rcgroup.it

next p

6 ÷ 112 kW COOLING

5 ÷ 93 kW HEATING

Heat pump air conditioners with upflow air delivery

technicalcatalogue

T_NXTP_0411_GB

rcgroupairconditioning

INDEX

GENERAL CHARACTERISTICS

NEXT P: Heat pump air conditioners with upflow air delivery.

The machines are made for indoor installation.

The constructive solutions and the internal lay-out allow high application flexibility and the frontal access to the main components for the inspection and routine maintenance.

Machines supply fully assembled with refrigerant charge and control systems. The installation requires electrical and hydraulic /refrigerant connections only allowing high costs and time reduction.

Final assembly on all machines before shipment including running test, reading and monitoring of operating parameters, alarms simulation and visual check.

Design, assembly and test as per the Company Quality Assurance program in full compliance with ISO 9001. RC Group has been the first Italian company in its segment to get the ISO 9001 in October 13th, 1991 with certificate ICIM 0018.

The machines are in full compliance with European Norms 2006/42CE, 2006/95CE, 2004/108CE, 97/23CE and subsequent amendments.

SERIES IDENTIFICATION

Frontal air suction and upflow air delivery.

NEXT DX O P: Direct expansion heat pump air conditioners for matching with remote air/gas exhaustion heat exchanger and equipped with scroll compressors and Plug-fans.

S version: with single refrigerant circuit
Cooling capacity 6,5 ÷ 95,8 kW
Heating capacity 6,5 ÷ 93,9 kW

DC version: with double refrigerant circuit
Cooling capacity 23,3 ÷ 96,9 kW
Heating capacity 22,7 ÷ 96,0 kW

NEXT DW O P: Direct expansion heat pump air conditioners with built-in water/gas exhaustion heat exchanger and equipped with scroll compressors and Plug-fans.

S version: with single refrigerant circuit
Cooling capacity 7,2 ÷ 112 kW
Heating capacity 7,3 ÷ 104 kW

DC version: with double refrigerant circuit
Cooling capacity 27,0 ÷ 112,0 kW
Heating capacity 24,6 ÷ 100,0 kW

MODEL IDENTIFICATION

NEXT HP DX O P 026 P 2 H5 DC

DX **Machine type**
DX direct expansion – air cooled
DW direct expansion – water cooled

O **Air delivery**
O upflow

P **Heat pump**

026 **Cooling capacity (kW) at nominal conditions**

P **Compressor type**
P Scroll hermetic

2 **Number of compressors**

H5 **Cabinet size**

DC **Double refrigerant circuit**

WORKING LIMITS

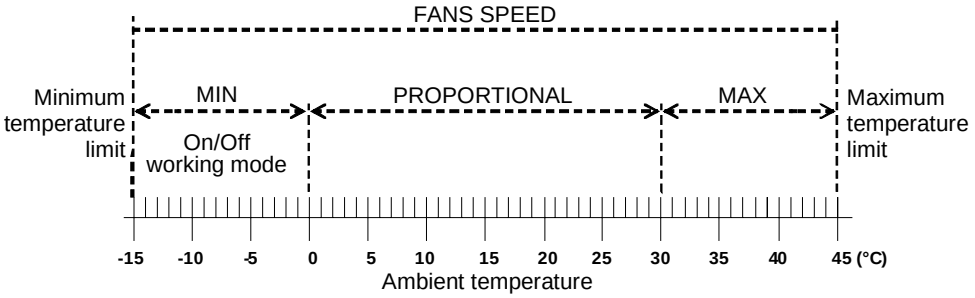
Room air temperature:
14°C minimum temperature with wet bulb.
24°C maximum temperature with wet bulb.
35°C maximum temperature with dry bulb.

Room air humidity:
20%RH minimum relative humidity.
75%RH maximum relative humidity.

REMOTE AIR/GAS EXHAUSTION HEAT EXCHANGER

CONDENSING CONTROL IN COOLING MODE

CONDENSING CONTROL WITH PHASE-CUT ELECTRONIC REGULATORS

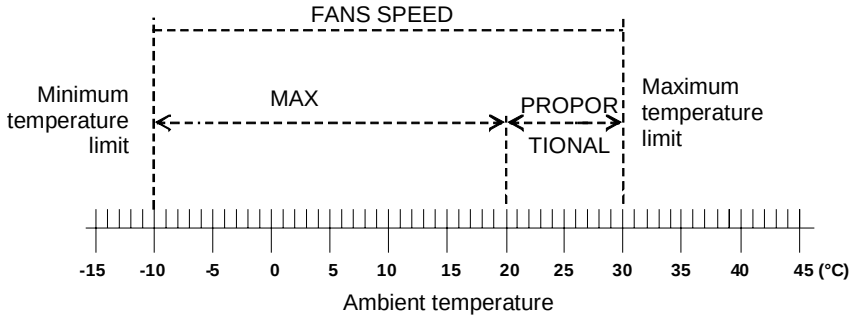


The values are indicative. The working temperatures are influenced by a series of variables as:

- Working conditions
- Thermal load
- Cleanness status of the condensing coils
- Set of the microprocessor control

EVAPORATING CONTROL IN HEATING MODE (HEAT PUMP)

EVAPORATING CONTROL WITH PHASE-CUT ELECTRONIC REGULATORS



The values are indicative. The working temperatures are influenced by a series of variables as:

- Working conditions
- Thermal load
- Cleanness status of the air/gas heat exchangers
- Set of the microprocessor control

WATER/GAS EXHAUSTION HEAT EXCHANGER

COOLING MODE
Water temperature:
12÷45°C Inlet water temperature range.
3°C Minimum Δt between water inlet/outlet

HEATING MODE
Water temperature:
9÷20°C Inlet water temperature range.
3÷8°C Δt range between water inlet/outlet

STORING TEMPERATURE
If the machine is not installed on receipt and is stored for a long time, store it in a protected place, at temperatures ranging between -30°C and 50°C in absence of superficial condensation and direct sun light.

MAIN COMPONENTS

FRAMEWORK

- Base in aluminium extrusion, painted with epoxy powders.
- Inner frame and upper frame in aluminium profile, painted with epoxy powders. The inner frame is provided with seals to ensure air tight with the panels.
- Galvanized steel sheet panels externally coated with PVC film and internally insulated with noise absorption material.
- The panels are fixed to the frame with non visible mounting system.
- Electric board in separate technical compartment on the machine front (Size H0, H1, H2, H3).
- Separate technical compartment on machine front for electric board, refrigerant and hydraulic connections and control and regulation devices (size H4, H5, H6, H7)
- Colour: RAL 9005 for base and frame
- Similar to RAL7015 for panels, with hammered finish
- Air intake from the front through honeycomb type grille and air delivery from the top.
- Washable air pre-filters with G2 efficiency, with cells in synthetic fibre (size H0 excluded).

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.
- Crankcase heater.
- Electric motor thermal protection via internal winding temperature sensors.
- Terminal box with IP54 enclosure class.
- Rubber supports.

FILTER SECTION

- Size H0
- Washable air filters with G3 efficiency, with cells in synthetic fibre and metallic frame (EN 779-2002).
- Size H1, H2, H3, H4, H5, H6, H7
- Washable air filters with G4 efficiency, with cells in synthetic fibre and metallic frame (EN 779-2002).

GAS/AIR HEAT ECHANGER SECTION

- Heat exchanger coil with internally corrugated copper tubes and high efficiency aluminium fins, specifically developed to provide high heat transfer and lower pressure drops.
  - With single refrigerant circuit for S version machines.
  - With double refrigerant circuit for DC version machines.
- Frame in galvanized steel.
- Condensate tray in peraluman with PVC flexible discharge pipe.

FANS SECTION

- Centrifugal fans with backward curved blades, single suction and without scroll housings (Plug-fans), directly coupled to external rotor electric motor.
  - Size H0, H1, H2, H3:
    Brushless type synchronous EC motor with integrated electronic commutated system and continuous variation of the rotation speed.
    The motor rotation control is obtained with the EC system (Electronic Commutation) that manage the motor according to the 0÷10V proportional signal coming from the microprocessor control.
  - Size H4, H5, H6, H7:
    Fans fed through an autotransformer that allows the manual selection of 7 rotation speed.
- Temperature sensors on air intake.

REFRIGERANT CIRCUIT

Components for each refrigerant circuit:

- Refrigerant circuit reverse valve.
- Thermostatic expansion valve.
- Sight glass.
- Filter dryer on liquid line.
- Pressure transducers with indication, control and protection functions, on low and high refrigerant pressure.
- High pressure safety switch with manual reset.
- Liquid receiver with accessories.
- Refrigerant circuit with copper tubing with anticondensate insulation of the suction line.
- Plastic capillary hoses for pressure sensors connection.
- R410A refrigerant charge.
- NEXT DX O P:
  - Valves on gas delivery and liquid return for coupling to remote air/gas exhaustion heat exchanger.
  - 0÷10V proportional signal to manage the condensing/evaporating control system of the remote air/gas exhaustion heat exchanger.
  - Ambient air sensor in waterproof box for outdoor installation.
- NEXT DW O P:
  - Water/gas exhaustion heat exchanger, copper brazed plate type with cover plates, plates and connections in AISI 316 stainless steel.
  - 2-way motorized valve with proportional control (0÷10V) for condensing/evaporating control and emergency manual control.
  - 0÷10V proportional signal to manage the condensing/evaporating control system of the 2-way motorized valve.

ELECTRICAL PANEL

In accordance with EN60204-1 norms complete with:

- Main switch with door lock safety.
- Magnetothermic switch for each compressor.
- Magnetothermic switches for fans.
- Contactors for each load.
- The supply fans equipped with EC electric motor are not supplied with contactors.
- Transformer for auxiliary circuit and microprocessor supply.
- Panel with machine controls.
- Seasonal Summer/Winter electric switch placed on the MP.COM terminal.
- Power supply:
  - 230/1/50 for model 006 P1 S H0.
  - 400/3/50 for the other models.

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.
  - Non-volatile “Flash” memory for data storage.
  - Menu with protection password.
  - LAN connection.

WARNING

For DX units it is necessary to provide the refrigerant and the lubricant oil charge for the connection pipes and for the remote air cooled condenser.

OPTIONAL ACCESSORIES

- Plug-fan with electronic commutated brushless motors (EC fan) for the continuous control of the fan rotation speed (machine size H4, H5, H6, H7).
- Remote air/gas exhaustion heat exchanger with axial fans series TEAM MATE DXAP MR.
- Electronic expansion valve (only for the air conditioner) .
- Proportional controlled steam humidifier with immersed electrodes fitted with safety and running accessories (temperature and humidity sensor on air intake is included).
- Electric heater consisting of aluminium armoured elements with integral fins and safety thermostat.
  - Size H0, H1, H2: One working step.
  - Size H3, H4, H5, H6, H7: Two working steps.
- On/off type hot gas reheating system. In case of matching with electric heater system, the electric heater has 1 working step.
- Hot water heating system:
  Components:
  - Hot water cooling coil with copper tubes, aluminium fins and galvanized steel frame.
  - 3-way motorized valve with proportional control (0÷10V) and emergency manual control.
  - Temperature sensor on air delivery with antifreeze function.
- Compressor capacitor for power factor - cosφ 0,9.
- Phase sequence control relay for compressor.
- Compressor soundproof cap for a noise reduction of about 3 dB(A).
- Washable air filter with F5 efficiency (size H0 excluded).
- Unit floor stand with height adjusting rubber holders. It is not possible to match the unit floor stand with plenum installed under the machine.
- Condensate drain kit including pump with activation float and 10 linear meters long discharge pipe. For machines size H0, H1, H2 and H3 the optional is supplied in mounting kit.
- Sandwich panels with interposed mattress in soundproof material.
- Blind frontal panel (size H0 excluded).
- The accessory allows the intake air from the bottom of the machine.
- Unit base noise insulation with special bottom panel (size H0 excluded).
- Differential pressure switch on the air side for clogged filters alarm signal.
- Loss of air flow alarm.
- Underfloor water alarm through sensor to be placed on the floor.
- Additional underfloor water sensor kit.
- Temperature sensor on air delivery.
- Temperature/humidity sensor on air intake.
- Non-return air damper driven by electric servomotor for installation on the machine air delivery.
- Air distribution plenum with double row adjustable grilles on three sides.
- Air distribution plenum with double row adjustable grilles on front side and noise absorption partitions (size H0 excluded).
- Plenum with F6/F7/F9 efficiency filters on air delivery (size H0 excluded).
- Plenum with noise absorption partitions on air delivery (size H0 excluded).

- MP.COM microprocessor control accessories:
  - MP3000 Touch Screen graphic display.
  - Remote terminal
  - Clock card for alarms date and time displaying and storing.
  - Line current indication.
  - Line voltage indication.
  - Serial port RCcom, MBUS/JBUS
  - Serial port LON
  - Serial port BACnet for Ethernet – SNMP – TCP/IP
  - Serial port BACnet for MS/TP
  - Serial port for GSM modem
  - Data logger for the memorization of the intervened alarms.
  - Additional module with the following inlets / outlets:
    INLETS
    - o External alarm
    - o Smoke / Fire alarm
    - o Cooling enabling
    - o Heating enabling

    OUTLETS
    - o External alarm 2
    - o General alarm 3
  - Driver for the additional module.

WARNING
RC GROUP reserves the right to accept the matching of the optional installed on the machine.

TECHNICAL DATA - NEXT DXOP

MODEL		006 P1 S	008 P1 S	010 P1 S	007 P1 S	009 P1 S	011 P1 S	013 P1 S
SIZE		**H0**	**H0**	**H0**	**H1**	**H1**	**H1**	**H1**
SUMMER WORKING MODE (1)								
COOLING CAPACITY								
Total	kW	**6,5**	**7,5**	**8,8**	**7,1**	**8,2**	**9,6**	**10,8**
Sensible	kW	**5,8**	**6,6**	**7,5**	**7,1**	**8,2**	**9,2**	**9,7**
Compressors power input	kW	1,67	1,98	2,53	1,60	2,00	2,57	3,00
Compressors operating current	A	7,97	3,82	4,85	3,03	3,85	4,92	5,07
WINTER WORKING MODE (2)								
HEATING CAPACITY	kW	**6,5**	**7,6**	**9,2**	**6,6**	**7,8**	**9,3**	**10,9**
Compressors power input	kW	1,45	1,72	2,20	1,20	1,48	1,91	2,32
Compressors operating current	A	7,01	3,49	4,41	2,52	3,20	4,05	4,11
SUPPLY FANS	n.	1	1	1	1	1	1	1
Air flow	m^3/h	1580	1800	2000	2273	2653	2653	2653
Nominal external static pressure	Pa	30	30	30	50	50	50	50
Max external static pressure	Pa	186	100	8	211	132	118	118
Power input (3)	kW	0,10	0,14	0,18	0,25	0,36	0,30	0,30
Max power input	kW	0,18	0,18	0,18	0,46	0,46	0,36	0,36
Operating current (3)	A	0,66	0,95	1,27	3,00	4,42	1,74	1,74
Max operating current (FLA)	A	1,3	1,3	1,3	6,9	6,9	2,2	2,2
COMPRESSORS		scroll	scroll	scroll	scroll	scroll	scroll	scroll
Quantity	n.	1	1	1	1	1	1	1
Max current	A	12,8	6,0	7,0	4,7	6,0	7,0	8,0
Starting current	A	60	38	46	28	38	46	43
Capacity steps	n.	1	1	1	1	1	1	1
AIR FILTERS	n.	1	1	1	1	1	1	1
Efficiency		G3	G3	G3	G4	G4	G4	G4
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (4)	kg	2,4	2,4	2,4	4,8	4,8	4,8	4,8
Gas circuits	n.	1	1	1	1	1	1	1
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	400/3/50+N
ENERGY EFFICIENCY INDEXES (5)								
EER – Energy Efficiency Ratio	kW/kW	3,20	3,16	2,97	3,36	3,15	3,00	2,98
COP = Coefficient of Performance	kW/kW	3,61	3,62	3,50	3,89	3,72	3,71	3,71
SOUND LEVEL – ISO 3744 (6)								
On air delivery	dB(A)	55,7	58,3	60,4	56,7	59,7	59,7	59,7
On air intake	dB(A)	50,7	52,5	54,6	49,7	50,6	51,9	51,9
Irradiated	dB(A)	39,5	41,5	43,6	39,7	41,9	42,4	42,4
DIMENSIONS								
Length	mm	655	655	655	650	650	650	650
Width	mm	420	420	420	650	650	650	650
Height	mm	1680	1680	1680	1925	1925	1925	1925
NET WEIGHT	kg	165	165	165	191	194	195	196
REMOTE CONDENSER (7)								
Quantity	n.	1	1	1	1	1	1	1
TEAM MATE DXAP MR STD series	Mod.	M 13	M 13	M 13	M 13	M 13	M 13	M 14
TEAM MATE DXAP MR LNO/ELN series	Mod.	M 13	M 13	M 14	M 13	M 13	M 14	M 18
ELECTRIC HEATER								
Capacity	kW	2,6	2,6	2,6	5,1	5,1	5,1	5,1
Operating current (OA)	A	11,0	11,0	11,0	7,4	7,4	7,4	7,4
Capacity steps	n.	1	1	1	1	1	1	1
HUMIDIFIER								
Steam capacity	kg/h	2	2	2	3	3	3	3
Power input	kW	1,4	1,4	1,4	2,3	2,3	2,3	2,3
Operating current (OA)	A	6,1	6,1	6,1	3,2	3,2	3,2	3,2
Max operating current (FLA)	A	8,8	8,8	8,8	4,5	4,5	4,5	4,5
HEATING COIL (8)								
Heating capacity	kW	10,2	11,1	11,8	16,5	18,2	18,2	18,2
Water flow rate	m^3/h	0,6	0,7	0,7	1,0	1,1	1,1	1,1
Pressure drop coil + valve	kPa	10	12	13	10	12	12	12
Water volume	l	0,8	0,8	0,8	1,7	1,7	1,7	1,7
REFRIGERANT CONNECTIONS								
Gas delivery	ODS Ø	12	12	12	12	12	12	12
Liquid return	ODS Ø	12	12	12	12	12	12	12
CONNECTIONS ISO 228/1-G								
Hot water Inlet/outlet	M Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Humidifier filling	F Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate discharge – rubber pipe	F Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 27°C with 47%rH; ambient temperature at 35°C
2. Characteristics referred to entering air at 20°C; ambient temperature at 7°C with 90% rH.
3. Corresponding to the nominal external static pressure.
4. Machine refrigerant charge. Exhaust air exchanger, connections pipes and optional are excluded.
5. The Energy Efficiency Indexes consider also the remote air cooled condenser as shown in the table.
6. Noise level at 1 meter in free field (nominal external static pressure).
7. For matching to other remote exchangers please refer to RC WORLD selection program.
8. Characteristics referred to entering air at 20°C with hot water at 75-60°C.

