

neXt DX.U.S* 052.Z2.H6.DC

GENERAL CHARACTERISTICS

Air conditioning unit with remote air cooled condenser, for computer rooms, any high-tech facility and offices. Units can run non-stop at 24x365 hours a year.

Peculiar construction features provide very simple installation and maintenance, allowing for the easy front inspection and fast replacement of each component.

Each unit is controlled by the microprocessor control system that can be programmed to meet the installation requirements.

The microprocessor supervises the functions of all the mechanical and electrical components transforming the unit into an integrated system for the precise control and monitoring of temperature, humidity, air flow and air cleanliness in modern technological environments.

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 on October 13th with certificate nr. 0018.

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

Units in full compliance with European Norms 2006/42CE, 2006/95CE, 2004/108CE, 97/23CE and following modifications.

MAIN COMPONENTS

Unit base made of epoxy painted extruded aluminium profile painted with epoxy powders.

Housing made of extruded aluminium profile inner frame and upper frame painted with epoxy powders. The inner frame includes gaskets for air tightening.

Galvanized steel sheet panels externally coated with PVC semirigid film. Panels are internally insulated by noise absorption material and are fixed with an invisible fixing system.

Air intake from the top.

Air supply from the bottom for air distribution through raised floor.

Unit with double refrigerant circuit.

Technical compartment, fully enclosed and separate from the air flow, housing components, electric box and control devices, with inspection frontal panel.

SCROLL type hermetic compressor with built-in integral electric protection, built-in silencer on gas discharge and crankcase electric heater.

Synthetic washable fibres cell air filters with G4 efficiency.

Cooling coil with copper tubes, aluminium finning and galvanized steel frame.

Condensate tray made of peralluman with PVC flexible discharge.

Plug Fans directly coupled to electric motor with external rotor.

Fan speed is adjustable through the built in autotransformer.

Water cooled condenser for city, well or tower water welded plate type in stainless steel AISI 316.

Refrigerant circuit equipped with:

Thermostatic expansion valve.

Liquid and moisture indicator.

Filter drier and deacidification on the gas line.

Liquid receiver complete with accessories.

Insulated copper pipes on suction refrigerant line.

Safety pressure switches on high pressure.

Low pressure trasducer on suction line.

High pressure trasducer on the gas discharge with monitoring, control and safety functions of the condensing pressure.

Refrigerant charge and non-freezing oil charge.

Temperature sensor on air intake.

MP.COM microprocessor control system for unit control and management, with free-contacts for alarms remotization.

Electrical box fitted in the unit frame, suitable for outdoors installation, including:

Main switch.

Magnetothermic automatic switches.

Contactors.

Transformer for auxiliary circuit and microprocessor.

Supply voltage 400V.3ph.50Hz+Mp

ACCESSORIES

TEAM.MATE.DX.A.STD M.37

GENERAL CHARACTERISTICS

Air cooled condensers with axial fans.

These air cooled condensers have been designed to be remotely coupled to air conditioning units or water chillers produced by RCGROUP.

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The airflow of the standard version is horizontal with direction from the cooling coil to the fan/s.

All units are fully factory assembled and for their installation only electric and gas connections are required.

Units in full compliance with European Norms 2006/42CE, 2006/95CE, 2004/108CE, 97/23CE and following modifications.

MAIN COMPONENTS

Cabinet made of galvanized steel sheet pre-painted with epoxy powders.

Condensing coil with copper tubes, continuous aluminium finning and galvanized steel sheet frame.

Direct driven axial fans protected by special safety mesh (single phase motor).

RIV 1200 electronic regulators, with IP55 protection degree, for fans motor control (max 6A -up to 2 fans for each regulator) with following functions:

* Circuit breaker and fuse on each regulator. * Stepless fans speed condensing control by 0-10V proportional signal managed by matched unit microprocessor control. * Voltage free deviating contact for general alarm remotization, that includes the following alarms: motor thermal protection -connection interrupted for switch in off position or lack of feeding -fans motor fault -Eprom error -power fault.

