BTICINO

Viale Borri 231
21100 Varese - Italy

LED Indicator

Cat N°(s): FN40V12, FN40R12, FN40G12, FN40B12, FN40T12, FN40RV12, FN40V110, FN40R110, FN40G110, FN40B110, FN40T110, FN40RV110, FN43T230, FN43R230, FN43M230,

CONTENTS

1. DESCRIPTION - USE

Indicator lamp to display a clear indication on the status of a circuit, an associated device or for phase monitoring.

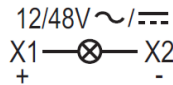## 2. RANGE

Functions, symbols, cat n°
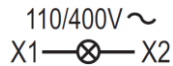
Single LED indicator :
12/48 Va.c. / d.c.

Green	FN40V12
Red	FN40R12
Yellow	FN40G12
Blue	FN40B12
White	FN40T12

12/48V ∼ / ⎓
X1 —⊗— X2
+   -

Single LED indicator:
110 - 400 Va.c.

Green	FN40V110
Red	FN40R110
Yellow	FN40G110
Blue	FN40B110
White	FN40T110

110/400V ∼
X1 —⊗— X2

Double LED indicator:
12/48 Va.c. / d.c.

12/48V ∼ / ⎓
X3 —⊗— X4
+   -

Green + Red   FN40RV12
X1 —⊗— X2
+   -

Double LED indicator:
110 - 400 Va.c.

110/400V ∼
X3 —⊗— X4

Green + Red   FN40RV110
X1 —⊗— X2
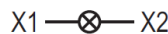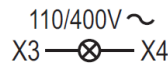
Triple LED indicator:
230 - 400 Va.c.

230/400V ∼

White	FN43T230
Red	FN43R230
Red + Yellow + Green	FN43M230

X1 —⊗
X2 —⊗— N
X3 —⊗

3. OVERALL DIMENSIONS

43.85

83

45

17.8

43.85

61

67.3

CE
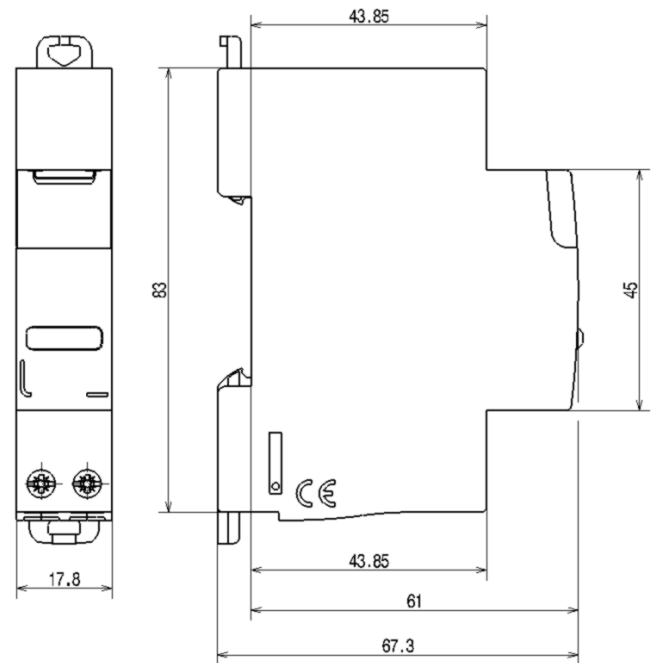
4. PREPARATION - CONNECTION

Operating positions:

.Vertical   Horizontal   Upside down   On the side
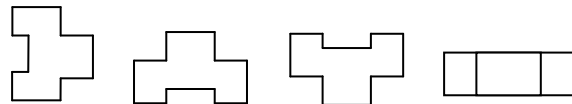
Mounting:
On symmetrical EN 60.715 rail or DIN 35 rail.

Power supply:
By the lower side.

LED Indicator

4. PREPARATION - CONNECTION

Recommended Tools:

. For the terminals screw: Screwdriver isolated or not with 4 mm blade or Pozidriv no. 1 screwdriver.
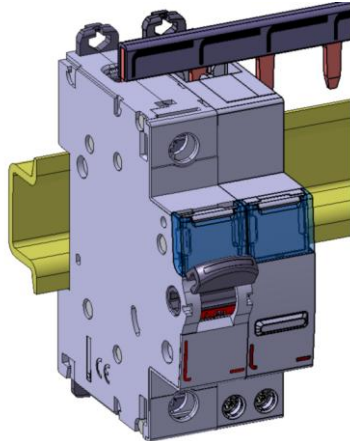. For attaching or removing the DIN rail: screwdriver with 5.5 mm blade or Pozidriv no. 2 screwdriver.

Position in a row:

. The product profile and the position of the terminals at the downstream allow the insertion of the prong-busbar by the upstream. In this way the position of the indicator in a row can be freely chosen.
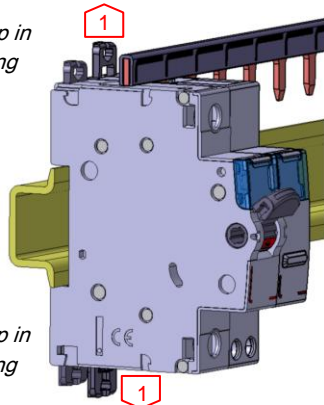

Module maintenance:

. An indicator may be replaced in the middle of a row supplied with prong-busbars without disconnecting the other devices.
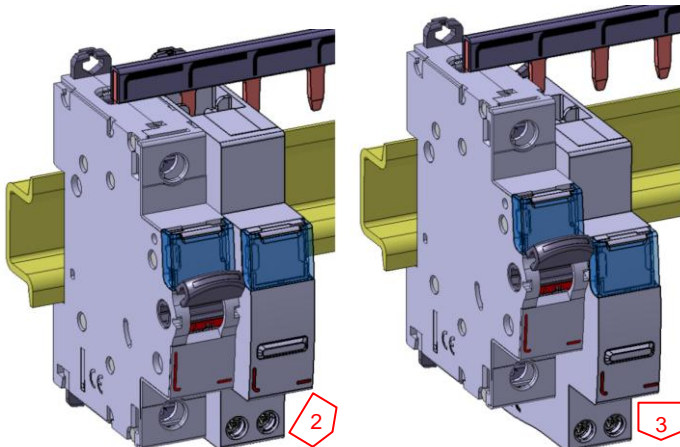
Put the clamp in the unlocking position

Put the clamp in the unlocking position

Pull the device forward in order to release it from the rail

Pull the device downward in order to release it completely from the prongs of the busbar

4. PREPARATION - CONNECTION *(continued)*

Connection :

. Screw terminals:
  - Type of terminal: caged
  - Terminal depth: 10 mm
  - Capacity (h x w): 4.7 x 4.7 mm

Connectable section:

. Copper cables.

	Without ferrule	With ferrule
Rigid cable	**1 x 0,75 ÷ 4 mm²** **2 x 0,75 ÷ 2,5 mm²**	**-**
Flexible cable	**1 x 0,75 ÷ 4 mm²** **2 x 0,75 ÷ 2,5 mm²**	**1 x 0,75 ÷ 4 mm²** **2 x 0,75 ÷ 2,5 mm²**

Screw head:

. mixed M3.5 , slotted 4mm and Pozidriv n°1

Tightening torque:

. Min.: 0,8 Nm
. Max. : 1,8 Nm
. Recommended:1,4 Nm.

Labelling:

.Circuit identification by way of a label inserted in the label holder situated on the front of the product.
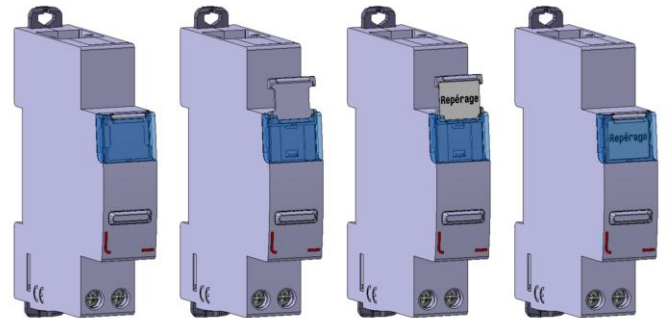
5. GENERAL CHARACTERISTICS

Marking :

. By permanent ink pad printing

Cat N°

Operating voltage :

.Ue indicator light (in accordance with the cat n°) 12/48 Va.c. / d.c., 110/400 Va.c.

Rated frequency :

. 50/60 Hz with standard tolerances.

Degree of pollution:

. 2 in accordance with standard EN/IEC 60898-1

LED Indicator

5. GENERAL CHARACTERISTICS *(continued)*

Indicator light :

Technology: non replaceable LED lamps

Power dissipated per Led:

Led: 12/48 V			Led: 110/400 V		
U (V)	P (W)		U (V)	P (W)	
	AC	DC		AC	DC
12	0.006	0.008	110	0.04	0.06
24	0.03	0.04	230	0.17	0.24
48	0.12	0.17	400	0.52	0.72

Life time:100 000 hours without maintenance.

Color of the translucent plastic window: red, green, yellow, blue, white (in accordance with the cat. N°)

The ergonomic design of the translucent plastic window allows an homogeneous projection of the light.

Protection class:

.Terminal protection when the product was connected :

IP2X according to IEC 529 – EN 60529 et NF C 20-010.

IP40 according to IEC 529 – EN 60529 et NF C 20-010.

. Protection against shocks: IK04 according to EN 62262.

. Class II, front panel with faceplate.

Plastic materials :

. Polyamide, PC

Enclosure heat and fire resistance:

. Resistance to glow wire tests at 960°C / 30 s, according to standard CEI 60695-2-10 & 60695-2-11.

Vibrations and tremors resistance :

. Compliant with appendix Q category F of standard IEC/EN 60947-1

Ambient temperatures :

. Operating: from - 25 °C to + 70 °C.

. Storage: from - 40 °C to + 70 °C.

Volume when packed :

	packaging	Volume (dm^3)
1 module	by 10	1.6

Average unit weight:

Cat N°	Weight (g)
FN40V12 / R12 / G12 / B12 / T12 / V110 / R110 / G110 / B110 / T110	46,5
FN40RV12, FN40RV110	55,1
FN43 T230 / R230 / M230	56,5

6. COMPLIANCES AND APPROVALS

Compliance with standard:

. EN/IEC 60947-5.1

Use in particular conditions:

. Compliant to category F according to classification defined in appendix Q of standard IEC/EN 60947-1.

6. COMPLIANCES AND APPROVALS *(continued)*

Environment respect – Compliance with CEE directives:

. Compliance with Directive 2002/95/EC of 27/01/03 known as "RoHS" which provides for a restriction on the use of dangerous substances such as lead, mercury, cadmium, hexavalent chromium and polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) brominated flame retardants from 1st July 2006

. Compliance with the Directive 91/338/EEC of 18/06/91 and decree 94-647 of 27/07/04.

. Compliant with regulation REACH

Plastic materials:

. Halogens-free plastic materials.

. Marking of parts according to ISO 11469 and ISO 1043.

Packaging:

. Design and manufacture of packaging in accordance with Decree 98-638 of 07.20.98 and Directive 94/62/EC

Environmental profile:

. PEP document available

Approvals obtained:

. See list of approvals available.