TECHNICAL DATA - NEXT DXOP

MODEL		014 P1 S	015 P1 S	017 P1 S	019 P1 S	021 P1 S	023 P1 S	025 P1 S
SIZE		**H2**	**H2**	**H2**	**H3**	**H3**	**H3**	**H4**
SUMMER WORKING MODE (1)								
COOLING CAPACITY								
Total	kW	**11,7**	**14,0**	**16,4**	**17,0**	**19,1**	**21,1**	**24,3**
Sensible	kW	**11,7**	**13,5**	**15,0**	**17,0**	**18,6**	**19,5**	**24,1**
Compressors power input	kW	3,06	3,87	4,29	4,29	5,02	5,94	6,28
Compressors operating current	A	5,15	6,44	7,62	7,60	8,81	11,10	11,40
WINTER WORKING MODE (2)								
HEATING CAPACITY	kW	**11,0**	**14,0**	**16,2**	**16,1**	**19,1**	**21,3**	**23,8**
Compressors power input	kW	2,05	2,80	3,36	3,12	3,72	4,33	4,58
Compressors operating current	A	3,75	4,85	6,27	5,92	7,01	9,00	9,16
SUPPLY FANS	n.	1	1	1	1	1	1	1
Air flow	m^3/h	3955	3955	3955	5460	5460	5460	7160
Nominal external static pressure	Pa	50	50	50	50	50	50	50
Max external static pressure	Pa	282	282	282	600	600	600	95
Power input (3)	kW	0,43	0,43	0,43	0,63	0,63	0,63	1,27
Max power input	kW	1,00	1,00	1,00	2,70	2,70	2,70	1,35
Operating current (3)	A	0,95	0,95	0,95	0,98	0,98	0,98	2,47
Max operating current (FLA)	A	1,9	1,9	1,9	4,3	4,3	4,3	2,6
COMPRESSORS		scroll	scroll	scroll	scroll	scroll	scroll	scroll
Quantity	n.	1	1	1	1	1	1	1
Max current	A	8,0	10,3	11,8	11,8	15,0	15,0	16,0
Starting current	A	43	52	64	64	75	101	95
Capacity steps	n.	1	1	1	1	1	1	1
AIR FILTERS	n.	1	1	1	2	2	2	2
Efficiency		G4	G4	G4	G4	G4	G4	G4
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (4)	kg	5,8	5,8	5,8	7,3	7,3	7,3	8,9
Gas circuits	n.	1	1	1	1	1	1	1
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	400/3/50+N	400/3/50+N
ENERGY EFFICIENCY INDEXES (5)								
EER – Energy Efficiency Ratio	kW/kW	3,05	3,02	3,15	3,13	3,11	2,98	3,01
COP = Coefficient of Performance	kW/kW	3,89	3,93	3,79	3,77	3,94	3,90	3,73
SOUND LEVEL – ISO 3744 (6)								
On air delivery	dB(A)	64,7	64,7	64,7	65,2	65,2	65,2	69,2
On air intake	dB(A)	53,9	53,9	55,5	55,7	58,4	56,3	58,1
Irradiated	dB(A)	46,6	46,6	46,8	47,2	48,2	47,4	51,1
DIMENSIONS								
Length	mm	785	785	785	1085	1085	1085	1320
Width	mm	650	650	650	750	750	750	860
Height	mm	1925	1925	1925	1925	1925	1925	1980
NET WEIGHT	kg	252	254	255	313	316	317	433
REMOTE CONDENSER (7)								
Quantity	n.	1	1	1	1	1	1	1
TEAM MATE DXAP MR STD series	Mod.	M 14	M 18	M 21	M 21	M 26	M 26	M 32
TEAM MATE DXAP MR LNO/ELN series	Mod.	M 21	M 26	M 26	M 26	M 32	M 32	M 41
ELECTRIC HEATER								
Capacity	kW	5,1	5,1	5,1	5,1	5,1	5,1	9,0
Operating current (OA)	A	7,4	7,4	7,4	7,4	7,4	7,4	13,0
Capacity steps	n.	1	1	1	2	2	2	2
HUMIDIFIER								
Steam capacity	kg/h	3	3	3	3	3	3	8
Power input	kW	2,3	2,3	2,3	2,3	2,3	2,3	6,0
Operating current (OA)	A	3,2	3,2	3,2	3,2	3,2	3,2	8,7
Max operating current (FLA)	A	4,5	4,5	4,5	4,5	4,5	4,5	12,4
HEATING COIL (8)								
Heating capacity	kW	25,0	25,0	26,8	39,0	39,0	39,0	49,3
Water flow rate	m^3/h	1,5	1,5	1,6	2,3	2,3	2,3	2,9
Pressure drop coil + valve	kPa	8	8	17	27	27	27	14
Water volume	l	2,3	2,3	2,3	3,3	3,3	3,3	4,7
REFRIGERANT CONNECTIONS								
Gas delivery	ODS Ø	22	22	22	22	22	22	22
Liquid return	ODS Ø	12	12	12	16	16	16	16
CONNECTIONS ISO 228/1-G								
Hot water Inlet/outlet	M Ø	3/4"	3/4"	3/4"	1"	1"	1"	1+1/4"
Humidifier filling	F Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate discharge – rubber pipe	F Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 27°C with 47%rH; ambient temperature at 35°C
2. Characteristics referred to entering air at 20°C; ambient temperature at 7°C with 90% rH.
3. Corresponding to the nominal external static pressure.
4. Machine refrigerant charge. Exhaust air exchanger, connections pipes and optional are excluded.
5. The Energy Efficiency Indexes consider also the remote air cooled condenser as shown in the table.
6. Noise level at 1 meter in free field (nominal external static pressure).
7. For matching to other remote exchangers please refer to RC WORLD selection program.
8. Characteristics referred to entering air at 20°C with hot water at 75-60°C.

TECHNICAL DATA - NEXT DXOP

MODEL		029 P1 S	033 P1 S	038 P1 S	040 P1 S	045 P1 S	049 P1 S
SIZE		**H4**	**H4**	**H5**	**H5**	**H5**	**H5**
SUMMER WORKING MODE (1)							
COOLING CAPACITY							
Total	kW	**27,1**	**32,2**	**33,7**	**37,6**	**40,6**	**47,5**
Sensible	kW	**25,9**	**28,7**	**33,7**	**36,1**	**37,5**	**41,4**
Compressors power input	kW	7,28	8,22	8,32	9,05	10,4	12,40
Compressors operating current	A	13,50	15,30	15,40	16,30	19,0	23,80
WINTER WORKING MODE (2)							
HEATING CAPACITY	kW	**26,9**	**31,9**	**32,2**	**37,2**	**40,7**	**47,8**
Compressors power input	kW	5,31	6,21	5,73	6,82	7,9	9,77
Compressors operating current	A	10,80	12,50	11,90	13,10	15,4	20,30
SUPPLY FANS	n.	1	1	1	1	1	1
Air flow	m^3/h	7440	7440	10440	10440	10440	10440
Nominal external static pressure	Pa	50	50	50	50	50	50
Max external static pressure	Pa	50	50	136	136	136	136
Power input (3)	kW	1,29	1,29	2,09	2,09	2,09	2,09
Max power input	kW	1,35	1,35	2,30	2,30	2,30	2,30
Operating current (3)	A	2,50	2,50	3,90	3,90	3,90	3,90
Max operating current (FLA)	A	2,5	2,5	4,2	4,2	4,2	4,2
COMPRESSORS		scroll	scroll	scroll	scroll	scroll	scroll
Quantity	n.	1	1	1	1	1	1
Max current	A	21,0	22,0	22,0	25,0	31,0	34,0
Starting current	A	111	118	118	118	140	174
Capacity steps	n.	1	1	1	1	1	1
AIR FILTERS	n.	2	2	2	2	2	2
Efficiency		G4	G4	G4	G4	G4	G4
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (4)	kg	8,9	8,9	15,1	15,2	15,3	15,4
Gas circuits	n.	1	1	1	1	1	1
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	400/3/50+N
ENERGY EFFICIENCY INDEXES (5)							
EER – Energy Efficiency Ratio	kW/kW	2,98	3,13	3,01	3,16	3,07	3,05
COP = Coefficient of Performance	kW/kW	3,77	3,85	3,74	3,85	3,80	3,69
SOUND LEVEL – ISO 3744 (6)							
On air delivery	dB(A)	72,2	72,2	74,9	74,9	74,9	74,9
On air intake	dB(A)	60,7	60,7	62,6	62,9	63,2	63,5
Irradiated	dB(A)	54,1	54,1	56,8	56,8	56,8	56,8
DIMENSIONS							
Length	mm	1320	1320	1620	1620	1620	1620
Width	mm	860	860	860	860	860	860
Height	mm	1980	1980	1980	1980	1980	1980
NET WEIGHT	kg	433	434	490	490	490	498
REMOTE CONDENSER (7)							
Quantity	n.	1	1	1	1	1	1
TEAM MATE DXAP MR STD series	Mod.	M 32	M 41	M 41	M 52	M 52	M 63
TEAM MATE DXAP MR LNO/ELN series	Mod.	M 41	M 52	M 52	M 63	M 63	M 86
ELECTRIC HEATER							
Capacity	kW	9,0	9,0	13,5	13,5	13,5	13,5
Operating current (OA)	A	13,0	13,0	19,5	19,5	19,5	19,5
Capacity steps	n.	2	2	2	2	2	2
HUMIDIFIER							
Steam capacity	kg/h	8	8	8	8	8	8
Power input	kW	6,0	6,0	6,0	6,0	6,0	6,0
Operating current (OA)	A	8,7	8,7	8,7	8,7	8,7	8,7
Max operating current (FLA)	A	12,4	12,4	12,4	12,4	12,4	12,4
HEATING COIL (8)							
Heating capacity	kW	50,5	50,5	72,0	72,0	72,0	72,0
Water flow rate	m^3/h	3,0	3,0	4,2	4,2	4,2	4,2
Pressure drop coil + valve	kPa	10	15	26	26	26	12
Water volume	l	4,7	4,7	6,8	6,8	6,8	6,8
REFRIGERANT CONNECTIONS							
Gas delivery	ODS Ø	28	28	28	28	28	28
Liquid return	ODS Ø	16	16	22	22	22	22
CONNECTIONS ISO 228/1-G							
Hot water Inlet/outlet	M Ø	1+1/4"	1+1/4"	1+1/4"	1+1/4"	1+1/4"	1+1/4"
Humidifier filling	F Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate discharge – rubber pipe	F Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 27°C with 47%rH; ambient temperature at 35°C
2. Characteristics referred to entering air at 20°C; ambient temperature at 7°C with 90% rH.
3. Corresponding to the nominal external static pressure.
4. Machine refrigerant charge. Exhaust air exchanger, connections pipes and optional are excluded.
5. The Energy Efficiency Indexes consider also the remote air cooled condenser as shown in the table.
6. Noise level at 1 meter in free field (nominal external static pressure).
7. For matching to other remote exchangers please refer to RC WORLD selection program.
8. Characteristics referred to entering air at 20°C with hot water at 75-60°C.

TECHNICAL DATA - NEXT DXOP

MODEL		026 P2 DC	028 P2 DC	032 P2 S	032 P2 DC	036 P2 S	036 P2 DC
SIZE		**H5**	**H5**	**H5**	**H5**	**H5**	**H5**
SUMMER WORKING MODE (1)							
COOLING CAPACITY							
Total	kW	**23,3**	**29,5**	**32,2**	**32,2**	**37,9**	**38,0**
Sensible	kW	**23,2**	**29,5**	**32,2**	**32,2**	**36,3**	**36,3**
Compressors power input	kW	5,73	7,35	8,52	8,5	10,00	10,00
Compressors operating current	A	9,74	12,30	15,10	15,1	17,60	17,60
WINTER WORKING MODE (2)							
HEATING CAPACITY	kW	**22,7**	**28,8**	**32,0**	**32,0**	**38,1**	**38,1**
Compressors power input	kW	4,29	5,34	6,59	6,6	7,53	7,54
Compressors operating current	A	7,75	9,33	12,30	12,3	14,10	14,10
SUPPLY FANS	n.	1	1	1	1	1	1
Air flow	m^3/h	7110	10440	10440	10440	10440	10440
Nominal external static pressure	Pa	50	50	50	50	50	50
Max external static pressure	Pa	172	136	136	136	136	136
Power input (3)	kW	1,11	2,09	2,09	2,09	2,09	2,09
Max power input	kW	1,35	2,30	2,30	2,30	2,30	2,30
Operating current (3)	A	2,13	3,90	3,90	3,90	3,90	3,90
Max operating current (FLA)	A	2,6	4,2	4,2	4,2	4,2	4,2
COMPRESSORS		scroll	scroll	scroll	scroll	scroll	scroll
Quantity	n.	2	2	2	2	2	2
Max current	A	16,0	20,6	23,6	23,6	30,0	30,0
Starting current	A	51	62	76	76	90	90
Capacity steps	n.	2	2	2	2	2	2
AIR FILTERS	n.	2	2	2	2	2	2
Efficiency		G4	G4	G4	G4	G4	G4
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (4)	kg	9,5	9,8	10,3	10,3	10,5	10,5
Gas circuits	n.	2	2	1	2	1	2
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	400/3/50+N
ENERGY EFFICIENCY INDEXES (5)							
EER – Energy Efficiency Ratio	kW/kW	3,18	2,89	2,83	2,82	2,95	2,96
COP = Coefficient of Performance	kW/kW	3,86	3,51	3,38	3,38	3,68	3,67
SOUND LEVEL – ISO 3744 (6)							
On air delivery	dB(A)	69,1	74,9	74,9	74,9	74,9	74,9
On air intake	dB(A)	57,7	62,6	62,6	62,6	64,0	64,0
Irradiated	dB(A)	51,0	56,8	56,8	56,8	57,0	57,0
DIMENSIONS							
Length	mm	1620	1620	1620	1620	1620	1620
Width	mm	860	860	860	860	860	860
Height	mm	1980	1980	1980	1980	1980	1980
NET WEIGHT	kg	469	471	467	471	470	474
REMOTE CONDENSER (7)							
Quantity	n.	2	2	1	2	1	2
TEAM MATE DXAP MR STD series	Mod.	M 18	M 21	M 41	M 21	M 52	M 26
TEAM MATE DXAP MR LNO/ELN series	Mod.	M 21	M 26	M 52	M 26	M 63	M 32
ELECTRIC HEATER							
Capacity	kW	13,5	13,5	13,5	13,5	13,5	13,5
Operating current (OA)	A	19,5	19,5	19,5	19,5	19,5	19,5
Capacity steps	n.	2	2	2	2	2	2
HUMIDIFIER							
Steam capacity	kg/h	8	8	8	8	8	8
Power input	kW	6,0	6,0	6,0	6,0	6,0	6,0
Operating current (OA)	A	8,7	8,7	8,7	8,7	8,7	8,7
Max operating current (FLA)	A	12,4	12,4	12,4	12,4	12,4	12,4
HEATING COIL (8)							
Heating capacity	kW	56,0	71,9	72,0	72,0	72,0	72,0
Water flow rate	m^3/h	3,3	4,2	4,2	4,2	4,2	4,2
Pressure drop coil + valve	kPa	7	22	22	22	22	22
Water volume	l	6,8	6,8	6,8	6,8	6,8	6,8
REFRIGERANT CONNECTIONS							
Gas delivery	ODS Ø	2x22	2x22	28	2x22	28	2x22
Liquid return	ODS Ø	2x12	2x12	16	2x12	16	2x12
CONNECTIONS ISO 228/1-G							
Hot water Inlet/outlet	M Ø	1+1/4"	1+1/4"	1+1/4"	1+1/4"	1+1/4"	1+1/4"
Humidifier filling	F Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate discharge – rubber pipe	F Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 27°C with 47%rH; ambient temperature at 35°C
2. Characteristics referred to entering air at 20°C; ambient temperature at 7°C with 90% rH.
3. Corresponding to the nominal external static pressure.
4. Machine refrigerant charge. Exhaust air exchanger, connections pipes and optional are excluded.
5. The Energy Efficiency Indexes consider also the remote air cooled condenser as shown in the table.
6. Noise level at 1 meter in free field (nominal external static pressure).
7. For matching to other remote exchangers please refer to RC WORLD selection program.
8. Characteristics referred to entering air at 20°C with hot water at 75-60°C.

TECHNICAL DATA - NEXT DXOP

MODEL		042 P2 S	042 P2 DC	048 P2 S	048 P2 DC	052 P2 S	052 P2 DC
SIZE		**H6**	**H6**	**H6**	**H6**	**H6**	**H6**
SUMMER WORKING MODE (1)							
COOLING CAPACITY							
Total	kW	**39,9**	**39,9**	**45,5**	**45,6**	**49,1**	**49,2**
Sensible	kW	**39,8**	**39,8**	**42,4**	**42,4**	**47,9**	**47,9**
Compressors power input	kW	10,20	10,10	11,40	11,30	12,60	12,60
Compressors operating current	A	17,80	17,80	21,50	21,50	22,80	22,80
WINTER WORKING MODE (2)							
HEATING CAPACITY	kW	**38,4**	**38,5**	**43,9**	**43,9**	**47,6**	**47,7**
Compressors power input	kW	7,08	7,09	8,27	8,28	9,09	9,10
Compressors operating current	A	13,60	13,60	17,50	17,50	18,20	18,20
SUPPLY FANS	n.	2	2	2	2	2	2
Air flow	m^3/h	11310	11310	11310	11310	13480	13480
Nominal external static pressure	Pa	50	50	50	50	50	50
Max external static pressure	Pa	313	313	313	313	170	170
Power input (3)	kW	1,85	1,85	1,85	1,85	2,30	2,30
Max power input	kW	2,70	2,70	2,70	2,70	2,70	2,70
Operating current (3)	A	3,38	3,38	3,38	3,38	4,41	4,41
Max operating current (FLA)	A	5,2	5,2	5,2	5,2	5,2	5,2
COMPRESSORS		scroll	scroll	scroll	scroll	scroll	scroll
Quantity	n.	2	2	2	2	2	2
Max current	A	30,0	30,0	30,0	30,0	32,0	32,0
Starting current	A	90	90	116	116	111	111
Capacity steps	n.	2	2	2	2	2	2
AIR FILTERS	n.	3	3	3	3	3	3
Efficiency		G4	G4	G4	G4	G4	G4
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (4)	kg	19,8	19,8	19,8	19,8	20,4	20,4
Gas circuits	n.	1	2	1	2	1	2
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	400/3/50+N
ENERGY EFFICIENCY INDEXES (5)							
EER – Energy Efficiency Ratio	kW/kW	3,12	3,14	3,18	3,21	3,07	3,08
COP = Coefficient of Performance	kW/kW	3,97	3,98	3,92	3,92	3,82	3,83
SOUND LEVEL – ISO 3744 (6)							
On air delivery	dB(A)	67,3	67,3	67,3	67,3	70,8	70,8
On air intake	dB(A)	61,3	61,3	59,0	59,0	60,3	60,3
Irradiated	dB(A)	52,4	52,4	50,7	50,7	53,0	53,0
DIMENSIONS							
Length	mm	2155	2155	2155	2155	2155	2155
Width	mm	860	860	860	860	860	860
Height	mm	1980	1980	1980	1980	1980	1980
NET WEIGHT	kg	581	585	583	587	686	694
REMOTE CONDENSER (7)							
Quantity	n.	1	2	1	2	1	2
TEAM MATE DXAP MR STD series	Mod.	M 52	M 26	M 63	M 32	M 63	M 32
TEAM MATE DXAP MR LNO/ELN series	Mod.	M 63	M 32	M 86	M 41	M 86	M 41
ELECTRIC HEATER							
Capacity	kW	13,5	13,5	13,5	13,5	13,5	13,5
Operating current (OA)	A	19,5	19,5	19,5	19,5	19,5	19,5
Capacity steps	n.	2	2	2	2	2	2
HUMIDIFIER							
Steam capacity	kg/h	15	15	15	15	15	15
Power input	kW	11,3	11,3	11,3	11,3	11,3	11,3
Operating current (OA)	A	16,2	16,2	16,2	16,2	16,2	16,2
Max operating current (FLA)	A	23	23	23	23	23	23
HEATING COIL (8)							
Heating capacity	kW	90,7	90,7	91,1	91,1	102,0	102,0
Water flow rate	m^3/h	5,3	5,3	5,3	5,3	6,0	6,0
Pressure drop coil + valve	kPa	15	15	22	22	19	19
Water volume	l	10,5	10,5	10,5	10,5	10,5	10,5
REFRIGERANT CONNECTIONS							
Gas delivery	ODS Ø	28	2x22	28	2x28	35	2x28
Liquid return	ODS Ø	22	2x16	22	2x16	22	2x16
CONNECTIONS ISO 228/1-G							
Hot water Inlet/outlet	M Ø	1+1/2"	1+1/2"	1+1/2"	1+1/2"	1+1/2"	1+1/2"
Humidifier filling	F Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate discharge – rubber pipe	F Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 27°C with 47%rH; ambient temperature at 35°C
2. Characteristics referred to entering air at 20°C; ambient temperature at 7°C with 90% rH.
3. Corresponding to the nominal external static pressure.
4. Machine refrigerant charge. Exhaust air exchanger, connections pipes and optional are excluded.
5. The Energy Efficiency Indexes consider also the remote air cooled condenser as shown in the table.
6. Noise level at 1 meter in free field (nominal external static pressure).
7. For matching to other remote exchangers please refer to RC WORLD selection program.
8. Characteristics referred to entering air at 20°C with hot water at 75-60°C.

