 35	2 x 35	2 x 35	2 x 42	
TEAM MATE	REMOTE CONDENSER - Quantity	n.	2	1	2	-- (***)	2	2	2	-- (***)
	Series TEAM MATE STD	Mod.	M 130	T 280	T 185	-- (***)	T 210	T 250	T 250	-- (***)
	Nominal power input	kW	2,1	4,2	3,2	-- (***)	3,2	4,2	4,2	-- (***)
	Max operating current	A	11,4	22,8	17,1	-- (***)	17,1	22,8	22,8	-- (***)
	Power supply (**)	V/Ph/Hz	230/1/50	400/3/50+N	400/3/50+N	-- (***)	400/3/50+N	400/3/50+N	400/3/50+N	-- (***)
OPTIONAL	Partial heat recovery (4)									
	Heating capacity	kW	70,3	83,5	88,7	114,0	110,0	128,0	139,0	180,0
	Total heat recovery (5)									
Heating capacity	kW	263,0	302,0	320,0	391,0	404,0	465,0	517,0	618,0	
TEAM MATE LNO	MANTA A + TEAM MATE LNO									
	Cooling capacity (1)	kW	201,0	250,0	242,0	311,0	306,0	348,0	376,0	491,0
	Unit power input	kW	62,4	69,0	78,1	87,7	99,0	116,0	134,0	138,0
	EER (1) (*)	kW/kW	2,96	3,62	2,90	3,55	2,88	2,82	2,66	3,56
	REMOTE CONDENSER - Quantity	n.	2	-- (***)	2	-- (***)	2	2	2	-- (***)
	Series TEAM MATE STD	Mod.	T 185	-- (***)	T 210	-- (***)	T 280	T 280	T 280	-- (***)
	Nominal power input	kW	2,7	-- (***)	2,7	-- (***)	3,6	3,6	3,6	-- (***)
Power supply (**)	V/Ph/Hz	400/3/50+N	-- (***)	400/3/50+N	-- (***)	400/3/50+N	400/3/50+N	400/3/50+N	-- (***)	
TEAM MATE ELN	MANTA A + TEAM MATE ELN									
	Cooling capacity (1)	kW	197,0	250,0	236,0	311,0	298,0	337,0	363,0	491,0
	Unit power input	kW	64,5	69,0	81,4	87,7	103,0	121,0	141,0	138,0
	EER (1) (*)	kW/kW	2,86	3,62	2,75	3,55	2,74	2,65	2,47	3,56
	REMOTE CONDENSER - Quantity	n.	2	-- (***)	2	-- (***)	2	2	2	-- (***)
	Series TEAM MATE STD	Mod.	T 185	-- (***)	T 210	-- (***)	T 280	T 280	T 280	-- (***)
	Nominal power input	kW	2,2	-- (***)	2,2	-- (***)	3,0	3,0	3,0	-- (***)
Power supply (**)	V/Ph/Hz	400/3/50+N	-- (***)	400/3/50+N	-- (***)	400/3/50+N	400/3/50+N	400/3/50+N	-- (***)	
TEAM MATE PF STD	MANTA A + TEAM MATE PF STD									
	Cooling capacity (1)	kW	197,0	250,0	254,0	311,0	320,0	370,0	410,0	491,0
	Unit power input	kW	64,5	69,0	72,1	87,7	91,9	104,0	117,0	138,0
	EER (1) (*)	kW/kW	2,48	3,62	3,52	3,55	3,48	3,56	3,50	3,56
	REMOTE CONDENSER - Quantity	n.	2	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)
	Series TEAM MATE STD	Mod.	T 144	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)
	External static pressure	Pa	50	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)
Nominal power input	kW	7,4	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	
Power supply (**)	V/Ph/Hz	380-480/3/50-60	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	
TEAM MATE PF LNO	MANTA A + TEAM MATE PF LNO									
	Cooling capacity (1)	kW	210,0	250,0	254,0	311,0	320,0	370,0	410,0	491,0
	Unit power input	kW	58,5	69,0	72,1	87,7	91,9	104,0	117,0	138,0
	EER (1) (*)	kW/kW	3,59	3,62	3,52	3,55	3,48	3,56	3,50	3,56
	REMOTE CONDENSER - Quantity	n.	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)
	Series TEAM MATE STD	Mod.	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)
	External static pressure	Pa	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)
Nominal power input	kW	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	
Power supply (**)	V/Ph/Hz	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	
TEAM MATE PF ELN	MANTA A + TEAM MATE PF ELN									
	Cooling capacity (1)	kW	210,0	250,0	254,0	311,0	320,0	370,0	410,0	491,0
	Unit power input	kW	58,5	69,0	72,1	87,7	91,9	104,0	117,0	138,0
	EER (1) (*)	kW/kW	3,59	3,62	3,52	3,55	3,48	3,56	3,50	3,56
	REMOTE CONDENSER - Quantity	n.	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)
	Series TEAM MATE STD	Mod.	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)
	External static pressure	Pa	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)
Nominal power input	kW	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	
Power supply (**)	V/Ph/Hz	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	-- (***)	

