

Data Book

DB_MEDR_092022_EN_rev01

MEDR 13-163 kW

Air cooled condensers for IT Cooling with axial fans. Outdoor installation.



Unit image is indicative and may vary by model

- ALUMINUM STRUCTURE FOR OUTDOOR INSTALLATION
- TUBE AND FINS HEAT EXCHANGER
- AXIAL FANS WITH MOTORS ELECTRIC AC OR EC
- 2 NOISE LEVELS
- OPERATION WITH OUTDOOR TEMPERATURE UP TO 45°C
- POWER SUPPLY 50HZ AND 60HZ

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CERTIFICATIONS

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CERTIFICATION ISO 9001 Quality Management System



CERTIFICATION ISO 14001 Quality Management System



CERTIFICATION BS OHSAS 18001 Workplace Health and Safety Management System



MARKING CE



RoHS 2011/65/EU



CERTIFICATION CCC - CQC (People's Republic of China)

Air Conditioners for IT Cooling FULL INVERTER

Heat sinks for IT Cooling equipped with axial fans with horizontal or vertical air flow.

Air flow from coil to fan. Machines are made for outdoor installation.

All-aluminum construction particularly suitable for outdoor installation. The construction solution allows high application flexibility.

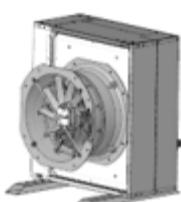
2 Series with 9 models with capacities from 13 to 163 kW. The series have power supply independent of the indoor unit.

Hydraulic and electrical connection of proportional fan speed control signal and alarms are required between the indoor unit and the heat sink.

PRODUCT FEATURES AND SELLING POINTS

- Adaptable to any type of system;
- Full magnesium aluminum alloy structure;
- Power supply independent of indoor unit;
- Available for 50Hz or 60Hz power supply;
- Models with 1/2/3 fans - horizontal air flow from coil to fan. Vertical air flow on request;
- Models with 4/6 fans - vertical air flow from coil to fan;
- 2 noise levels and high operating silence suitable for applications in urban areas;
- Electrical panel with line disconnect switch on board the machine;
- Fans with AC or EC electric motors;
- High efficiency fans in line with Erp2020.

MODEL IDENTIFICATION



MEDR-TF-SL-A 015

MEDR Dry Cooler

TF Coil Type
TF = Tube & fins

SL Acoustic enclosure
[] = Standard
SL = Low Noise

A Fan electric motor
A = AC electric motor
E = EC electric motor

015 Model code identify the cooling power (kW)



PRODUCT FEATURES

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AVAILABLE SERIES



MEDR-TF-A Dry Cooler with AC fan
Standard acoustic enclosure
230/1/50 power supply for all models



MEDR-TF-SL-A Dry Cooler with AC fan
Low noise acoustic enclosure
230/1/50 power supply for all models

MEDR-TF-E Dry Cooler with EC fan
Standard acoustic enclosure
Single-phase power supply for model 014
Three-phase power supply for other models

MEDR-TF-SL-E Dry Cooler with EC fan
Low noise acoustic enclosure
Single-phase power supply for model 014
Three-phase power supply for other models

OPERATING LIMITS

TEMPERATURE LIQUID TO COOL

-10°C	Minimum temperature of the liquid.
60°C	Maximum temperature of the liquid.

EXTERNAL AIR TEMPERATURE

-15°C	Minimum temperature external air.
45°C	Maximum temperature external air.

HYDRAULIC CIRCUIT

10 Bar	Maximum operation pressure for the hydraulic circuit.
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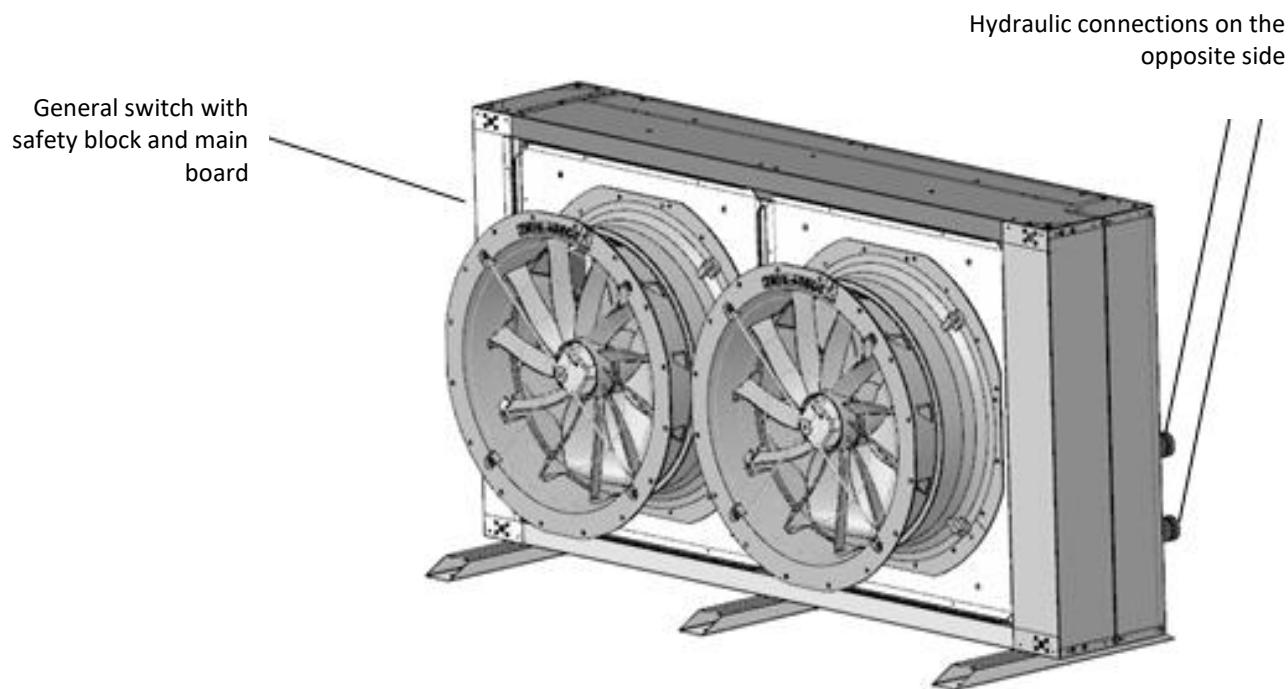
POWER SUPPLY

230 V ± 10%	Maximum tolerance of supply voltage for AC fan version.
200 V ÷ 277 V	Supply voltage range for single-phase versions with EC fan.
380V ÷ 480 V	Supply voltage range for three-phase versions with EC fans.
50 Hz / 60 Hz	Power supply frequency for all versions with EC fan.
± 2%	Maximum unbalance between phases (only for fans with EC motor).

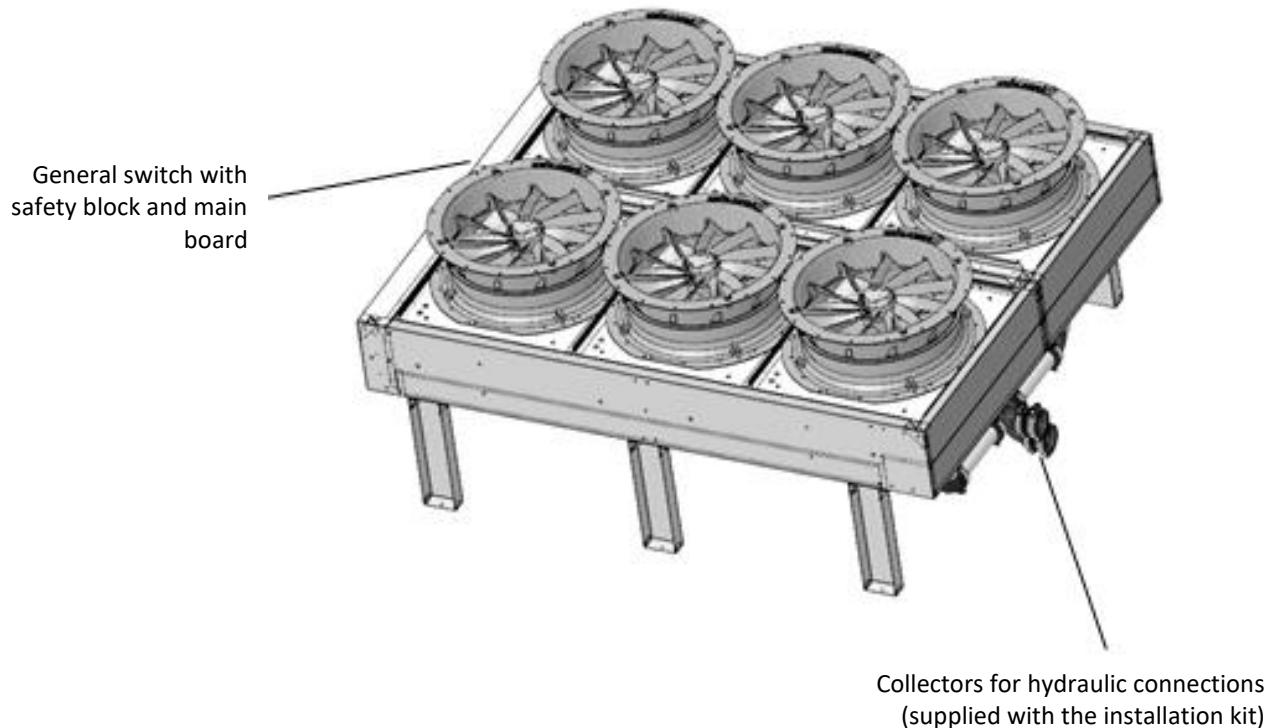
TRANSPORT AND STORAGE TEMPERATURE

During transportation and if the machine is not installed upon receipt, place it in its packaging in a closed, dry and sunlight-protected environment at a temperature between -40°C and 60°C in the absence of surface condensation.

MODEL WITH 1/2/3 FANS



MODEL WITH 4/6 FANS



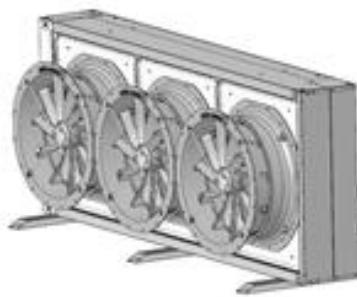
MODELS

MEDR-TF

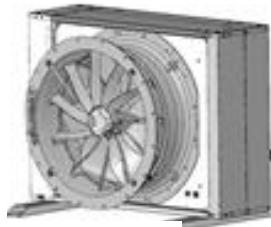
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Model 014



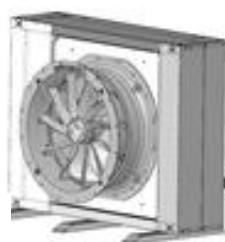
Model 082



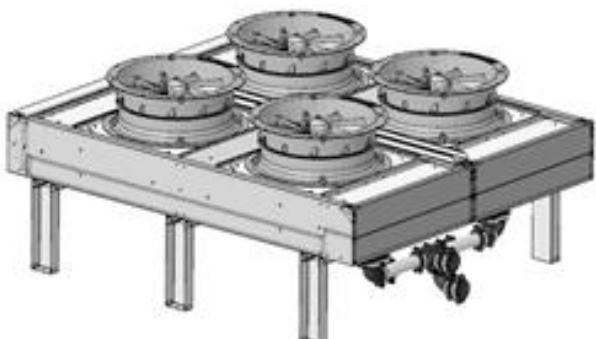
Model 026



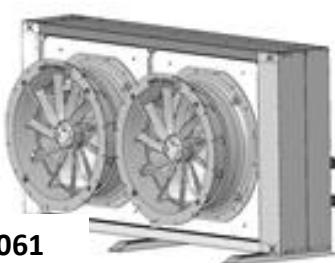
Model 122



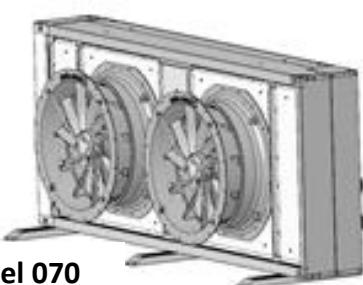
Model
034



Model 140



Model 061



Model 070



Model 165

UNIT DESCRIPTION

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STRUCTURE

Supporting and anchoring supports, self-supporting structure and paneling of smooth aluminum-magnesium alloy PERALLUMAN 5754 H22 cold-rolled sheet metal.

Removable side panels.

Side compartment for containing electrical panel and control and regulating organs.

Natural unpainted structure.

Structure fully recyclable at end of life.

ULTRA-SILENCED VERSION

Dedicated fans and electronics to ensure low noise levels

Sound insulation for side paneling.

PERALLUMAN 5754 H22

The aluminum alloy used for the structure of the heat sinks, in addition to offering high mechanical strength Rm 220 ÷ 270 N/mm² and good surface hardness HB 63, manifests its best characteristics in resistance against corrosion according to ISO 12944-2014:

EXCELLENT for environments classified C1 - C4

GOOD for environments classified C5

FAN SECTION.

Axial fans with sickle-shaped blades and protective grilles, optimized for low sound levels.

Maximized airflow and efficiency due to:

aluminum blades with bionic design

air flow conveyor made of composite material

integrated diffuser with dynamic energy recovery system;

External rotor electric motor.

Integrated motor thermal protection - Insulation class F - THC 155°C.

Motor rotation speed control by 0-10Vdc proportional signal from indoor unit controller.

Protective grille on fan air supply.

Dynamic balancing on 2 planes.

VDE, UL, CCC, EAC, CE approvals.

IP54 protection.

Compliant with the current ErP directive and ErP 2020 ready.

VERSION WITH AC ELECTRIC MOTORS - MEDR-TF-A series.

Rotation speed control by external electronics

VERSION WITH EC ELECTRICAL MOTORS - MEDR-TF-E series.

Rotation speed control with built-in controller

WATER/AIR EXCHANGER

- Finned pack coil with copper tubes and high-efficiency aluminum fin, specifically developed to ensure high heat transfer coefficient and low pressure drops.

- Slotted hydraulic connection for machines with 2 or more fans; threaded for machines with only one fan

ELECTRICAL PANEL

The electrical panel is located inside the heat sink structure; the side panel must be removed to access it.

The electrical box is suitable for outdoor installation and complies with EN60204-1.

The electrical box includes:

IP44 degree of protection - degree of protection of the electrical panel included in the machine structure and not referring to the panel alone.

Main disconnect switch with door lock safety.

Terminal block for electrical connections:

- power supply - power supply is independent of the indoor unit.
- 0-10Vdc signal for fan rotation speed control - to be connected to the indoor unit.
- alarm signal of fans and, if present, FMC electronic board - to be connected to the indoor unit.

VERSION WITH AC ELECTRIC MOTORS - MEDR-TF-A series.

- FMC electronic board for fan rotation speed control. In case of power supply failure and malfunction, the board sends digital alarm signal to indoor unit (refer to wiring diagrams)

- Fan power supply voltage regulation system managed by the FMC electronic board.

VERSION WITH ELECTRICAL EC MOTORS - MEDR-TF-E series.

- Direct control of fan rotation speed by 0-10Vdc signal.