TECHNICAL DATA - NEXT DXOP

MODEL		060 P2 S	060 P2 DC	064 P2 S	064 P2 DC	072 P2 S	072 P2 DC
SIZE		**H6**	**H6**	**H6**	**H6**	**H7**	**H7**
SUMMER WORKING MODE (1)							
COOLING CAPACITY							
Total	kW	**57,5**	**57,1**	**59,5**	**59,1**	**68,8**	**68,2**
Sensible	kW	**53,5**	**53,4**	**58,3**	**58,1**	**66,1**	**65,8**
Compressors power input	kW	13,50	13,60	13,60	13,80	16,40	16,70
Compressors operating current	A	25,40	25,70	25,60	25,80	30,50	30,90
WINTER WORKING MODE (2)							
HEATING CAPACITY	kW	**55,7**	**55,7**	**56,1**	**56,0**	**64,6**	**64,5**
Compressors power input	kW	10,60	10,60	10,10	10,10	11,40	11,40
Compressors operating current	A	21,60	21,60	21,00	21,00	23,70	23,70
SUPPLY FANS	n.	2	2	2	2	2	2
Air flow	m^3/h	14500	14500	16000	16000	17610	17610
Nominal external static pressure	Pa	50	50	50	50	50	50
Max external static pressure	Pa	94	94	50	50	346	346
Power input (3)	kW	2,52	2,52	2,54	2,54	3,27	3,27
Max power input	kW	2,70	2,70	2,70	2,70	4,60	4,60
Operating current (3)	A	4,91	4,91	4,97	4,97	5,57	5,57
Max operating current (FLA)	A	5,2	5,2	5,2	5,2	8,4	8,4
COMPRESSORS		scroll	scroll	scroll	scroll	scroll	scroll
Quantity	n.	2	2	2	2	2	2
Max current	A	42,0	42,0	42,0	42,0	44,0	44,0
Starting current	A	132	132	132	132	140	140
Capacity steps	n.	2	2	2	2	2	2
AIR FILTERS	n.	3	3	3	3	4	4
Efficiency		G4	G4	G4	G4	G4	G4
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (4)	kg	20,7	20,7	21,3	21,3	28,1	28,1
Gas circuits	n.	1	2	1	2	1	2
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	400/3/50+N
ENERGY EFFICIENCY INDEXES (5)							
EER – Energy Efficiency Ratio	kW/kW	3,27	3,23	3,36	3,30	3,24	3,17
COP = Coefficient of Performance	kW/kW	3,79	3,79	3,94	3,94	3,97	3,97
SOUND LEVEL – ISO 3744 (6)							
On air delivery	dB(A)	72,5	72,5	75,4	75,4	73,1	73,1
On air intake	dB(A)	62,2	62,2	63,8	63,8	62,5	62,5
Irradiated	dB(A)	54,8	54,8	57,3	57,3	55,3	55,3
DIMENSIONS							
Length	mm	2155	2155	2155	2155	2690	2690
Width	mm	860	860	860	860	860	860
Height	mm	1980	1980	1980	1980	1980	1980
NET WEIGHT	kg	686	694	701	709	792	802
REMOTE CONDENSER (7)							
Quantity	n.	1	2	1	2	1	2
TEAM MATE DXAP MR STD series	Mod.	M 86	M 41	M 86	M 41	M 86	M 41
TEAM MATE DXAP MR LNO/ELN series	Mod.	M 86	M 52	M 98	M 52	M 117	M 63
ELECTRIC HEATER							
Capacity	kW	13,5	13,5	13,5	13,5	13,5	13,5
Operating current (OA)	A	19,5	19,5	19,5	19,5	19,5	19,5
Capacity steps	n.	2	2	2	2	2	2
HUMIDIFIER							
Steam capacity	kg/h	15	15	15	15	15	15
Power input	kW	11,3	11,3	11,3	11,3	11,3	11,3
Operating current (OA)	A	16,2	16,2	16,2	16,2	16,2	16,2
Max operating current (FLA)	A	23	23	23	23	23	23
HEATING COIL (8)							
Heating capacity	kW	107,0	107,0	114,0	114,0	131,0	131,0
Water flow rate	m^3/h	6,3	6,3	6,7	6,7	7,7	7,7
Pressure drop coil + valve	kPa	21	21	23	23	13	13
Water volume	l	10,5	10,5	10,5	10,5	13,9	13,9
REFRIGERANT CONNECTIONS							
Gas delivery	ODS Ø	35	2x28	35	2x28	42	2x35
Liquid return	ODS Ø	22	2x16	22	2x16	22	2x22
CONNECTIONS ISO 228/1-G							
Hot water Inlet/outlet	M Ø	1+1/2"	1+1/2"	1+1/2"	1+1/2"	2"	2"
Humidifier filling	F Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate discharge – rubber pipe	F Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 27°C with 47%rH; ambient temperature at 35°C
2. Characteristics referred to entering air at 20°C; ambient temperature at 7°C with 90% rH.
3. Corresponding to the nominal external static pressure.
4. Machine refrigerant charge. Exhaust air exchanger, connections pipes and optional are excluded.
5. The Energy Efficiency Indexes consider also the remote air cooled condenser as shown in the table.
6. Noise level at 1 meter in free field (nominal external static pressure).
7. For matching to other remote exchangers please refer to RC WORLD selection program.
8. Characteristics referred to entering air at 20°C with hot water at 75-60°C.

TECHNICAL DATA - NEXT DXOP

MODEL		082 P2 S	082 P2 DC	092 P2 S	092 P2 DC	100 P2 S	100 P2 DC
SIZE		**H7**	**H7**	**H7**	**H7**	**H7**	**H7**
SUMMER WORKING MODE (1)							
COOLING CAPACITY							
Total	kW	**77,2**	**77,9**	**86,4**	**84,7**	**95,8**	**96,9**
Sensible	kW	**76,0**	**76,2**	**82,3**	**81,6**	**86,8**	**87,2**
Compressors power input	kW	18,60	18,30	20,40	21,10	25,40	24,90
Compressors operating current	A	33,20	32,80	37,30	38,40	48,60	47,90
WINTER WORKING MODE (2)							
HEATING CAPACITY	kW	**73,6**	**75,0**	**82,1**	**82,1**	**93,9**	**96,0**
Compressors power input	kW	13,00	13,10	14,90	14,90	18,90	19,00
Compressors operating current	A	25,40	25,50	29,70	29,70	39,70	39,90
SUPPLY FANS	n.	2	2	2	2	2	2
Air flow	m^3/h	20870	20870	22040	22040	22040	22040
Nominal external static pressure	Pa	50	50	50	50	50	50
Max external static pressure	Pa	136	136	50	50	50	50
Power input (3)	kW	4,18	4,18	4,14	4,14	4,14	4,14
Max power input	kW	4,60	4,60	4,60	4,60	4,60	4,60
Operating current (3)	A	7,77	7,77	7,77	7,77	7,77	7,77
Max operating current (FLA)	A	8,4	8,4	8,4	8,4	8,4	8,4
COMPRESSORS		scroll	scroll	scroll	scroll	scroll	scroll
Quantity	n.	2	2	2	2	2	2
Max current	A	50,0	50,0	62,0	62,0	68,0	68,0
Starting current	A	143	143	171	171	208	208
Capacity steps	n.	2	2	2	2	2	2
AIR FILTERS	n.	4	4	4	4	4	4
Efficiency		G4	G4	G4	G4	G4	G4
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (4)	kg	28,1	28,1	28,1	28,1	28,4	28,4
Gas circuits	n.	1	2	1	2	1	2
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	400/3/50+N
ENERGY EFFICIENCY INDEXES (5)							
EER – Energy Efficiency Ratio	kW/kW	3,17	3,25	3,24	3,17	3,03	3,11
COP = Coefficient of Performance	kW/kW	3,92	4,00	3,88	4,00	3,73	3,79
SOUND LEVEL – ISO 3744 (6)							
On air delivery	dB(A)	77,9	77,9	79,7	79,7	79,7	79,7
On air intake	dB(A)	65,9	65,9	67,5	67,5	67,7	67,7
Irradiated	dB(A)	59,8	59,8	61,6	61,6	61,6	61,6
DIMENSIONS							
Length	mm	2690	2690	2690	2690	2690	2690
Width	mm	860	860	860	860	860	860
Height	mm	1980	1980	1980	1980	1980	1980
NET WEIGHT	kg	798	808	805	815	834	844
REMOTE CONDENSER (7)							
Quantity	n.	1	2	1	2	1	2
TEAM MATE DXAP MR STD series	Mod.	M 98	M 52	M 117	M 52	M 117	M 63
TEAM MATE DXAP MR LNO/ELN series	Mod.	M 130	M 63	M 130	M 63	T 172	M 86
ELECTRIC HEATER							
Capacity	kW	13,5	13,5	13,5	13,5	13,5	13,5
Operating current (OA)	A	19,5	19,5	19,5	19,5	19,5	19,5
Capacity steps	n.	2	2	2	2	2	2
HUMIDIFIER							
Steam capacity	kg/h	15	15	15	15	15	15
Power input	kW	11,3	11,3	11,3	11,3	11,3	11,3
Operating current (OA)	A	16,2	16,2	16,2	16,2	16,2	16,2
Max operating current (FLA)	A	23	23	23	23	23	23
HEATING COIL (8)							
Heating capacity	kW	146,0	146,0	151,0	151,0	151,0	151,0
Water flow rate	m^3/h	8,6	8,6	8,9	8,9	8,9	8,9
Pressure drop coil + valve	kPa	16	16	17	17	17	17
Water volume	l	13,9	13,9	13,9	13,9	13,9	13,9
REFRIGERANT CONNECTIONS							
Gas delivery	ODS Ø	42	2x35	42	2x35	42	2x35
Liquid return	ODS Ø	22	2x22	28	2x22	28	2x22
CONNECTIONS ISO 228/1-G							
Hot water Inlet/outlet	M Ø	2"	2"	2"	2"	2"	2"
Humidifier filling	F Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate discharge – rubber pipe	F Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 27°C with 47%rH; ambient temperature at 35°C
2. Characteristics referred to entering air at 20°C; ambient temperature at 7°C with 90% rH.
3. Corresponding to the nominal external static pressure.
4. Machine refrigerant charge. Exhaust air exchanger, connections pipes and optional are excluded.
5. The Energy Efficiency Indexes consider also the remote air cooled condenser as shown in the table.
6. Noise level at 1 meter in free field (nominal external static pressure).
7. For matching to other remote exchangers please refer to RC WORLD selection program.
8. Characteristics referred to entering air at 20°C with hot water at 75-60°C.

TECHNICAL DATA - NEXT DWOP

MODEL		006 P1 S	008 P1 S	010 P1 S	007 P1 S	009 P1 S	011 P1 S	013 P1 S
SIZE		**H0**	**H0**	**H0**	**H1**	**H1**	**H1**	**H1**
SUMMER WORKING MODE (1)								
COOLING CAPACITY								
Total	kW	**7,2**	**8,5**	**10,1**	**8,0**	**9,4**	**11,1**	**12,5**
Sensible	kW	**6,1**	**7,0**	**8,0**	**7,8**	**9,1**	**9,9**	**10,5**
Compressors power input	kW	1,2	1,4	1,7	1,1	1,3	1,7	1,9
Compressors operating current	A	5,9	3,1	3,8	2,4	3,0	3,8	3,6
Water flow	m^3/h	0,48	0,57	0,68	0,52	0,62	0,74	0,83
Pressure drops	kPa	3	4	3	3	5	4	5
WINTER WORKING MODE (2)								
HEATING CAPACITY	kW	**7,3**	**8,6**	**10,7**	**7,5**	**8,9**	**11,0**	**12,6**
Compressors power input	kW	1,5	1,8	2,4	1,2	1,5	2,0	2,5
Compressors operating current	A	7,3	3,6	4,6	2,6	3,2	4,2	4,3
Water flow	m^3/h	0,64	0,75	0,92	0,69	0,81	0,99	1,12
Pressure drops	kPa	5	7	6	6	8	7	9
Condensing control valve kV (7)	m^3/h	4,0	4,0	4,0	4,0	4,0	4,0	4,0
SUPPLY FANS	n.	1	1	1	1	1	1	1
Air flow	m^3/h	1580	1800	2000	2273	2653	2653	2653
Nominal external static pressure	Pa	30	30	30	50	50	50	50
Max external static pressure	Pa	186	100	8	211	132	118	118
Power input (3)	kW	0,10	0,14	0,18	0,25	0,36	0,30	0,30
Max power input	kW	0,18	0,18	0,18	0,46	0,46	0,36	0,36
Operating current (3)	A	0,66	0,95	1,27	3,00	4,42	1,74	1,74
Max operating current (FLA)	A	1,3	1,3	1,3	6,9	6,9	2,2	2,2
COMPRESSORS		scroll	scroll	scroll	scroll	scroll	scroll	scroll
Quantity	n.	1	1	1	1	1	1	1
Max current	A	12,8	6,0	7,0	4,7	6,0	7,0	8,0
Starting current	A	60	38	46	28	38	46	43
Capacity steps	n.	1	1	1	1	1	1	1
EXHAUSTION HEAT EXCHANGER								
Water volume	l	0,4	0,4	0,5	0,4	0,4	0,5	0,5
Maximum water flow	m^3/h	0,7	0,9	1,0	0,8	0,9	1,1	1,2
AIR FILTERS	n.	1	1	1	1	1	1	1
Efficiency		G3	G3	G3	G4	G4	G4	G4
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (4)	kg	2,7	2,7	2,7	5,1	5,1	5,1	5,1
Gas circuits	n.	1	1	1	1	1	1	1
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	400/3/50+N
ENERGY EFFICIENCY INDEXES								
EER – Energy Efficiency Ratio	kW/kW	4,95	5,04	4,93	4,80	4,70	4,74	4,81
COP = Coefficient of Performance	kW/kW	4,08	4,09	3,95	4,22	4,11	4,12	4,05
SOUND LEVEL – ISO 3744 (5)								
On air delivery	dB(A)	55,7	58,3	60,4	56,7	59,7	59,7	59,7
On air intake	dB(A)	50,7	52,5	54,6	49,7	50,6	51,9	51,9
Irradiated	dB(A)	39,5	41,5	43,6	39,7	41,9	42,4	42,4
DIMENSIONS								
Length	mm	655	655	655	650	650	650	650
Width	mm	420	420	420	650	650	650	650
Height	mm	1680	1680	1680	1925	1925	1925	1925
NET WEIGHT	kg	169	169	171	195	198	201	202
ELECTRIC HEATER								
Capacity	kW	2,6	2,6	2,6	5,1	5,1	5,1	5,1
Operating current (OA)	A	11,0	11,0	11,0	7,4	7,4	7,4	7,4
Capacity steps	n.	1	1	1	1	1	1	1
HUMIDIFIER								
Steam capacity	kg/h	2	2	2	3	3	3	3
Power input	kW	1,4	1,4	1,4	2,3	2,3	2,3	2,3
Operating current (OA)	A	6,1	6,1	6,1	3,2	3,2	3,2	3,2
Max operating current (FLA)	A	8,8	8,8	8,8	4,5	4,5	4,5	4,5
HEATING COIL (6)								
Heating capacity	kW	10,2	11,1	11,8	16,5	18,2	18,2	18,2
Water flow rate	m^3/h	0,6	0,7	0,7	1,0	1,1	1,1	1,1
Pressure drop coil + valve	kPa	10	12	13	10	12	12	12
Water volume	l	0,8	0,8	0,8	1,7	1,7	1,7	1,7
CONNECTIONS ISO 228/1-G								
Exhaustion exchanger water Inlet/outlet	M Ø	1"	1"	1"	1"	1"	1"	1"
Hot water Inlet/outlet	M Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Humidifier filling	F Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate discharge – rubber pipe	F Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 27°C with 47%rH; water to exhaustion exchanger 15/30°C.
2. Characteristics referred to entering air at 20°C; water to exhaustion exchanger 15/7°C.
3. Corresponding to the nominal external static pressure.
4. Machine refrigerant charge, optional excluded.
5. Noise level at 1 meter in free field (nominal external static pressure).
6. Characteristics referred to entering air at 20°C with hot water at 75/60°C.
7. Water flow value causing 100 kPa pressure drop

TECHNICAL DATA - NEXT DWOP

MODEL		014 P1 S	015 P1 S	017 P1 S	019 P1 S	021 P1 S	023 P1 S	025 P1 S
SIZE		**H2**	**H2**	**H2**	**H3**	**H3**	**H3**	**H4**
SUMMER WORKING MODE (1)								
COOLING CAPACITY								
Total	kW	**13,8**	**16,7**	**19,1**	**19,3**	**21,5**	**23,6**	**27,7**
Sensible	kW	**13,4**	**14,6**	**16,1**	**18,7**	**19,6**	**20,6**	**25,5**
Compressors power input	kW	1,9	2,4	2,9	3,0	3,8	4,5	4,7
Compressors operating current	A	3,5	4,3	5,6	5,8	7,1	9,2	9,3
Water flow	m^3/h	0,90	1,10	1,26	1,29	1,45	1,62	1,86
Pressure drops	kPa	3	5	7	2	2	3	2
WINTER WORKING MODE (2)								
HEATING CAPACITY	kW	**12,9**	**16,0**	**18,9**	**18,8**	**21,5**	**24,2**	**28,1**
Compressors power input	kW	2,1	2,9	3,5	3,2	3,9	4,6	4,9
Compressors operating current	A	3,9	5,0	6,4	6,0	7,2	9,3	9,5
Water flow	m^3/h	1,19	1,45	1,70	1,71	1,93	2,16	2,55
Pressure drops	kPa	6	9	12	3	4	4	6
Condensing control valve kV (7)	m^3/h	6,3	6,3	6,3	6,3	6,3	10,0	10,0
SUPPLY FANS	n.	1	1	1	1	1	1	1
Air flow	m^3/h	3955	3955	3955	5460	5460	5460	7160
Nominal external static pressure	Pa	50	50	50	50	50	50	50
Max external static pressure	Pa	282	282	282	600	600	600	95
Power input (3)	kW	0,43	0,43	0,43	0,63	0,63	0,63	1,27
Max power input	kW	1,00	1,00	1,00	2,70	2,70	2,70	1,35
Operating current (3)	A	0,95	0,95	0,95	0,98	0,98	0,98	2,47
Max operating current (FLA)	A	1,9	1,9	1,9	4,3	4,3	4,3	2,6
COMPRESSORS		scroll	scroll	scroll	scroll	scroll	scroll	scroll
Quantity	n.	1	1	1	1	1	1	1
Max current	A	8,0	10,3	11,8	11,8	15,0	15,0	16,0
Starting current	A	43	52	64	64	75	101	95
Capacity steps	n.	1	1	1	1	1	1	1
EXHAUSTION HEAT EXCHANGER								
Water volume	l	1,2	1,6	1,6	1,9	1,9	1,9	1,9
Maximum water flow	m^3/h	1,4	1,7	1,9	1,9	2,2	2,4	2,8
AIR FILTERS	n.	1	1	1	2	2	2	2
Efficiency		G4	G4	G4	G4	G4	G4	G4
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (4)	kg	6,3	6,3	6,3	8,0	8,0	8,0	9,9
Gas circuits	n.	1	1	1	1	1	1	1
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	400/3/50+N	400/3/50+N
ENERGY EFFICIENCY INDEXES								
EER – Energy Efficiency Ratio	kW/kW	4,18	4,38	4,43	3,03	3,02	3,03	3,80
COP = Coefficient of Performance	kW/kW	3,62	3,70	3,86	2,89	2,98	3,05	3,75
SOUND LEVEL – ISO 3744 (5)								
On air delivery	dB(A)	64,7	64,7	64,7	65,2	65,2	65,2	69,2
On air intake	dB(A)	53,9	53,9	55,5	55,7	58,4	56,3	58,1
Irradiated	dB(A)	46,6	46,6	46,8	47,2	48,2	47,4	51,1
DIMENSIONS								
Length	mm	785	785	785	1085	1085	1085	1320
Width	mm	650	650	650	750	750	750	860
Height	mm	1925	1925	1925	1925	1925	1925	1980
NET WEIGHT	kg	260	262	263	324	327	328	448
ELECTRIC HEATER								
Capacity	kW	5,1	5,1	5,1	5,1	5,1	5,1	9,0
Operating current (OA)	A	7,4	7,4	7,4	7,4	7,4	7,4	13,0
Capacity steps	n.	1	1	1	2	2	2	2
HUMIDIFIER								
Steam capacity	kg/h	3	3	3	3	3	3	8
Power input	kW	2,3	2,3	2,3	2,3	2,3	2,3	6,0
Operating current (OA)	A	3,2	3,2	3,2	3,2	3,2	3,2	8,7
Max operating current (FLA)	A	4,5	4,5	4,5	4,5	4,5	4,5	12,4
HEATING COIL (6)								
Heating capacity	kW	25,0	25,0	26,8	39,0	39,0	39,0	49,3
Water flow rate	m^3/h	1,5	1,5	1,6	2,3	2,3	2,3	2,9
Pressure drop coil + valve	kPa	8	8	17	27	27	27	14
Water volume	l	2,3	2,3	2,3	3,3	3,3	3,3	4,7
CONNECTIONS ISO 228/1-G								
Exhaustion exchanger water Inlet/outlet	M Ø	1+1/2"	1+1/2"	1+1/2"	1+1/2"	1+1/2"	1+1/2"	1+1/2"
Hot water Inlet/outlet	M Ø	3/4"	3/4"	3/4"	1"	1"	1"	1+1/4"
Humidifier filling	F Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate discharge – rubber pipe	F Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 27°C with 47%rH; water to exhaustion exchanger 15/30°C.
2. Characteristics referred to entering air at 20°C; water to exhaustion exchanger 15/7°C.
3. Corresponding to the nominal external static pressure.
4. Machine refrigerant charge, optional excluded.
5. Noise level at 1 meter in free field (nominal external static pressure).
6. Characteristics referred to entering air at 20°C with hot water at 75/60°C.
7. Water flow value causing 100 kPa pressure drop

