

Power Overvoltage Protection (POP)

Cat. N°: F80SVP

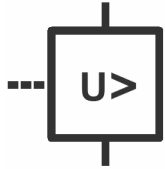
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1. DESCRIPTION - USE

. Power Overvoltage Protection (POP) is an auxiliary which is intended to mitigate the effects of the overvoltage between phase and neutral conductor (e.g. caused by loss of neutral conductor in the three phase supply upstream the POP) for downstream equipment by actuating the main protective device when an overvoltage between phase and neutral is detected.

Symbol:

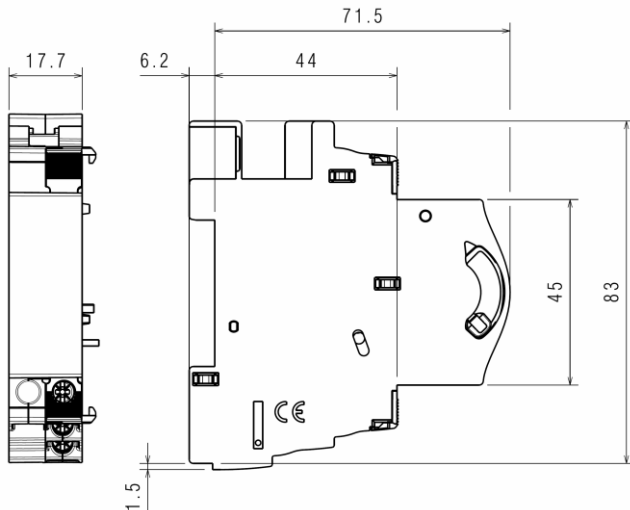


2. RANGE

. Cat n° F80SVP: 230 V ~ (a.c.).

3. OVERALL DIMENSIONS

1 module width.



4. PREPARATION CONNECTION

Mounting:

. On symmetrical EN/IEC 60715 or DIN 35 rail, by the device which is associated.

Operating positions:

. Vertical Horizontal Upside down On the side



Power Supply:

. Only from the bottom.

4. PREPARATION –CONNECTION (continued)

Terminals:

- . Terminal depth: 8 mm.
- . Stripping length: 8 mm

Screw head:

- . Mixed, slotted and Pozidriv n°1 (UNI7596 type Z1).

Recommended tightening torque:

- . 1 Nm.

Recommended tools:

- . For the terminals: Pozidriv n°1 or flat screwdriver 4 mm.

Conductor type:

	Copper cables	
	Without ferrule	With ferrule
Rigid Cable	1 x 0,5 mm ² to 1,5 mm ² 2 x 1,5 mm ²	-
Flexible Cable	1 x 0,5 mm ² to 1,5 mm ² 2 x 1,5 mm ²	1 x 0,5 mm ² to 1,5 mm ² 2 x 1,5 mm ²

Manual action of the POP:

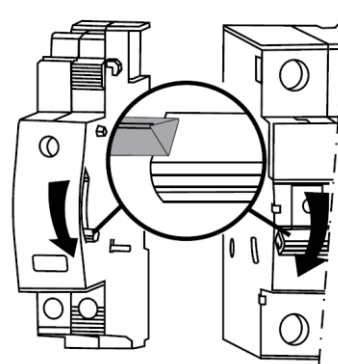
- . By the handle of the associated device, for reset the release.

Display of POP state:

- . By mechanical indicator on front face of the auxiliary:
 - red: indicates the tripping of the device by the coil.
 - transparent: the Overvoltage release is in ON position (armed position, ready for tripping).

Assembling:

- . On the left side of Bticino MCB, RCBO, RCCB or Isolating switch equipped or not with signalling auxiliaries
- . No tool required. Clipped by mean of plastic clamps on the associated device.
- . Assembling products in OFF position
- . The switching device of the POP must be positioned above of the handle of the associated device or the signalling auxiliary.



4. PREPARATION –CONNECTION (continued)

List of allowed associations (General rules):

Three auxiliaries maximum which:

- two signalling auxiliaries maximum. (Cat n°(s) F80RC05, F80CR, F80CA, F80RC).
- only one control auxiliary (Cat n°(s) F80ST1, F80ST2, F80SV1, F80SV2, F80SVE1, F80SVP, F80SVE2).

. If signalling and control auxiliaries are associated on the same circuit breaker, the command auxiliary must be placed to the left of the signal auxiliary.

List of allowed associations (Particular rules):

. With an isolating switch BT DIN - IS:

- only one signalling auxiliary CA type (Cat. n°(s) F80CA, F80CR, F80RC and F80RC05).

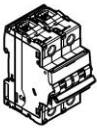

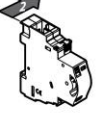
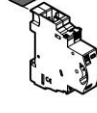
. With a remote trip head isolating switch BT DIN-IS, three auxiliaries maximum which:

- one or two signalling auxiliaries CA type (Cat. n°(s) F80CA, F80CR, F80RC and F80RC05).
- one control auxiliary (Cat. n°(s) F80ST1, F80ST2, F80SV1, F80SV2, F80SVE1, F80SVE2 and F80SVP)

. With a MCB, IS, RCBO or RCCB three auxiliaries maximum which:

- one or two signalling auxiliaries maximum, (Cat. n°(s) F80CA, F80CR, F80RC and F80RC05).
- one control auxiliary Cat. n°(s) F80ST1, F80ST2, F80SV1, F80SV2, F80SVE1, F80SVE2 and F80SVP)

