BTICINO

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Vary-depth rotary handle for BTDIN circuit breakers

Cat. Nos:

F80KMN, F80KMR

Contents

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1. DESCRIPTION - USE:

The external rotary control is used to control the associated modular product (open or closed) via the door-mounted handle, without opening the cabinet.

2. RANGE:

The external control is supplied complete. It consists of:
- an actuator
- a handle
- connecting rods
- a bracket
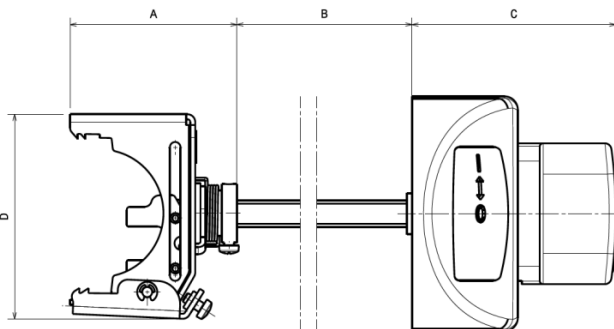- a self-adhesive drilling template
- fixing accessories

. Cat. n° F80KMN: with black handle

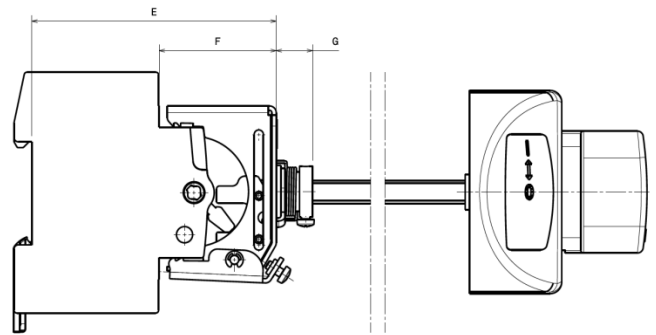. Cat. n° F80KMR: with red/yellow (emergency) handle

3. OVERALL DIMENSIONS

Cat. Nos	Dimensions (mm)			
	A	B (max.)	C	D
F80KMN F80KMR	50.4	250.5	62	61

3. OVERALL DIMENSIONS *(continued)*

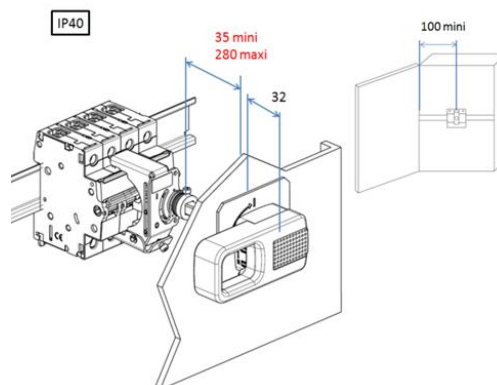| Cat. Nos	Dimensions (mm)			
	E	F for 1 module per pole width MCB's	F for 1,5 modules per pole width MCB's	G
F80KMN F80KMR	85	41	39.5	12.6

4. PREPARATION – CONNECTION

Door mounting:

. IP55 enclosure, 280 mm min. dimension on the hinge side
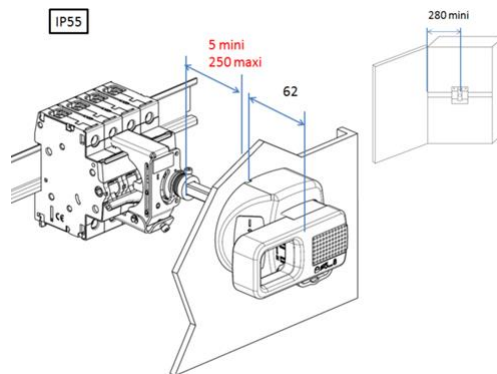
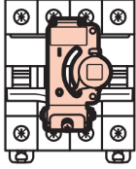. IP40 enclosure, 100 mm min. dimension on the hinge side

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4. PREPARATION – CONNECTION *(continued)*

Product mounting:

. Mounted on the front of modular products.
. For catalogue items without a test button: the actuator must be placed in the middle of the device.