TECHNICAL DATA - NEXT DWOP

MODEL		029 P1 S	033 P1 S	038 P1 S	040 P1 S	045 P1 S	049 P1 S
SIZE		H4	H4	H5	H5	H5	H5
SUMMER WORKING MODE (1)							
COOLING CAPACITY							
Total	kW	**30,9**	**35,8**	**39,3**	**43,4**	**47,0**	**54,7**
Sensible	kW	**27,4**	**30,2**	**36,7**	**38,5**	**40,1**	**44,3**
Compressors power input	kW	5,3	6,3	5,5	6,4	7,4	8,3
Compressors operating current	A	10,8	12,6	11,6	12,5	14,7	18,5
Water flow	m^3/h	2,08	2,42	2,58	2,86	3,13	3,62
Pressure drops	kPa	2	3	3	4	5	4
WINTER WORKING MODE (2)							
HEATING CAPACITY	kW	**32,0**	**37,2**	**36,6**	**40,8**	**44,8**	**52,8**
Compressors power input	kW	5,7	6,6	6,0	7,0	8,2	10,2
Compressors operating current	A	11,3	13,0	12,2	13,4	15,8	20,9
Water flow	m^3/h	2,90	3,37	3,37	3,71	4,03	4,69
Pressure drops	kPa	7	9	6	7	8	7
Condensing control valve kV (7)	m^3/h	10,0	10,0	16,0	16,0	16,0	16,0
SUPPLY FANS	n.	1	1	1	1	1	1
Air flow	m^3/h	7440	7440	10440	10440	10440	10440
Nominal external static pressure	Pa	50	50	50	50	50	50
Max external static pressure	Pa	50	50	136	136	136	136
Power input (3)	kW	1,29	1,29	2,09	2,09	2,09	2,09
Max power input	kW	1,35	1,35	2,30	2,30	2,30	2,30
Operating current (3)	A	2,50	2,50	3,90	3,90	3,90	3,90
Max operating current (FLA)	A	2,5	2,5	4,2	4,2	4,2	4,2
COMPRESSORS		scroll	scroll	scroll	scroll	scroll	scroll
Quantity	n.	1	1	1	1	1	1
Max current	A	21,0	22,0	22,0	25,0	31,0	34,0
Starting current	A	111	118	118	118	140	174
Capacity steps	n.	1	1	1	1	1	1
EXHAUSTION HEAT EXCHANGER							
Water volume	l	2,5	2,8	3,1	3,1	3,1	3,9
Maximum water flow	m^3/h	3,1	3,6	3,9	4,3	4,7	5,4
AIR FILTERS	n.	2	2	2	2	2	2
Efficiency		G4	G4	G4	G4	G4	G4
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (4)	kg	9,9	9,9	16,4	16,5	16,6	17,0
Gas circuits	n.	1	1	1	1	1	1
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	400/3/50+N
ENERGY EFFICIENCY INDEXES							
EER – Energy Efficiency Ratio	kW/kW	3,91	4,00	3,97	4,04	3,99	4,30
COP = Coefficient of Performance	kW/kW	3,86	4,02	3,53	3,57	3,56	3,62
SOUND LEVEL – ISO 3744 (5)							
On air delivery	dB(A)	72,2	72,2	74,9	74,9	74,9	74,9
On air intake	dB(A)	60,7	60,7	62,6	62,9	63,2	63,5
Irradiated	dB(A)	54,1	54,1	56,8	56,8	56,8	56,8
DIMENSIONS							
Length	mm	1320	1320	1620	1620	1620	1620
Width	mm	860	860	860	860	860	860
Height	mm	1980	1980	1980	1980	1980	1980
NET WEIGHT	kg	448	449	515	515	515	528
ELECTRIC HEATER							
Capacity	kW	9,0	9,0	13,5	13,5	13,5	13,5
Operating current (OA)	A	13,0	13,0	19,5	19,5	19,5	19,5
Capacity steps	n.	2	2	2	2	2	2
HUMIDIFIER							
Steam capacity	kg/h	8	8	8	8	8	8
Power input	kW	6,0	6,0	6,0	6,0	6,0	6,0
Operating current (OA)	A	8,7	8,7	8,7	8,7	8,7	8,7
Max operating current (FLA)	A	12,4	12,4	12,4	12,4	12,4	12,4
HEATING COIL (6)							
Heating capacity	kW	50,5	50,5	72,0	72,0	72,0	72,0
Water flow rate	m^3/h	3,0	3,0	4,2	4,2	4,2	4,2
Pressure drop coil + valve	kPa	10	15	26	26	26	12
Water volume	l	4,7	4,7	6,8	6,8	6,8	6,8
CONNECTIONS ISO 228/1-G							
Exhaustion exchanger water Inlet/outlet	M Ø	1+1/2"	1+1/2"	2"	2"	2"	2"
Hot water Inlet/outlet	M Ø	1+1/4"	1+1/4"	1+1/4"	1+1/4"	1+1/4"	1+1/4"
Humidifier filling	F Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate discharge – rubber pipe	F Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 27°C with 47%rH; water to exhaustion exchanger 15/30°C.
2. Characteristics referred to entering air at 20°C; water to exhaustion exchanger 15/7°C.
3. Corresponding to the nominal external static pressure.
4. Machine refrigerant charge, optional excluded.
5. Noise level at 1 meter in free field (nominal external static pressure).
6. Characteristics referred to entering air at 20°C with hot water at 75/60°C.
7. Water flow value causing 100 kPa pressure drop

TECHNICAL DATA - NEXT DWOP

MODEL		026 P2 DC	028 P2 DC	032 P2 S	032 P2 DC	036 P2 S	036 P2 DC
SIZE		**H5**	**H5**	**H5**	**H5**	**H5**	**H5**
SUMMER WORKING MODE (1)							
COOLING CAPACITY							
Total	kW	**27,0**	**34,3**	**37,2**	**37,2**	**43,7**	**43,7**
Sensible	kW	**24,7**	**33,2**	**34,5**	**34,5**	**38,7**	**38,7**
Compressors power input	kW	3,8	4,8	5,8	5,8	7,0	7,0
Compressors operating current	A	7,0	8,6	11,2	11,2	13,4	13,4
Water flow	m^3/h	1,77	2,25	2,47	2,47	2,92	2,92
Pressure drops	kPa	2	3	5	4	7	6
WINTER WORKING MODE (2)							
HEATING CAPACITY	kW	**24,6**	**30,9**	**35,3**	**34,4**	**40,5**	**39,4**
Compressors power input	kW	4,4	5,4	6,7	6,7	7,7	7,6
Compressors operating current	A	7,9	9,5	12,5	12,5	14,4	14,3
Water flow	m^3/h	2,22	2,80	3,14	3,05	3,61	3,50
Pressure drops	kPa	3	5	9	6	11	8
Condensing control valve kV (7)	m^3/h	10,0	10,0	10,0	10,0	10,0	10,0
SUPPLY FANS	n.	1	1	1	1	1	1
Air flow	m^3/h	7110	10440	10440	10440	10440	10440
Nominal external static pressure	Pa	50	50	50	50	50	50
Max external static pressure	Pa	172	136	136	136	136	136
Power input (3)	kW	1,11	2,09	2,09	2,09	2,09	2,09
Max power input	kW	1,35	2,30	2,30	2,30	2,30	2,30
Operating current (3)	A	2,13	3,90	3,90	3,90	3,90	3,90
Max operating current (FLA)	A	2,6	4,2	4,2	4,2	4,2	4,2
COMPRESSORS		scroll	scroll	scroll	scroll	scroll	scroll
Quantity	n.	2	2	2	2	2	2
Max current	A	16,0	20,6	23,6	23,6	30,0	30,0
Starting current	A	51	62	76	76	90	90
Capacity steps	n.	2	2	2	2	2	2
EXHAUSTION HEAT EXCHANGER							
Water volume	l	2,7	2,7	2,5	2,7	2,5	2,7
Maximum water flow	m^3/h	2,7	3,4	3,7	3,7	4,4	4,4
AIR FILTERS	n.	2	2	2	2	2	2
Efficiency		G4	G4	G4	G4	G4	G4
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (4)	kg	10,6	10,9	11,3	11,4	11,5	11,6
Gas circuits	n.	2	2	1	2	1	2
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	400/3/50+N
ENERGY EFFICIENCY INDEXES							
EER – Energy Efficiency Ratio	kW/kW	4,33	3,74	3,67	3,67	3,84	3,84
COP = Coefficient of Performance	kW/kW	3,60	3,15	3,18	3,11	3,35	3,28
SOUND LEVEL – ISO 3744 (5)							
On air delivery	dB(A)	69,1	74,9	74,9	74,9	74,9	74,9
On air intake	dB(A)	57,7	62,6	62,6	62,6	64,0	64,0
Irradiated	dB(A)	51,0	56,8	56,8	56,8	57,0	57,0
DIMENSIONS							
Length	mm	1620	1620	1620	1620	1620	1620
Width	mm	860	860	860	860	860	860
Height	mm	1980	1980	1980	1980	1980	1980
NET WEIGHT	kg	492	494	488	494	491	497
ELECTRIC HEATER							
Capacity	kW	13,5	13,5	13,5	13,5	13,5	13,5
Operating current (OA)	A	19,5	19,5	19,5	19,5	19,5	19,5
Capacity steps	n.	2	2	2	2	2	2
HUMIDIFIER							
Steam capacity	kg/h	8	8	8	8	8	8
Power input	kW	6,0	6,0	6,0	6,0	6,0	6,0
Operating current (OA)	A	8,7	8,7	8,7	8,7	8,7	8,7
Max operating current (FLA)	A	12,4	12,4	12,4	12,4	12,4	12,4
HEATING COIL (6)							
Heating capacity	kW	56,0	71,9	72,0	72,0	72,0	72,0
Water flow rate	m^3/h	3,3	4,2	4,2	4,2	4,2	4,2
Pressure drop coil + valve	kPa	7	22	22	22	22	22
Water volume	l	6,8	6,8	6,8	6,8	6,8	6,8
CONNECTIONS ISO 228/1-G							
Exhaustion exchanger water Inlet/outlet	M Ø	1+1/2"	1+1/2"	1+1/2"	1+1/2"	1+1/2"	1+1/2"
Hot water Inlet/outlet	M Ø	1+1/4"	1+1/4"	1+1/4"	1+1/4"	1+1/4"	1+1/4"
Humidifier filling	F Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate discharge – rubber pipe	F Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 27°C with 47%rH; water to exhaustion exchanger 15/30°C.
2. Characteristics referred to entering air at 20°C; water to exhaustion exchanger 15/7°C.
3. Corresponding to the nominal external static pressure.
4. Machine refrigerant charge, optional excluded.
5. Noise level at 1 meter in free field (nominal external static pressure).
6. Characteristics referred to entering air at 20°C with hot water at 75/60°C.
7. Water flow value causing 100 kPa pressure drop

TECHNICAL DATA - NEXT DWOP

MODEL		042 P2 S	042 P2 DC	048 P2 S	048 P2 DC	052 P2 S	052 P2 DC
SIZE		H6	H6	H6	H6	H6	H6
SUMMER WORKING MODE (1)							
COOLING CAPACITY							
Total	kW	**47,1**	**47,0**	**52,4**	**52,4**	**57,5**	**57,5**
Sensible	kW	**42,9**	**42,8**	**45,2**	**45,3**	**51,4**	**51,4**
Compressors power input	kW	6,9	6,9	7,9	7,9	8,9	8,9
Compressors operating current	A	13,4	13,4	17,1	17,1	18,1	18,1
Water flow	m^3/h	3,10	3,10	3,47	3,46	3,82	3,82
Pressure drops	kPa	5	3	6	4	7	5
WINTER WORKING MODE (2)							
HEATING CAPACITY	kW	**42,2**	**41,2**	**47,5**	**46,3**	**51,7**	**50,4**
Compressors power input	kW	7,3	7,3	8,6	8,5	9,4	9,3
Compressors operating current	A	13,9	13,8	17,9	17,8	18,6	18,5
Water flow	m^3/h	3,84	3,74	4,28	4,16	4,66	4,53
Pressure drops	kPa	7	5	9	6	11	8
Condensing control valve kV (7)	m^3/h	16,0	16,0	16,0	16,0	16,0	16,0
SUPPLY FANS	n.	2	2	2	2	2	2
Air flow	m^3/h	11310	11310	11310	11310	13480	13480
Nominal external static pressure	Pa	50	50	50	50	50	50
Max external static pressure	Pa	313	313	313	313	170	170
Power input (3)	kW	1,85	1,85	1,85	1,85	2,30	2,30
Max power input	kW	2,70	2,70	2,70	2,70	2,70	2,70
Operating current (3)	A	3,38	3,38	3,38	3,38	4,41	4,41
Max operating current (FLA)	A	5,2	5,2	5,2	5,2	5,2	5,2
COMPRESSORS		scroll	scroll	scroll	scroll	scroll	scroll
Quantity	n.	2	2	2	2	2	2
Max current	A	30,0	30,0	30,0	30,0	32,0	32,0
Starting current	A	90	90	116	116	111	111
Capacity steps	n.	2	2	2	2	2	2
EXHAUSTION HEAT EXCHANGER							
Water volume	l	3,1	3,6	3,1	3,6	3,1	3,6
Maximum water flow	m^3/h	4,7	4,7	5,2	5,2	5,7	5,7
AIR FILTERS	n.	3	3	3	3	3	3
Efficiency		G4	G4	G4	G4	G4	G4
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (4)	kg	21,1	21,3	21,1	21,3	21,7	21,9
Gas circuits	n.	1	2	1	2	1	2
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	400/3/50+N
ENERGY EFFICIENCY INDEXES							
EER – Energy Efficiency Ratio	kW/kW	4,11	4,10	4,20	4,20	4,13	4,13
COP = Coefficient of Performance	kW/kW	3,56	3,49	3,62	3,56	3,60	3,53
SOUND LEVEL – ISO 3744 (5)							
On air delivery	dB(A)	67,3	67,3	67,3	67,3	70,8	70,8
On air intake	dB(A)	61,3	61,3	59,0	59,0	60,3	60,3
Irradiated	dB(A)	52,4	52,4	50,7	50,7	53,0	53,0
DIMENSIONS							
Length	mm	2155	2155	2155	2155	2155	2155
Width	mm	860	860	860	860	860	860
Height	mm	1980	1980	1980	1980	1980	1980
NET WEIGHT	kg	606	614	608	616	711	723
ELECTRIC HEATER							
Capacity	kW	13,5	13,5	13,5	13,5	13,5	13,5
Operating current (OA)	A	19,5	19,5	19,5	19,5	19,5	19,5
Capacity steps	n.	2	2	2	2	2	2
HUMIDIFIER							
Steam capacity	kg/h	15	15	15	15	15	15
Power input	kW	11,3	11,3	11,3	11,3	11,3	11,3
Operating current (OA)	A	16,2	16,2	16,2	16,2	16,2	16,2
Max operating current (FLA)	A	23	23	23	23	23	23
HEATING COIL (6)							
Heating capacity	kW	90,7	90,7	91,1	91,1	102,0	102,0
Water flow rate	m^3/h	5,3	5,3	5,3	5,3	6,0	6,0
Pressure drop coil + valve	kPa	15	15	22	22	19	19
Water volume	l	10,5	10,5	10,5	10,5	10,5	10,5
CONNECTIONS ISO 228/1-G							
Exhaustion exchanger water Inlet/outlet	M Ø	2"	2"	2"	2"	2"	2"
Hot water Inlet/outlet	M Ø	1+1/2"	1+1/2"	1+1/2"	1+1/2"	1+1/2"	1+1/2"
Humidifier filling	F Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate discharge – rubber pipe	F Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 27°C with 47%rH; water to exhaustion exchanger 15/30°C.
2. Characteristics referred to entering air at 20°C; water to exhaustion exchanger 15/7°C.
3. Corresponding to the nominal external static pressure.
4. Machine refrigerant charge, optional excluded.
5. Noise level at 1 meter in free field (nominal external static pressure).
6. Characteristics referred to entering air at 20°C with hot water at 75/60°C.
7. Water flow value causing 100 kPa pressure drop

TECHNICAL DATA - NEXT DWOP

MODEL		060 P2 S	060 P2 DC	064 P2 S	064 P2 DC	072 P2 S	072 P2 DC
SIZE		H6	H6	H6	H6	H7	H7
SUMMER WORKING MODE (1)							
COOLING CAPACITY							
Total	kW	**65,0**	**64,9**	**67,9**	**67,8**	**80,0**	**79,9**
Sensible	kW	**56,6**	**56,6**	**61,8**	**61,8**	**70,7**	**70,7**
Compressors power input	kW	9,7	9,8	9,7	9,8	11,4	11,4
Compressors operating current	A	20,6	20,6	20,6	20,6	23,5	23,6
Water flow	m^3/h	4,30	4,29	4,47	4,46	5,26	5,25
Pressure drops	kPa	6	5	6	5	8	7
WINTER WORKING MODE (2)							
HEATING CAPACITY	kW	**60,1**	**58,3**	**60,7**	**58,8**	**70,3**	**68,0**
Compressors power input	kW	10,9	10,7	10,3	10,2	11,7	11,6
Compressors operating current	A	22,0	21,8	21,3	21,2	24,1	23,9
Water flow	m^3/h	5,42	5,23	5,54	5,35	6,44	6,21
Pressure drops	kPa	9	7	10	8	13	10
Condensing control valve kV (7)	m^3/h	16,0	16,0	16,0	16,0	25,0	25,0
SUPPLY FANS	n.	2	2	2	2	2	2
Air flow	m^3/h	14500	14500	16000	16000	17610	17610
Nominal external static pressure	Pa	50	50	50	50	50	50
Max external static pressure	Pa	94	94	50	50	346	346
Power input (3)	kW	2,52	2,52	2,54	2,54	3,27	3,27
Max power input	kW	2,70	2,70	2,70	2,70	4,60	4,60
Operating current (3)	A	4,91	4,91	4,97	4,97	5,57	5,57
Max operating current (FLA)	A	5,2	5,2	5,2	5,2	8,4	8,4
COMPRESSORS		scroll	scroll	scroll	scroll	scroll	scroll
Quantity	n.	2	2	2	2	2	2
Max current	A	42,0	42,0	42,0	42,0	44,0	44,0
Starting current	A	132	132	132	132	140	140
Capacity steps	n.	2	2	2	2	2	2
EXHAUSTION HEAT EXCHANGER							
Water volume	l	3,9	4,2	3,9	4,2	3,9	4,2
Maximum water flow	m^3/h	6,5	6,4	6,7	6,7	7,9	7,9
AIR FILTERS	n.	3	3	3	3	4	4
Efficiency		G4	G4	G4	G4	G4	G4
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (4)	kg	22,3	22,4	22,9	23,0	29,7	29,8
Gas circuits	n.	1	2	1	2	1	2
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	400/3/50+N
ENERGY EFFICIENCY INDEXES							
EER – Energy Efficiency Ratio	kW/kW	4,35	4,34	4,53	4,52	4,15	4,15
COP = Coefficient of Performance	kW/kW	3,73	3,66	3,91	3,81	3,59	3,49
SOUND LEVEL – ISO 3744 (5)							
On air delivery	dB(A)	72,5	72,5	75,4	75,4	73,1	73,1
On air intake	dB(A)	62,2	62,2	63,8	63,8	62,5	62,5
Irradiated	dB(A)	54,8	54,8	57,3	57,3	55,3	55,3
DIMENSIONS							
Length	mm	2155	2155	2155	2155	2690	2690
Width	mm	860	860	860	860	860	860
Height	mm	1980	1980	1980	1980	1980	1980
NET WEIGHT	kg	716	726	731	741	822	834
ELECTRIC HEATER							
Capacity	kW	13,5	13,5	13,5	13,5	13,5	13,5
Operating current (OA)	A	19,5	19,5	19,5	19,5	19,5	19,5
Capacity steps	n.	2	2	2	2	2	2
HUMIDIFIER							
Steam capacity	kg/h	15	15	15	15	15	15
Power input	kW	11,3	11,3	11,3	11,3	11,3	11,3
Operating current (OA)	A	16,2	16,2	16,2	16,2	16,2	16,2
Max operating current (FLA)	A	23	23	23	23	23	23
HEATING COIL (6)							
Heating capacity	kW	107,0	107,0	114,0	114,0	131,0	131,0
Water flow rate	m^3/h	6,3	6,3	6,7	6,7	7,7	7,7
Pressure drop coil + valve	kPa	21	21	23	23	13	13
Water volume	l	10,5	10,5	10,5	10,5	13,9	13,9
CONNECTIONS ISO 228/1-G							
Exhaustion exchanger water Inlet/outlet	M Ø	2"	2"	2"	2"	2"	2"
Hot water Inlet/outlet	M Ø	1+1/2"	1+1/2"	1+1/2"	1+1/2"	2"	2"
Humidifier filling	F Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate discharge – rubber pipe	F Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 27°C with 47%rH; water to exhaustion exchanger 15/30°C.
2. Characteristics referred to entering air at 20°C; water to exhaustion exchanger 15/7°C.
3. Corresponding to the nominal external static pressure.
4. Machine refrigerant charge, optional excluded.
5. Noise level at 1 meter in free field (nominal external static pressure).
6. Characteristics referred to entering air at 20°C with hot water at 75/60°C.
7. Water flow value causing 100 kPa pressure drop