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Models with 4/6 fans:

There are two switchboards each with the above enclosure. The switchboards are already interconnected with each other but only one of them performs main switchboard action. Power supply and control and alarm signals must be connected in the latter.

REFERENCE STANDARDS

REFERENCE STANDARDS FOR ELECTRICAL PANEL AND MACHINE

- EN 60204-1
- Direttiva macchine 2006/42/CE
- LVD 2006/95/CE
- EMC 2014/30/CE:
 - EN 61000-6-2:2005 "Compatibilità elettromagnetica - Immunità per ambienti industriali".
 - EN 61000-6-3:2007 "Compatibilità elettromagnetica - Standard di emissione per ambienti residenziali, commerciali e industriali leggeri".

TECHNICAL DATA

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TECHNICAL DATA MEDR-TF-A - 230/1/50

Fans with AC electric motors and STANDARD acoustic enclosure



MODELS	014	026	034	061	070
POWER SUPPLY	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD
COOLING CAPACITY (1)	kW	13.5	25.3	33.3	60.4
AXIAL FANS "AC"	n.	1	1	1	2
Total air flow	m³/h	3800	7200	8850	16200
External static pressure	Pa	0	0	0	0
Total power consumption	kW	0.35	0.61	0.57	1.16
Starting current (SA)	A	1,7	2,9	2,9	5,8
Max electrical power absorbed (FLI)	kW	0,38	0,64	0,64	1,28
Max absorbed current (FLA)	A	1,7	2,9	2,9	5,8
Net weight	kg	47	73	94	156
MODEL	082	122	140	165	
POWER SUPPLY	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD
COOLING CAPACITY (1)	kW	81.7	121	139	163
AXIAL FANS "AC"	n.	3	4	4	6
Total air flow	m³/h	22500	32400	36400	45000
External static pressure	Pa	0	0	0	0
Total power consumption	kW	1.83	2.24	2.24	3.66
Starting current (SA)	A	8,7	11,6	11,6	17,4
Max electrical power absorbed (FLI)	kW	1,92	2,56	2,56	3,84
Max absorbed current (FLA)	A	8,7	11,6	11,6	17,4
Net weight	kg	201	375	449	484

1.Referred to inlet/outlet water temperature 50°C/45°C. Outdoor air temperature 35°C.

ACOUSTIC DATA MEDR-TF-A - 230/1/50

Fans with AC electric motors and STANDARD acoustic enclosure

MODEL	014	026	034	061	070
POWER SUPPLY	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD
Sound Power Level [Lw] ISO 9614-2	dB(A)	69	73	72	75
Average Level Sound Pressure [Lpm] ISO 3744					
At 1 m	dB(A)	55	58	57	59
At 5 m	dB(A)	44	47	46	49
At 10 m	dB(A)	38	41	41	43
MODEL	082	122	140	165	
POWER SUPPLY	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD
Sound Power Level [Lw] ISO 9614-2	dB(A)	77	78	78	80
Average Level Sound Pressure [Lpm] ISO 3744					
At 1 m	dB(A)	61	61	60	62
At 5 m	dB(A)	51	51	51	54
At 10 m	dB(A)	46	46	46	49

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SOUND SPECTER MEDR-TF-A - 230/1/50

Sound level spectrum at 1 meter

Model 014

ACOUSTIC ENCLOSURE STANDARD

Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	72.1	69.1	64.8	64.9	62.2	54.8	47.7	69.4
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	57.6	54.6	50.3	50.4	47.7	40.3	33.2	54.9

Sound level spectrum at 1 meter

Model 026

ACOUSTIC ENCLOSURE STANDARD

Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	75.4	72.4	68.1	68.2	65.5	58.1	51	72.7
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	60.5	57.5	53.2	53.3	50.6	43.2	36.1	57.8

Sound level spectrum at 1 meter

Model 034

ACOUSTIC ENCLOSURE STANDARD

Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	74.7	71.7	67.4	67.5	64.8	57.4	50.3	72
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	59.3	56.3	52	52.1	49.4	42	34.9	56.6

Sound level spectrum at 1 meter

Model 061

ACOUSTIC ENCLOSURE STANDARD

Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	77.7	74.7	70.4	70.5	67.8	60.4	53.3	75
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	61.8	58.8	54.5	54.6	51.9	44.5	37.4	59

Sound level spectrum at 1 meter

Model 070

ACOUSTIC ENCLOSURE STANDARD

Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	77.6	74.6	70.3	70.4	67.7	60.3	53.2	74.9
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	61.3	58.2	54	54.1	51.4	44	36.9	58.5

Sound level spectrum at 1 meter

Model 082

ACOUSTIC ENCLOSURE STANDARD

Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	80	77	72.7	72.8	70.1	62.7	55.6	77.3
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	63.7	60.6	56.4	56.5	53.8	46.4	39.3	60.9

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Sound level spectrum at 1 meter

Model	122									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	80.7	77.7	73.4	73.5	70.8	63.4	56.3	78	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	63.5	60.5	56.2	56.3	53.6	46.2	39.1	60.8	

Sound level spectrum at 1 meter

Model	140									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	80.6	77.6	73.3	73.4	70.7	63.3	56.2	77.9	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	63.1	60	55.7	55.8	53.2	45.7	38.6	60.3	

Sound level spectrum at 1 meter

Model	165									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	83	80	75.7	75.8	73.1	65.7	58.6	80.3	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	65.5	62.4	58.1	58.2	55.6	48.1	41	62.7	

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TECHNICAL DATA MEDR-TF-SL-A - 230/1/50

Fans with AC electric motors and ULTRA-SILENCED acoustic enclosure



50 Hz



AXIAL-AC

MODELS		014	026	034	061	070
POWER SUPPLY	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
ACOUSTIC ENCLOSURE		SL	SL	SL	SL	SL
COOLING CAPACITY (1)	kW	10.2	19.2	25.1	45.6	52.1
AXIAL FANS "AC"	n.	1	1	1	2	2
Total air flow	m³/h	2660	5040	6195	11340	12740
External static pressure	Pa	0	0	0	0	0
Total power consumption	kW	0.25	0.43	0.4	0.81	0.78
Starting current (SA)	A	1,19	2,03	2,03	4,06	4,06
Max electrical power absorbed (FLI)	kW	0,266	0,448	0,448	0,896	0,896
Max absorbed current (FLA)	A	1,19	2,03	2,03	4,06	4,06
Net weight	kg	48	74	95	158	185
MODELS		082	122	140	165	
POWER SUPPLY	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
ACOUSTIC ENCLOSURE		SL	SL	SL	SL	SL
COOLING CAPACITY (1)	kW	61.8	91.1	104	124	
AXIAL FANS "AC"	n.	3	4	4	6	
Total air flow	m³/h	15750	22680	25480	31500	
External static pressure	Pa	0	0	0	0	
Total power consumption	kW	1.28	1.62	1.57	2.56	
Starting current (SA)	A	6,09	8,12	8,12	12,18	
Max electrical power absorbed (FLI)	kW	1,344	1,792	1,792	2,688	
Max absorbed current (FLA)	A	6,09	8,12	8,12	12,18	
Net weight	kg	203	378	458	488	

1.Referred to inlet/outlet water temperature 50°C/45°C. Outdoor air temperature 35°C.

ACOUSTIC DATA MEDR-TF-SL-A - 230/1/50

Fans with AC electric motors and ULTRA-SILENCED acoustic enclosure

MODEL		014	026	034	061	070
POWER SUPPLY	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
ACOUSTIC ENCLOSURE		SL	SL	SL	SL	SL
Sound Power Level [Lw] ISO 9614-2	dB(A)	62	65	64	67	67
Average Level Sound Pressure [Lpm] ISO 3744						
At 1 m	dB(A)	47	50	49	51	51
At 5 m	dB(A)	36	39	38	41	41
At 10 m	dB(A)	30	34	33	36	36
MODEL		082	122	140	165	
POWER SUPPLY	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
ACOUSTIC ENCLOSURE		SL	SL	SL	SL	SL
Sound Power Level [Lw] ISO 9614-2	dB(A)	70	70	70	73	
Average Level Sound Pressure [Lpm] ISO 3744						
At 1 m	dB(A)	54	53	52	55	
At 5 m	dB(A)	44	44	44	46	
At 10 m	dB(A)	38	39	38	41	

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SOUND SPECTER MEDR-TF-SL-A - 230/1/50

Sound level spectrum at 1 meter

Model	014								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	69.1	60.2	60.9	55.9	50.2	43.1	31.8	61.7
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	54.5	45.7	46.3	41.3	35.7	28.5	17.3	47.2

Sound level spectrum at 1 meter

Model	026								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	72.4	63.5	64.2	59.2	53.5	46.4	35.1	65
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	57.5	48.6	49.3	44.3	38.6	31.5	20.2	50.1

Sound level spectrum at 1 meter

Model	034								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	71.6	62.7	63.4	58.4	52.7	45.6	34.3	64.2
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	56.2	47.3	48	43	37.3	30.2	18.9	48.8

Sound level spectrum at 1 meter

Model	061								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	74.6	65.7	66.4	61.4	55.7	48.6	37.3	67.2
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	58.6	49.8	50.4	45.4	39.8	32.6	21.3	51.2

Sound level spectrum at 1 meter

Model	070								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	74.6	65.7	66.4	61.4	55.7	48.6	37.3	67.2
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	58.2	49.4	50	45	39.4	32.2	20.9	50.8

Sound level spectrum at 1 meter

Model	082								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	77.4	68.5	69.2	64.2	58.5	51.4	40.1	70
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	61	52.2	52.8	47.8	42.2	35	23.7	53.6

TECHNICAL DATA

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Sound level spectrum at 1 meter

Model	122									
ACOUSTIC ENCLOSURE	SL									
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	77.6	68.7	69.4	64.4	58.7	51.6	40.3	70.2	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	60.3	51.5	52.1	47.1	41.5	34.3	23.1	53	

Sound level spectrum at 1 meter

Model	140									
ACOUSTIC ENCLOSURE	SL									
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	77.6	68.7	69.4	64.4	58.7	51.6	40.3	70.2	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	60	51.1	51.8	46.8	41.1	34	22.7	52.6	

Sound level spectrum at 1 meter

Model	165									
ACOUSTIC ENCLOSURE	SL									
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	79.9	71	71.7	66.7	61	53.9	42.6	72.5	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	62.3	53.4	54.1	49.1	43.4	36.3	25	54.9	

AXIAL FANS WITH ELECTRIC MOTOR "EC"



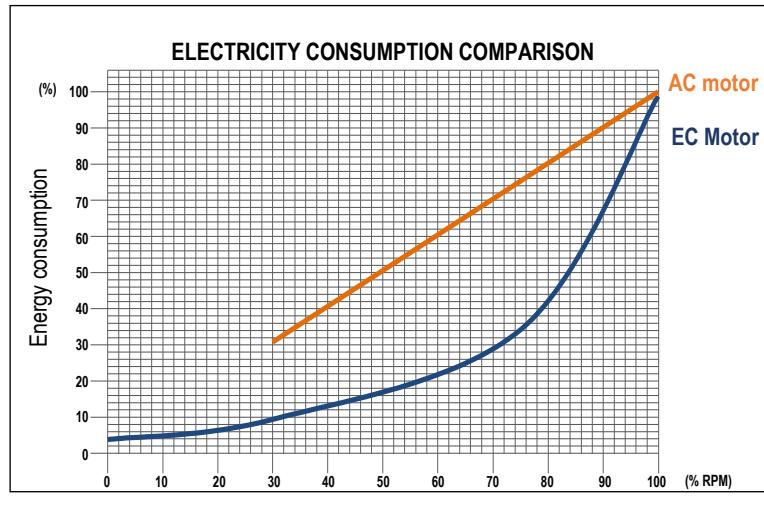
"EC" axial fans are equipped with a brushless-type synchronous electric motor with an integrated electronic commutation system.

Motor speed regulation is achieved through the "EC" (Electronic Commutation) system, which controls the motor based on a 0-10V proportional signal from the microprocessor control system.

Characteristics of "EC" electric motors:

- absence of electromagnetic noise
- efficiency 83÷86%
- minimum power consumption

Comparison of the main characteristics between a typical asynchronous "AC" type electric motor with electronic phase-cut controller and an "EC" type brushless synchronous motor.



WARNINGS >>> The graphs refer to operating conditions with zero useful static pressure (0 Pa).

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TECHNICAL DATA MEDR-TF-E - 230/1/50 - 400/3/50

Fans with EC electric motors and STANDARD acoustic enclosure



50 Hz



AXIAL-EC

MODELS	014	026	034	061	070
POWER SUPPLY	V/ph/Hz	230/1/50	400/3/50	400/3/50	400/3/50
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD
COOLING CAPACITY (1)	kW	12.7	25.3	33.3	60.4
AXIAL FANS "AC"	n.	1	1	1	2
Total air flow	m³/h	3500	7200	8850	16200
External static pressure	Pa	0	0	0	0
Total power consumption	kW	0.19	0.44	0.42	0.84
Starting current (SA)	A	0,91	1,92	1,92	3,84
Max electrical power absorbed (FLI)	kW	0,21	1	1	2
Max absorbed current (FLA)	A	0,91	1,92	1,92	3,84
Net weight	kg	45	71	91	152
MODELS	082	122	140	165	
POWER SUPPLY	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD
COOLING CAPACITY (1)	kW	81.7	121	139	163
AXIAL FANS "AC"	n.	3	4	4	6
Total air flow	m³/h	22500	32400	36400	45000
External static pressure	Pa	0	0	0	0
Total power consumption	kW	1.31	1.68	1.66	2.66
Starting current (SA)	A	5,76	7,68	7,68	11,52
Max electrical power absorbed (FLI)	kW	3	4	4	6
Max absorbed current (FLA)	A	5,76	7,68	7,68	11,52
Net weight	kg	197	367	441	476

1.Referred to inlet/outlet water temperature 50°C/45°C. Outdoor air temperature 35°C.

