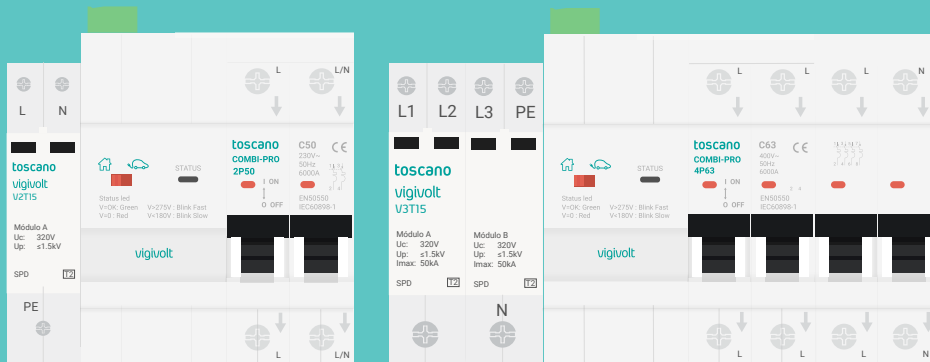


Surge protector against transient overvoltages, permanent overvoltages, and undervoltage. With automatic reconnection. For three-phase lines.



WARNING!

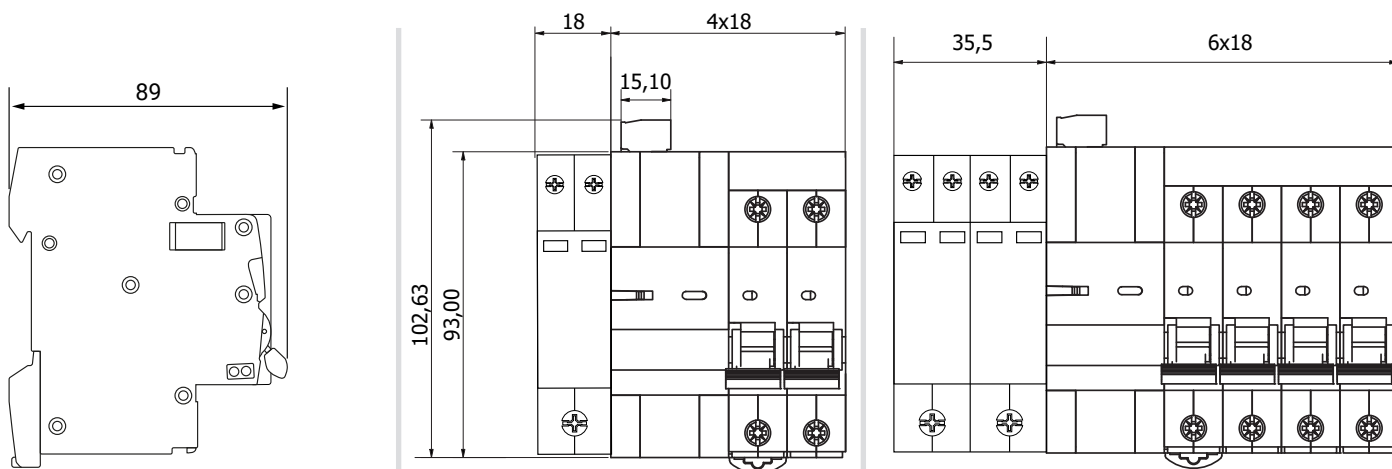
- The installation, maintenance and eventual replacement of this device must only be carried out by a qualified electrician.
- This device must not be repaired.
- All applicable local, regional and national regulations must be complied with during the installation, use, maintenance and replacement of this device.
- This device should not be installed if, when unpacking it, you observe that it is damaged.
- Toscano cannot be held responsible in the event of non-compliance with the instructions in this document and in the documents to which it refers.
- For the correct operation of the equipment, the phases must be connected to the "L" terminals, the neutral to the "N" terminal and the earth to terminal "PE".



HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

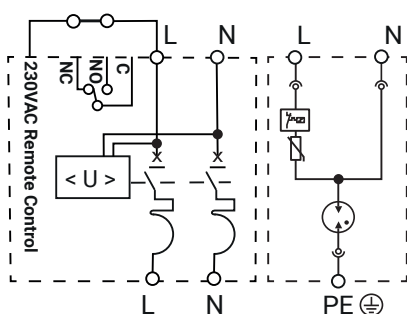
- Turn off all power supplying this device before working on it.
- Use a voltage tester on an appropriate range to verify that all live conductors are not energized.
- Failure to comply with these instructions may result in serious injury or even death.