. For catalogue items with a test button: the actuator must be placed in such a way that the test button is always accessible.
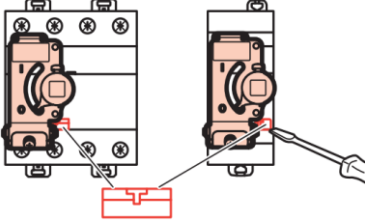
Screw head:

. PZ head.

Recommended tightening torque:

. 0,8 Nm.
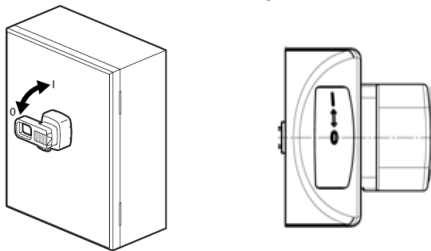
Tools required:

. PZ no. 1 screwdriver

Actuation of the associated device:

. Via the external control handle

Status display of the front external rotary handle:

. Via the handle position:
- Up position: I/ON. The associated product is activated.
- Down position: O/OFF. The associated product is deactivated.

Handle position on the door. Marking on the handle:

Opening the door of the enclosure:

. Handle in down position: O/OFF. The associated product is deactivated: the door can be opened.
. Handle in up position: I/ON. The associated product is activated: the door cannot be opened. The handle must be returned to the down position (O/OFF) to open the door.

## 4. PREPARATION – CONNECTION *(continued)*

Assembling:

. Mounted on the front of the following 2-poles, 3-poles and 4-poles modular products:
- MCBs with 1 or 1.5 modules per pole (DX^3 125 or 25 kA to 50 kA circuit breakers)
- Isolating switches
- RCCBs
- RCBOs

List of permitted combinations:

. The external control allows unrestricted access to the terminals of the associated device using an insulated screwdriver, and to the sides of the product, meaning that the following components can be used:
- Signalling and trip auxiliaries
- Motorised controls
- Accessories (insulation dividers, screw covers or terminals, etc)
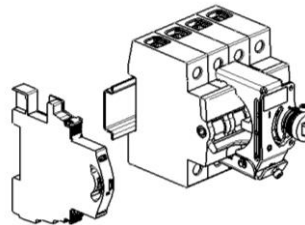
Lockout in 2 steps:

. Step 1 on the module:
- Put the handle of the front external rotary handle in the down position (O/OFF)
- Open the door of the enclosure
- Put the switch handle in the down position (O/OFF)
- Fit the locking accessory cat. n° F80BL on the associated device and one padlock Ø6 mm or Ø5 mm
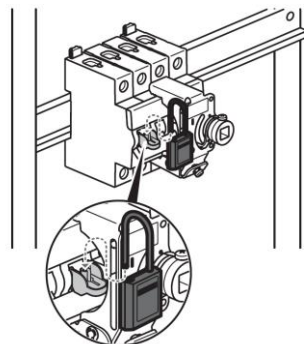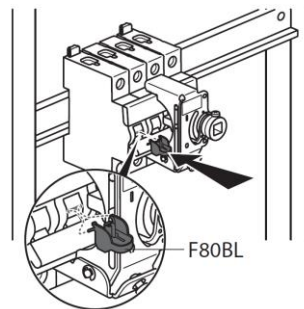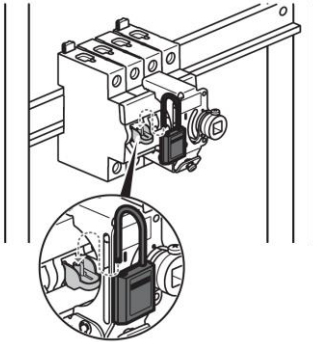
F80BL