ACOUSTIC DATA MEDR-TF-E - 230/1/50 - 400/3/50

Fans with EC electric motors and STANDARD acoustic enclosure

MODEL	014	026	034	061	070
POWER SUPPLY	V/ph/Hz	230/1/50	400/3/50	400/3/50	400/3/50
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD
Sound Power Level [Lw] ISO 9614-2	dB(A)	65	72	71	74
Average Level Sound Pressure [Lpm] ISO 3744					
At 1 m	dB(A)	50	57	56	58
At 5 m	dB(A)	40	46	45	48
At 10 m	dB(A)	34	41	40	42
MODEL	082	122	140	165	
POWER SUPPLY	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD
Sound Power Level [Lw] ISO 9614-2	dB(A)	76	77	77	79
Average Level Sound Pressure [Lpm] ISO 3744					
At 1 m	dB(A)	60	60	59	62
At 5 m	dB(A)	50	50	51	53
At 10 m	dB(A)	45	45	46	48

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SOUND SPECTER MEDR-TF-E - 230/1/50 - 400/3/50

Sound level spectrum at 1 meter

Model	014									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	67.9	64.9	60.6	60.7	58	50.6	43.5	65.2	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	53.4	50.4	46.1	46.2	43.5	36.1	29	50.7	

Sound level spectrum at 1 meter

Model	026									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	74.6	71.6	67.3	67.4	64.7	57.3	50.2	71.9	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	59.7	56.7	52.4	52.5	49.8	42.4	35.3	57	

Sound level spectrum at 1 meter

Model	034									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	73.8	70.8	66.5	66.6	63.9	56.5	49.4	71.1	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	58.4	55.4	51.1	51.2	48.5	41.1	34	55.7	

Sound level spectrum at 1 meter

Model	061									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	76.6	73.6	69.3	69.4	66.7	59.3	52.2	73.9	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	60.7	57.7	53.4	53.5	50.8	43.4	36.3	57.9	

Sound level spectrum at 1 meter

Model	070									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	77	74	69.7	69.8	67.1	59.7	52.6	74.3	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	60.7	57.6	53.4	53.5	50.8	43.4	36.3	57.9	

Sound level spectrum at 1 meter

Model	082									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	79	76	71.7	71.8	69.1	61.7	54.6	76.3	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	62.7	59.6	55.4	55.5	52.8	45.4	38.3	59.9	

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Sound level spectrum at 1 meter

Model	122									
ACOUSTIC ENCLOSURE	STANDARD									
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	79.6	76.6	72.3	72.4	69.7	62.3	55.2	76.9	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	62.4	59.4	55.1	55.2	52.5	45.1	38	59.7	

Sound level spectrum at 1 meter

Model	140									
ACOUSTIC ENCLOSURE	STANDARD									
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	80	77	72.7	72.8	70.1	62.7	55.6	77.3	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	62.5	59.4	55.1	55.2	52.6	45.1	38	59.7	

Sound level spectrum at 1 meter

Model	165									
ACOUSTIC ENCLOSURE	STANDARD									
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	82	79	74.7	74.8	72.1	64.7	57.6	79.3	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	64.4	61.4	57.1	57.2	54.5	47.1	40	61.7	

TECHNICAL DATA

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TECHNICAL DATA MEDR-TF-SL-E - 230/1/50 - 400/3/50

Fans with EC electric motors and LOW-NOISE acoustic enclosure



MODELS		014	026	034	061	070
POWER SUPPLY	V/ph/Hz	230/1/50	400/3/50	400/3/50	400/3/50	400/3/50
ACOUSTIC ENCLOSURE		SL	SL	SL	SL	SL
COOLING CAPACITY (1)	kW	9.57	19.2	25.1	45.6	52.1
AXIAL FANS "AC"	n.	1	1	1	2	2
Total air flow	m³/h	2450	5040	6195	11340	12740
External static pressure	Pa	0	0	0	0	0
Total power consumption	kW	0.07	0.15	0.14	0.29	0.28
Starting current (SA)	A	0,91	1,92	1,92	3,84	3,84
Max electrical power absorbed (FLI)	kW	0,21	1	1	2	2
Max absorbed current (FLA)	A	0,91	1,92	1,92	3,84	3,84
Net weight	kg	46	72	92	154	181
MODELS		082	122	140	165	
POWER SUPPLY	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
ACOUSTIC ENCLOSURE		SL	SL	SL	SL	SL
COOLING CAPACITY (1)	kW	61.8	91.1	104	124	
AXIAL FANS "AC"	n.	3	4	4	6	
Total air flow	m³/h	15750	22680	25480	31500	
External static pressure	Pa	0	0	0	0	
Total power consumption	kW	0.46	0.58	0.56	0.92	
Starting current (SA)	A	5,76	7,68	7,68	11,52	
Max electrical power absorbed (FLI)	kW	3	4	4	6	
Max absorbed current (FLA)	A	5,76	7,68	7,68	11,52	
Net weight	kg	199	370	445	480	

1.Referred to inlet/outlet water temperature 50°C/45°C. Outdoor air temperature 35°C.

ACOUSTIC DATA MEDR-TF-SL-E - 230/1/50 - 400/3/50

Fans with EC electric motors and LOW-NOISE acoustic enclosure

MODEL		014	026	034	061	070
POWER SUPPLY	V/ph/Hz	230/1/50	400/3/50	400/3/50	400/3/50	400/3/50
ACOUSTIC ENCLOSURE		SL	SL	SL	SL	SL
Sound Power Level [Lw] ISO 9614-2	dB(A)	57	65	63	66	66
Average Level Sound Pressure [Lpm] ISO 3744						
At 1 m	dB(A)	43	50.1	48	50.1	50.1
At 5 m	dB(A)	32	39	37	40	40
At 10 m	dB(A)	26	34	32	35	35
MODEL		082	122	140	165	
POWER SUPPLY	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
ACOUSTIC ENCLOSURE		SL	SL	SL	SL	SL
Sound Power Level [Lw] ISO 9614-2	dB(A)	69	69	70	72	
Average Level Sound Pressure [Lpm] ISO 3744						
At 1 m	dB(A)	52.6	52.2	51.9	54.6	
At 5 m	dB(A)	43	43	43	46	
At 10 m	dB(A)	37	38	38	40	

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SOUND SPECTER MEDR-TF-SL-E - 230/1/50 - 400/3/50

Sound level spectrum at 1 meter

Model	014								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	64.9	56	56.7	51.7	46	38.9	27.6	57.5
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	50.3	41.5	42.1	37.1	31.5	24.3	13.1	43

Sound level spectrum at 1 meter

Model	026								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	72.4	63.5	64.2	59.2	53.5	46.4	35.1	65
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	57.5	48.6	49.3	44.3	38.6	31.5	20.2	50.1

Sound level spectrum at 1 meter

Model	034								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	70.8	61.9	62.6	57.6	51.9	44.8	33.5	63.4
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	55.4	46.5	47.2	42.2	36.5	29.4	18.1	48

Sound level spectrum at 1 meter

Model	061								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	73.5	64.6	65.3	60.3	54.6	47.5	36.2	66.1
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	57.5	48.7	49.3	44.3	38.7	31.5	20.2	50.1

Sound level spectrum at 1 meter

Model	070								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	73.9	65	65.7	60.7	55	47.9	36.6	66.5
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	57.5	48.7	49.3	44.3	38.7	31.5	20.2	50.1

Sound level spectrum at 1 meter

Model	082								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot

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Sound Power Level [Lw] ISO 9614-2	dB(A)	76.4	67.5	68.2	63.2	57.5	50.4	39.1	69
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	60	51.2	51.8	46.8	41.2	34	22.7	52.6

Sound level spectrum at 1 meter

Model	122								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	76.8	67.9	68.6	63.6	57.9	50.8	39.5	69.4
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	59.5	50.7	51.3	46.3	40.7	33.5	22.3	52.2

Sound level spectrum at 1 meter

Model	140								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	76.9	68	68.7	63.7	58	50.9	39.6	69.5
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	59.3	50.4	51.1	46.1	40.4	33.3	22	51.9

Sound level spectrum at 1 meter

Model	165								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	79.6	70.7	71.4	66.4	60.7	53.6	42.3	72.2
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	62	53.1	53.8	48.8	43.1	36	24.7	54.6

TECHNICAL DATA

MEDR-TF

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TECHNICAL DATA MEDR-TF-E - 220/1/60 - 380/3/60

Fans with EC electric motors and STANDARD acoustic enclosure



60 Hz



AXIAL-EC

MODELS		014	026	034	061	070
POWER SUPPLY	V/ph/Hz	220/1/60	380/3/60	380/3/60	380/3/60	380/3/60
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD	STANDARD
COOLING CAPACITY (1)	kW	12.7	25.3	33.3	60.4	69.3
AXIAL FANS "AC"	n.	1	1	1	2	2
Total air flow	m³/h	3500	7200	8850	16200	18200
External static pressure	Pa	0	0	0	0	0
Total power consumption	kW	0.19	0.44	0.42	0.84	0.83
Starting current (SA)	A	0.95	2	2	4	4
Max electrical power absorbed (FLI)	kW	0.21	1	1	2	2
Max absorbed current (FLA)	A	0.95	2	2	4	4
Net weight	kg	45	71	91	152	179
MODELS		082	122	140	165	
POWER SUPPLY	V/ph/Hz	380/3/60	380/3/60	380/3/60	380/3/60	
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD	
COOLING CAPACITY (1)	kW	81.7	121	139	163	
AXIAL FANS "AC"	n.	3	4	4	6	
Total air flow	m³/h	22500	32400	36400	45000	
External static pressure	Pa	0	0	0	0	
Total power consumption	kW	1.31	1.68	1.66	2.66	
Starting current (SA)	A	6	8	8	12	
Max electrical power absorbed (FLI)	kW	3	4	4	6	
Max absorbed current (FLA)	A	6	8	8	12	
Net weight	kg	197	367	441	476	

1.Referred to inlet/outlet water temperature 50°C/45°C. Outdoor air temperature 35°C.

TECHNICAL DATA

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ACOUSTIC DATA MEDR-TF-E - 220/1/60 - 380/3/60

Ventilatori con motori elettrici EC e allestimento acustico STANDARD

MODEL	014	026	034	061	070
POWER SUPPLY	V/ph/Hz	220/1/60	380/3/60	380/3/60	380/3/60
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD
Sound Power Level [Lw] ISO 9614-2	dB(A)	65	72	71	74
Average Level Sound Pressure [Lpm] ISO 3744					
At 1 m	dB(A)	50	57	56	58
At 5 m	dB(A)	40	46	45	48
At 10 m	dB(A)	34	41	40	42
MODEL	082	122	140	165	
POWER SUPPLY	V/ph/Hz	380/3/60	380/3/60	380/3/60	380/3/60
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD
Sound Power Level [Lw] ISO 9614-2	dB(A)	76	77	77	79
Average Level Sound Pressure [Lpm] ISO 3744					
At 1 m	dB(A)	60	60	59	62
At 5 m	dB(A)	50	50	51	53
At 10 m	dB(A)	45	45	46	48

SOUND SPECTER MEDR-TF-E - 220/1/60 - 380/3/60

Sound level spectrum at 1 meter									
Model	014								
ACOUSTIC ENCLOSURE	STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	67.9	64.9	60.6	60.7	58	50.6	43.5	65.2
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	53.4	50.4	46.1	46.2	43.5	36.1	29	50.7
Sound level spectrum at 1 meter									
Model	026								
ACOUSTIC ENCLOSURE	STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	74.6	71.6	67.3	67.4	64.7	57.3	50.2	71.9
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	59.7	56.7	52.4	52.5	49.8	42.4	35.3	57
Sound level spectrum at 1 meter									
Model	034								
ACOUSTIC ENCLOSURE	STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	73.8	70.8	66.5	66.6	63.9	56.5	49.4	71.1
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	58.4	55.4	51.1	51.2	48.5	41.1	34	55.7
Sound level spectrum at 1 meter									
Model	061								
ACOUSTIC ENCLOSURE	STANDARD								

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Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	76.6	73.6	69.3	69.4	66.7	59.3	52.2	73.9
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	60.7	57.7	53.4	53.5	50.8	43.4	36.3	57.9
Sound level spectrum at 1 meter									
Model	070								
ACOUSTIC ENCLOSURE	STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	77	74	69.7	69.8	67.1	59.7	52.6	74.3
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	60.7	57.6	53.4	53.5	50.8	43.4	36.3	57.9
Sound level spectrum at 1 meter									
Model	082								
ACOUSTIC ENCLOSURE	STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	79	76	71.7	71.8	69.1	61.7	54.6	76.3
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	62.7	59.6	55.4	55.5	52.8	45.4	38.3	59.9
Sound level spectrum at 1 meter									
Model	122								
ACOUSTIC ENCLOSURE	STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	79.6	76.6	72.3	72.4	69.7	62.3	55.2	76.9
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	62.4	59.4	55.1	55.2	52.5	45.1	38	59.7
Sound level spectrum at 1 meter									
Model	140								
ACOUSTIC ENCLOSURE	STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	80	77	72.7	72.8	70.1	62.7	55.6	77.3
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	62.5	59.4	55.1	55.2	52.6	45.1	38	59.7
Sound level spectrum at 1 meter									
Model	165								
ACOUSTIC ENCLOSURE	STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	82	79	74.7	74.8	72.1	64.7	57.6	79.3
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	64.4	61.4	57.1	57.2	54.5	47.1	40	61.7

TECHNICAL DATA

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TECHNICAL DATA MEDR-TF-SL-E - 220/1/60 - 380/3/60

Fans with EC electric motors and LOW-NOISE acoustic enclosure



60 Hz



AXIAL-EC

MODELS	014	026	034	061	070
POWER SUPPLY	V/ph/Hz	220/1/60	380/3/60	380/3/60	380/3/60
ACOUSTIC ENCLOSURE		SL	SL	SL	SL
COOLING CAPACITY (1)	kW	9.57	19.2	25.1	45.6
AXIAL FANS "AC"	n.	1	1	1	2
Total air flow	m³/h	2450	5040	6195	11340
External static pressure	Pa	0	0	0	0
Total power consumption	kW	0.07	0.15	0.14	0.29
Starting current (SA)	A	0,95	2	2	4
Max electrical power absorbed (FLI)	kW	0,21	1	1	2
Max absorbed current (FLA)	A	0,95	2	2	4
Net weight	kg	46	72	92	154
MODELS	082	122	140	165	
POWER SUPPLY	V/ph/Hz	380/3/60	380/3/60	380/3/60	380/3/60
ACOUSTIC ENCLOSURE		SL	SL	SL	SL
COOLING CAPACITY (1)	kW	61.8	91.1	104	124
AXIAL FANS "AC"	n.	3	4	4	6
Total air flow	m³/h	15750	22680	25480	31500
External static pressure	Pa	0	0	0	0
Total power consumption	kW	0.46	0.58	0.56	0.92
Starting current (SA)	A	6	8	8	12
Max electrical power absorbed (FLI)	kW	3	4	4	6
Max absorbed current (FLA)	A	6	8	8	12
Net weight	kg	199	370	445	480

1.Referred to inlet/outlet water temperature 50°C/45°C. Outdoor air temperature 35°C.