Stop valves on gas connections

Supply voltage 230V.1ph.50Hz

ACCESSORIES

101 - EC fan

922 - Driver card

931 - BACnet Ethernet - SNMP - TCP/IP Serial board

934 - MP.COM expansion card

904 - Temperature/Humidity sensor

909 - Clogged filters alarm

911 - Water presence alarm

913 - Additional water sensor (kit)

310 - Electric heater

consisting of aluminium armoured elements with integral finning, 2 working stages, fitted with safety thermostat.

321 - Steam humidifier

Proportional controlled steam humidifier with immersed electrodes fitted with safety and running accessories.

912- Air flow loss alarm EC Fan

511 - Legs for vertical air flow (kit)

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COOLING CAPACITY

Total	kW	49.5
Sensible	kW	48.9
Inlet air temperature	°C	24 ± 1
Relative humidity	%	50 ± 5
Compressors power input	kW	12.6
Compressors electric absorption	A	23.5

FANS

Airflow	m ³ /h	13480
External static pressure	Pa	50
Total power input	kW	2.3
Max electric absorption FLA	A	5.2

COMPRESSORS

Quantity	n.	2
Max electric absorption FLA	A	34
Starting current LRA	A	112
Capacity steps	n.	2

AIR FILTERS

Efficiency	n.	3
		G4

REFRIGERANT

Total refrigerant charge	kg	18.9
Gas circuits	n.	2

POWER SUPPLY

V-ph-Hz	400-3-50 + N
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ENERGY EFFICIENCY INDEXES

EER = Energy Efficiency Ratio	kW/kW	3.00
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SPL @ 1 m in free field conditions (ISO3744)

from fan discharge	dB(A)	70.8
from unit front	dB(A)	54.3

DIMENSIONS

Width	mm	2155
Depth	mm	860
Height	mm	1980

NET WEIGHT

kg	694
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REMOTE CONDENSERS

Ambient temperature	°C	35
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Quantity	n.	2
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Series and model **TEAM.MATE.DX.A.STD.M.37**

AXIAL FANS	n.	1
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Airflow	m ³ /h	9700
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Nominal mechanical power	kW	0.7
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Max electric absorption FLA	A	3.4
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POWER SUPPLY	V-ph-Hz	230-1-50
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SPL @ 1 m in free field conditions (ISO3744)	dB(A)	67
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DIMENSIONS		
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Length	mm	1355
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Width	mm	620 (H) - 1086 (V)
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Height	mm	1026 (H) - 1017 (V)
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ACCESSORIES

101 - EC fan; 922 - Driver card; 931 - BACnet Ethernet - SNMP - TCP/IP Serial board; 934 - MP.COM expansion card; 904 - Temperature/Humidity sensor; 909 - Clogged filters alarm; 911 - Water presence alarm; 913 - Additional water sensor (kit); 310 - Electric heater; 321 - Steam humidifier; 912- Air flow loss alarm EC Fan; 511 - Legs for vertical air flow (kit);

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ACCESSORIES

ELECTRIC HEATER

Heating capacity	kW	13.5
Electric absorption	A	19.5
Steps	n.	2

HUMIDIFIER

Volume	kg/h	15
Power input	kW	11.3
Electric absorption	A	16.2

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NOISE PRESSURE LEVELS IN FREE FIELD CONDITIONS OVER A REFLECTING PLANE (ISO3744)

Octave band noise pressure level at 1 m far in free fiel conditions (ISO3744)

OCTAVE BAND								Total
63	125	250	500	1000	2000	4000	8000	dB(A)
64.6	63.1	56.2	49.4	46.7	42.9	43.5	41.3	54.3

Noise pressure levels Ref. 2×10^{-5} Pa (20 μ Pa)

TEAM.MATE.DX.A.STD.M.37

NOISE PRESSURE LEVELS IN FREE FIELD CONDITIONS OVER A REFLECTING PLANE (ISO3744)

Octave band noise pressure level at 1 m far in free fiel conditions (ISO3744)

OCTAVE BAND								Total
63	125	250	500	1000	2000	4000	8000	dB(A)
64.9	64.2	62.4	65.4	62.6	58.6	52.8	43.8	67

Noise pressure levels Ref. 2×10^{-5} Pa (20 μ Pa)

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