TECHNICAL DATA - NEXT DWOP

MODEL		082 P2 S	082 P2 DC	092 P2 S	092 P2 DC	100 P2 S	100 P2 DC
SIZE		H7	H7	H7	H7	H7	H7
SUMMER WORKING MODE (1)							
COOLING CAPACITY							
Total	kW	**90,9**	**91,2**	**99,9**	**99,7**	**112,0**	**112,0**
Sensible	kW	**81,7**	**81,8**	**87,9**	**87,9**	**93,5**	**93,4**
Compressors power input	kW	13,0	12,9	15,0	15,1	16,8	17,0
Compressors operating current	A	25,4	25,2	29,9	29,9	37,3	37,5
Water flow	m^3/h	5,97	5,99	6,61	6,61	7,41	7,40
Pressure drops	kPa	8	4	5	5	7	6
WINTER WORKING MODE (2)							
HEATING CAPACITY	kW	**80,1**	**79,5**	**90,6**	**87,5**	**104,0**	**100,0**
Compressors power input	kW	13,3	13,3	15,5	15,3	19,7	19,4
Compressors operating current	A	25,9	25,8	30,5	30,2	40,8	40,4
Water flow	m^3/h	7,34	7,28	8,26	7,95	9,27	8,92
Pressure drops	kPa	12	7	9	8	11	10
Condensing control valve kV (7)	m^3/h	25,0	25,0	25,0	25,0	25,0	25,0
SUPPLY FANS	n.	2	2	2	2	2	2
Air flow	m^3/h	20870	20870	22040	22040	22040	22040
Nominal external static pressure	Pa	50	50	50	50	50	50
Max external static pressure	Pa	136	136	50	50	50	50
Power input (3)	kW	4,18	4,18	4,14	4,14	4,14	4,14
Max power input	kW	4,60	4,60	4,60	4,60	4,60	4,60
Operating current (3)	A	7,77	7,77	7,77	7,77	7,77	7,77
Max operating current (FLA)	A	8,4	8,4	8,4	8,4	8,4	8,4
COMPRESSORS		scroll	scroll	scroll	scroll	scroll	scroll
Quantity	n.	2	2	2	2	2	2
Max current	A	50,0	50,0	62,0	62,0	68,0	68,0
Starting current	A	143	143	171	171	208	208
Capacity steps	n.	2	2	2	2	2	2
EXHAUSTION HEAT EXCHANGER							
Water volume	l	4,7	6,4	6,2	6,4	6,2	6,4
Maximum water flow	m^3/h	9,0	9,0	9,9	9,9	11,1	11,1
AIR FILTERS	n.	4	4	4	4	4	4
Efficiency		G4	G4	G4	G4	G4	G4
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (4)	kg	30,0	30,7	30,6	30,7	30,9	31,0
Gas circuits	n.	1	2	1	2	1	2
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	400/3/50+N
ENERGY EFFICIENCY INDEXES							
EER – Energy Efficiency Ratio	kW/kW	4,17	4,21	4,21	4,18	4,39	4,35
COP = Coefficient of Performance	kW/kW	3,63	3,60	3,74	3,64	3,66	3,55
SOUND LEVEL – ISO 3744 (5)							
On air delivery	dB(A)	77,9	77,9	79,7	79,7	79,7	79,7
On air intake	dB(A)	65,9	65,9	67,5	67,5	67,7	67,7
Irradiated	dB(A)	59,8	59,8	61,6	61,6	61,6	61,6
DIMENSIONS							
Length	mm	2690	2690	2690	2690	2690	2690
Width	mm	860	860	860	860	860	860
Height	mm	1980	1980	1980	1980	1980	1980
NET WEIGHT	kg	833	854	849	861	878	890
ELECTRIC HEATER							
Capacity	kW	13,5	13,5	13,5	13,5	13,5	13,5
Operating current (OA)	A	19,5	19,5	19,5	19,5	19,5	19,5
Capacity steps	n.	2	2	2	2	2	2
HUMIDIFIER							
Steam capacity	kg/h	15	15	15	15	15	15
Power input	kW	11,3	11,3	11,3	11,3	11,3	11,3
Operating current (OA)	A	16,2	16,2	16,2	16,2	16,2	16,2
Max operating current (FLA)	A	23	23	23	23	23	23
HEATING COIL (6)							
Heating capacity	kW	146,0	146,0	151,0	151,0	151,0	151,0
Water flow rate	m^3/h	8,6	8,6	8,9	8,9	8,9	8,9
Pressure drop coil + valve	kPa	16	16	17	17	17	17
Water volume	l	13,9	13,9	13,9	13,9	13,9	13,9
CONNECTIONS ISO 228/1-G							
Exhaustion exchanger water Inlet/outlet	M Ø	2"	2"	2"	2"	2"	2"
Hot water Inlet/outlet	M Ø	2"	2"	2"	2"	2"	2"
Humidifier filling	F Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate discharge – rubber pipe	F Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 27°C with 47%rH; water to exhaustion exchanger 15/30°C.
2. Characteristics referred to entering air at 20°C; water to exhaustion exchanger 15/7°C.
3. Corresponding to the nominal external static pressure.
4. Machine refrigerant charge, optional excluded.
5. Noise level at 1 meter in free field (nominal external static pressure).
6. Characteristics referred to entering air at 20°C with hot water at 75/60°C.
7. Water flow value causing 100 kPa pressure drop

ELECTRICAL DATA

MAXIMUM ELECTRICAL ABSORPTION CALCULATION
This chapter has the aim to explain the calculation of the maximum absorbed current by the unit (A), corresponding to extreme working conditions.

Example in cooling mode for unit NEXT DXOP 013 P1 S H1

COOLING (1)			
- Main fans (FLA)	A	2.2	+
- Compressor (FLA)	A	8.0	+
- Electric heaters (OA)	A	7.4	=
Absorbed current	**A**	**17.6**	

COOLING (2)			
- Main fans (FLA)	A	2.2	+
- Compressor (FLA)	A	8.0	+
- Humidifier (FLA)	A	4.5	=
Absorbed current	**A**	**14.7**	

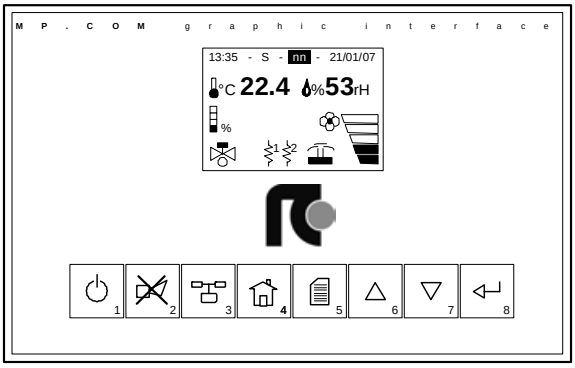
HEATING (3)			
- Main fans (FLA)	A	2.2	+
- Electric heaters (OA)	A	7.4	+
- Humidifier (FLA)	A	4.5	=
Absorbed current	**A**	**14.1**	

The COOLING (1) working condition corresponds to the unit maximum electric absorption.

IMPORTANT
For the fans, the current nominal values have been considered equal to the data plate values. For this reason, the nominal current and the data plate current are the same. Actually, the real absorbed current is normally lower than the data plate value.
These values depend on the unit working conditions and on the type of control of the plant.

MP.COM: MICROPROCESSOR CONTROL SYSTEM

The MP.COM microprocessor control system is equipped with 8 keys terminal and back lighted graphic display on which all information in different languages or easily identifiable symbols are displayed.
The system disposes of a “flash” memory that preserves the information even in absence of power supply.



KEYBOARD FUNCTIONS

KEY 1 Switches on/off the unit.

KEY 2 Stops the alarm acoustical signal and displays the intervened alarm.

KEY 3 Accedes to the parameters of possible units connected in LAN network.
LAN connection with 3 wires without additional accessories. It is possible to connect in network different capacity units and with different number of compressors.

KEY 4 Home key – displays the main screen.

KEY 5 Accedes to control and visualization menus as:
- Unit working status
- Set-points
- Alarms reset (protected by password)
- Service parameters setting (protected by password)
- Intervened alarms history
- Setting for main components manual operation (protected by password)
- Date and time setting
- Setting of communication system for SMS messages dispatch

KEY 6 Scrolls the pages inside each menu and decreases the displayed value

KEY 7 Scrolls the pages inside each menu and increases the displayed value

KEY 8 Shifts the cursor inside each menu and confirms a parameter insertion

REMOTE CONTROLS/ALARMS

INLETS	
1 External enabling	•
2 Cooling enabling	•
3 Heating enabling	•
4 Smoke/Fire alarm	•
5 Temperature set-point compensation (optional)	•

OUTLETS	
1 General alarm 1 – deviating contact	••
2 General alarm 2 – programmable deviating contact (optional)	••
3 General alarm 3 - programmable deviating contact (optional)	••
4 Clogged filters alarm (optional)	••

• controls/alarms for remotization
•• voltage free controls/alarms for remotization

POSSIBLE AIR INTAKE

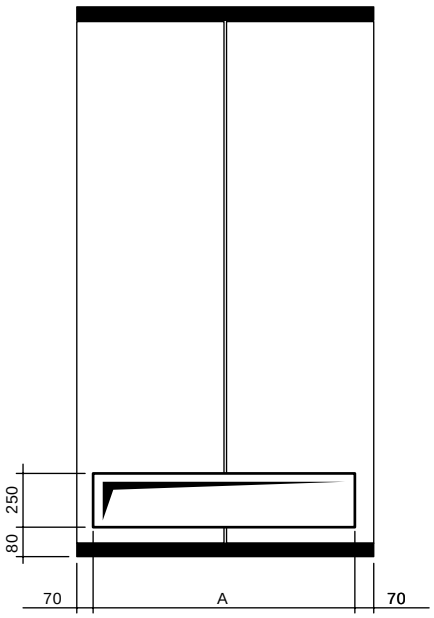
AIR INTAKE FROM THE BOTTOM
(Size H0 excluded)
Thanks to the particular basement design, it is possible to have the unit air intake from the bottom side.
With this solution it is necessary to foresee the frontal panels without grilles.

AIR INTAKE FROM THE BACK SIDE
(Size H0 excluded)
It is possible to have the unit air intake from the back side.
The air intake hole has to be made by Customer during installation.

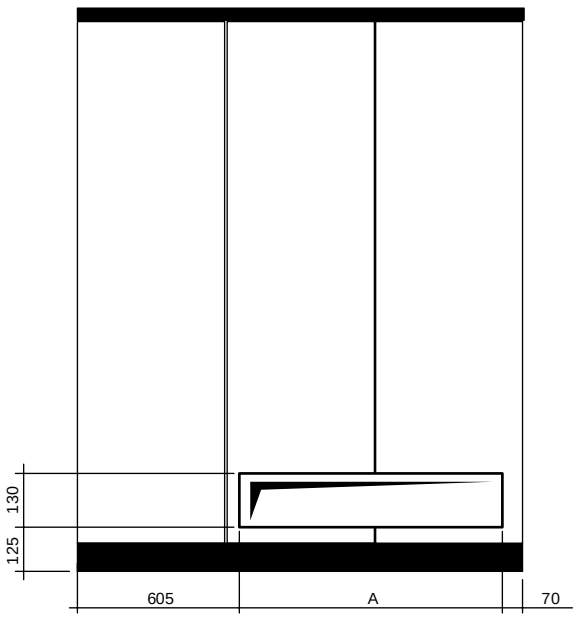
AIR INTAKE FROM THE BACK SIDE

Back side view

NEXT OVER
H1 – H2 – H3



NEXT OVER
H4 – H5 – H6 – H7



NEXT DXOP		H0	H1	H2	H3	H4	H5	H6	H7
A	mm	--	510	645	945	645	945	1480	2015
Max air flow	m^3/h	--	2300	2900	4250	1500	2200	3450	4700

NEXT DWOP		H0	H1	H2	H3	H4	H5	H6	H7
A	mm	--	--	--	--	645	945	1480	2015
Max air flow	m^3/h	--	--	--	--	1500	2200	3450	4700

OPTIONAL ACCESSORIES – REMOTE AIR/GAS EXHAUSTION HEAT EXCHANGER

Remote air/gas exhaustion heat exchanger series TEAM MATE DXAP MR with horizontal air flow, from coil to fan.

The machines are made with weather resistant materials and suitable for outdoor installation.

Design, assembly and test as per the Company Quality Assurance program in full compliance with ISO 9001. RC Group has been the first Italian company in its segment to get the ISO 9001 in October 13th, 1991 with certificate ICIM 0018.

The machines are in full compliance with European Norms 2006/42CE, 2006/95CE, 2004/108CE, 97/23CE and subsequent amendments.

AVAILABLE VERSIONS
The TEAM MATE MR series is available in 3 versions:

- TEAM MATE MR STD - No air flow and sound level reduction
- TEAM MATE MR LNO – Air flow reduction at 85% with consequent sound level reduction.
- TEAM MATE MR ELN – Air flow reduction at 70% with further sound level reduction.

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

FANS SECTION

- Axial fans with sickle-shaped blades, fan guard and optimized for low noise levels.
- External rotor electric motor with stepless variable speed for condensing pressure control.
- IP54 enclosure class.

CONDENSING COIL

- Heat exchanger coil with internally corrugated copper tubes and high efficiency aluminium fins, specifically developed to provide high heat transfer and lower pressure drops. The combination of two factors, special tubes and fins, allow to optimally combine the following aspects:
  - Maximum capacity relative to the size of the exchanger.
  - Minimum charge of refrigerant.
  - Reduction of the air flow required for the heat exchange.
- Frame in galvanized steel.

REFRIGERANT CIRCUIT

- Valves on gas and liquid line for coupling to refrigerant pipe. The condenser is supplied with nitrogen seal.
- Thermostatic expansion valve.
- Liquid and moisture indicator.
- Dryer and anti-acid gas filter.
- Solenoid valve
- Non return valve

ELECTRICAL PANEL
In accordance with EN60204-1 norms, suitable for outdoor installation, IP54 enclosure class, complete with:

- Terminals for power supply (from network).
  - 400/3/50+N for model T 172
  - 230/1/50 for the other models.
- Terminals for 0÷10V signal for condensing control system (connect to indoor machine).
- Terminals for alarm signal (connect to indoor machine).
- Fans speed regulator for condensing control.

TECHNICAL DATA

MODEL		M 13	M 14	M 18	M 21	M 26	M 32	M 41
TEAM MATE DXAP MR STD								
AXIAL FANS	n.	1	1	1	1	1	1	2
Air flow	m³/h	4500	4180	4800	6000	7000	9100	12000
Max power input	kW	0,25	0,26	0,24	0,39	0,37	0,53	0,78
Max operating current (FLA)	A	1,18	1,18	1,18	2,60	2,60	2,85	5,20
SOUND LEVEL – ISO 3744 (1)	dB(A)	63,0	63,0	63,0	65,0	65,0	67,0	67,4
TEAM MATE DXAP MR LNO								
AXIAL FANS	n.	1	1	1	1	1	1	2
Air flow	m³/h	3850	3550	4100	5100	5950	7750	10200
Max power input	kW	0,19	0,20	0,18	0,29	0,28	0,40	0,59
Max operating current (FLA)	A	1,00	1,00	1,00	2,21	2,21	2,42	4,42
SOUND LEVEL – ISO 3744 (1)	dB(A)	59,5	59,5	59,5	61,5	61,5	63,5	63,9
TEAM MATE DXAP MR ELN								
AXIAL FANS	n.	1	1	1	1	1	1	2
Air flow	m³/h	3150	2950	3550	4200	4900	6400	8400
Max power input	kW	0,18	0,18	0,17	0,27	0,26	0,37	0,55
Max operating current (FLA)	A	0,83	0,83	0,83	1,82	1,82	2,00	3,64
SOUND LEVEL – ISO 3744 (1)	dB(A)	55,3	55,3	55,3	57,3	57,3	59,3	59,7
COMMON DATA								
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
REFRIGERANT CHARGE (2)	kg							
DIMENSIONS								
Length	mm	875	875	1200	1200	1400	1400	1600
Width	mm	540	540	540	540	665	665	665
Height	mm	726	726	726	726	1026	1026	1026
NET WEIGHT	kg	57	61	77	80	123	125	161

MODEL		M 52	M 63	M 86	M 98	M 117	M 130	T 172
TEAM MATE DXAP MR STD								
AXIAL FANS	n.	2	2	3	3	4	4	6
Air flow	m³/h	14000	18000	28000	27000	37300	36000	56000
Max power input	kW	0,74	1,08	1,59	1,59	2,12	2,12	3,18
Max operating current (FLA)	A	5,20	5,70	8,55	8,55	11,40	11,40	17,10
SOUND LEVEL – ISO 3744 (1)	dB(A)	67,4	69,4	70,5	70,5	71,1	71,1	71,5
TEAM MATE DXAP MR LNO								
AXIAL FANS	n.	2	2	3	3	4	4	6
Air flow	m³/h	11900	15300	23800	22950	31700	30600	47600
Max power input	kW	0,56	0,81	1,19	1,19	1,59	1,59	2,39
Max operating current (FLA)	A	4,42	4,85	7,27	7,27	9,69	9,69	14,54
SOUND LEVEL – ISO 3744 (1)	dB(A)	63,9	65,8	66,9	66,9	67,5	67,5	68,0
TEAM MATE DXAP MR ELN								
AXIAL FANS	n.	2	2	3	3	4	4	6
Air flow	m³/h	9800	12600	19600	18900	26110	25200	39200
Max power input	kW	0,52	0,76	1,12	1,12	1,50	1,50	2,23
Max operating current (FLA)	A	3,64	3,99	5,99	5,99	7,98	7,98	12,00
SOUND LEVEL – ISO 3744 (1)	dB(A)	59,7	61,6	62,7	62,7	63,3	63,3	63,8
COMMON DATA								
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
REFRIGERANT CHARGE (2)	kg	14,7	15,3	15,6	22,3	23,4	23,3	24,7
DIMENSIONS								
Length	mm	2320	2320	3680	3680	4760	4760	3680
Width	mm	665	665	770	770	770	770	770
Height	mm	1140	1140	1135	1135	1135	1135	2270
NET WEIGHT	kg	221	224	253	284	336	368	494

1. Sound pressure level [Lp] 1m far according to ISO EN 3744.
2. The condenser is supplied with nitrogen seal. For the refrigerant charge consider, in addition to the these value, even the refrigerant pipes for the connection to the indoor machine and lubricant oil in 10% ratio of charged refrigerant.

ACOUSTIC DATA

TEAM MATE DXAP MR STD

MODEL		M 13	M 14	M 18	M 21	M 26	M 32	M 41
Sound power level [Lw] (1)	dB(A)	77,2	77,2	77,5	79,5	80,2	82,2	82,8
Sound pressure level at 1m [Lp] (2)	dB(A)	63,0	63,0	63,0	65,0	65,0	67,0	67,4
Sound pressure level at 5m [Lp] (2)	dB(A)	51,6	51,6	51,8	53,8	54,3	56,3	56,9
Sound pressure level at 10m [Lp] (2)	dB(A)	46,0	46,0	46,2	48,2	48,8	50,8	51,4

MODEL		M 52	M 63	M 86	M 98	M 117	M 130	T 172
Sound power level [Lw] (1)	dB(A)	83,7	85,6	87,4	87,4	88,6	88,6	89,3
Sound pressure level at 1m [Lp] (2)	dB(A)	67,4	69,4	70,5	70,5	71,1	71,1	71,5
Sound pressure level at 5m [Lp] (2)	dB(A)	57,5	59,4	60,9	60,9	61,9	61,9	62,6
Sound pressure level at 10m [Lp] (2)	dB(A)	52,1	54,1	55,7	55,7	56,8	56,8	57,5

TEAM MATE DXAP MR LNO

MODEL		M 13	M 14	M 18	M 21	M 26	M 32	M 41
Sound power level [Lw] (1)	dB(A)	73,7	73,7	73,9	75,9	76,7	78,7	79,3
Sound pressure level at 1m [Lp] (2)	dB(A)	59,5	59,5	59,5	61,5	61,5	63,5	63,9
Sound pressure level at 5m [Lp] (2)	dB(A)	48,1	48,1	48,3	50,3	50,8	52,8	53,4
Sound pressure level at 10m [Lp] (2)	dB(A)	42,5	42,5	42,7	44,7	45,3	47,3	47,9

MODEL		M 52	M 63	M 86	M 98	M 117	M 130	T 172
Sound power level [Lw] (1)	dB(A)	80,1	82,0	83,8	83,8	85,0	85,0	85,8
Sound pressure level at 1m [Lp] (2)	dB(A)	63,9	65,8	66,9	66,9	67,5	67,5	68,0
Sound pressure level at 5m [Lp] (2)	dB(A)	53,9	55,9	57,4	57,4	58,4	58,4	59,1
Sound pressure level at 10m [Lp] (2)	dB(A)	48,6	50,5	52,2	52,2	53,2	53,2	53,9

TEAM MATE DXAP MR ELN

MODEL		M 13	M 14	M 18	M 21	M 26	M 32	M 41
Sound power level [Lw] (1)	dB(A)	69,4	69,4	69,7	71,7	72,4	74,4	75,1
Sound pressure level at 1m [Lp] (2)	dB(A)	55,3	55,3	55,3	57,3	57,3	59,3	59,7
Sound pressure level at 5m [Lp] (2)	dB(A)	43,9	43,9	44,1	46,1	46,6	48,6	49,2
Sound pressure level at 10m [Lp] (2)	dB(A)	38,2	38,2	38,5	40,5	41,1	43,1	43,7

MODEL		M 52	M 63	M 86	M 98	M 117	M 130	T 172
Sound power level [Lw] (1)	dB(A)	75,9	77,8	79,6	79,6	80,8	80,8	81,5
Sound pressure level at 1m [Lp] (2)	dB(A)	59,7	61,6	62,7	62,7	63,3	63,3	63,8
Sound pressure level at 5m [Lp] (2)	dB(A)	49,7	51,7	53,2	53,2	54,2	54,2	54,8
Sound pressure level at 10m [Lp] (2)	dB(A)	44,4	46,3	48,0	48,0	49,0	49,0	49,7

1. Sound power level [Lw] according to ISO EN 9614 - 2.
2. Sound pressure level [Lp] according to ISO EN 3744

IMPORTANT

For further information about units acoustic data, please refer to "The Noise" bulletin of RC GROUP technical literature.