ACOUSTIC DATA MEDR-TF-SL-E - 220/1/60 - 380/3/60

Fans with EC electric motors and LOW-NOISE acoustic enclosure

MODEL	014	026	034	061	070
POWER SUPPLY	V/ph/Hz	220/1/60	380/3/60	380/3/60	380/3/60
ACOUSTIC ENCLOSURE		SL	SL	SL	SL
Sound Power Level [Lw] ISO 9614-2	dB(A)	57	65	63	66
Average Level Sound Pressure [Lpm] ISO 3744					
At 1 m	dB(A)	43	50.1	48	50.1
At 5 m	dB(A)	32	39	37	40
At 10 m	dB(A)	26	34	32	35
MODEL	082	122	140	165	
POWER SUPPLY	V/ph/Hz	380/3/60	380/3/60	380/3/60	380/3/60
ACOUSTIC ENCLOSURE		SL	SL	SL	SL
Sound Power Level [Lw] ISO 9614-2	dB(A)	69	69	70	72
Average Level Sound Pressure [Lpm] ISO 3744					
At 1 m	dB(A)	52.6	52.2	51.9	54.6
At 5 m	dB(A)	43	43	43	46
At 10 m	dB(A)	37	38	38	40

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SOUND SPECTER MEDR-TF-SL-E - 220/1/60 - 380/3/60

Sound level spectrum at 1 meter

Model	014								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	64.9	56	56.7	51.7	46	38.9	27.6	57.5
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	50.3	41.5	42.1	37.1	31.5	24.3	13.1	43

Sound level spectrum at 1 meter

Model	026								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	72.4	63.5	64.2	59.2	53.5	46.4	35.1	65
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	57.5	48.6	49.3	44.3	38.6	31.5	20.2	50.1

Sound level spectrum at 1 meter

Model	034								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	70.8	61.9	62.6	57.6	51.9	44.8	33.5	63.4
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	55.4	46.5	47.2	42.2	36.5	29.4	18.1	48

Sound level spectrum at 1 meter

Model	061								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	73.5	64.6	65.3	60.3	54.6	47.5	36.2	66.1
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	57.5	48.7	49.3	44.3	38.7	31.5	20.2	50.1

Sound level spectrum at 1 meter

Model	070								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	73.9	65	65.7	60.7	55	47.9	36.6	66.5
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	57.5	48.7	49.3	44.3	38.7	31.5	20.2	50.1

Sound level spectrum at 1 meter

Model	082								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	76.4	67.5	68.2	63.2	57.5	50.4	39.1	69
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	60	51.2	51.8	46.8	41.2	34	22.7	52.6

TECHNICAL DATA

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Sound level spectrum at 1 meter

Model	122									
ACOUSTIC ENCLOSURE	SL									
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	76.8	67.9	68.6	63.6	57.9	50.8	39.5	69.4	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	59.5	50.7	51.3	46.3	40.7	33.5	22.3	52.2	

Sound level spectrum at 1 meter

Model	140									
ACOUSTIC ENCLOSURE	SL									
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	76.9	68	68.7	63.7	58	50.9	39.6	69.5	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	59.3	50.4	51.1	46.1	40.4	33.3	22	51.9	

Sound level spectrum at 1 meter

Model	165									
ACOUSTIC ENCLOSURE	SL									
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	79.6	70.7	71.4	66.4	60.7	53.6	42.3	72.2	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	62	53.1	53.8	48.8	43.1	36	24.7	54.6	

TECHNICAL DATA MEDR-TF-E - 265/1/60 - 460/3/60

Ventilatori con motori elettrici EC e allestimento acustico STANDARD



60 Hz



AXIAL-EC

MODELS		014	026	034	061	070
POWER SUPPLY	V/ph/Hz	265/1/60	460/3/60	460/3/60	460/3/60	460/3/60
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD	STANDARD
COOLING CAPACITY (1)	kW	12.7	25.3	33.3	60.4	69.3
AXIAL FANS "AC"	n.	1	1	1	2	2
Total air flow	m³/h	3500	7200	8850	16200	18200
External static pressure	Pa	0	0	0	0	0
Total power consumption	kW	0.19	0.44	0.42	0.84	0.83
Starting current (SA)	A	0,79	1,67	1,67	3,34	3,34
Max electrical power absorbed (FLI)	kW	0,21	1	1	2	2
Max absorbed current (FLA)	A	0,79	1,67	1,67	3,34	3,34
Net weight	kg	45	71	91	152	179
MODELS		082	122	140	165	
POWER SUPPLY	V/ph/Hz	460/3/60	460/3/60	460/3/60	460/3/60	
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD	
COOLING CAPACITY (1)	kW	81.7	121	139	163	
AXIAL FANS "AC"	n.	3	4	4	6	
Total air flow	m³/h	22500	32400	36400	45000	
External static pressure	Pa	0	0	0	0	
Total power consumption	kW	1.31	1.68	1.66	2.66	
Starting current (SA)	A	5,01	6,68	6,68	10,02	
Max electrical power absorbed (FLI)	kW	3	4	4	6	
Max absorbed current (FLA)	A	5,01	6,68	6,68	10,02	
Net weight	kg	197	367	441	476	

1.Referred to inlet/outlet water temperature 50°C/45°C. Outdoor air temperature 35°C.

ACOUSTIC DATA MEDR-TF-E - 265/1/60 - 460/3/60

Ventilatori con motori elettrici EC e allestimento acustico STANDARD

MODEL		014	026	034	061	070
POWER SUPPLY	V/ph/Hz	265/1/60	460/3/60	460/3/60	460/3/60	460/3/60
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD	STANDARD
Sound Power Level [Lw] ISO 9614-2	dB(A)	65	72	71	74	74
Average Level Sound Pressure [Lpm] ISO 3744						
At 1 m	dB(A)	50	57	56	58	58
At 5 m	dB(A)	40	46	45	48	48
At 10 m	dB(A)	34	41	40	42	43
MODEL		082	122	140	165	
POWER SUPPLY	V/ph/Hz	460/3/60	460/3/60	460/3/60	460/3/60	
ACOUSTIC ENCLOSURE		STANDARD	STANDARD	STANDARD	STANDARD	
Sound Power Level [Lw] ISO 9614-2	dB(A)	76	77	77	79	
Average Level Sound Pressure [Lpm] ISO 3744						
At 1 m	dB(A)	60	60	59	62	
At 5 m	dB(A)	50	50	51	53	
At 10 m	dB(A)	45	45	46	48	

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SOUND SPECTER MEDR-TF-E - 265/1/60 - 460/3/60

Sound level spectrum at 1 meter

Model	014									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	67.9	64.9	60.6	60.7	58	50.6	43.5	65.2	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	53.4	50.4	46.1	46.2	43.5	36.1	29	50.7	

Sound level spectrum at 1 meter

Model	026									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	74.6	71.6	67.3	67.4	64.7	57.3	50.2	71.9	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	59.7	56.7	52.4	52.5	49.8	42.4	35.3	57	

Sound level spectrum at 1 meter

Model	034									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	73.8	70.8	66.5	66.6	63.9	56.5	49.4	71.1	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	58.4	55.4	51.1	51.2	48.5	41.1	34	55.7	

Sound level spectrum at 1 meter

Model	061									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	76.6	73.6	69.3	69.4	66.7	59.3	52.2	73.9	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	60.7	57.7	53.4	53.5	50.8	43.4	36.3	57.9	

Sound level spectrum at 1 meter

Model	070									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	77	74	69.7	69.8	67.1	59.7	52.6	74.3	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	60.7	57.6	53.4	53.5	50.8	43.4	36.3	57.9	

Sound level spectrum at 1 meter

Model	082									
ACOUSTIC ENCLOSURE		STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	79	76	71.7	71.8	69.1	61.7	54.6	76.3	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	62.7	59.6	55.4	55.5	52.8	45.4	38.3	59.9	

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Sound level spectrum at 1 meter

Model	122	STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	79.6	76.6	72.3	72.4	69.7	62.3	55.2	76.9	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	62.4	59.4	55.1	55.2	52.5	45.1	38	59.7	

Sound level spectrum at 1 meter

Model	140	STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	80	77	72.7	72.8	70.1	62.7	55.6	77.3	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	62.5	59.4	55.1	55.2	52.6	45.1	38	59.7	

Sound level spectrum at 1 meter

Model	165	STANDARD								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot	
Sound Power Level [Lw] ISO 9614-2	dB(A)	82	79	74.7	74.8	72.1	64.7	57.6	79.3	
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	64.4	61.4	57.1	57.2	54.5	47.1	40	61.7	



TECHNICAL DATA

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TECHNICAL DATA MEDR-TF-SL-E - 265/1/60 - 460/3/60

Fans with EC electric motors and LOW-NOISE acoustic enclosure

MODELS		014	026	034	061	070
POWER SUPPLY	V/ph/Hz	265/1/60	460/3/60	460/3/60	460/3/60	460/3/60
ACOUSTIC ENCLOSURE		SL	SL	SL	SL	SL
COOLING CAPACITY (1)	kW	9.57	19.2	25.1	45.6	52.1
AXIAL FANS "AC"	n.	1	1	1	2	2
Total air flow	m ³ /h	2450	5040	6195	11340	12740
External static pressure	Pa	0	0	0	0	0
Total power consumption	kW	0.07	0.15	0.14	0.29	0.28
Starting current (SA)	A	0.79	1,67	1,67	3,34	3,34
Max electrical power absorbed (FLI)	kW	0,21	1	1	2	2
Max absorbed current (FLA)	A	0,79	1,67	1,67	3,34	3,34
Net weight	kg	46	72	92	154	181
MODELS		082	122	140	165	
POWER SUPPLY	V/ph/Hz	460/3/60	460/3/60	460/3/60	460/3/60	
ACOUSTIC ENCLOSURE		SL	SL	SL	SL	
COOLING CAPACITY (1)	kW	61.8	91.1	104	124	
AXIAL FANS "AC"	n.	3	4	4	6	
Total air flow	m ³ /h	15750	22680	25480	31500	
External static pressure	Pa	0	0	0	0	
Total power consumption	kW	0.46	0.58	0.56	0.92	
Starting current (SA)	A	5,01	6,68	6,68	10,02	
Max electrical power absorbed (FLI)	kW	3	4	4	6	
Max absorbed current (FLA)	A	5,01	6,68	6,68	10,02	
Net weight	kg	199	370	445	480	

1. Riferito a temperatura acqua in ingresso a 50°C e temperatura aria esterna 35°C.

ACOUSTIC DATA MEDR-TF-SL-E - 265/1/60 - 460/3/60

Fans with EC electric motors and LOW-NOISE acoustic enclosure

MODEL		014	026	034	061	070
POWER SUPPLY	V/ph/Hz	265/1/60	460/3/60	460/3/60	460/3/60	460/3/60
ACOUSTIC ENCLOSURE		SL	SL	SL	SL	SL
Sound Power Level [Lw] ISO 9614-2	dB(A)	57	65	63	66	66
Average Level Sound Pressure [Lpm] ISO 3744						
At 1 m	dB(A)	43	50.1	48	50.1	50.1
At 5 m	dB(A)	32	39	37	40	40
At 10 m	dB(A)	26	34	32	35	35
MODEL		082	122	140	165	
POWER SUPPLY	V/ph/Hz	460/3/60	460/3/60	460/3/60	460/3/60	
ACOUSTIC ENCLOSURE		SL	SL	SL	SL	
Sound Power Level [Lw] ISO 9614-2	dB(A)	69	69	70	72	
Average Level Sound Pressure [Lpm] ISO 3744						
At 1 m	dB(A)	52.6	52.2	51.9	54.6	
At 5 m	dB(A)	43	43	43	46	
At 10 m	dB(A)	37	38	38	40	

TECHNICAL DATA

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SOUND SPECTER MEDR-TF-SL-E - 265/1/60 - 460/3/60

Sound level spectrum at 1 meter

Model	014								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	64.9	56	56.7	51.7	46	38.9	27.6	57.5
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	50.3	41.5	42.1	37.1	31.5	24.3	13.1	43

Sound level spectrum at 1 meter

Model	026								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	72.4	63.5	64.2	59.2	53.5	46.4	35.1	65
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	57.5	48.6	49.3	44.3	38.6	31.5	20.2	50.1

Sound level spectrum at 1 meter

Model	034								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	70.8	61.9	62.6	57.6	51.9	44.8	33.5	63.4
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	55.4	46.5	47.2	42.2	36.5	29.4	18.1	48

Sound level spectrum at 1 meter

Model	061								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	73.5	64.6	65.3	60.3	54.6	47.5	36.2	66.1
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	57.5	48.7	49.3	44.3	38.7	31.5	20.2	50.1

Sound level spectrum at 1 meter

Model	070								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	73.9	65	65.7	60.7	55	47.9	36.6	66.5
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	57.5	48.7	49.3	44.3	38.7	31.5	20.2	50.1

TECHNICAL DATA

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Sound level spectrum at 1 meter

Model	082								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	76.4	67.5	68.2	63.2	57.5	50.4	39.1	69
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	60	51.2	51.8	46.8	41.2	34	22.7	52.6

Sound level spectrum at 1 meter

Model	122								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	76.8	67.9	68.6	63.6	57.9	50.8	39.5	69.4
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	59.5	50.7	51.3	46.3	40.7	33.5	22.3	52.2

Sound level spectrum at 1 meter

Model	140								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	76.9	68	68.7	63.7	58	50.9	39.6	69.5
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	59.3	50.4	51.1	46.1	40.4	33.3	22	51.9

Sound level spectrum at 1 meter

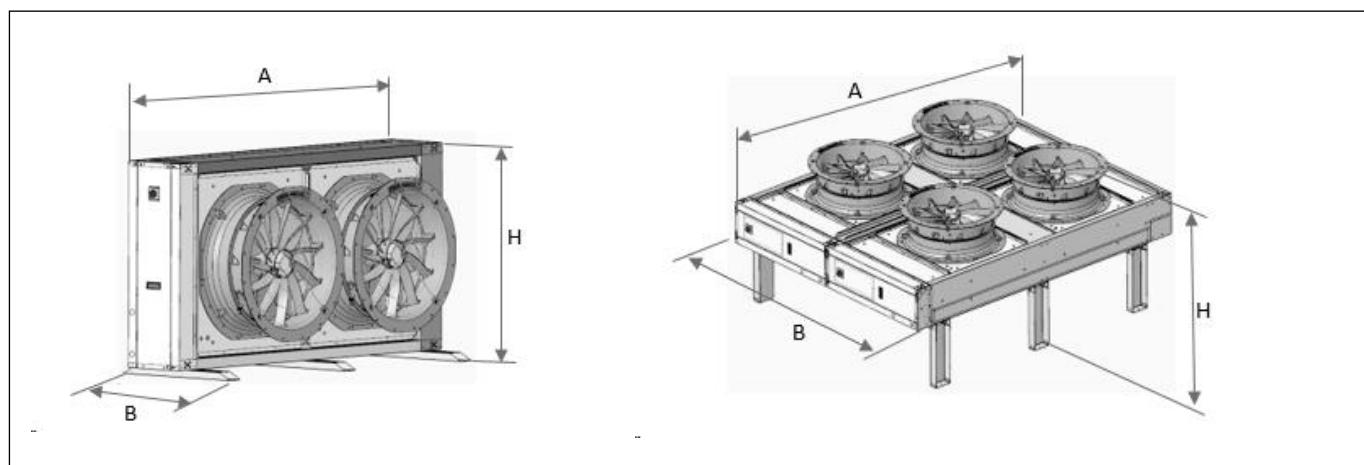
Model	165								
ACOUSTIC ENCLOSURE	SL								
Frequency	Hz	125	250	500	1000	2000	4000	8000	L_tot
Sound Power Level [Lw] ISO 9614-2	dB(A)	79.6	70.7	71.4	66.4	60.7	53.6	42.3	72.2
Average Level Sound Pressure [Lpm] ISO 3744	dB(A)	62	53.1	53.8	48.8	43.1	36	24.7	54.6

DIMENSIONS & HYDRAULIC CONNECTIONS

MODEL		014	026	034	061	070
A - Length	mm	770	1150	1360	2040	2600
B - Width	mm	718	718	718	718	718
H - High	mm	900	900	1100	1100	1100
CONNESSIONI IDRAULICA						
Inlet / Outlet	Inch	1+1/4	1+1/2	2	-	-
Inlet / Outlet (1)	Inch	-	-	-	2	2+1/2
MODEL		082	122	140	165	
A - Length	mm	2600	2156	2668	2668	
B - Width	mm	718	2120	2120	2120	
H - High	mm	1100	1166	1166	1166	
CONNESSIONI IDRAULICA						
Inlet / Outlet	Inch	-	-	-	-	-
Inlet / Outlet (1)	Inch/DN	2+1/2	2+1/2 (*)	3 (*)	3 (*)	

(1) Grooved connection

(*) Referred to the manifold



WATER QUALITY OF HYDRAULIC CONNECTIONS

The values given in the table must be guaranteed throughout the life cycle of the machine.

