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

IT COOLING

CLOSE CONTROL AIR CONDITIONERS

i-MTR2-G02-M0

PRECISION AIR CONDITIONERS FOR STABLE ROOM CONDITIONS

melcohit.com

i-MTR2-G02-M0

Extreme precision in temperature and humidity control

The temperature and humidity parameters strongly affect the measurements, tests and storing of sensitive goods.
i-MTR2-G02-M0 is the most dependable and efficient solution developed for these kinds of applications even in low or no load conditions.

IDEAL APPLICATIONS

- Metrological environments
- Laboratories
- Technological sites
- Archives
- Textile industry
- Tobacco industry
- Paper industry
- Museums

PRECISION AIR CONDITIONERS WITH INVERTER TECHNOLOGY FOR STABLE ROOM CONDITIONS

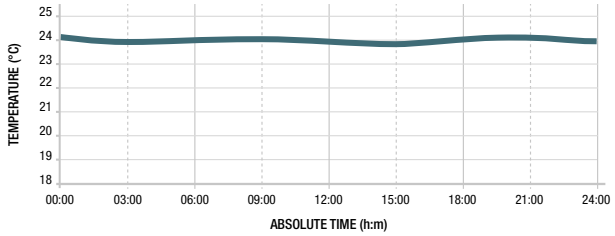
TEMPERATURE AND HUMIDITY ALWAYS UNDER CONTROL

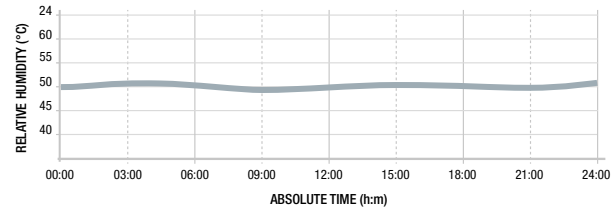
± 0.3 °C

± 2 % RH

Minimal variations in the environmental conditions can influence the final result of test activities or compromise the correct preservation of perishable goods.

i-MTR2-G02-M0 ensures an accurate calibration of temperature and humidity thanks to the continuous modulation of: compressor, hot gas reheating and steam production.





PRECISION IN ALL LOAD CONDITIONS

The i-MTR2-G02-M0 unit was designed as completely autonomous unit.
In fact, thanks to the EVOLUTION+ software, it allows for the reduction of the refrigeration capacity from 100% to 0%.
The unit is able to maintain control of the temperature and humidity with maximum precision even on low heat load.

AVANT-GARDE TECHNOLOGICAL CHOICES, FOR THE MOST CRITICAL APPLICATIONS

NEW GENERATION EC FANS

The high performing EC fans ensure:

- A perfect airflow modulation at partial loads
- Reduction of the noise levels by 4-5 dB(A)
- Reduction of the absorbed power by 25% compared to traditional solutions

VAIR
VARIABLE AIR FLOW

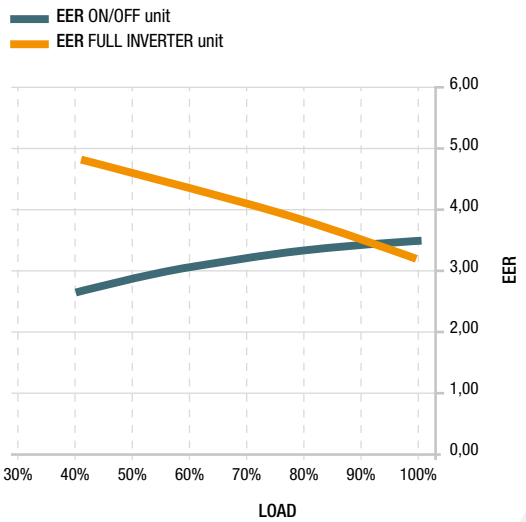
ADVANCED EVOLUTION+ CONTROL

The electronic heart of the unit has been designed internally to guarantee maximum reliability, efficiency and perfect control of all the parameters:

- Automatic reactivation after black out
- Management of additional T/H remote probes
- Management LAN network (up to 15 units)
- Up to 200 events recorded

MAXIMUM ENERGY EFFICIENCY

i-MTR2-G02-M0 thanks to the inverter compressor technology combines the increase of efficiency at partial load and the reliability of the continuous operation.