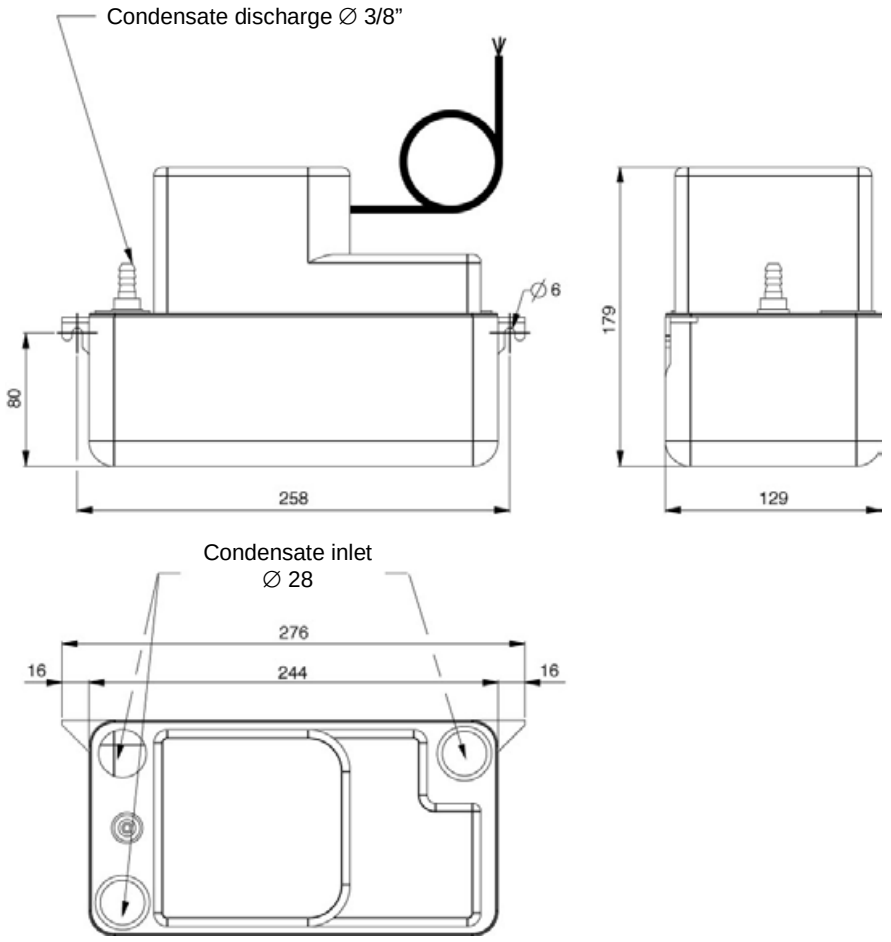
OPTIONAL ACCESSORIES - CONDENSATE DISCHARGE PUMP

A plastic case contains the vertical type pump, the water tank with float plus safety switch and hydraulic and electric connection.
Together the pump 10 linear meters anti-crushing plastic discharge spiral tube is supplied
The optional has to be installed as shown in the documentation delivered together with the unit.
Wiring includes power supply and an alarm, displayed on microprocessor, that includes motor pump thermal protection and tank overflow.
The condensate discharge pump operation is fully automatic.

WARNING
For machines size H0, H1, H2 and H3 the optional is supplied in mounting kit.

TECHNICAL DATA		
Power supply		230/1/50
Power input	W	75
Absorbed current	A	0,5
Capacity tank	l	2
Discharge pipe	Ø mm	10/16
Maximum water flow	l/h	300
Minimum water flow	l/h	3
Discharge head		
- with min. water flow	mH_2O	4,5
- with max. water flow	mH_2O	0,3

CONDENSATE DISCHARGE PUMP

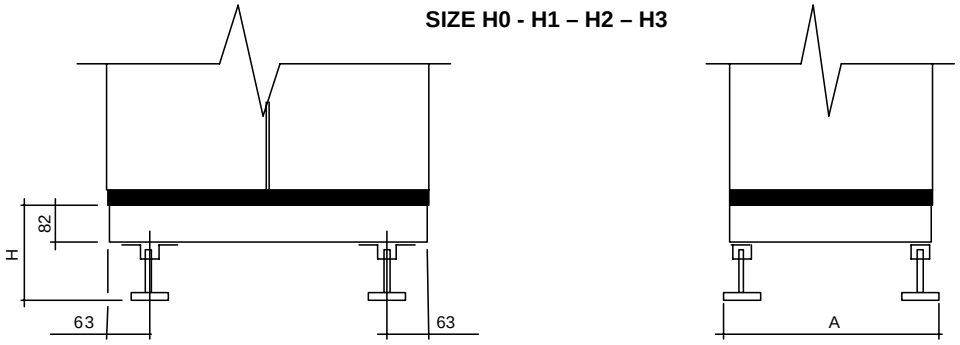


OPTIONAL ACCESSORIES - FLOOR STAND

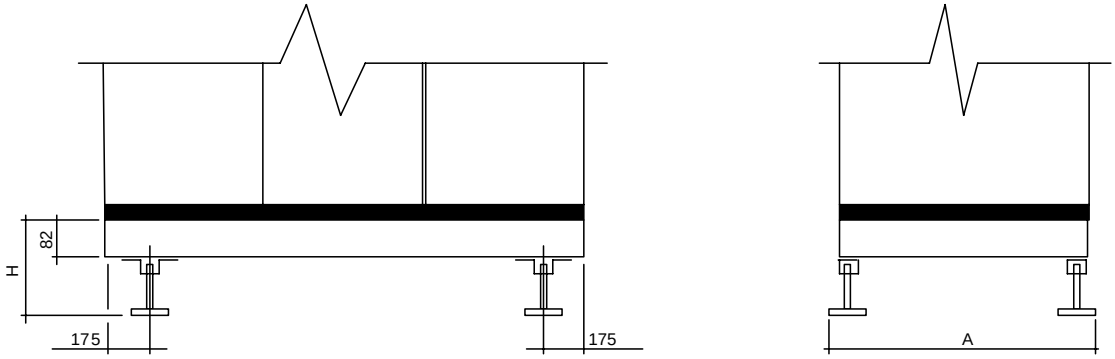
It is not possible to match the unit floor stand with plenum installed under the machine.
For a correct installation of the air conditioner we suggest you to utilize a gasket between the floor stand and the unit base.
The floor stand is available in 3 different heights.

FLOOR STAND

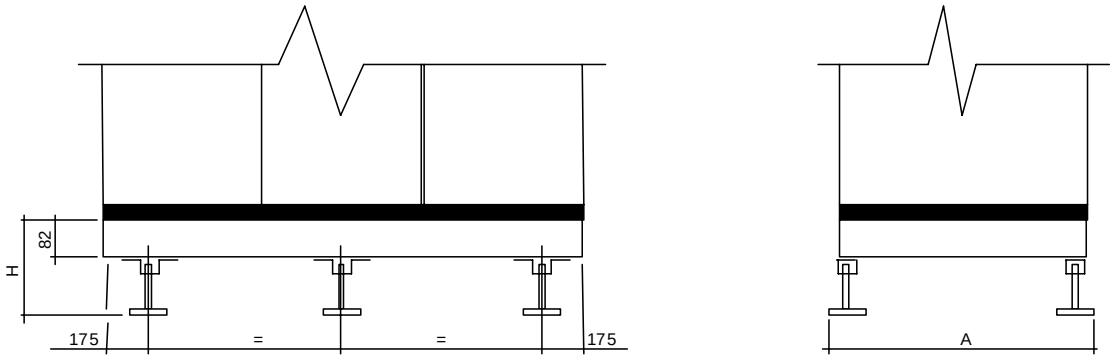
SIZE H0 - H1 – H2 – H3



SIZE H4 – H5



SIZE H6 – H7 – H8



SIZE	H0	H1	H2	H3	H4	H5	H6	H7	H8
A mm	460	691	691	791	900	900	900	900	900

MODEL		230	330	390
H minimum height	mm	255	355	400
H maximum height	mm	350	450	510

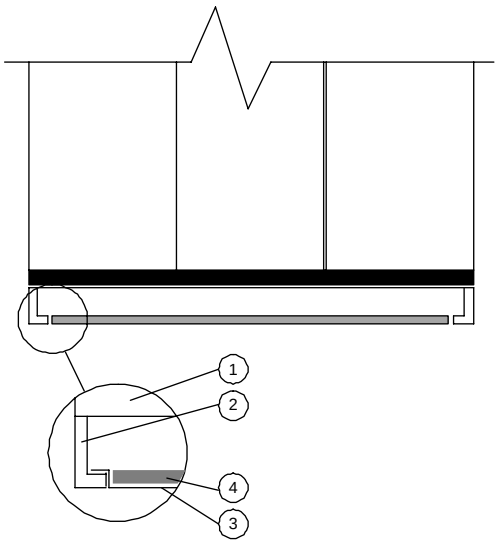
OPTIONAL ACCESSORIES - BOTTOM PANEL

(size H0 excluded)
With this accessory it is possible a noise insulation of the machine base, when the machine is installed directly on particular floor as raised floor, wood floor etc.
The accessory includes:

- Panel in galvanized steel sheet.
- Noise insulation with special soundproof material.

The bottom panel is supplied assembled inside the unit base and does not modify the unit dimensions.

BOTTOM PANEL



1) Air conditioner
2) Air conditioner base
3) Bottom panel
4) Insulation with special sound soundproof material

OPTIONAL ACCESSORIES - SANDWICH PANEL

The accessory includes:

- External part as standard panel.
- Internal part in galvanized steel sheet.
- Noise insulation with special soundproof material.

The accessory increase the machine weight.

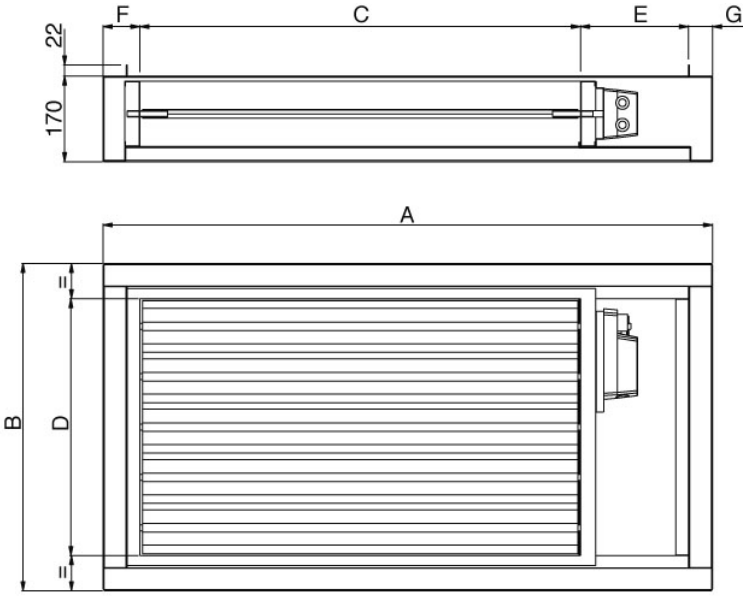
Size		H0	H1	H2	H3	H4	H5	H6	H7
Weight increasing (1)	kg	28	39	43	54	64	72	86	99

1. Add this value to the total machine weight

OPTIONAL ACCESSORIES - NON RETURN MOTORIZED DAMPER

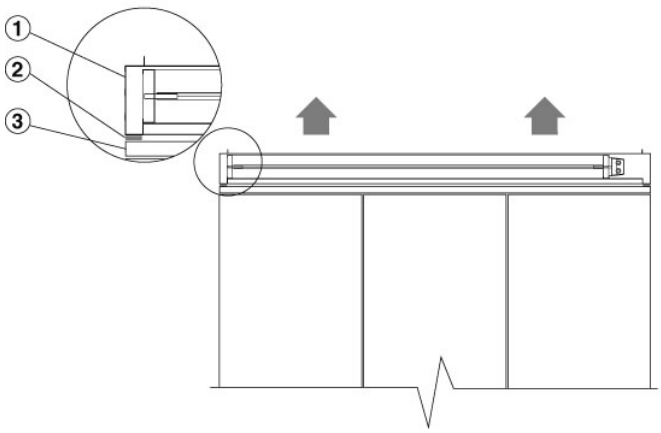
(size H0 excluded)
Accessory to install on units air delivery and it can be matched to air conditioner, plenums and floor stand. The damper is provided with connecting flange for the air delivery duct.
For a correct installation we suggest you to utilize a gasket between the damper and the unit or the plenum or the floor stand..

NON RETURN MOTORIZED DAMPER



Size		H0	H1	H2	H3	H4	H5	H6	H7
A	mm	--	650	785	1085	1320	1620	2155	2690
B	mm	--	650	650	750	860	860	860	860
C	mm	--	300	450	750	680	980	1510	2050
D	mm	--	510	510	610	610	610	610	610
E	mm	--	229	214	214	489	489	494	489
F	mm	--	73	73	73	90	90	90	90
G	mm	--	48	48	48	61	61	61	61
Weight (1)	kg	--	20	23	30	40	47	60	75

1. Add this value to the total unit weight

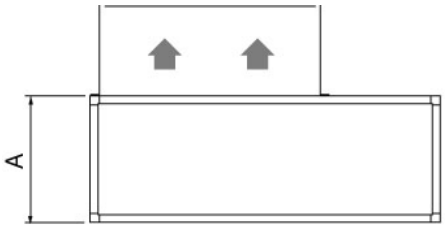


1) Non return damper
2) Gasket
3) Air conditioner

OPTIONAL ACCESSORIES - AIR DELIVERY PLENUM

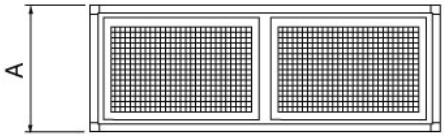
The plenums have same technical characteristics and base dimensions of the machine cabinet.

NEXT PLENUM



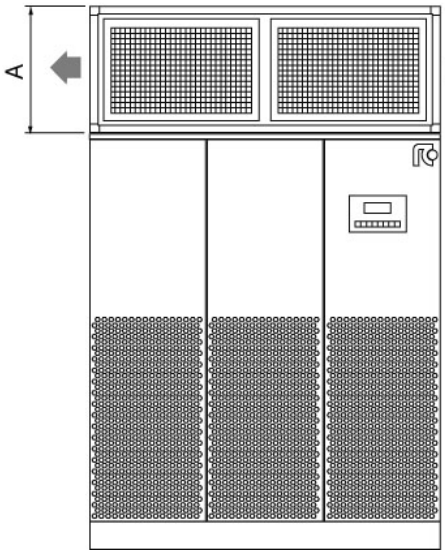
- Plenum for ducting
- Plenum for ducting with F6/F7/F9 efficiency filters
- Plenum for ducting with noise absorption partitions

Size		H0	H1	H2	H3	H4	H5	H6	H7
Plenum (1)	kg	18	20	21	20	27	38	38	44
Plenum with filters (1)	kg	--	26	27	27	42	51	62	81
Plenum with partitions (1)	kg	--	25	27	30	42	49	62	74



- Plenum with grille for frontal air distribution into the room and noise absorption partitions

Size		H0	H1	H2	H3	H4	H5	H6	H7
Plenum with grilles (1)	kg	15,5	23	26	28	39	45	55	67
Plenum with grilles and partitions (1)	kg	--	30	30	37	67	60	76	92



- Plenum with grilles on 3 sides, for direct air distribution into the room.

Size		H0	H1	H2	H3	H4	H5	H6	H7
Plenum with grilles (1)	kg	15	21	23	30	41	46	58	70

1. Add this value to the total unit weight

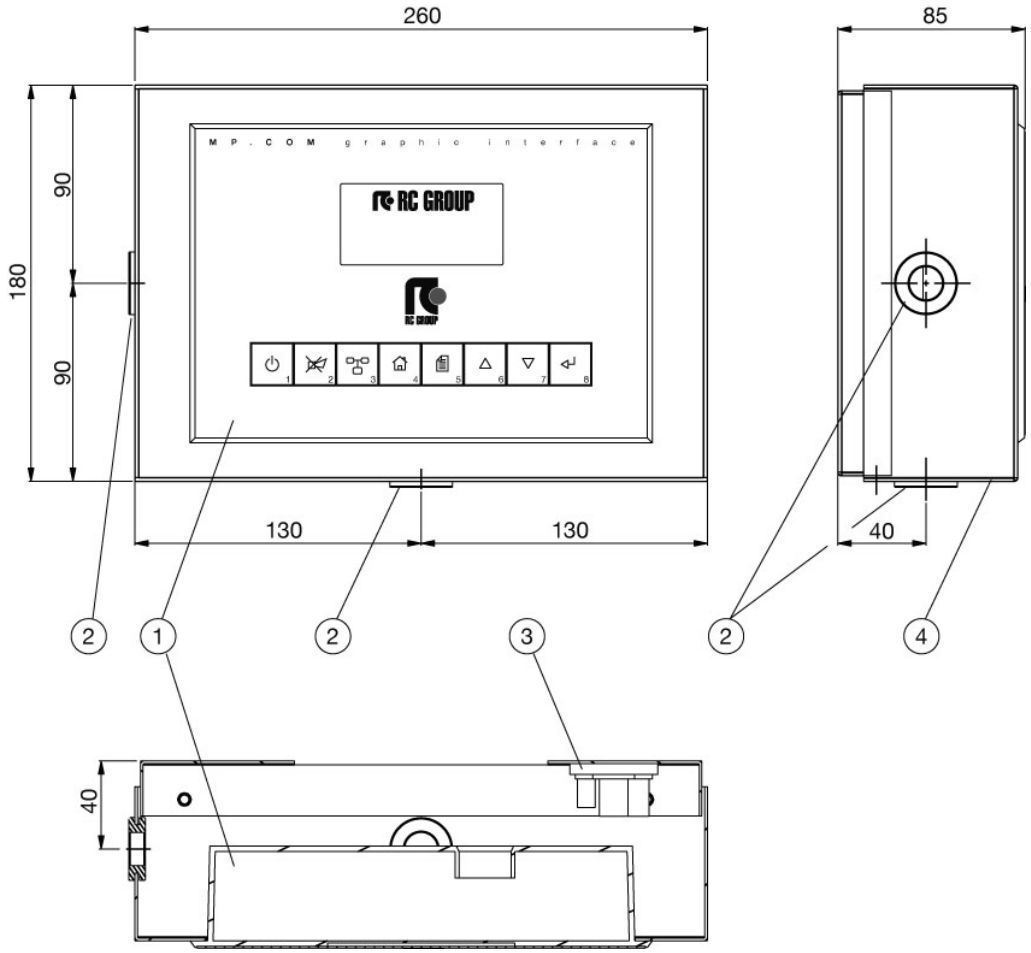
FOR ALL PLENUMS

Size		H0	H1	H2	H3	H4	H5	H6	H7
A	mm	490	490	490	490	510	510	510	510

OPTIONAL ACCESSORIES – MP.COM REMOTE TERMINAL

The remote terminal is supplied in kit and includes a painted steel sheet box contained the Terminal and the “T” card for the connection to the unit.
The box has a wall mounting predisposition.
With the remote terminal it is possible the remote management of all the units connected in LAN network (max 10 units).

MP.COM REMOTE TERMINAL

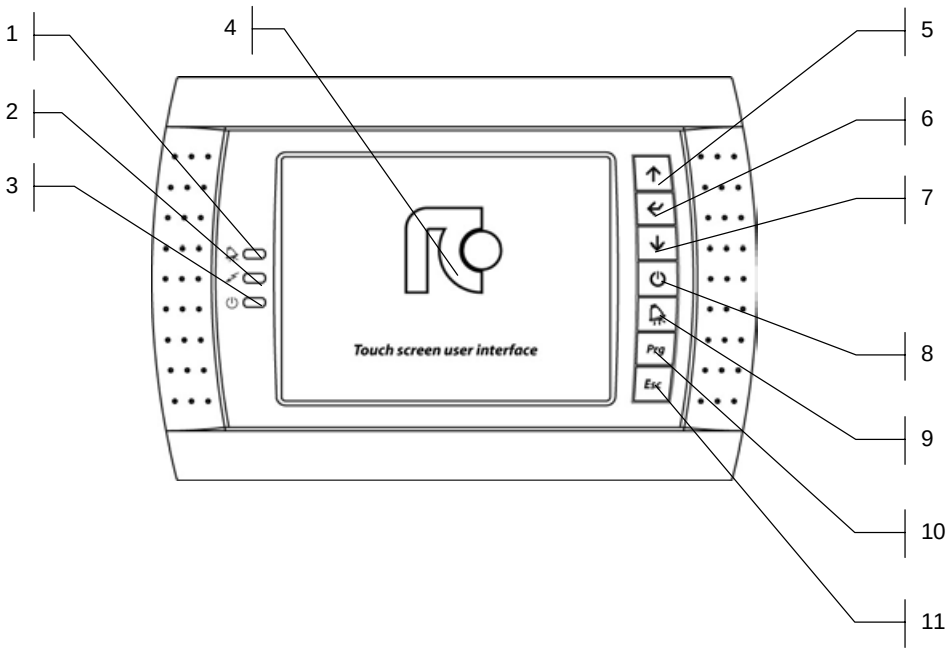


1) LCD display with keyboard
2) Rubber fairlead 16MV
3) “T” card for connection
4) Wall mounting box

OPTIONAL ACCESSORIES – MP3000 TOUCH-SCREEN DISPLAY

5,7” colour “tough-screen” graphic display that shown in a practical and intuitive mode all information relating to operating status, alarm and block of the machine and the set-point.