	DESCRIPTION	SYMBOL	RANGE VALUES
1	Hydrogen ions	pH	7.5 ÷ 9
2	Presence of calcium (Ca) and magnesium (Mg)	Durezza	4 ÷ 8.5 °D
3	Chlorine ions	Cl ⁻	< 150 ppm
4	Iron ions	Fe ³⁺	< 0.5 ppm
5	Manganese ions	Mn ²⁺	< 0.05 ppm
6	Carbon dioxide	CO ₂	< 10 ppm
7	Hydrogen sulfide	H ₂ S	< 50 ppb
8	Oxygen	O ₂	< 0.1 ppm
9	Chlorine	Cl ₂	< 0.5 ppm
10	Ammonia NH ₃	NH ₃	< 0.5 ppm
11	Ratio of carbonates to sulfates	HCO ₃ ⁻ /SO ₄ ²⁻	> 1
12	Sulfate ions	SO ₄ ²⁻	< 100 ppm
13	Phosphate ions	PO ₄ ³⁻	< 2.0 ppm

Where: 1/1.78°D = 1°Fr with 1°Fr = 10 gr CaCO₃ / m³

ppm = parts per million

ppb = parts per billion

Explanatory notes:

- ref.1: A greater concentration of hydrogen ions (pH) than 9 implies a high risk of deposits, whereas a lower pH than 7 implies a high risk of corrosion.
- ref.2: The hardness measures the amount of Ca and Mg carbonate dissolved in the water with a temperature lower than 100°C (temporary hardness). A high hardness implies a high risk of deposits.
- ref.3: The concentration of chloride ions with higher values than those indicated causes corrosion.
- ref. 4 - 5 - 8: The presence of iron and manganese ions and oxygen leads to corrosion.
- ref.6 - 7: Carbon dioxide and hydrogen sulphide are impurities that promote corrosion.
- ref.9: Usually in water from the waterworks it is a value of between 0.2 and 0.3 ppm. High values cause corrosion.
- ref.10: The presence of ammonia reinforces the oxidising power of oxygen
- ref.11: Below the value shown in the table, there is a risk of corrosion due to the trigger of galvanic currents between copper and other less noble metals.
- ref.12: The presence of sulphates ions triggers corrosion phenomenon.
- ref.13: The presence of phosphates ions triggers corrosion phenomenon.

It is necessary to carry out periodic checks, with withdrawals at different points of the hydraulic system. During the first year of operation, checks are recommended every 4 months which can be reduced every 6 months starting from the second year of operation.

WARNING:

Values of the parameters outside the indicated ranges can lead to the formation of deposits and limescale and/or favour corrosive phenomena within the plant. For operating fluids other than water (mixtures of ethylene and propylene glycol) it is recommended to use specific inhibitors, designed to offer thermal stability within the operating temperature range and protection against corrosion. It is necessary that, in the presence of dirty and / or aggressive waters, an intermediate heat exchanger is installed upstream of the heat exchangers.

corrosione. È assolutamente necessario che, in presenza di acque sporche e/o aggressive, sia interposto uno scambiatore intermedio a monte degli scambiatori di calore.

ANTIFREEZE MIXTURES

In plants that are not adequately protected by heating cables, protect the hydraulic circuit with an anti-freeze mixture when the ambient air temperature can drop below 5°C.

Minimum ambient air temperature	°C	5	0	-5	-10	-15	-20	-25	-30
ETHYLENE GLYCOL (suggested % in weight)	%	0	12	20	30	35	40	45	50

Minimum ambient air temperature	°C	5	2	-3	-9	-13	-17	-23	-29
PROPYLENE GLYCOL (suggested % in weight)	%	0	10	20	30	35	40	45	50

The values are indicative and may significantly vary depending on the glycol manufacturer. Refer to your glycol supplier for detail.

The values consider a precautionary difference of 5°C between the minimum ambient air temperature and the freezing temperature of the mixture.

FAN ROTATION SPEED CONTROL

UNITS WITH AXIAL FANS WITH AC-TYPE ELECTRIC MOTORS.

Units are equipped with FMC electronic controller to control and regulate fan speed from a 0-10 Vdc proportional control from the indoor unit.

In case of power failure and malfunction, the controller sends a digital alarm signal to the indoor unit (refer to the wiring diagrams).

UNITS WITH AXIAL FANS WITH EC-TYPE ELECTRIC MOTORS.

Units have axial fans with EC-type electric motor directly coupled, with continuous variation of rotation speed according to a 0-10V proportional signal from the indoor unit controller.

POWER SUPPLY



The power supply is independent from the indoor unit.

The supply line must be equipped with all the protections and controls required by current regulations.
If the condenser is powered from the indoor unit, the power line protections are already present.

ELECTRICAL CONNECTION TO THE INDOOR UNIT

Electrical connection with the indoor unit is the responsibility of the installer and includes:

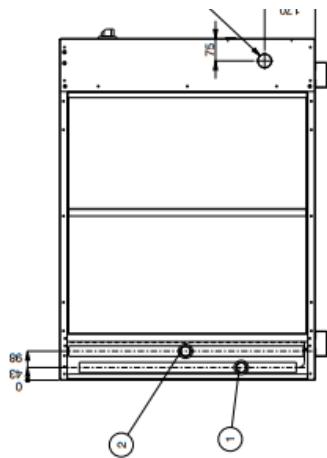
- 0-10Vdc signal cable for fan speed control.
- Cable for fan alarm signal / FMC board if present.
- Machine power supply if provided on the indoor unit.

UNITS DRAWINGS

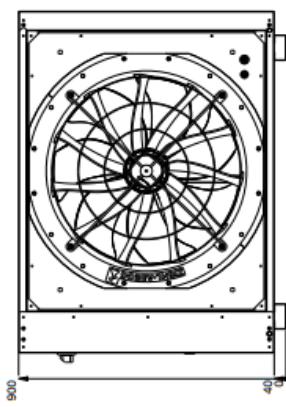
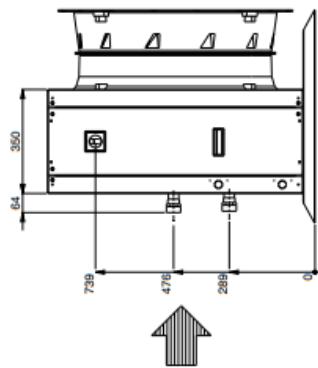
MEDR-TF

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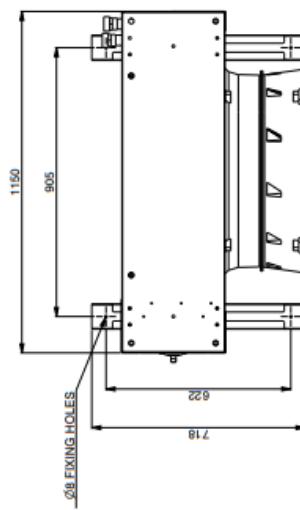
MODEL 014
Dimensions in mm



FLUSSO ARIA
AIR FLOW



HORIZONTAL FLOW



CONNESSIONI / CONNECTIONS	
3 ALIMENTAZIONE ELETTRICA	ELECTRICAL FEEDING
2 USCITA ACQUA REFERIGERANTE A T°10	WATER OUTLET AT T°10
1 INGRESSO ACQUA REFERIGERATA A T°10	WATER INLET AT T°10
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
R.S.	R.S.
1:10 A2	1:10 A2
DSS010501-00	DSS010501-00

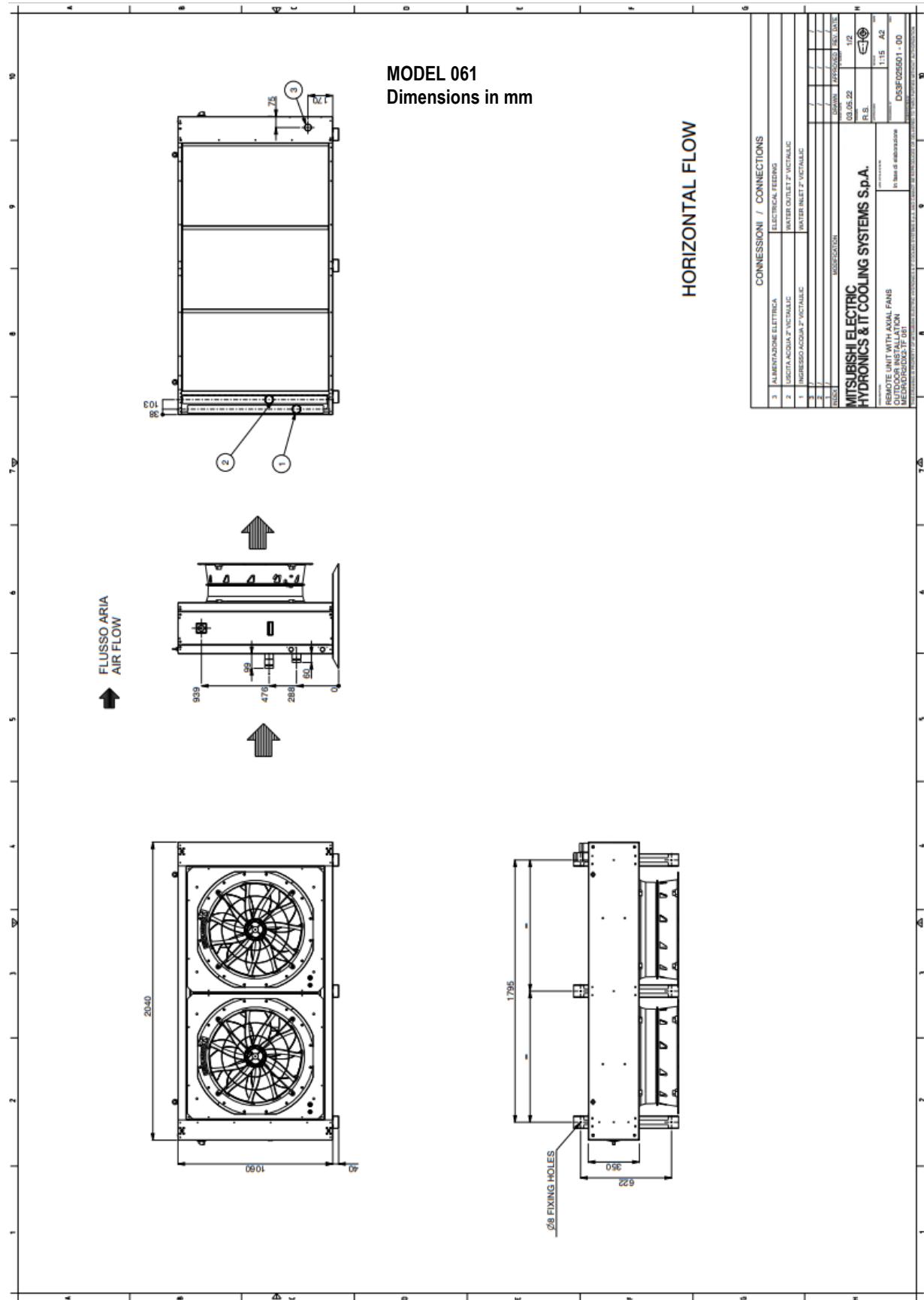
MITSUBISHI ELECTRIC
HYDRONICS & AIR COOLING SYSTEMS S.p.A.