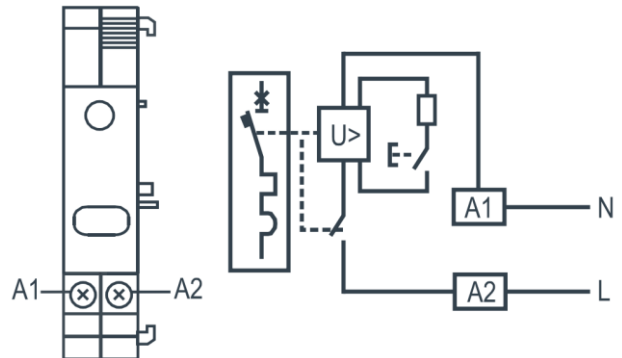
Combinations of the auxiliaries:

MAX n°3			
			
		F80RC05 F80ST1 F80CR F80ST2 F80CA F80SV1 F80RC F80SV2 F80SVE1 F80SVE2 F80SVE1+F80B F80SVE2+F80B F80SVP	
		F80RC05 F80RC05	
	F80RC05 F80RC F80ST1 F80CR F80ST2 F80CA F80SV1 F80SV2 F80SVE1 F80SVE2 F80SVE1+F80B F80SVE2+F80B F80SVP	F80RC05 F80CR F80CA F80RC	FT... / FV... FN... / FH... FA8X... FX... G... / GA... GN...
F80ST1 F80ST2 F80SV1 F80SV2 F80SVE1 F80SVE2 F80SVE1+F80B F80SVE2+F80B F80SVP	F80RC05 F80RC05 F80CR F80CA F80RC	F80RC05 F80CR F80CA F80RC	

4. PREPARATION –CONNECTION (continued)

Electric wiring diagram:

. Cat. n° F80SVP

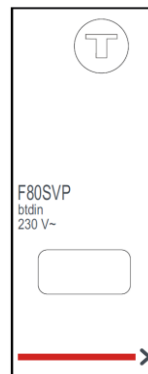


5. GENERAL CHARACTERISTICS

Marking on the front side:

. By permanent ink pad printing:

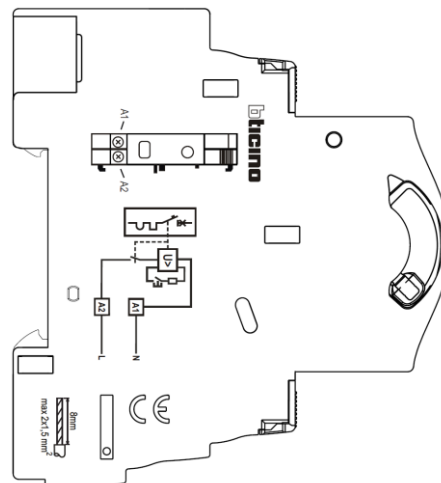
- Bticino catalogue number
- Trade name: btidin
- Operating voltage (in V)



Marking on the left side:

. By permanent ink pad printing:

- Electric wiring diagram and cabling information



5. GENERAL CHARACTERISTICS *(continued)*

Tripping time:

. Limit values of breaking time and non actuation time at a voltage

≤255 V	275 V	300 V	350 V	400 V
No tripping	5 s	5 s	0,75 s	0,20 s
	3 s	1 s	0,25 s	0,07 s

Power absorbed:

. 230 V a.c. = 0,45 VA.

Rated impulse withstand voltage:

. Uimp = 5kV.

Electromagnetic compatibility:

. Burst: 4 kV.

. Surge 1,2/50 μs : 4 kV differential mode and 5 kV common mode.

Insulation voltage:

. Ui = 500 V

Dielectric strength:

. 2500 V.

Tripping force:

. 3 Nm.

Mechanical endurance:

. 3 000 electrical tripping.

. These devices support the mechanical cycles of the associated devices

Ambient temperatures:

. Operation: from -25°C. to +70°C

. Storage: from -40°C. to +70°C

Enclosure material:

. Polycarbonate charged 10% glass fiber.

. Characteristics of this material: self extinguishing, heat and fire resistant in accordance with standard EN 60898-1, glow-wire test at 960°C for external parts made of insulating material necessary to retain in position current-carrying parts and parts of protective circuit (650°C for all other external parts made of insulating material).

5. GENERAL CHARACTERISTICS *(continued)*

Degree or class protection:

. Protection index of terminals against solid and liquid bodies: IP20 (in accordance with standards IEC/EN 60529 and NF C 20-010).

. Protection index of the box against solid and liquid bodies: IP40 (in accordance with standards IEC/EN 60529 and NF C 20-010).

. Protection index against mechanical shocks: IK02 (in accordance with standards EN 50102 and NF C 20-015).

Sinusoidal vibration resistance in accordance with IEC 60068-2-6:

. Axes: x, y, z.

. Frequency: 5÷100 Hz ; duration 90 minutes

. Displacement (5÷13,2 Hz) : 1mm

. Acceleration (13,2÷100 Hz) : 0,7g (g=9,81 m/s²)

Average weight per device:

. 0,055 kg.

Volume when packed:

. 0,21 dm³.

6. COMPLIANCE AND APPROVALS

In accordance with:

. EN 50550:2010

. Standards IEC/EN 23-105, EN 60439-1 (Low Voltage Directive 2006/95/EC), EN 60439-3 (Directive EMC 2004/108/EC).

. CEE guidelines : 73/23/CEE + 93/68/CEE

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