INVERTER
DRIVEN COMPRESSOR

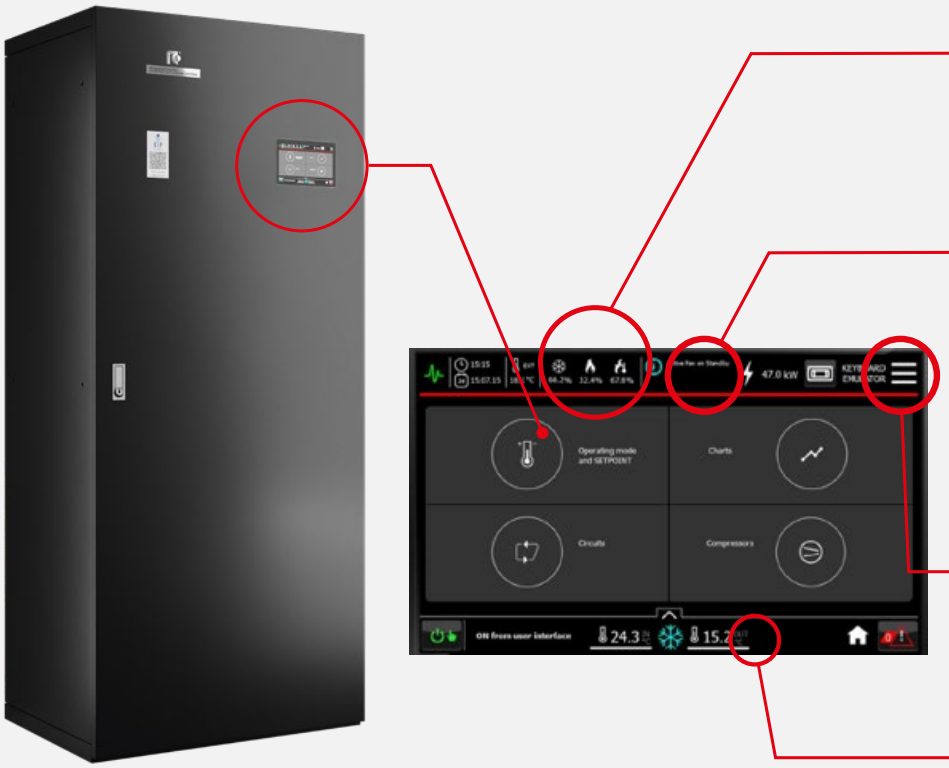
NEW TOUCH KEYBOARD

A completely redesigned interface improves the user experience.
The 7” touch screen display (opt.) with easy-to-read color graphics ensures the immediate visualization of the units’ status and provide simple alarms and event management.

Dedicated menus show the main operating parameters like temperature, humidity, and ventilation.

7” TOUCH DISPLAY

MULTILANGUAGE



INTUITIVE ICONS
for a better user experience

MULTILANGUAGE
13 available languages

QUICK MENU ACCESS

REAL-TIME DISPLAY
of main operating variables

INNOVATIVE KIPLINK INTERFACE

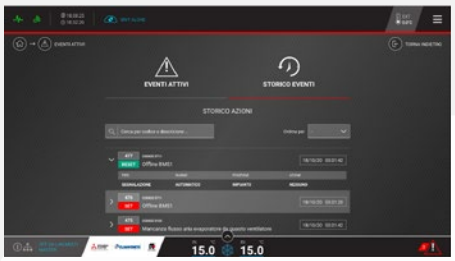
Based on proprietary technology, KIPlink is an option that allows one to operate the unit directly from a mobile device smartphone, tablet, or notebook.

EASIER ON-SITE OPERATION

View and change all parameters thanks to an easy-to-understand interface and dedicated tooltips. Get devoted “help” messages for alarm reset and troubleshooting.

REAL-TIME GRAPHS AND TRENDS

Monitor the immediate labour status of main components.
View the real-time graphs of the key operating variable trends.



DATA LOGGER FUNCTION

View history of events and use the filter for a simple search.
Enhance diagnostics with data and graphs of 10 minutes before and after each alarm.
Download all the data for detailed analysis.

WI-FI KEYBOARD
Close to the unit with MEHITS APP access

MOBILE DEVICE

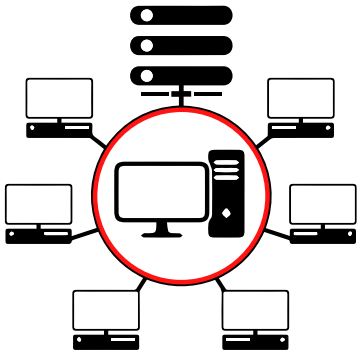
LOCAL WI-FI

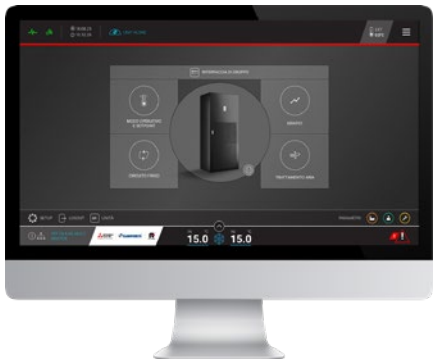
Direct access to the control is achieved by scanning the QR-code positioned on the front side of the unit.

