



K R C P L U S radio controlled advanced zoning system



MADEL®

Zoning System R/C allows for individualised temperature control of different zones using the same air treatment equipment to provide **increased comfort** in each one.

KRCPLUS control panel is compatible with any duct-type **direct expansion** air handling unit, and optionally with uni-zone or multi-zone heating systems, even radiators or underfloor heating.

The control is carried out by means of digital thermostats linked by radio frequency to a control panel who operates the different motorised (24 Vdc) zone dampers. **R/C** Radio-controlled digital thermostats offer an **easy installation**: Neither thermostat wiring nor additional works are required.

Ecologically friendly: Zoning System R/C provides a rational use of energy, both from an economic and environmental point of view.

KRC PLUS



A modular zoning kit designed for independent temperature control in direct-expansion ducted air conditioning systems and, optionally, for controlling a single-zone or multi-zone heating system that uses radiators or under-floor heating.

- * /MH/: Expansion module (optional) for controlling radiator or under-floor heating in 2 to 8 zones.
- * /MC/: Expansion module (optional) with the MODBUS protocol for intelligent-building applications.
- * Control over up to 16 separate air conditioning zones and 8 heating zones (by adding the module MH).
- * Full control over mechanical air conditioning systems. The air conditioner's controller can be overridden.
- * ON/OFF control for electronic air conditioning systems, whose original controller is retained.
- * Turning on back-up batteries for both mechanical and electronic systems.
- * Enables Controlled Mechanical Ventilation (CMV) to be activated from the master thermostat.
- * Radio-controlled digital master chrono-thermostat with week-to-week programming.
- * Time-set radio-controlled zone thermostats (with timing in 30-minute intervals).
- * Coded radio-controlled transmission system (over 3000 combinations).

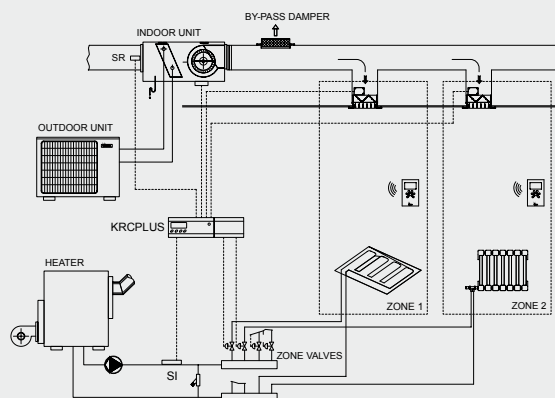
Module technical specifications

Heating module MH:

- 8 potential-free relays 230 VAC x 10 A
- Zone-damper control
- 3 potential-free relays 230 VAC x 10 A
- Control for the production unit (boiler)
- Protection class: IP 20
- Size 105 x 90 x 60 mm

Communication module:

- Communication bus RS485
- Protocol MODBUS®
- Protection class: IP 20
- Size 35 x 90 x 60 mm



Technical specifications

Control board (receiver)

- Power supply 230 VAC ± 10%, 50/60 Hz
- Consumption: 10 VA
- 4 outputs potential-free relays 230 VAC x 10 A for controlling the air conditioning equipment
- Sixteen 24 VDC outputs, for zone control
- Digital input for remote ON/OFF
- Protection class: IP 20
- Safety sensor NTC 10 K air return
- Safety sensor NTC 10 K water discharge
- Size 160 x 90 x 60 mm

Thermostats (emitter)

- Power supply 2 x 1.5 V LR06 AA
- Average operating life 1 year (or longer)
- Temperature differential (± 0.5 °C)
- Protection class: IP 20
- Carrier frequency (ISM band, as per standard I-ETS 300-220): 433.92 MHz
- Average range: 50 m in free field, 20 m in enclosure
- Size 115 x 70 x 18 mm (chrono)
- 130 x 80 x 19 mm (touch)

Accessories

- Motorised damper (24 VDC) ZP-AZ, for mounting in MADEL grilles
- Motorised damper (24 VDC) ZC for mounting on circular ducts
- Motorised damper (24 VDC) ZQ for mounting on rectangular ducts
- Motorised plenums (24 VDC) PL...-ZR, mountable on grilles and adaptable to MADEL grilles and diffusers
- Adjustable overpressure dampers (ZS series)