

# CONTROL UNIT FICO-MINI

## DATASHEET

### USE

FICO-MINI control unit for up to 12 dampers. The device can operate in standalone mode or with up to 2 FCBB slave units connected. The device can be integrated to BMS through Modbus RTU.

### CONNECTIVITY

FICO-MINI implements one Modbus RTU (RS485) interface for integration to BMS system.

### ACCESSORY

FDKC-2 = UG-3-0 Smoke detector for ducts, Optical, L=600  
 FDKC-4 = UG-3-0-M Smoke detector for ducts, Optical with auxiliary fan  
 FDRC-2 = EVC-PY-DA Smoke detector for rooms, Optical + UB-6

### PRODUCT CODE

FCMB-4

### FUNCTIONING

For the control and management of 4 24V fire damper actuators directly connected and the control and management of up to a further 8 24V damper actuators via the Multi-boxes FCBB-2 and or FCBB-4.

The unit firmware incorporates a calendar for the set up of regulated testing. See FICO-MINI (FCMB-4) Installation & Commissioning document for how and flexible test times.

### MECHANICAL DESIGN

Individual status indicators exists for all fire damper and detector connections. Each function is identified by single color led.

- STATUS ●
- FIRE ●
- SERVICE ●
- BMS ●

### COMMISSIONING NOTES

See FICO MINI (FCMB-4) Installation & Commissioning.

### CONFIGURATION

See FICO MINI (FCMB-4) Installation & Commissioning.



### MODBUS SPECIFICATION

See FICO MINI (FCMB-4) BMS Integration.

### TECHNICAL DATA

Electrical interface	
Power supply	SELV/PELV
Supply voltage	230V AC ±15% 50/60 Hz
Power consumption	36 VA
Functional data	
Digital inputs	Max 40 VDC
Motor supply	Max 450 mA
Smoke detectors	
Calectro	EVC-PY-DA
Calectro	UG-3-0
Protection class	
	IP54 as per IEC 60 529
Connections	
Electrical connections	
- Screw terminals for mains	Max 2.5 mm <sup>2</sup> (wire or stranded)
- Screw terminals other	Max 1.5 mm <sup>2</sup> (wire or stranded)
Environmental conditions	
Permissible ambient temperature	
- Operation	-20...50 °C (non-condensing)
- Transport/storage	-30...80 °C (non-condensing)
Permissible ambient humidity	< 90% r.h. (without condensation)
Directives, standards	
conformity as per EMC guidelines	2014/30/EU
- Immunity	EN 61 326-1
- Emissions	EN 61 326-2-3
Weight	
Product including package	1.2 Kg

## ENGINEERING

Installation of this product must be carried out by a certified electrician.

No work on mains powered devices can be carried out before an engineer completely reads and understands this manual.

### Warning

Opening the cover of the device will expose areas where mains voltage (230VAC) exist inside the product.

Before any such action takes place, mains power must always be switched off.

Special action needs to take place to ensure that any external connection to relay functions are also disconnected from mains before work is started.



**No accidental contact with mains voltage (supply or relay functions) are allowed.**

Failing to comply with this, may result in serious injury or death.

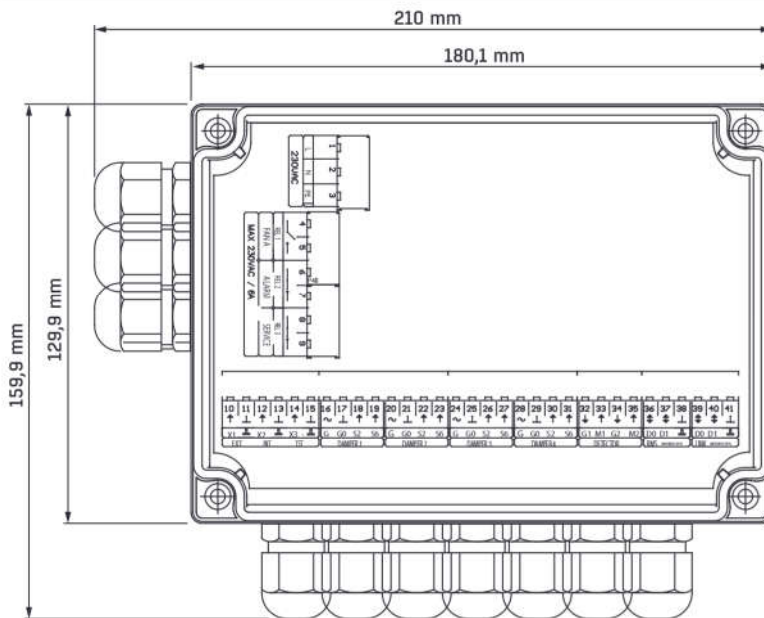
- Use external protection for inductive load of relay functions
- Use appropriate external fuse for over current protection of relay outputs.
- Do not mix SELV / PELV and line voltage on the same terminal
- 230VAC cables must be double insulated against safety extra-low voltage (SELV) cables.
- Fire damper motor cables and end position switches must be double insulated against PELV and SELV cables.
- Signal cables must be double insulated against PELV and SELV cables.

