Touch interface with Web APP for remote control and monitoring.

MTM
Multi Tecnology Manager
Intelligent management of Rhoss hydronic units

MTM is the new system, conceived, designed and built by RHOSS, for managing up to a maximum of 10 between multipurpose units, reversible heat pumps and chillers in perfect synergy with a guarantee of safety and reliability in modern systems.

Thanks to dedicated algorithms, MTM can effectively manage cooling and thermal loads in a stable and precise manner.

MTM is a manager and as such optimally decides the start-up sequence of the RHOSS units in the applications that the designer deals with every day.

MTM – THE OFFER

- MTM is available in two configurations but with one goal: to efficiently manage the units selected for the system.
- MTM/SI – with graphic interface and standard functions such as the display of unit operating parameters, operating status, alarms, etc.
- MTM/TI – with Touch graphic interface and advanced functions. Access to the various pages, for consultation and parameter editing, is simplified in the 7” display; it is also possible to view, through graphs, the trends of water/air temperatures and e-mail notification of any alarm can be set

MTM - Types of units managed

- Multipurpose units
- Reversible heat pumps and HT65 heat pumps
- Chillers also with freecooling and inverter technology
- Condenserless units

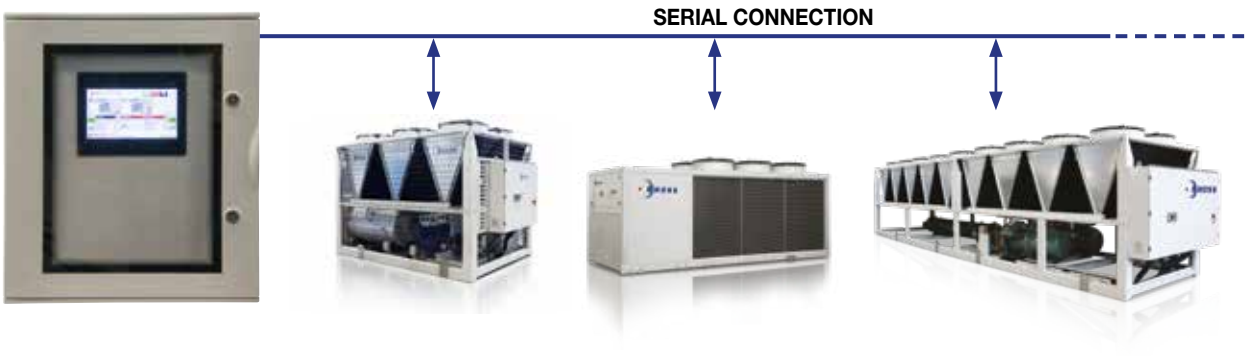
The units can operate at variable flow rate with the innovative VPF by Rhoss.

Ideal for using different technologies
Management of RHOSS refrigeration units present in the system by optimising the specific technologies used (chillers, heat pumps and multipurpose units).
In addition to managing homogeneous units, it is possible to combine EXP MULTIPURPOSE units with CHILLERS or HEAT PUMPS and units with different sizes and versions.

Ideal for ensuring system loads
In medium-large systems, MTM meets the required thermal loads in a precise and stable manner throughout the year.
In the case of systems with both 2 pipes + DHW and 4 pipes, where there is the demand for even unbalanced refrigeration and thermal loads, the possibility of managing units with different technology and power, optimises efficiency and the overall offer of the system.

Ideal because easy to connect
- MTM is connected to the chiller units, hydraulically connected in parallel to each other, via serial network (*).
- The user interacts in a simple way with the manager, via a graphic interface (standard or Touch).
- MTM connectivity to BMS systems is guaranteed through accessory serial interfaces, with MODBUS, BacNet MS/TP, BacNet IP, TCP/IP Modbus protocols.
- If there is a need to monitor and act on MTM from a remote station using specific web pages, MTM/TI is set up for connection to a company LAN network or to enable access via any Web browser from mobile devices (e.g. smartphone, tablet).

(*) the RS485 serial board is required in some units. See the price list for more information



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Ideal because easy to configure

The value of a manager like MTM is also measured by the simplicity of the installation. Thanks to the WIZARD procedure introduced and the Self-learning function of the connected units, the user is guided through the first device configuration to be immediately ready and operational.