MP.3000 TOUCH-SCREEN DISPLAY

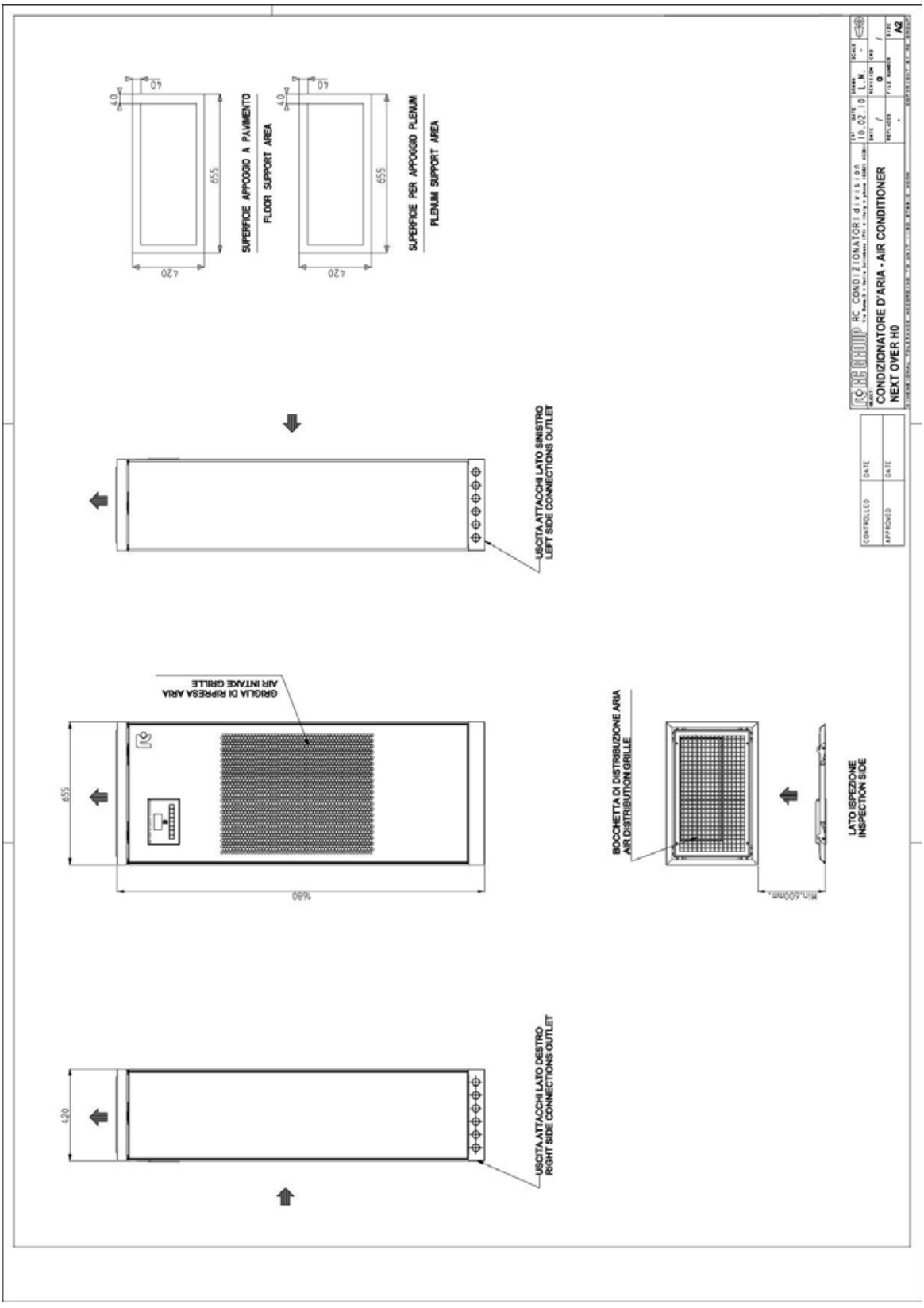


TOUCH-SCREEN DISPLAY
1 Alarms signalling LED.
2 Interlock signalling LED.
3 On/off LED for terminal feeding.
4 Touch-screen
5 Arrow up key
6 Enter key
7 Arrow down key
8 Machine On/off key
9 Stop alarm acoustic signalling key
10 Not used
11 Back to upper level key