REMOTE CONTROL
In local network (LAN) of building with internet browser

BROWSER

LAN PORT





With a simple Ethernet connection, it is possible to connect KIPlink to the facility LAN and get full access to the unit's control with a browser. All the menus and functions are available with total security.

i-MTR2-G02-M0

INV.COMP. VAIR EEV
R HFC R410A HUMIDIF. DEHUMID. RE-HEAT

Unit fitted with modulating hot gas re-heating coil that combines the use of the INVERTER compressor with the possibility to humidify or dehumidify the environment. It allows for extremely precise and stable control of the temperature and humidity conditions, resulting in particular efficiency especially at low heat loads.

i-MTR2-G02-M0 DX

Model		012	018
Size		E2	E2
COOLING CAPACITY (1)			
Total	kW	11.1	15.8
Sensible	kW	11.1	14.55
Total Power Input	kW	2.94	4.84
Cooling Capacity Control		0 - 100 %	0 - 100 %
Thermal Capacity In Heating (2)	kW	6.41	6.65
Refrigerant		R410A	R410A
Power Supply	V/Ph/Hz	400/3+N/50	400/3+N/50
VAPOUR PRODUCTION	kg/h	5	5
ELECTRIC HEATERS			
Steps		2	2
Power	kW	6	6
EER (1)		3.78	3.26
FAN SECTION			
Air flow	mc/h	3500	4100
Number		1	1
Type		EC	EC
Power input (3)	kW	0.41	0.65
DIMENSIONS			
Lenght	mm	785	785
Width	mm	675	675
Height	mm	1925	1925
Net weight	kg	278	280

NOTES
1) Incoming air 24°C/50%, condensing temperature 45°C-ESP 20 Pa
2) Heating capacity resulting from operation of electric heaters with the compressors off and the ventilation running
3) Corresponding to the nominal external static pressure

GR-Z

R HFC R410A | COILS MICRO CHANNEL | AL ALUMINIUM | AXIAL-AC | AXIAL-EC

Remote air cooled condenser for optimal matching with i-MTR2-G02-M0. Equipped with variable speed fans and micro-channel condensing coil to achieve a high level of efficiency.

GR-Z

Model		015	024
REFRIGERANT		R410A	R410A
POWER SUPPLY	V/ph/Hz	230/1/50	230/1/50
CAPACITY (1)	kW	14.4	23
FANS	n.	1	1
Total air flow	m³/h	4600	7098
External static pressure	Pa	0	0
Total engaged power	kW	0,31	0,51
Total absorbed current (SA)	A	1,7	2,5
Maximum total engaged power (FLI)	kW	0,38	0,54
Maximum total absorbed current (FLA)	A	1,7	2,5
NET WEIGHT	kg	30	45

NOTES
1) Referred to condensing temperature at 50°C and ambient air temperature at 35°C.

“BY FAR THE BEST PROOF IS EXPERIENCE”

Sir Francis Bacon
British philosopher (1561-1626)

All over the world, in most data centers and in all projects where efficiency, quality, and reliability are priorities, the precision RC IT Cooling air conditioners are the best guarantee.

TRUE MTG DATA CENTER BANGKOK - THAILAND

Data center
Total cooling capacity: 3103 kW
Installed units:
50 x close control units

BRUNEI SHELL PETROLEUM DATA CENTER PANAGA-BRUNEI

Data center
Total cooling capacity: 1137 kW
Installed units:
4x Chilled water close control
air conditioners, downflow version

NATIONAL ARCHIVE (CIAM) ORAN-ALGERIA

Institutions
Total cooling capacity: 495 kW
Total heating capacity: 240 kW
Installed units:
2x Scroll compressor heat pump,
15x Direct expansion close control
air conditioners, upflow version

CONSUM - LOGISTICAL PLATFORM TORRES DE COTILLAS - MURCIA - SPAIN

Industrial technology, Supermarket
Total cooling capacity: 536 kW
Total heating capacity: 400 kW
Installed units:
2x chiller, 1x Rooftop Unit,
4x precision close control units, Fancoils

VOLKSWAGEN PLANT BRATISLAVA - SLOVAKIA

Automotive
Total cooling capacity: 10.848 kW
Installed units:
32 Units: Chiller and HPAC units

LEONARDO DA VINCI INTERNATIONAL AIRPORT ROME, FIUMICINO-ITALY

Airports
Total cooling capacity: 266 kW
Installed units:
9x Air handling units,
2x screw compressor chillers,
9x Chilled water close control
air conditioners

SIAM PHARMACEUTICAL BANGKOK-THAILANDIA

Process cooling
Total cooling capacity: 56 kW
Installed units:
2x Direct expansion air conditioners
with inverter technology

RC_I-MTR2-G02-M0_06/21_ENG

MITSUBISHI ELECTRIC
Changes for the Better

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