REMOTE UNIT WITH AXIAL FANS
OUTDOOR INSTALLATION
OVERHEAD-TF 014

MODEL 061

Dimensions in mm

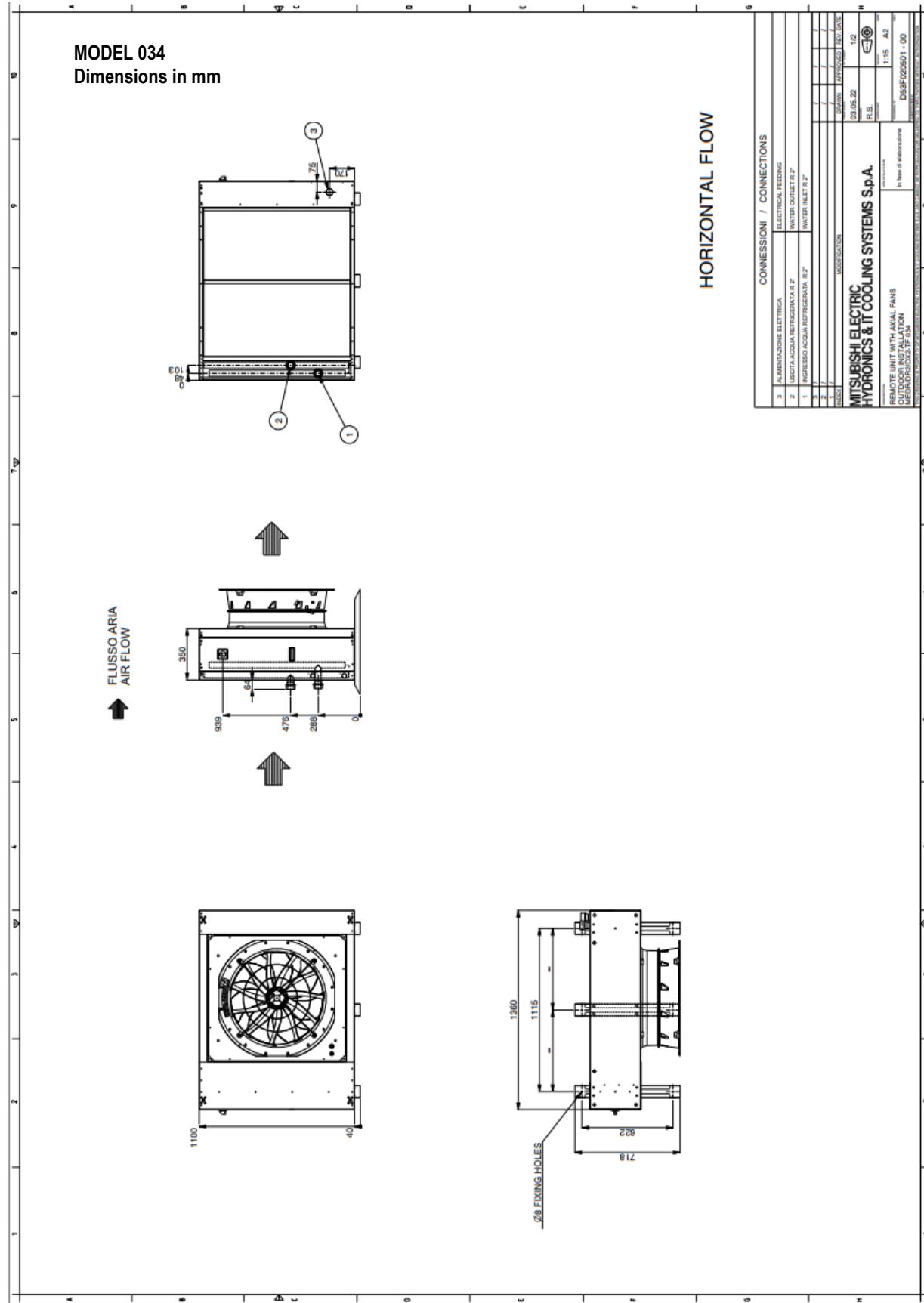
HORIZONTAL FLOW



UNITS DRAWINGS

MEDR-TF

Data Book
DB_MEDR_092022_EN_rev01



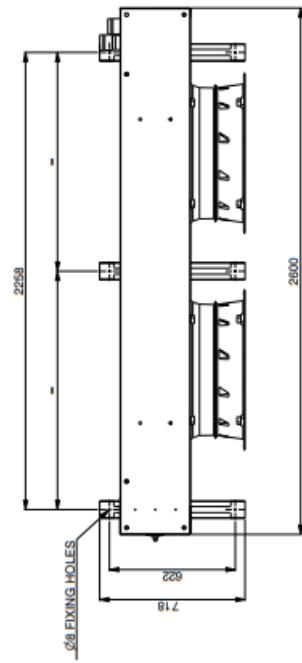
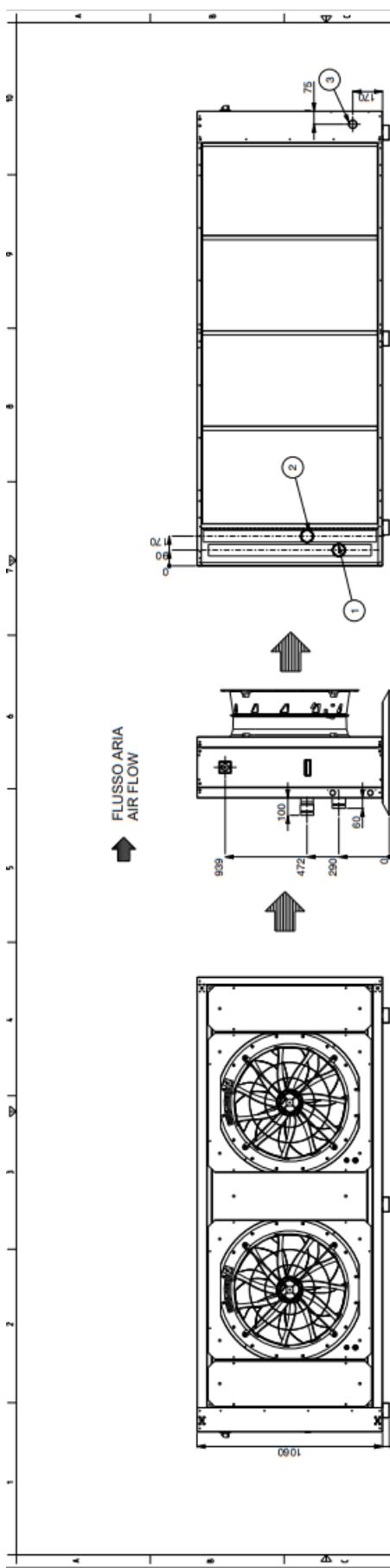
UNIT DRAWINGS

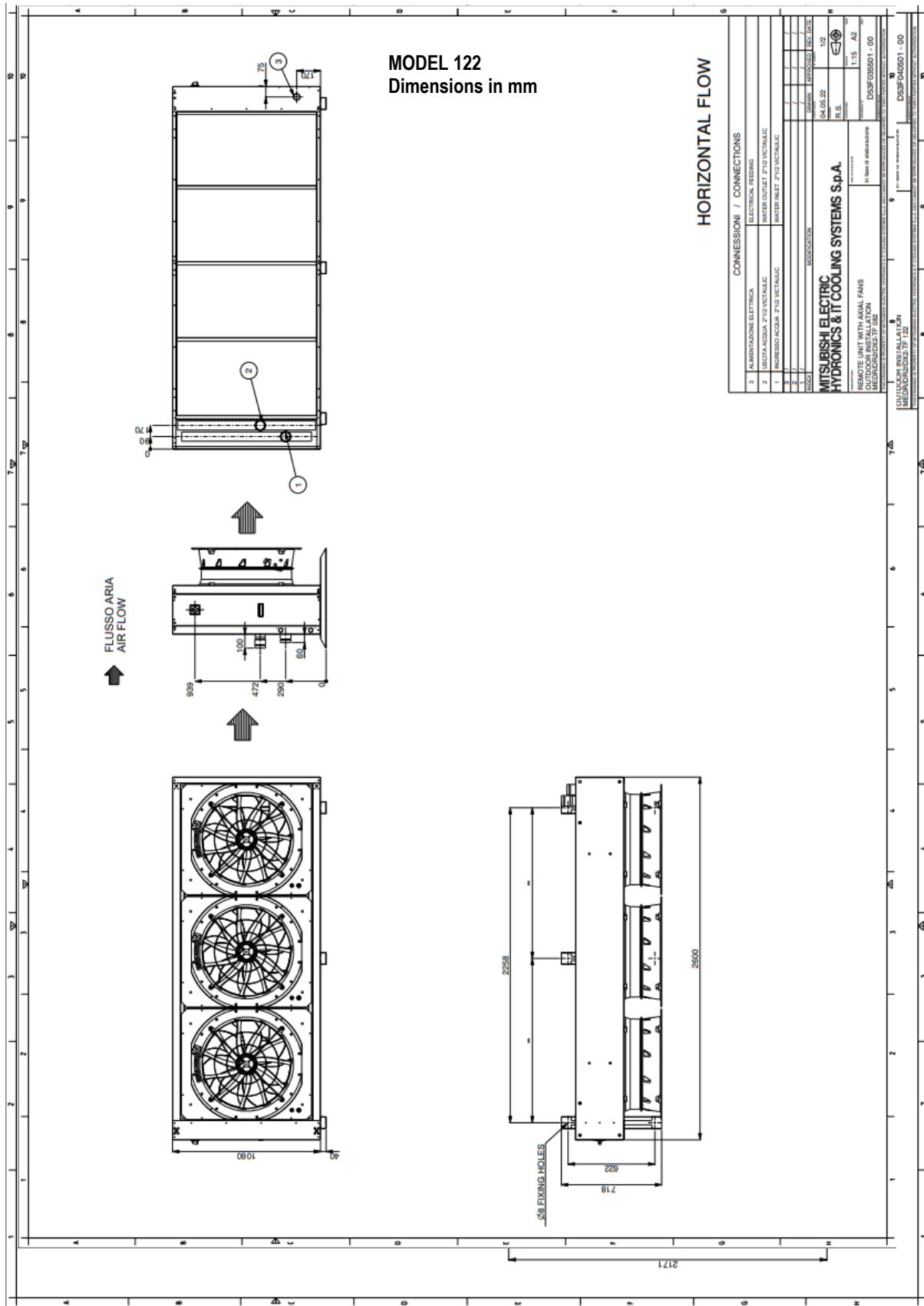
MEDR-TF

Data Book
DB_MEDR_092022_EN_rev01_EN_rev00

MODEL 070

Dimensions in mm

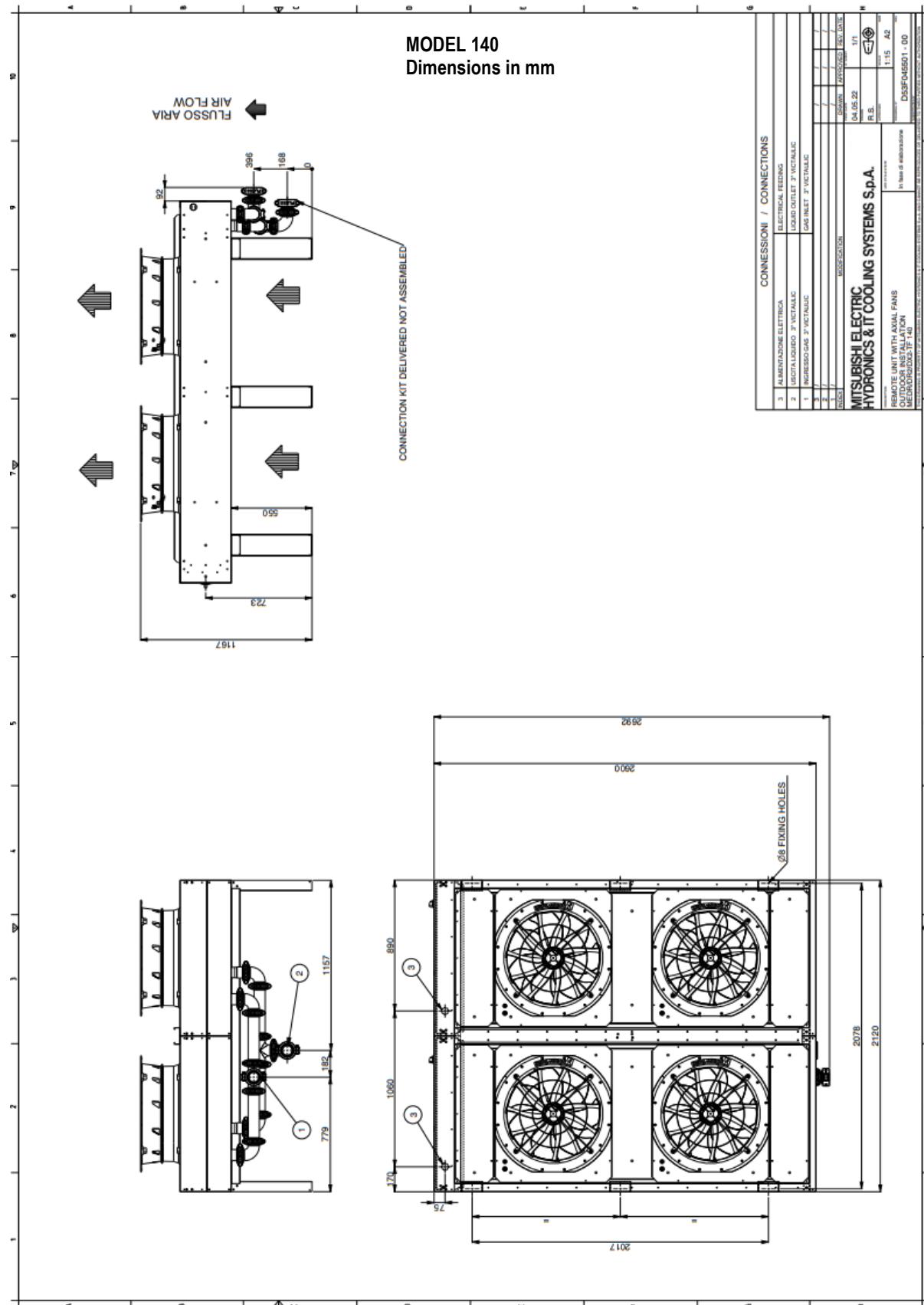


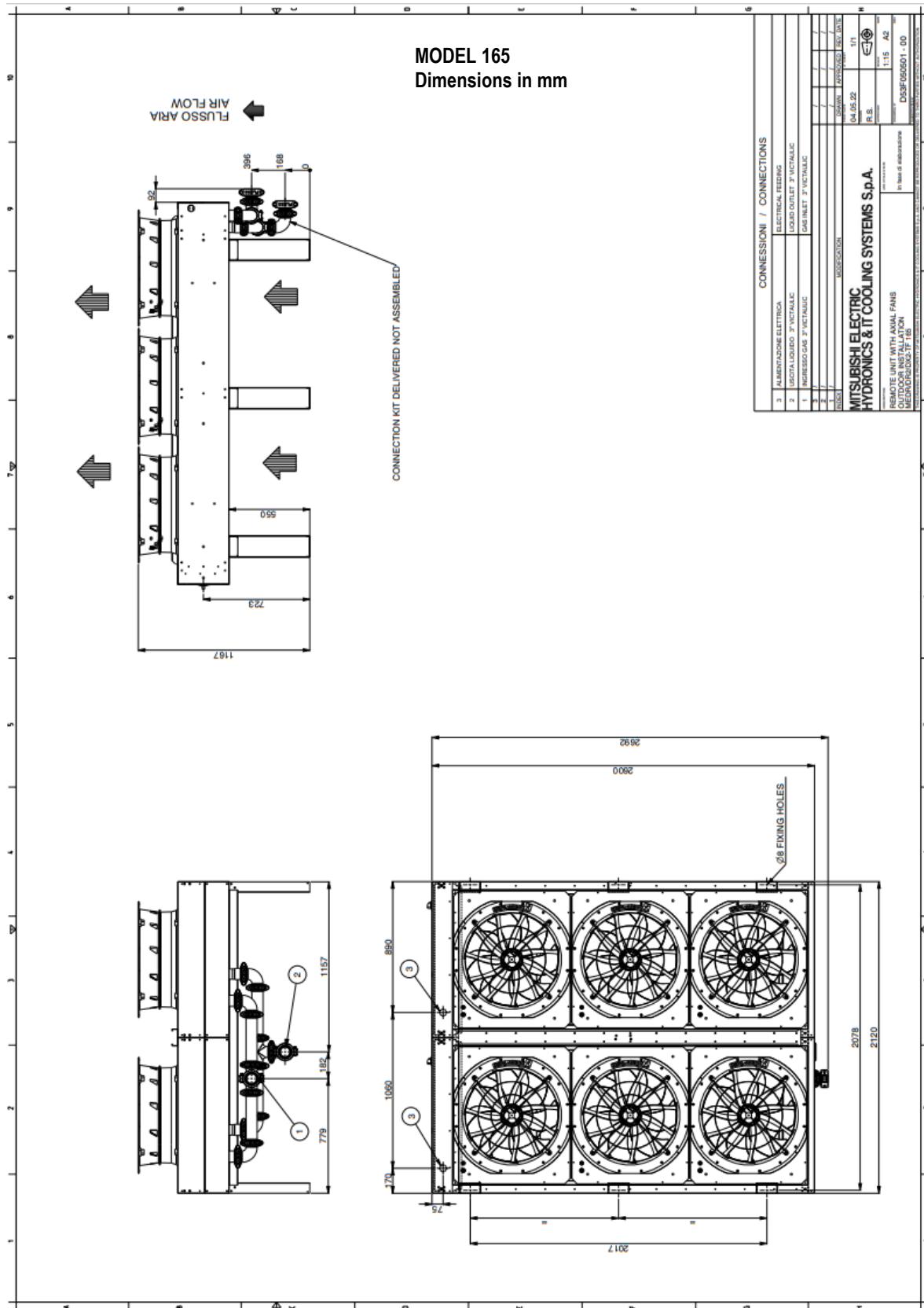


UNIT DRAWINGS

MEDR-TF

Data Book
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ACCESSORIES

1042	Vertical airflow: Excluding models with 4/6 fans. Support feet for vertical airflow supplied in mounting kit. Accessory is not suitable for installation in seismic areas.
895	Coil with Fin Guard Silver treatment: Condensing coil with Fin Guard protective treatment
2211	Interceptor taps
9973	Wood cage packing: Excluding models with 4/6 fans. Machines are delivered on pallet, covered with shrink-wrap plastic film with wooden cage packing.

WARNINGS

The Manufacturer reserves the right to accept any combinations of accessories installed on the machine.

ACCESSORIES: 1042 - VERTICAL AIR FLOW DIRECTION

The accessory is available only for machines equipped with 1/2/3 fans.