1. Referred to chilled water temperature 12/7°C; ambient temperature 35°C.
 2. Sound power level [Lw] according to ISO EN 9614 - 2
 3. Average sound pressure level [Lp_m] 1m far according to ISO EN 3744.
 4. Referred to chilled water temperature 12/7°C; ambient temperature 35°C and recovery hot water temperature 40/45°C.
 5. Referred to chilled water temperature 12/7°C and recovery hot water temperature 40/45°C.
- (*) The value includes the remote condenser
(**) The remote condenser has separated power supply
(***) Remote condensers not available for this model. Value are referred to 45°C condensation temperature

TECHNICAL DATA MANTA A

MANTA A		T 570 P6	
SIZE		D J10	
STANDARD	Cooling capacity (1)	kW	617,0
	Unit power input (*)	kW	175,0
	Evaporator water flow rate	m ³ /h	106,0
	Evaporator pressure drop	kPa	75
	Compressors		scroll
	Quantity	n.	6
	Capacity steps	n.	6
	Refrigerant		R410A
	Total refrigerant charge (optional excluded)	kg	62,6
	Gas circuits	n.	2
	Power supply	V/Ph/Hz	400/3/50
	Max unit operating current (FLA)	A	492
	Unit starting current (LRA)	A	794
	EER (1) (*)	kW/kW	3,53
	Sound power level [Lw] (2)	dB(A)	86,3
	Average sound pressure level [Lp _m] (3)	dB(A)	68,8
	Net weight	kg	2053
	Hydraulic connections		
	Evaporator IN/OUT - ISO228/1-G M	Ø	--
	Evaporator IN/OUT - OD	Ø mm	88,9
Refrigerant connection			
Liquid return - ODS	n x Ø	2 x 42	
Gas delivery - ODS	n x Ø	2 x 42	
TEAM MATE	REMOTE CONDENSER - Quantity	n.	-- (***)
	Series TEAM MATE STD	Mod.	-- (***)
	Nominal power input	kW	-- (***)
	Max operating current	A	-- (***)
	Power supply (**)	V/Ph/Hz	-- (***)
OPTIONAL	Partial heat recovery (4)		
	Heating capacity	kW	227,0
	Total heat recovery (5)		
	Heating capacity	kW	776,0
TEAM MATE LNO	MANTA A + TEAM MATE LNO		
	Cooling capacity (1)	kW	617,0
	Unit power input	kW	175,0
	EER (1) (*)	kW/kW	3,53
	REMOTE CONDENSER - Quantity	n.	-- (***)
	Series TEAM MATE STD	Mod.	-- (***)
	Nominal power input	kW	-- (***)
Power supply (**)	V/Ph/Hz	-- (***)	
TEAM MATE ELN	MANTA A + TEAM MATE ELN		
	Cooling capacity (1)	kW	617,0
	Unit power input	kW	175,0
	EER (1) (*)	kW/kW	3,53
	REMOTE CONDENSER - Quantity	n.	-- (***)
	Series TEAM MATE STD	Mod.	-- (***)
	Nominal power input	kW	-- (***)
Power supply (**)	V/Ph/Hz	-- (***)	
TEAM MATE PF STD	MANTA A + TEAM MATE PF STD		
	Cooling capacity (1)	kW	617,0
	Unit power input	kW	175,0
	EER (1) (*)	kW/kW	3,53
	REMOTE CONDENSER - Quantity	n.	-- (***)
	Series TEAM MATE STD	Mod.	-- (***)
	External static pressure	Pa	-- (***)
Nominal power input	kW	-- (***)	
Power supply (**)	V/Ph/Hz	-- (***)	
TEAM MATE PF LNO	MANTA A + TEAM MATE PF LNO		
	Cooling capacity (1)	kW	617,0
	Unit power input	kW	175,0
	EER (1) (*)	kW/kW	3,53
	REMOTE CONDENSER - Quantity	n.	-- (***)
	Series TEAM MATE STD	Mod.	-- (***)
	External static pressure	Pa	-- (***)
Nominal power input	kW	-- (***)	
Power supply (**)	V/Ph/Hz	-- (***)	
TEAM MATE PF ELN	MANTA A + TEAM MATE PF ELN		
	Cooling capacity (1)	kW	617,0
	Unit power input	kW	175,0
	EER (1) (*)	kW/kW	3,53
	REMOTE CONDENSER - Quantity	n.	-- (***)
	Series TEAM MATE STD	Mod.	-- (***)
	External static pressure	Pa	-- (***)
Nominal power input	kW	-- (***)	
Power supply (**)	V/Ph/Hz	-- (***)	

1. Referred to chilled water temperature 12/7°C; ambient temperature 35°C.

2. Sound power level [Lw] according to ISO EN 9614 - 2

3. Average sound pressure level [Lp_m] 1m far according to ISO EN 3744.

4. Referred to chilled water temperature 12/7°C; ambient temperature 35°C and recovery hot water temperature 40/45°C.

5. Referred to chilled water temperature 12/7°C and recovery hot water temperature 40/45°C.

(*) The value includes the remote condenser

(**) The remote condenser has separated power supply

(***) Remote condensers not available for this model. Value are referred to 45°C condensation temperature

DIMENSIONS (mm)

	a	b	c
J4	1000	650	1400
J7	1200	750	1700
J8	1800	1200	1740
J9	1800	1200	1740
J10	1800	1800	1740

