

## Radio Remote Control Systems

### MC-Receiver Unit MC-MB2



MB2 base unit for dinrail mounting



MB2 in Bue 1 enclosure



Polled duplex radio communication

*Cavotec is a global engineering group that manufactures power transmission, distribution and control technologies that form the link between fixed and mobile equipment in the Ports & Maritime and Airports & Industry sectors.*

*One of Cavotec's eight Centres of Excellence, Cavotec Micro-control engineers advanced radio remote control systems in close co-operation with customers worldwide.*

#### Benefits

- Modular & flexible design.
- Compact size for easier system integration.
- Safety, and stop function rated CAT3 PLd.
- Display for diagnostics, parameter settings and trouble shooting.
- World wide approved radio modules including 2.4GHz version.
- Radio signal strength indication in receiver and terminal unit.
- Tandem operation with multiple terminals and multiple receiver units included polled radio systems.
- PLC programming possibilities including extensions with Micro USB.
- Self configuration of modules.
- Back-up solution with cable connection for programming and control.
- Smart cable pairing for extended flexibility and easier spare part handling.

#### Applications

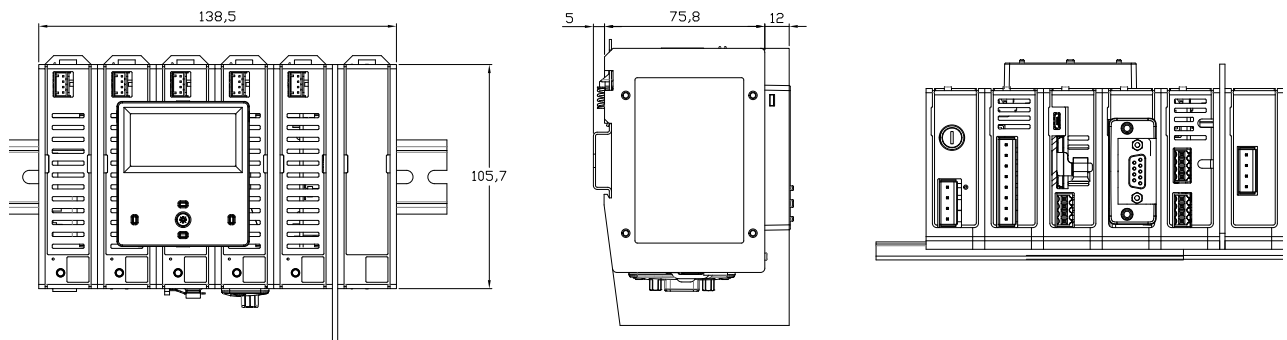
- The MB2 receiver unit can be used in any RRC system, where quality, reliability and safety are essential in system design
- Typical use is in offshore installations, mining equipment as well as general industry and deck handling equipment
- Both EX and safe zone versions available and possible to combine with any Cavotec remote terminal units

## Technical characteristics

### MB2 Receiver Unit

- Dual safety processor.
- Complete operational control with unique signal encoding prevents unintended movements.
- Activity check on start up to guarantee safe operations.
- Stop relay activation in less than 500ms.
- Redundant radio solution.
- License free frequency with low power outputs.
- PLC functionality for interlocking, sequencing and timing functions programmed directly without additional hardware.
- Available interfaces include: Profibus DP, ModBus TCP, Ethernet IP, CANopen, DeviceNet or Profinet I/O.

## Dimensions



## General data

Display	Graphical display for configuration and error codes			
Power supply	24 V, 2.5A1, 100-240V 50-60Hz, 2.5A			
Dimensions	138,5 X 105,5 X 92,8mm			
Weight	<0,9kg without enclosure			
IP	IP65/IP66 Standard enclosure, IP65/IP66 Steel enclosure, IP20 Open frame solution			
Operating distance	Up to 2,000m			
Temperature		Open frame	MC Bue 1 enclosure	Steel enclosure
	With radio	-20°C and +60°C	-20°C and +45°C	-20°C and +45°C
	Without radio	-20°C and +70°C	-20°C and +45°C	-20°C and +45°C
Frequency	According to local authority guidelines			

## Approvals & Standards

Cavotec radio remote control systems comply with a variety of international rules and regulations. All systems are CE marked and can be used with our FCC Part 90 approved radio. The systems are designed in accordance with the Machinery Directive and comply with IEC 60204 and ISO 13849. In addition we have a wide range of compliant radios that can be used in type approvals of systems for specific countries worldwide.