## SAFETY



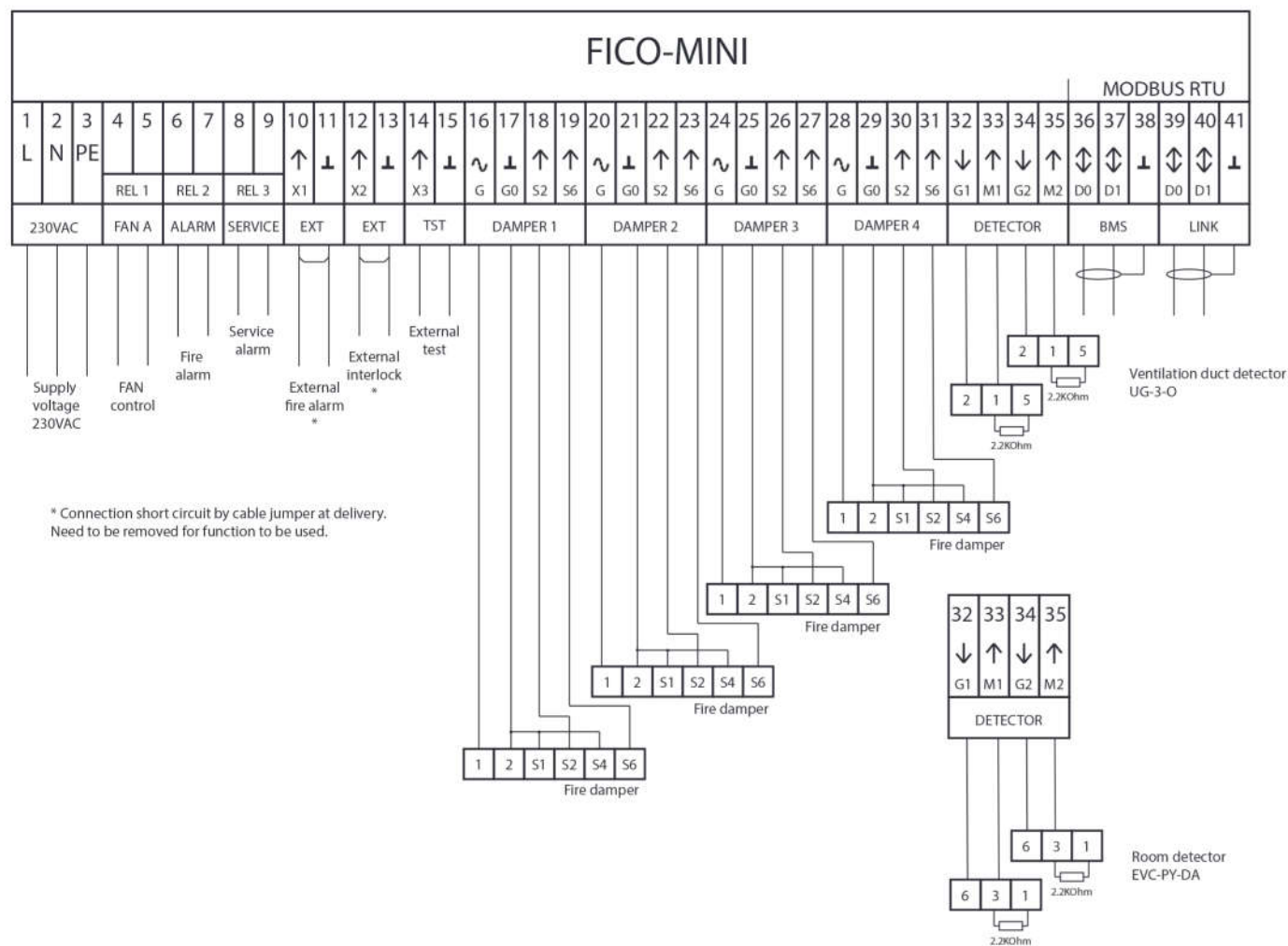
When installing the product, national safety regulations **MUST** be fulfilled for all phases of the installation. Failure to comply with national safety regulations, may result in personal injury, loss of life and property damage.

## DIMENSIONS



## CONNECTION TERMINALS

For complete details see FICO-MINI (FCMB-4) Connection Drawings.



Mains power	230V AC Power supply
REL1 (FAN A)	FAN start stop relay (NO)
REL2 (ALARM)	Fire alarm (NC)
REL3 (SERVICE)	Service alarm (NC)
EXT Alarm	Set external alarm external switch
EXT Interlock	Close unit from external switch
TST	External damper test
DAMPER 1.. 4	Connection for 1..4 fire dampers
DETECTOR	Connection for 1..2 detectors
BMS	RS485 interface for BMS connection
LINK	RS485 interface connection for slave units