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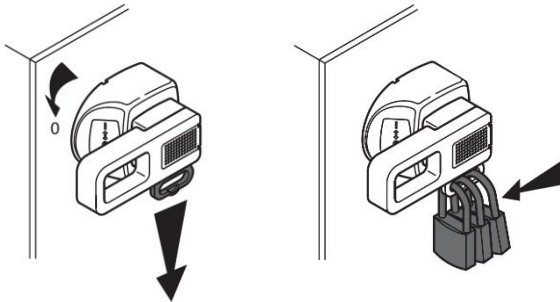
Cat. Nos:

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4. PREPARATION – CONNECTION *(continued)*

Lockout in 2 steps *(continued)*:

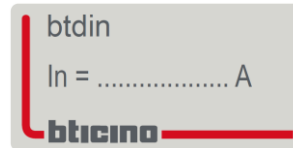

Step 2 on the external control handle:
- Close the cabinet door: the handle is in the down position (O/OFF)
- Pull down the locking tab.
  From this moment the cabinet door cannot be opened
- Lock out with up to 3 padlocks Ø5 mm up to Ø8 mm
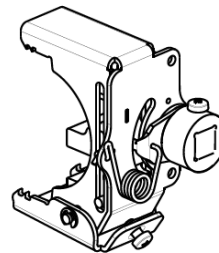

5. GENERAL CARACHTERISTICS

Marking:

. By permanent flexography on the label, on the front of the external control unit:

- Range name: btdin
- Brand: BTicino
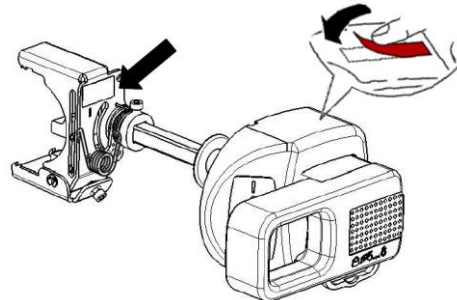- Marking area for information about the associated device:
  In = …………………A

. By machining on the external control:

- External control status: I/0

Marking on the actuator:

. Marking on the actuator, via the label on the front
. Possible marking on the handle, via a label (not supplied)

Mechanical endurance:

. The external control can withstand the same number of mechanical endurance cycles as the associated product.

Ambient temperature:

. Operation: from -25°C to +60°C
. Storage: from -40°C to +70°C

Material:

. Self-extinguishing, resistance to heat and fire according to standard EN 60695-2-11, glow-wire test at 650°C.
- Handle + bracket: glass fibre filled polycarbonate
- Catch pin: yellow zinc-plated DC01 steel (6 microns)
- Seal: SBS
- Drilling template: self-adhesive paper
- Connecting rods: aluminium
- Locking accessory: polyamide and Zamak
- Screws and spring: galvanised + stainless steel
- Other: brass
- Actuator: PA66 GF

5. GENERAL CARACHTERISTICS *(continued)*

Protection index:

. Handle index of protection against solid objects and liquids: IP 55 in accordance with IEC 60529, once the handle has been mounted on the door and the retaining ring correctly fitted (supplied with the external control).
. Index of protection against mechanical impacts: IK 10 in accordance with standard EN 62262.

Resistance to mechanical vibrations:

. Acceleration amplitude: 10 g
. Pulse duration: 18 ms

Product weight:

. 350 g once all the components and accessories have been fitted.

Volume:

. Packaged: 2.52 dm^3
. Without packaging: 2.6 dm^3

6. COMPLIANCE AND APPROVALS

Environment respect - Compliance with EU directives:

. Compliance with Directive 2011/65/EU as amended by Directive 2015/863 (RoHS 2) on the restriction of the use of certain hazardous substances in electrical and electronic equipment.
. Compliance with REACH regulation (1907/2006): at the date of the publication of this document no element of the SVHC substance list (updated on 27/06/2018) is present in these products.

7. EQUIPMENT AND ACCESSORIES

Installation software:

. XL PRO^3