Units can be supplied with support feet to achieve vertical airflow. Support feet are supplied as an assembly kit along with the necessary hardware. Mounting of the feet is the responsibility of the Installer. Always secure the unit to the floor as provided for the basic version.

The horizontal airflow version is recommended for installations in windy areas.

The vertical airflow version is not suitable for installations in seismic areas.

WEIGHT MACHINES WITH VERTICAL AIR FLOW

Serie MEDR-TF-A

MODEL	014	026	034	061	070	082	122	140	165
ACOUSTIC ENCLOSURE	STANDARD								
NET WEIGHT	kg	49.4	75.4	95.8	159.6	186.6	204.6	---	---

Serie MEDR-TF-SL-A

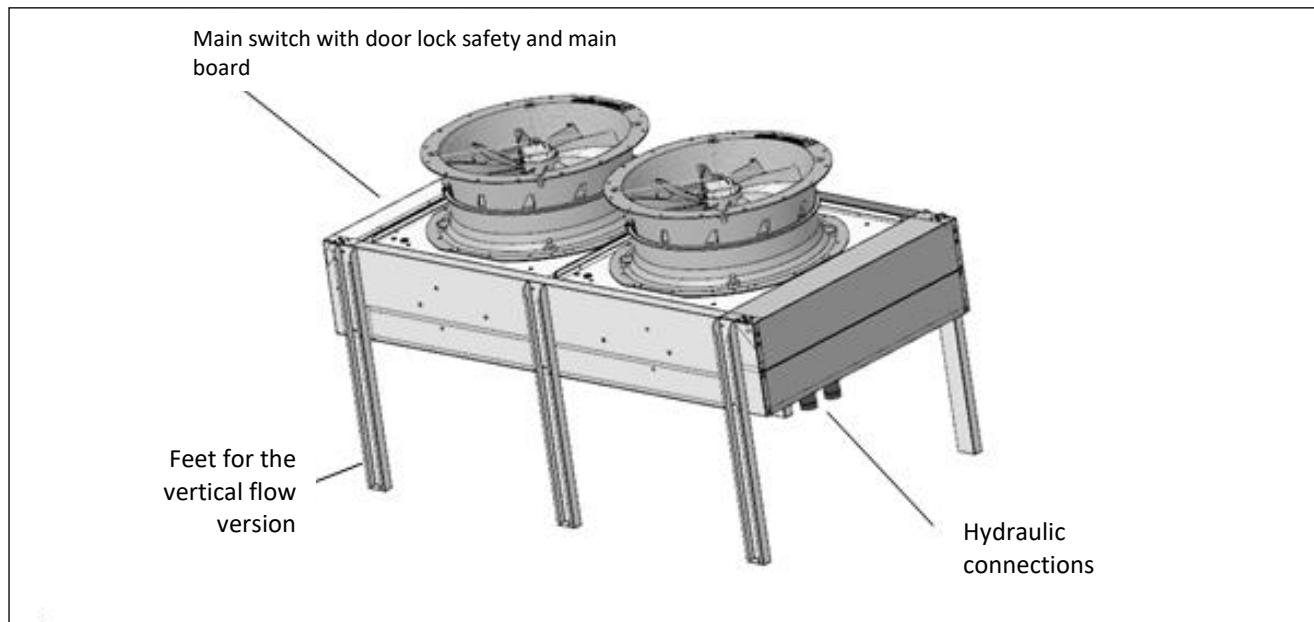
MODEL	014	026	034	061	070	082	122	140	165
ACOUSTIC ENCLOSURE	SL	SL	SL	SL	SL	SL	SL	SL	SL
NET WEIGHT	kg	50.4	76.4	96.8	161.6	188.6	206.6	---	---

Serie MEDR-TF-E

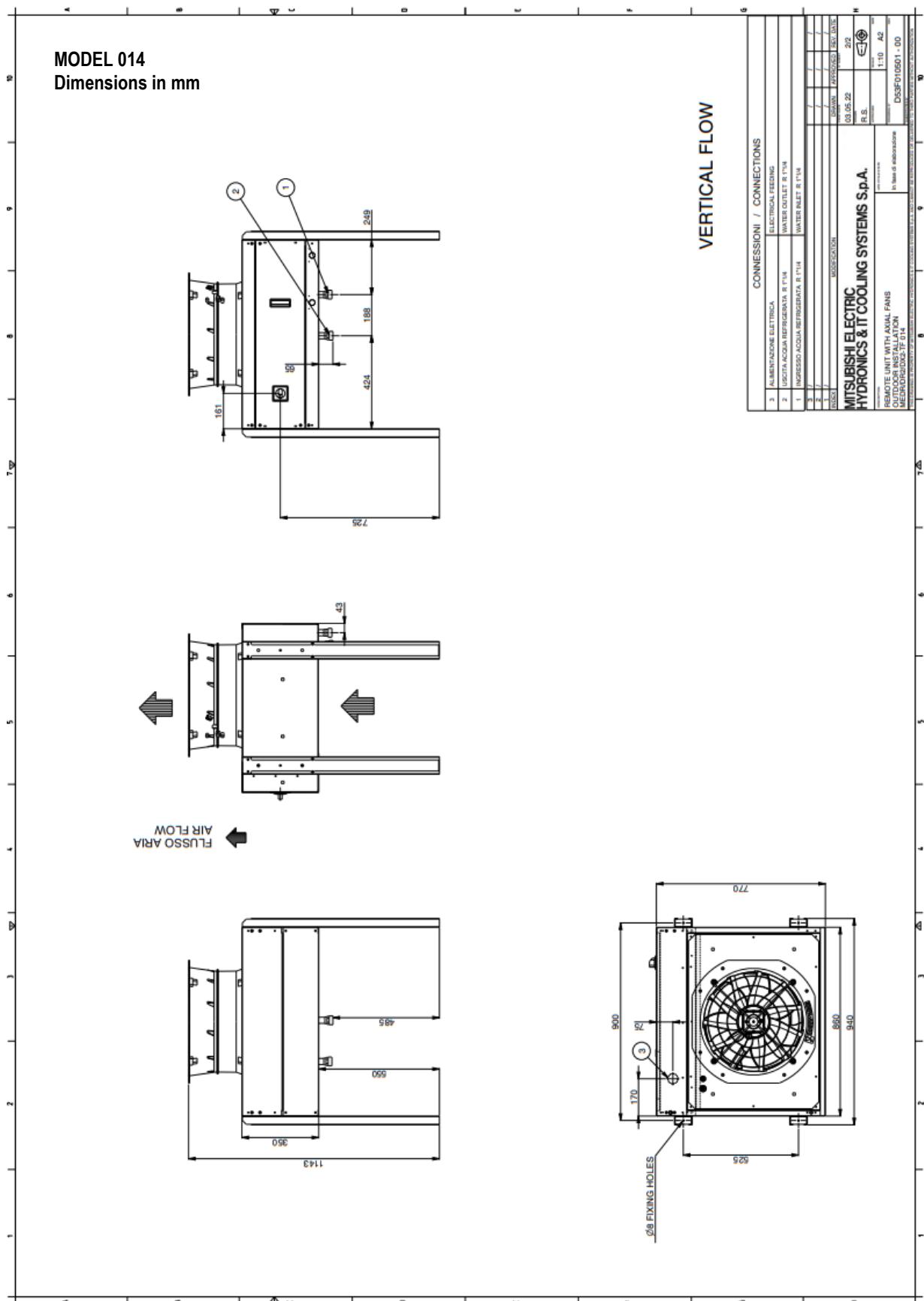
MODEL	014	026	034	061	070	082	122	140	165
ACOUSTIC ENCLOSURE	STANDARD								
NET WEIGHT	kg	47.4	73.4	92.8	155.6	182.6	200.6	---	---

Serie MEDR-TF-SL-E

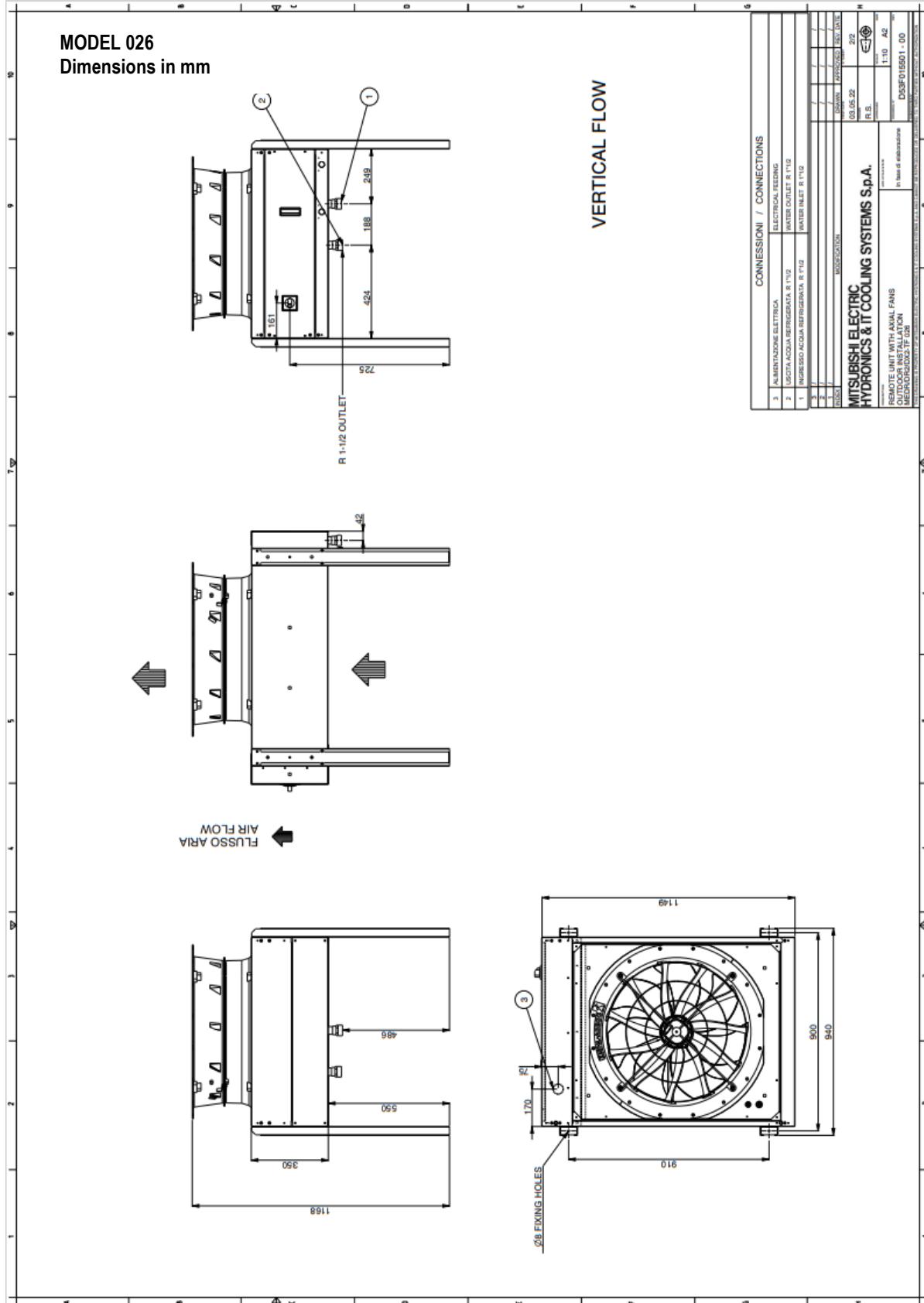
MODEL	014	026	034	061	070	082	122	140	165
ACOUSTIC ENCLOSURE	SL	SL	SL	SL	SL	SL	SL	SL	SL
NET WEIGHT	kg	48.4	74.4	93.8	157.6	184.6	202.6	---	---



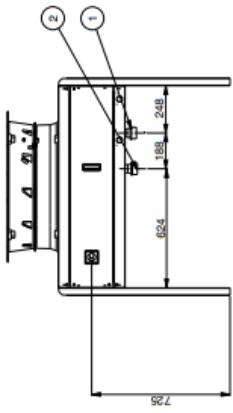
MODEL 014
Dimensions in mm



MODEL 026
Dimensions in mm



MODEL 034
Dimensions in mm

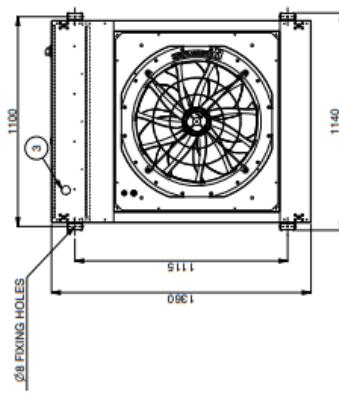
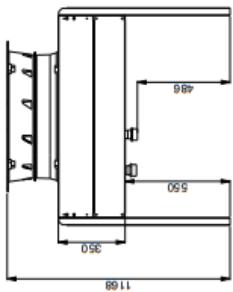
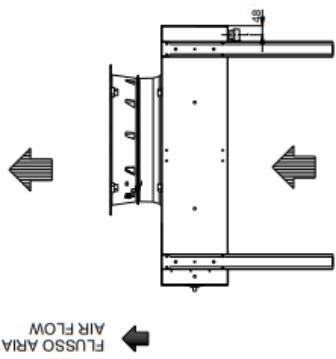