MACHINE DRAWINGS

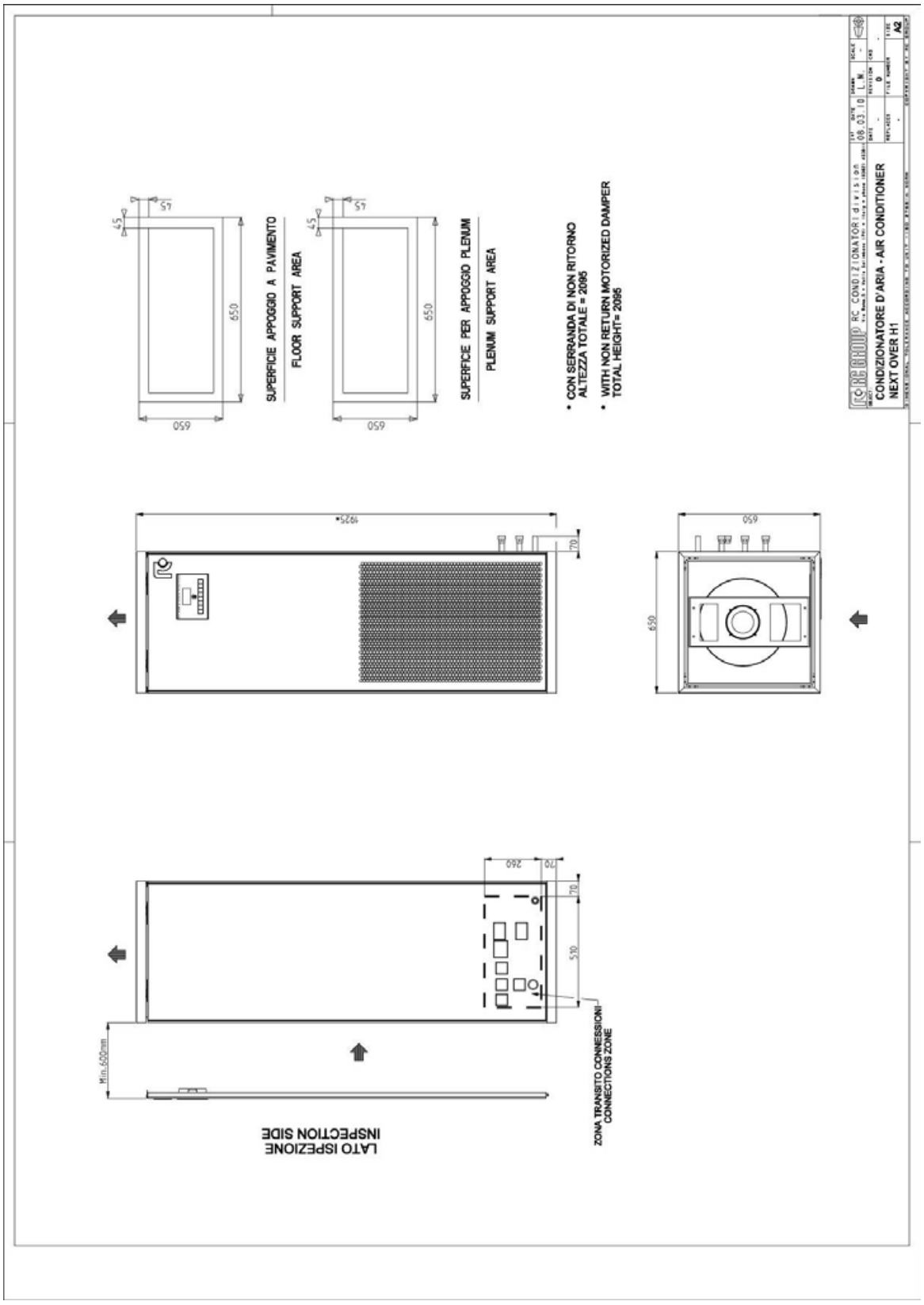
Dimensions in mm

NEXT OVER H0



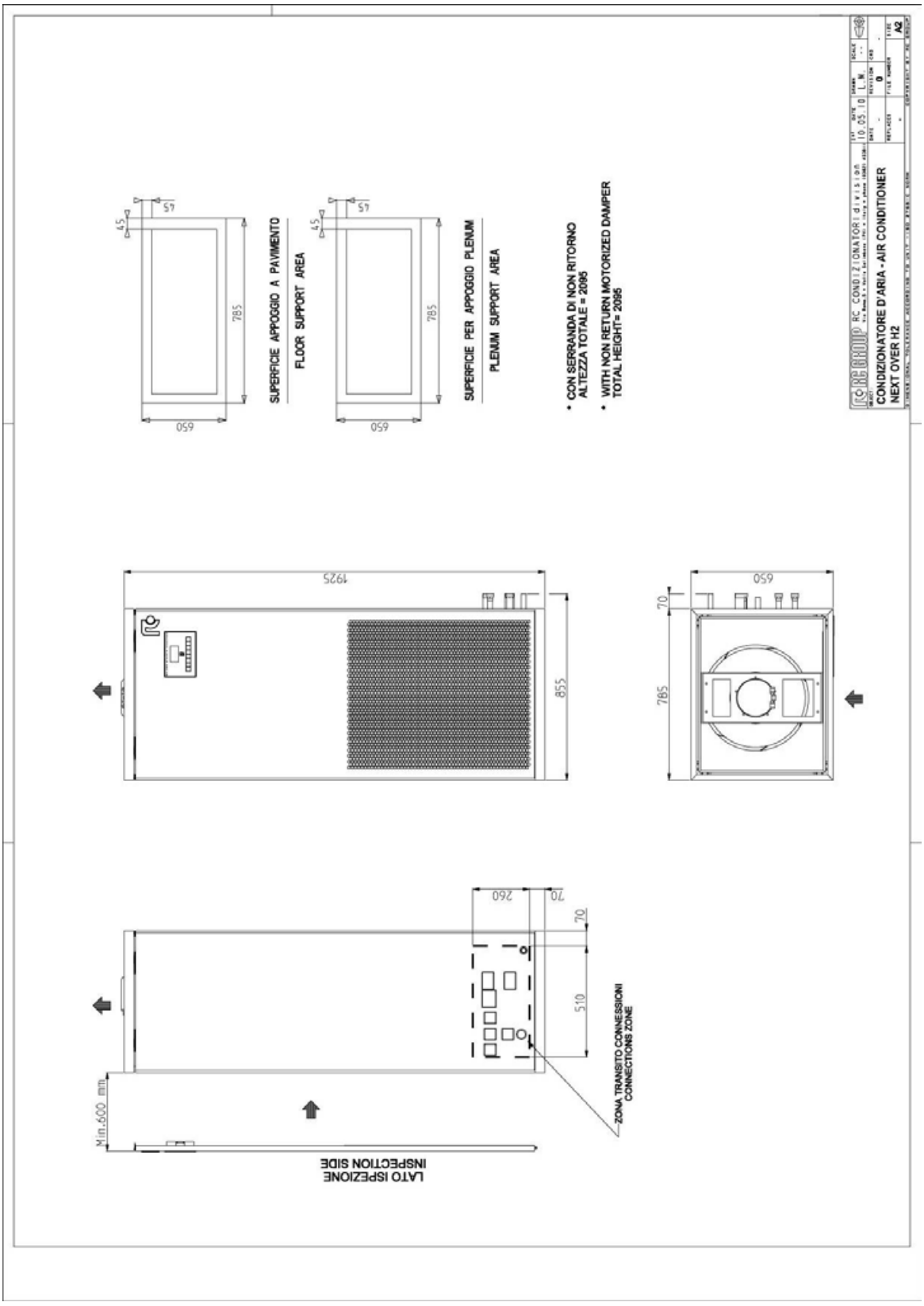
MACHINE DRAWINGS
Dimensions in mm

NEXT OVER H1



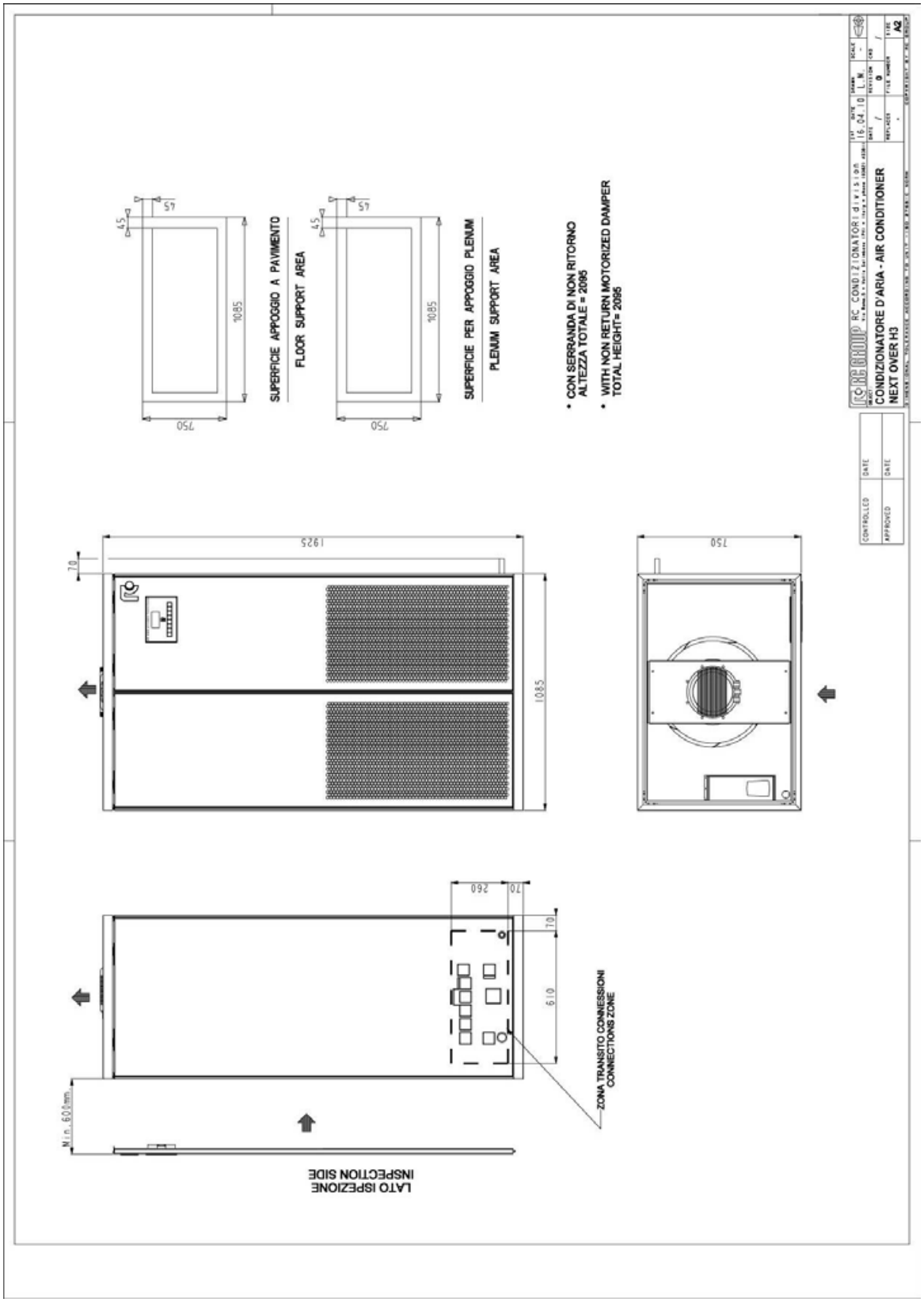
MACHINE DRAWINGS
Dimensions in mm

NEXT OVER H2



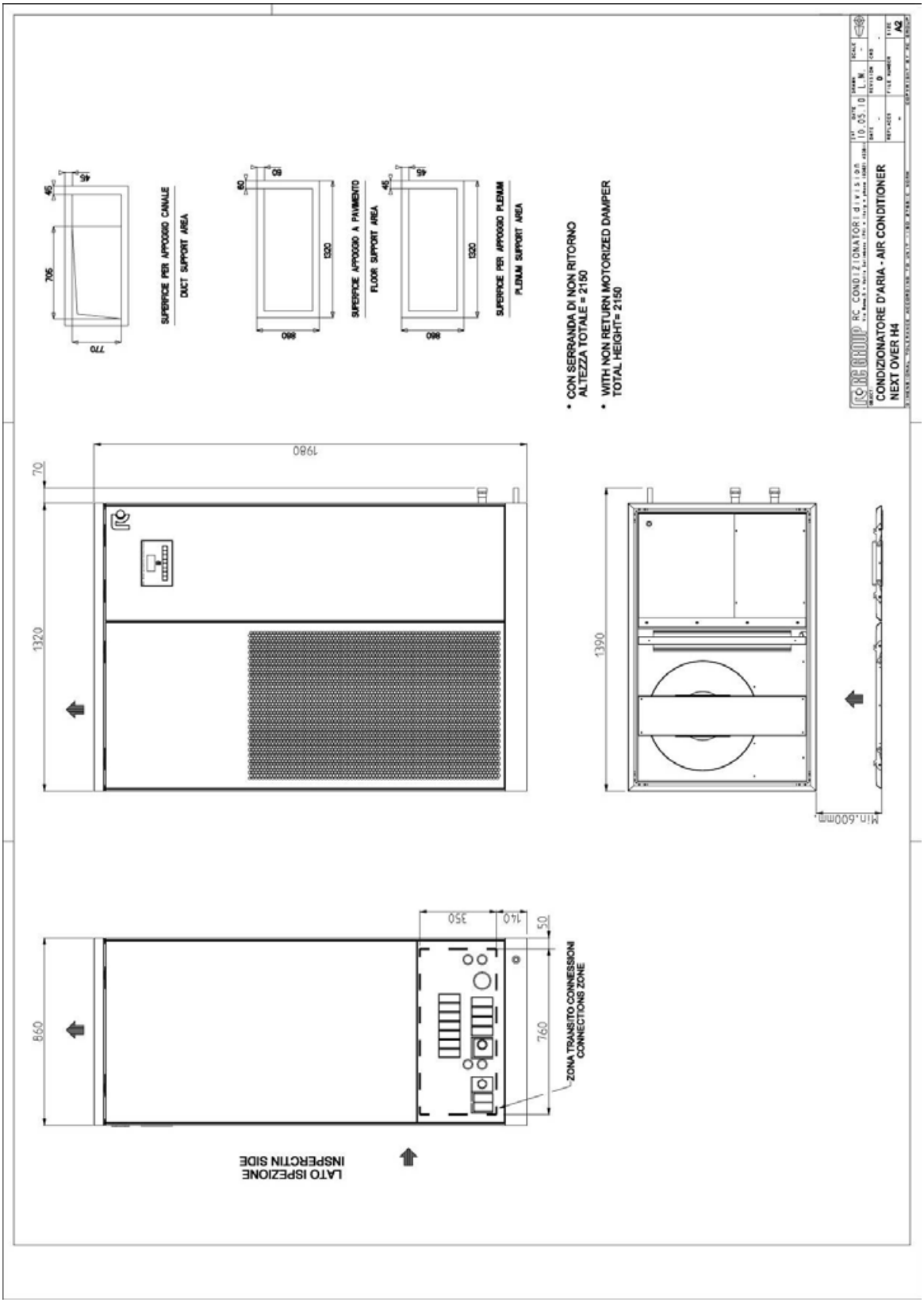
MACHINE DRAWINGS
Dimensions in mm

NEXT OVER H3



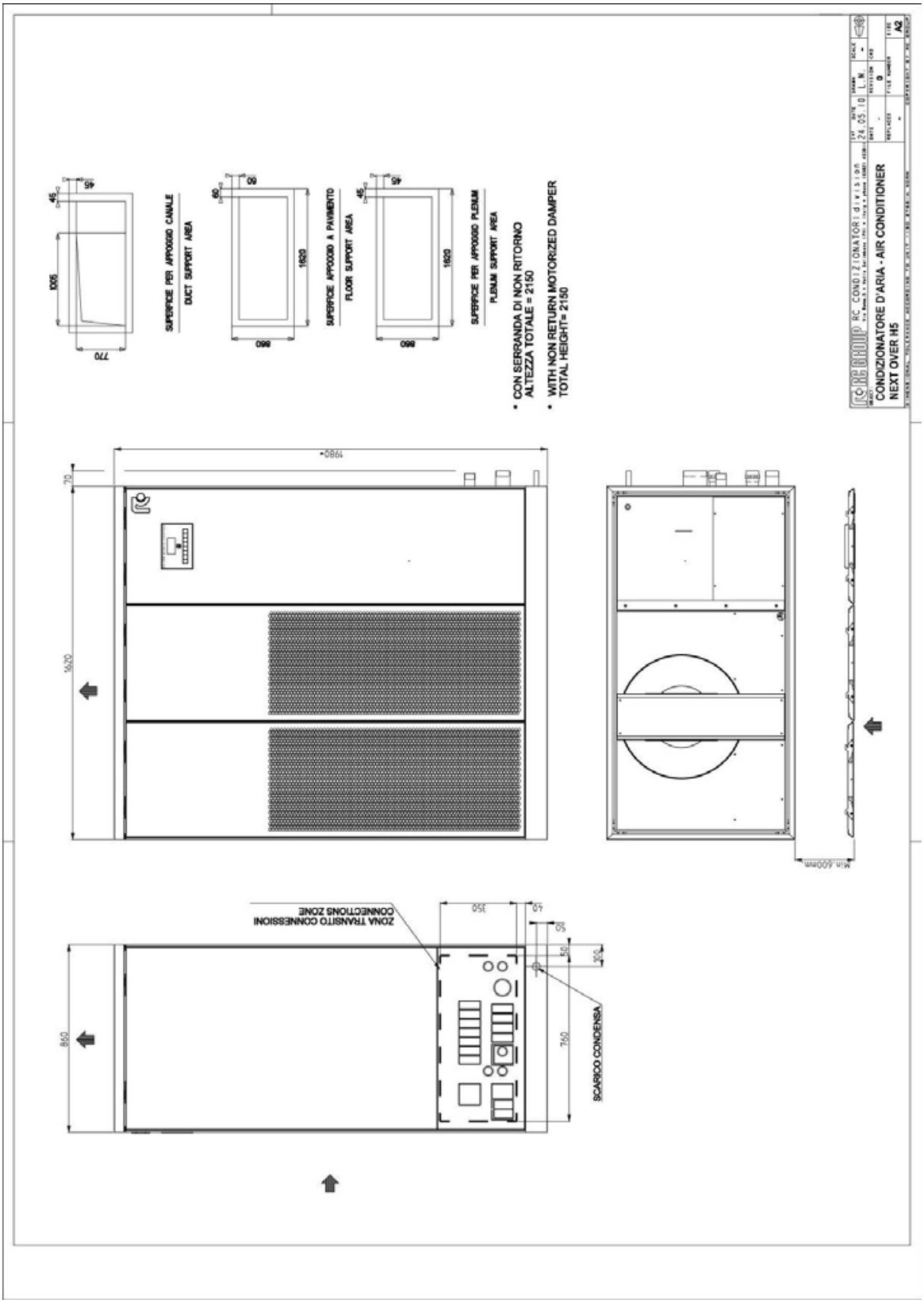
MACHINE DRAWINGS
Dimensions in mm

NEXT OVER H4



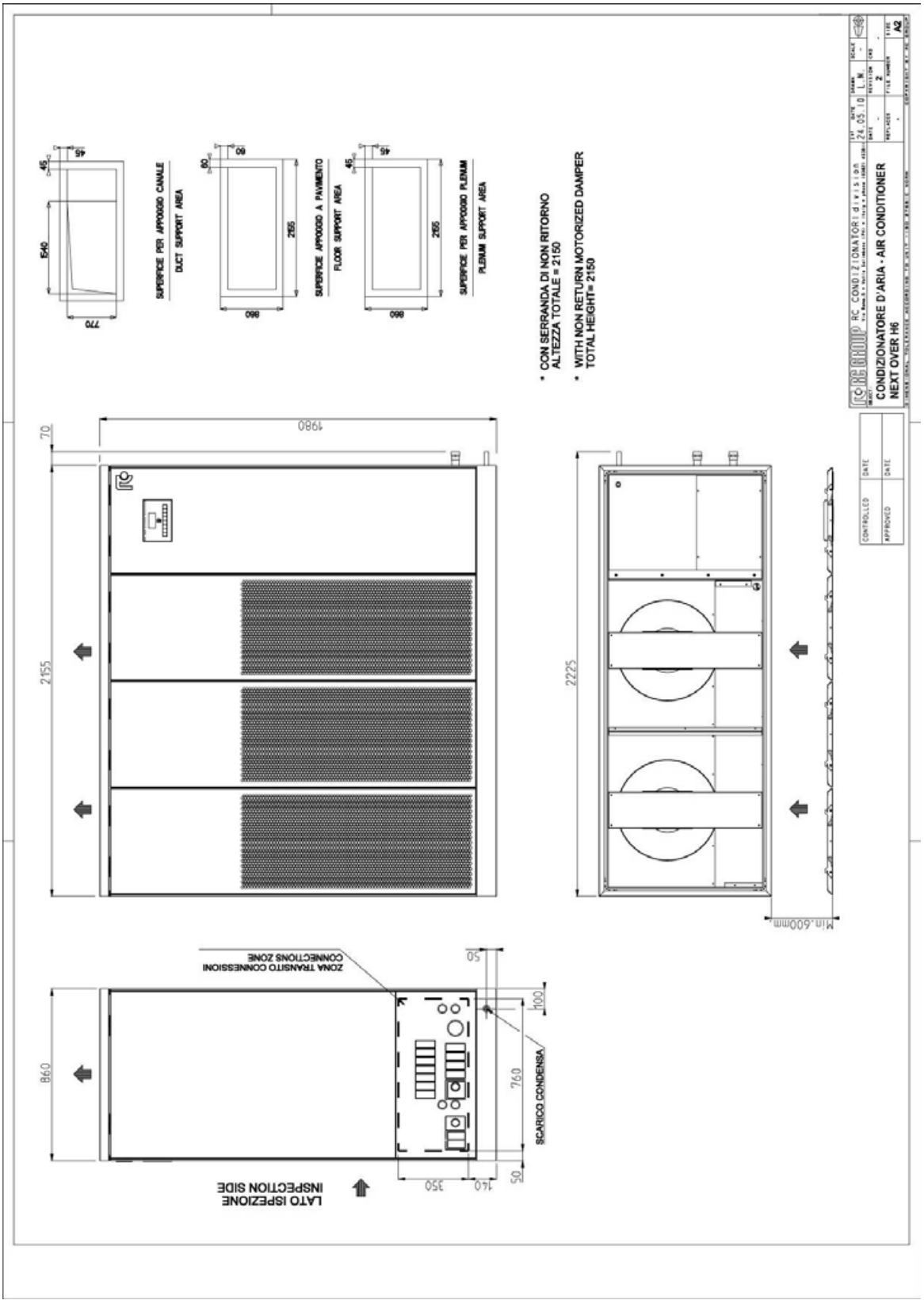
MACHINE DRAWINGS
Dimensions in mm

NEXT OVER H5



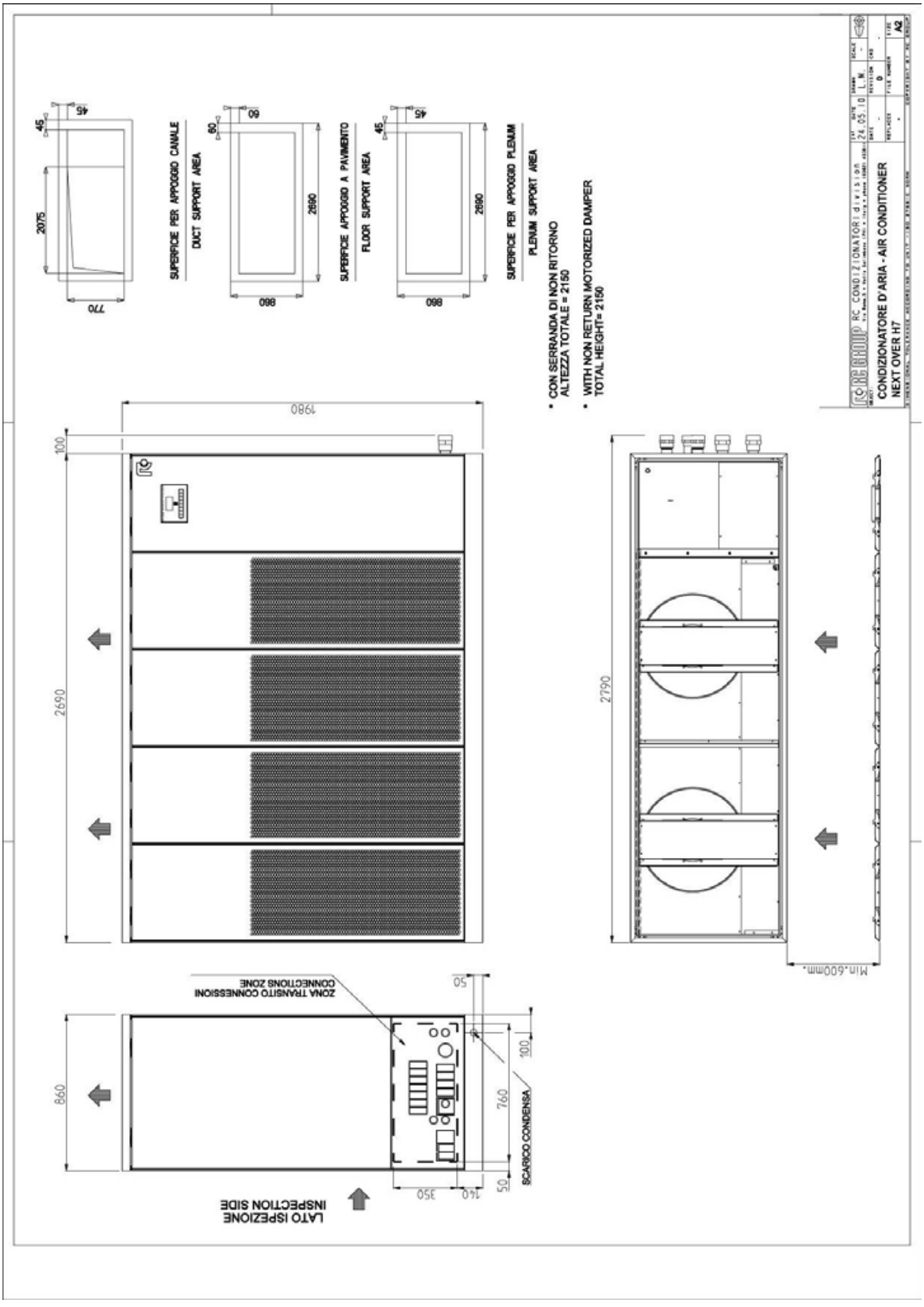
MACHINE DRAWINGS
Dimensions in mm

NEXT OVER H6

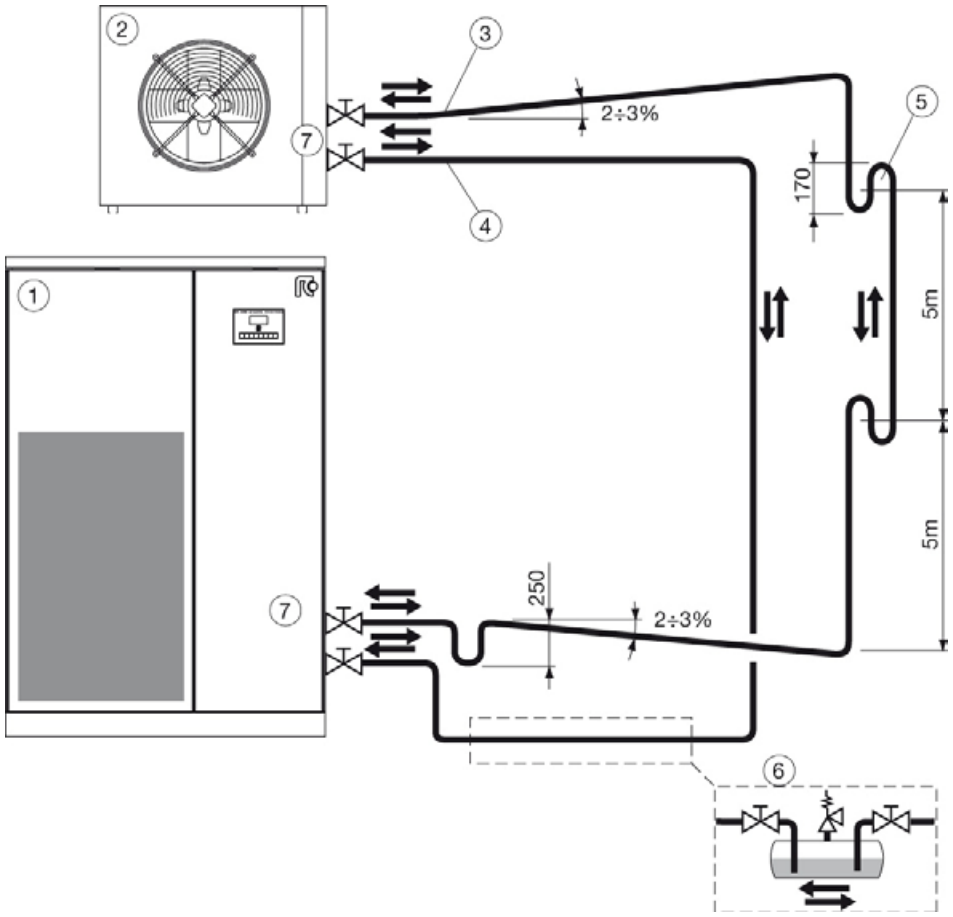


MACHINE DRAWINGS
Dimensions in mm

NEXT OVER H7



TYPICAL INSTALLATION DIAGRAMS FOR MACHINES WITH REMOTE AIR/GAS EXHAUSION HEAT EXCHANGER

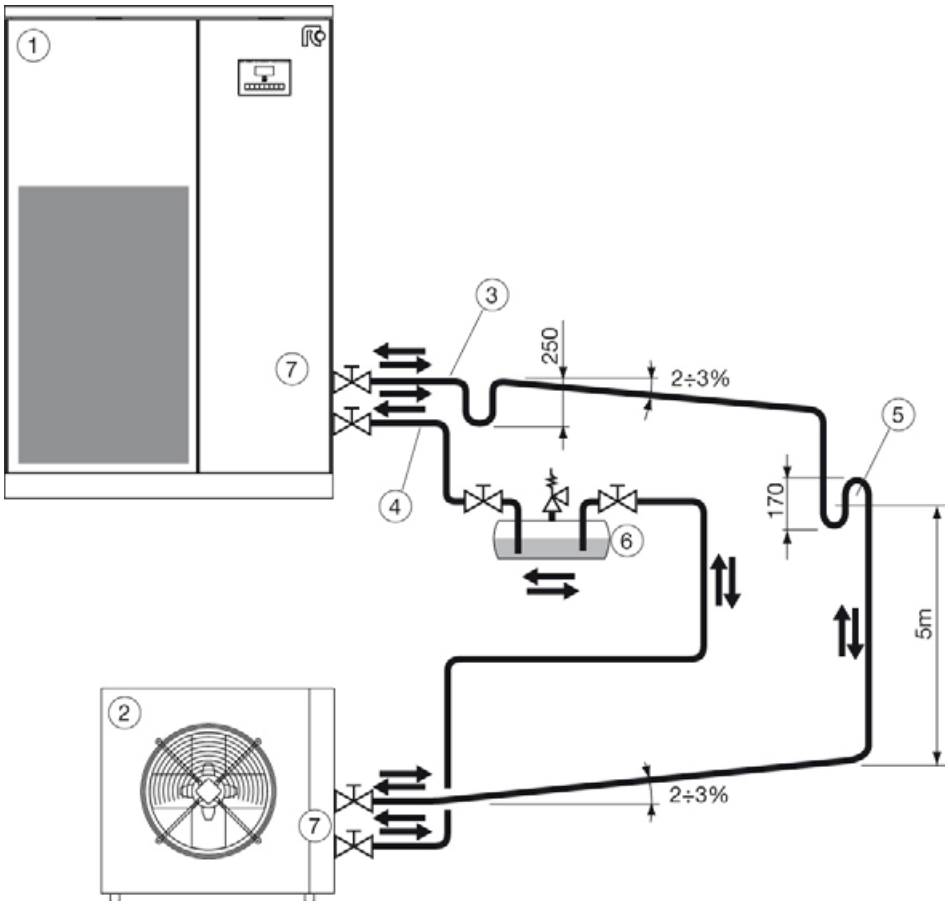


1) Air conditioner
2) Remote air/gas exhaustion heat exchanger
3) Gas discharge line
4) Liquid line
5) Trap. Foresee a trap every 5m of the rising pipe.
6) Additional liquid receiver external to the conditioner with cocks and safety valve.
Suggested part in the case of refrigerant line longer than 25-30m
Install the liquid receiver close to the air conditioner.
7) Double expansion valve.

THIS DIAGRAM APPLIES TO EACH REFRIGERANT CIRCUIT OF THE UNIT.

WARNING
It is necessary to provide the refrigerant charge for the connection pipes and for the remote air/gas exhaustion heat exchanger.
Charge refrigerant in the suitable quantity and lubricant oil in 10% ratio of charged refrigerant.
Lubricant oil must be the same type as the charged one as shown on the compressor plate.

TYPICAL INSTALLATION DIAGRAMS FOR DIRECT EXPANSION MACHINES WITH REMOTE AIR/GAS EXHAUSTION HEAT EXCHANGER



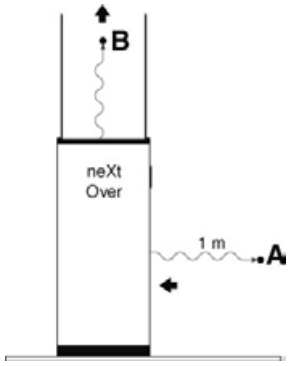
1) Air conditioner
2) Remote air/gas exhaustion heat exchanger
3) Gas discharge line
4) Liquid line
5) Trap. Foresee a trap every 5m of the rising pipe.
6) Additional liquid receiver external to the conditioner with cocks and safety valve. Install the liquid receiver close to the air conditioner.
7) Double expansion valve.

THIS DIAGRAM APPLIES TO EACH REFRIGERANT CIRCUIT OF THE UNIT.

WARNING
It is necessary to provide the refrigerant charge for the connection pipes and for the remote air/gas exhaustion heat exchanger.
Charge refrigerant in the suitable quantity and lubricant oil in 10% ratio of charged refrigerant.
Lubricant oil must be the same type as the charged one as shown on the compressor plate.

EXAMPLE FOR MACHINES NOISE EMISSION CALCULATION

NEXT OVER WITH DUCT

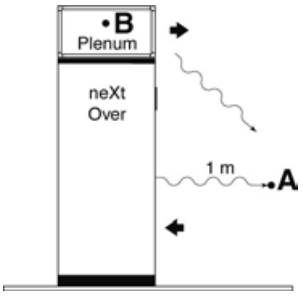


Lp **A** = Air intake Over catalogue value

Lp **B** = Air delivery Over catalogue value

The point **B** do not influence the point **A**

NEXT OVER WITH PLENUM ON AIR DELIVERY

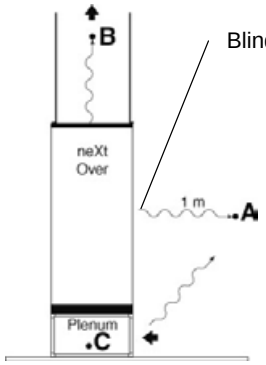


Lp **A** = Air intake Over catalogue value

Lp **B** = Air delivery Over catalogue value – plenum noise reduction

$$Lp\ \mathbf{A+B} = 10\log_{10}\left(10^{\frac{LpA}{10}} + 10^{\frac{LpC}{10}}\right)$$

NEXT OVER WITH DUCT AND PLENUM ON AIR DELIVERY



Blind front panel

Lp **A** = Radiated Over catalogue value

Lp **B** = Air delivery Over catalogue value

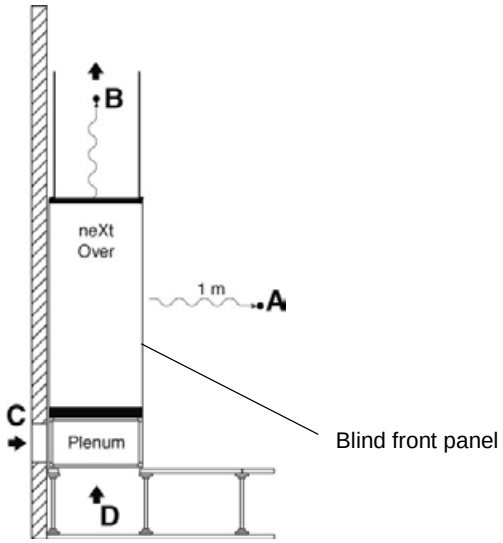
Lp **C** = Lp **A** + 6dB(A) – plenum noise reduction

$$Lp\ \mathbf{A+C} = 10\log_{10}\left(10^{\frac{LpA}{10}} + 10^{\frac{LpC}{10}}\right)$$

The point **B** do not influence the point **A+C**

EXAMPLE FOR MACHINES NOISE EMISSION CALCULATION

NEXT OVER WITH DUCT AND PLENUM ON AIR DELIVERY



Lp **A** = Radiated Over catalogue value

Lp **B** = Air delivery Over catalogue value

Lp **C** = Lp **D** = Lp A + 6 dB(A) – plenum noise reduction

The points **B, C** and **D** do not influence the point **A**

IMPORTANT
The declared noise levels are intended in free field conditions.
The noise pressure level of an installed unit is affected by the room acoustic characteristics.
Please consider an average noise increase of +4/+6 dB(A).

The continuous improvement of products may imply changes in the data shown in this catalogue.

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