Ideal for any installation

MTM is designed, in the standard configuration, to automatically start-up the hydronic units. Once the individual units present are recognised, it decides which strategy to use to maximise efficiency, for example preferring freecooling units if the outdoor temperature is favourable, inverter technology for the best power modulation or simultaneous operation (cooling+heating) of the multipurpose units. It is also possible to “customise” unit management, according to the customer’s preferences or type of system, even with the Backup function in the most sensitive installations. The Booster function, which can be set if there is a Backup unit, can meet the various peak loads that may occur throughout the year.

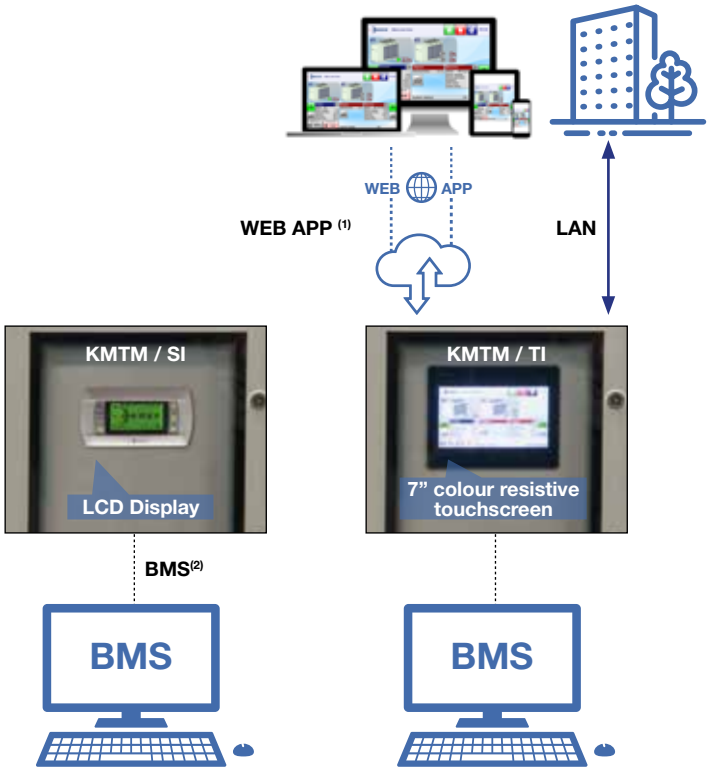
Ideal for service

- MTM simplifies SERVICE operation as the implemented algorithms enable optimal operation of the group of units even in case of partial dysfunctions.
- MTM provides the history of the alarms and, in case of MTM/TI version, also the notification function by mail/message to designated users.

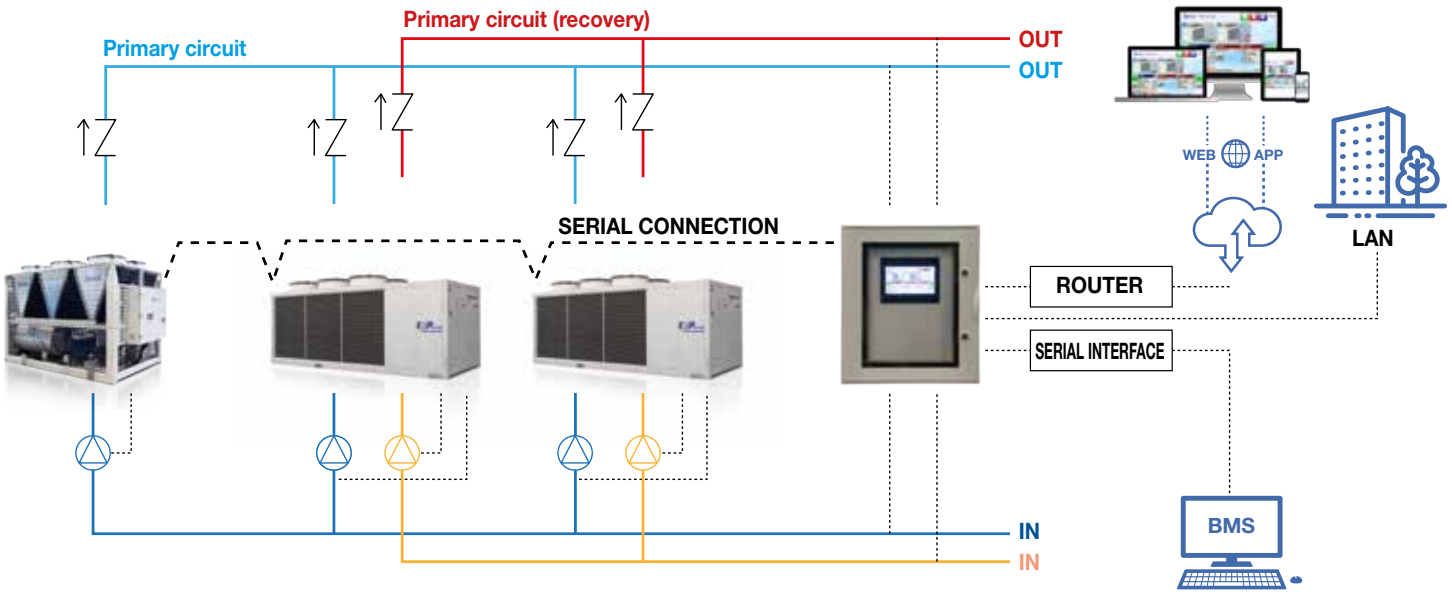
Ideal for having the situation under control