VERTICAL FLOW

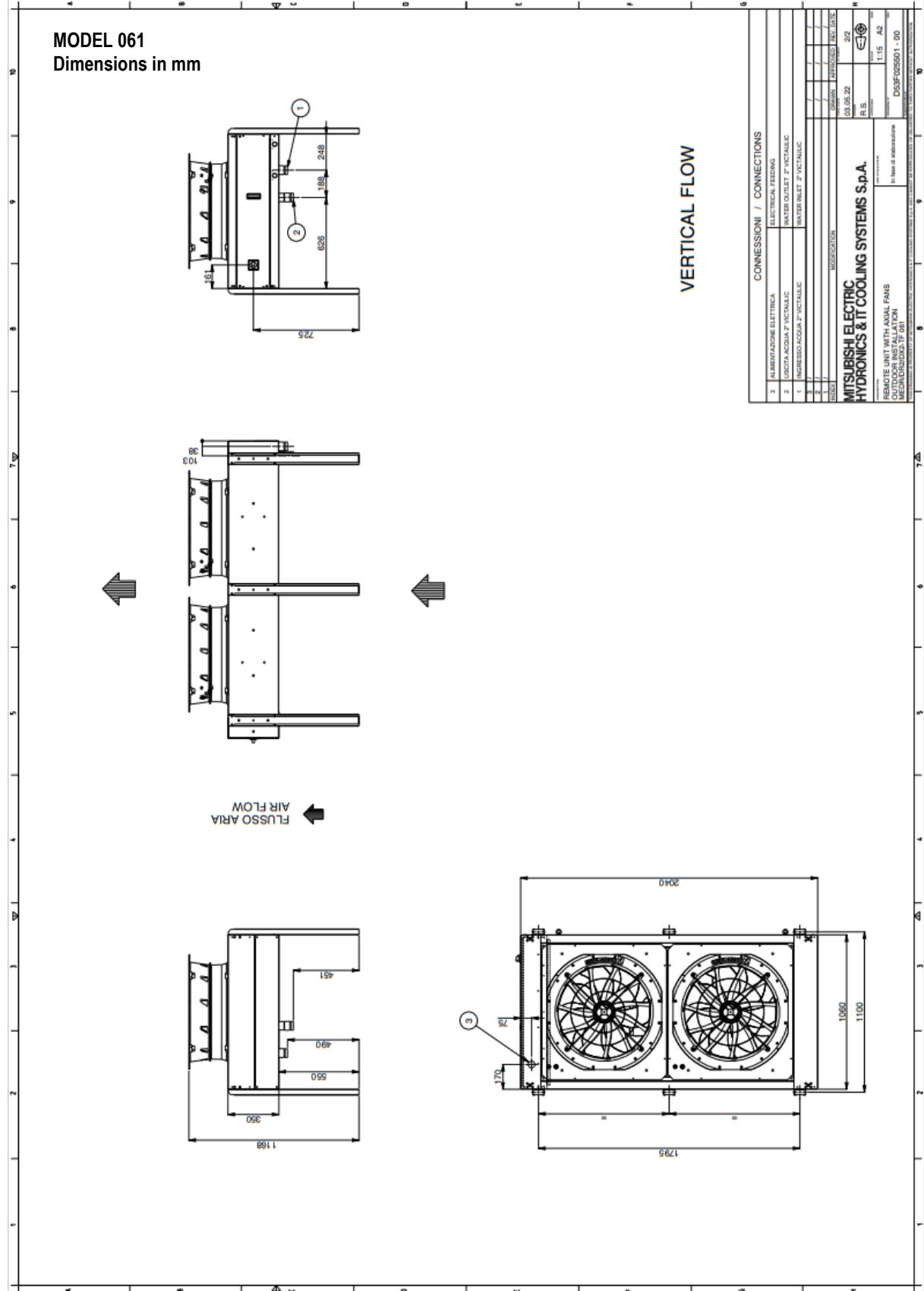
CONNESSIONI / CONNECTIONS	
3	ELETTRICA/ELETTRICA ELECTRICAL/ELÉCTRICO
2	USCITA ACQUA RIGENERATRICE R. 2" WATER OUTLET R. 2"
1	INGRESSO ACQUA RIGENERATRICE R. 2" WATER INLET R. 2"
3	/
2	/
MESSA IN MARCHIAGE	
1	USCITA D'ARIA EXHAUST AIR OUTLET
2	APERTURA/ABRIR OPENING
3	RIBASSO ARIA AIR UNDERLAY

MITSUBISHI ELECTRIC
HYDRONICS & IT COOLING SYSTEMS S.p.A.
REMOVABLE FRONT PANEL
REMOTE UNIT WITH AXIAL FANS
OUTDOOR INSTALLATION
MITSUBISHI ELECTRIC

DSCF2020501.00

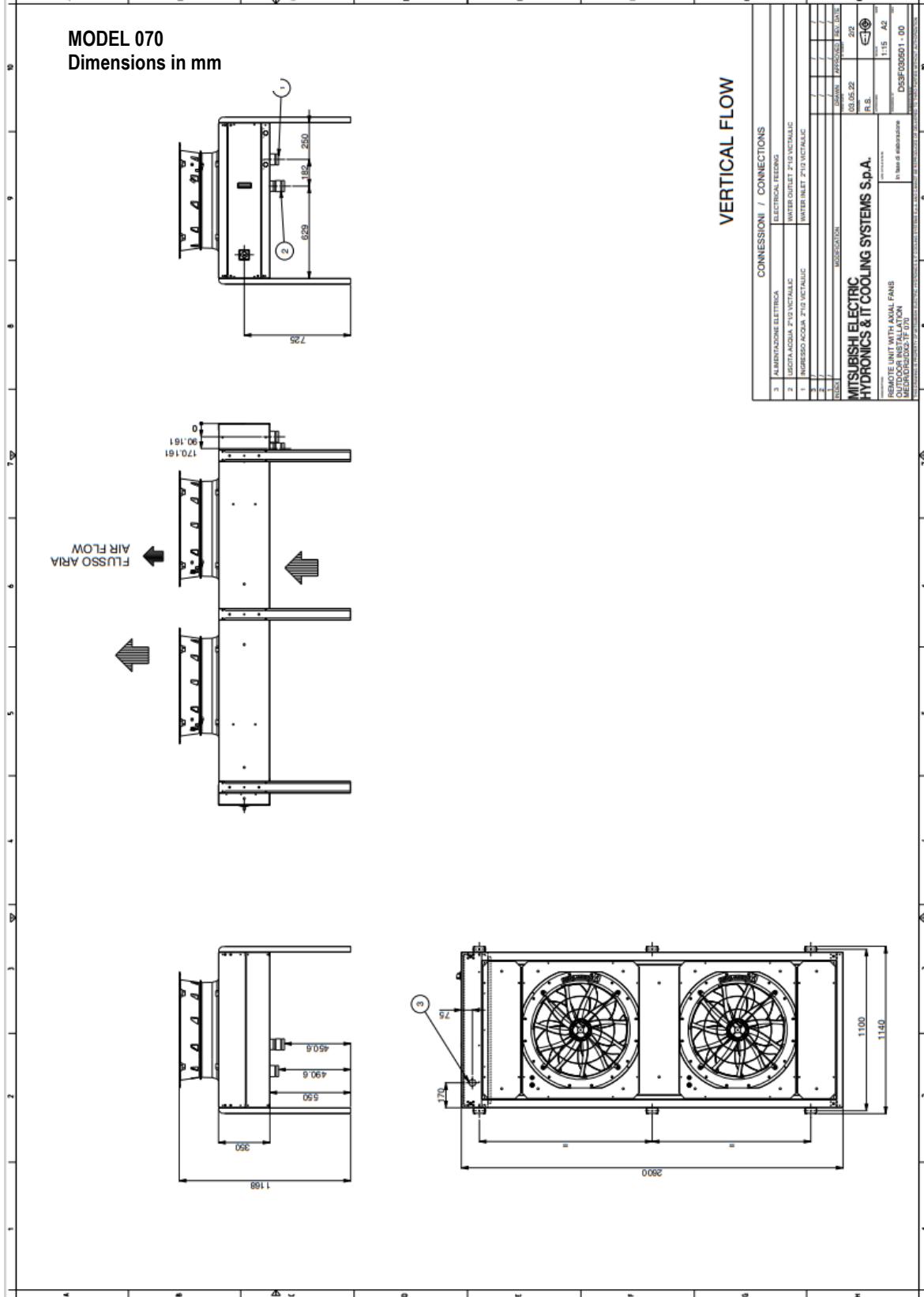


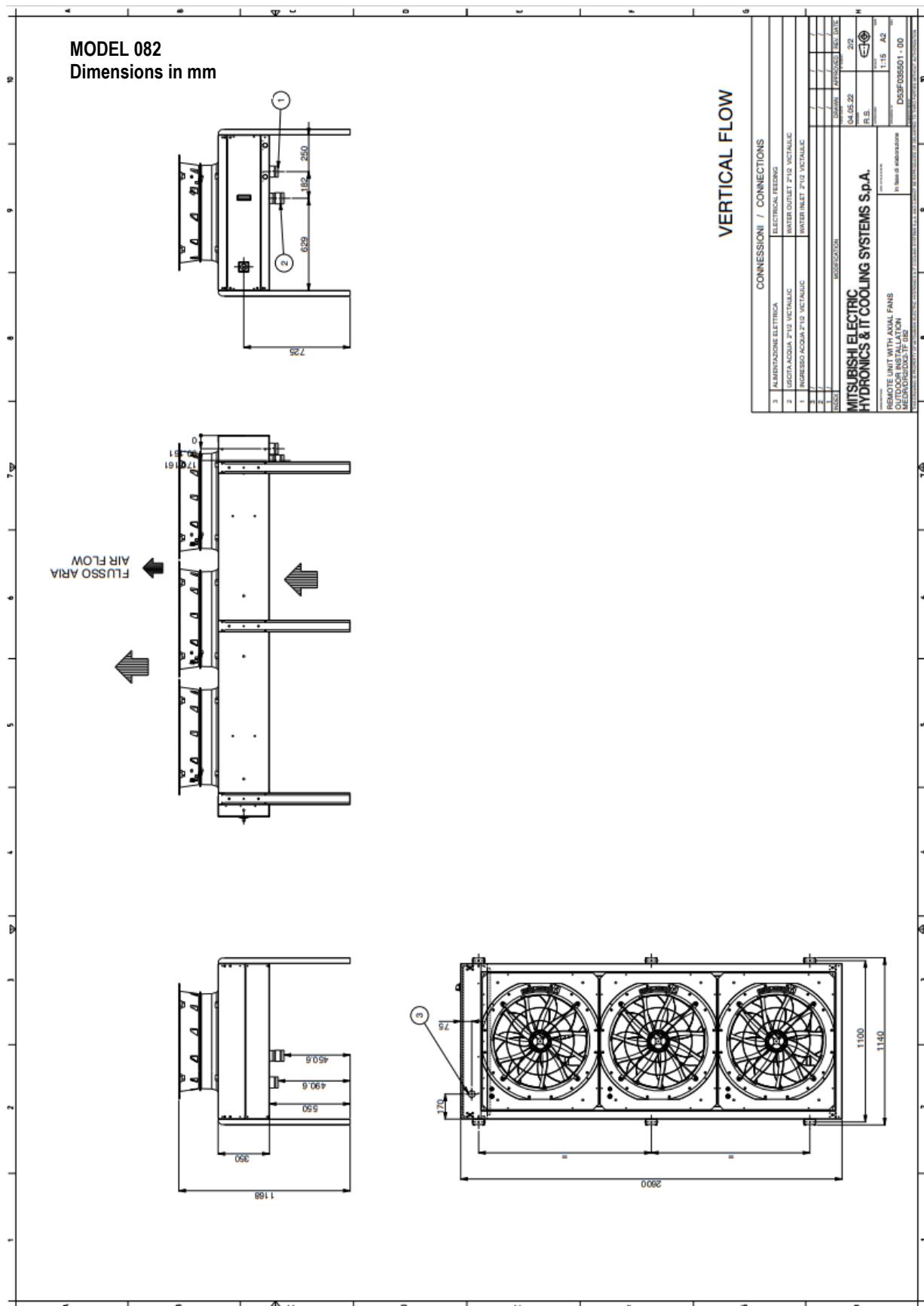
MODEL 061
Dimensions in mm



MODEL 070

Dimensions in mm





ACCESSORIES: 895 – CONDENSING COIL WITH FIN GUARD TREATMENT

The exchanger is fully treated with a high-pressure spray painting process for the surface deposition of a protective layer of polyurethane paint. The main advantages of this type of treatment are as follows:

- Polyurethane paint with metal suspension
- Salt spray corrosion resistance according to ASTM B117 not less than 3000 hours
- Excellent UV resistance

To ensure proper machine operation and the best operating conditions, it is important to keep the exchangers clean and efficient as indicated in the Installation, Operation and Maintenance manuals.

Protective treatment results in a slight reduction in exchanger efficiency.

Protective treatment does not preclude maintenance and cleaning of the exchangers.

SHIPMENT: PACKAGE DIMENSIONS

Values refer to the basic machine. The presence of some accessories increases the weight of the machine.

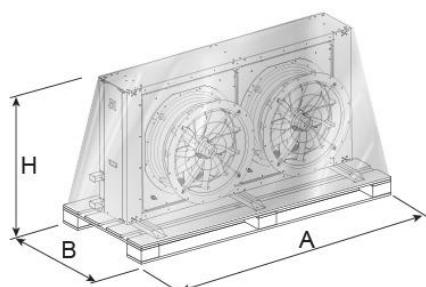
MODELS WITH 1/2/3 FANS - HORIZONTAL AIRFLOW

Machines are shipped on pallet and covered with shrink film.

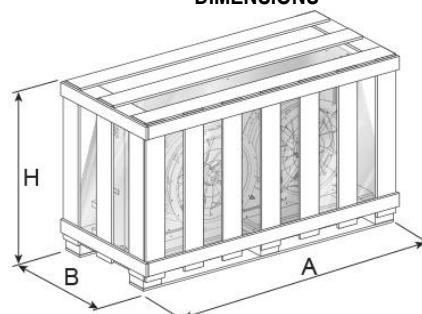
On request packed on pallet, covered with shrink film and wooden cage (opt. 9973).

When foreseen the wooden cage, stacking on two levels is allowed.

STANDARD PACKAGE DIMENSIONS



ACCESSORY 9973 – WOODEN CAGE PACKAGE DIMENSIONS



MODEL	A (mm)	B (mm)	H (mm)
014	1050	850	1050
026	1400	850	1050
034	1650	850	1250
061	2300	850	1250
070	2850	850	1250
082	2850	850	1250

MODEL	A (mm)	B (mm)	H (mm)
014	1100	900	1200
026	1450	900	1200
034	1700	900	1400
061	2350	900	1400
070	2900	900	1400
082	2900	900	1400

ACCESSORIES

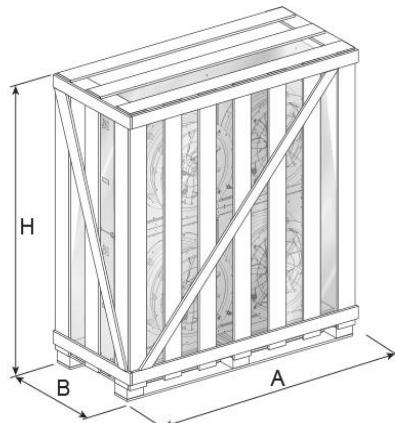
MEDR-TF

Data Book
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MODELS WITH 4/6 FANS - VERTICAL AIR FLOW.

Machines are shipped upright on pallet, covered with shrink film and wooden cage. Stacking not permitted.

WOODEN CAGE PACKAGE (STANDARD)
DIMENSIONS



Model	A (mm)	B (mm)	H (mm)
122	2350	900	2400
140	2950	900	2400
165	2950	900	2400

SHIPMENT: SHIPPING WEIGHT STANDARD MACHINES

Serie	Voltage	Model									
MEDR-TF-A	230/1/50	014	026	034	061	070	082	122	140	165	
PACKAGE TYPE											
Standard	kg	64	94	121	193	236	254	---	---	---	
Wooden cage	kg	78	109	137	213	266	284	481	578	613	

Serie	Voltage	Model									
MEDR-TF-SL-A	230/1/50	014	026	034	061	070	082	122	140	165	
PACKAGE TYPE											
Standard	kg	65	95	122	195	238	256	---	---	---	
Wooden cage	kg	79	110	138	215	268	286	484	582	617	

Serie	Model										
MEDR-TF-E	014	026	034	061	070	082	122	140	165		
PACKAGE TYPE											
Standard	kg	62	92	118	189	232	250	---	---	---	
Wooden cage	kg	76	107	134	209	262	280	473	570	605	

Serie	Model										
MEDR-TF-SL-E	014	026	034	061	070	082	122	140	165		
PACKAGE TYPE											
Standard	kg	63	93	119	191	234	252	---	---	---	
Wooden cage	kg	77	108	135	211	264	282	476	574	609	

(--) Not available

MITSUBISHI ELECTRIC HYDRONICS & IT COOLING SYSTEMS S.p.A.

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