MTM is accessible:

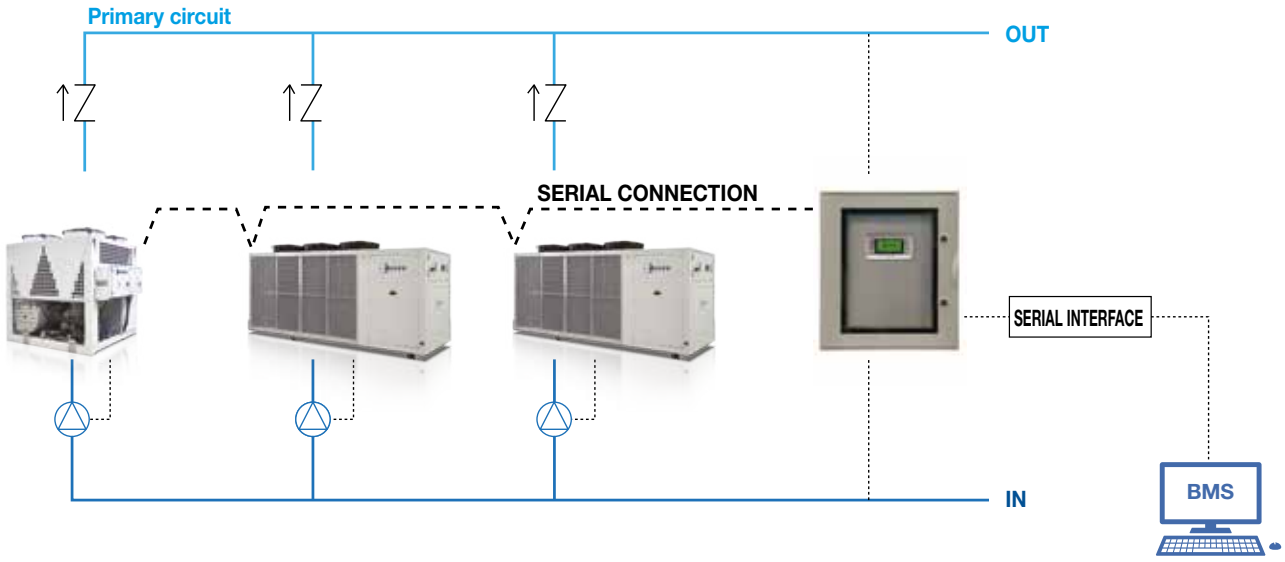
- Directly from the device (KMTM/SI and KMTM/TI) through the present graphic interface.
- From a BMS connected to the device (KMTM/SI and KMTM/TI) through serial interfaces Through the dedicated Web pages (KMTM/TI only).
- In this case, the pages can be accessed via LAN connection or WEB APP



(1) service can be activated (2) via interface, using the MODBUS, BACNET IP, MODBUS TCP/IP protocols



Simplified example of a 4-pipe system with one chiller and two EXP multipurpose units managed by KMTM/TI. The system provides for the units to operate throughout the year, with the production of cold and hot water at the same time or independently.



Simplified example of a 2-pipe system with two heat pumps and one chiller managed by KMTM/SI. The system provides for summer operation with the two heat pumps and the chiller operating in SUMMER mode and winter operation with the inversion of the heat pumps and the shutdown of the chiller.