Dimensions

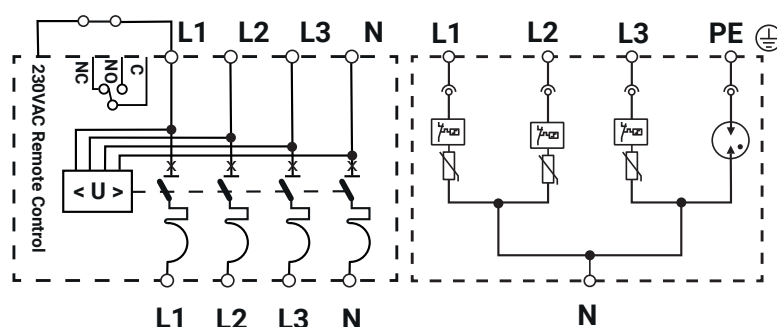


Electrical diagrams

COMBI-PRO-2PT15

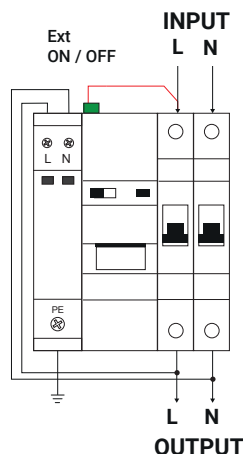


COMBI-PRO-4PT15

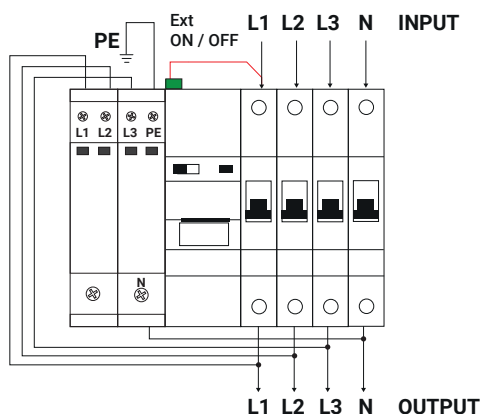


Wiring

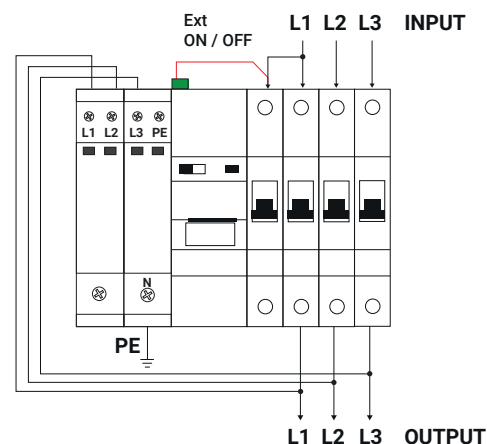
COMBI-PRO-2PT15



COMBI-PRO-4PT15



COMBI-PRO-4PT15
(230 V without neutral)



Technical specifications

	COMBI-PRO-2PT15	COMBI-PRO-4PT15
GENERALS	Rated voltage U_n (L-N / L-L)	240 VAC
	Maximum voltage U_c (L-N / N-PE)	320 VAC
	Frequency	50-60 Hz
	Consumption	0,3W
	Maximum terminal cross-section	25 mm ²
	Environmental limits	-20° +70° C / 80% H.R.
	Protection	IP20
	Mounting	Rail DIN 35
	Number of DIN modules	5
	Directives	2014/35/UE (LVD) 2014/30/UE (EMC) 2011/65/UE (RoHS)
	Dimensions (width x height x depth)	18+72 x 93 x 89 mm
	Approx. average weight	510 g
OVERVOLT.	Disconnection voltage	According to UNE-EN50550/63052
	Overvoltage response time	IEC-63052:2019
	Reset time	10 s
	Reconnection voltage	< 255 V ± 2%
UNDERVOLT.	Disconnection voltage	180 VAC ± 2%
	Undervoltage response time	10 s
	Reset time	10 s
	Reconnection voltage	210 V ± 2%
MCB	Rated current (at 25 °C ambient temperature)	16-20-25-32-40-50-63 A
	Tripping curve	C
	Breaking capacity I_{cn}	6 kA
OTHER	Changeover contact	230 VAC 1 A / 24 VDC 2 A
	Remote control Input	230 VAC 1 A
TRANSIENT	Level protection U_p (L-N / N-PE)	<1,5 kV
	Maximum terminal cross-section	16 mm ²
	Maximum discharge current (8/20μs) I_{max} (L-N / N-PE)	15 kA / 15 kA
	Rated discharge current (8/20μs) I_n (L-N / N-PE)	8 kA / 10 kA
	Type	2
	Overvoltage response time	≤25 ns
	Product standards	IEC/EN61643-11



For correct operation of the device, it is necessary to connect the "EXT ON / OFF" terminal to phase L / L1 of the electrical installation. In addition, the phase must be connected to terminal "L" and the neutral to terminal "N". Do not install on lines without neutral (N) and without earth connection (PE). In the event of tripping due to overcurrent, short circuit, or manual disconnection, the device will not automatically reset.

○ Description

Permanent overvoltage protection device, designed to protect against increases in mains voltage in single-phase or three-phase installations with automatic reconnection. It also protects against undervoltage conditions.

The device continuously **monitors the voltage** in the installation and supervises any variations. If an anomaly is detected, it acts on the **built-in MCB (MAIN CIRCUIT BREAKER)**, disconnecting the power supply to the installation.

It also protects **against transient overvoltages** caused by lightning strikes, switching operations in electrical circuits, and electrostatic discharges. If the protection becomes inoperative due to a transient overvoltage, the device will display a red warning window. In such case, the unit must be replaced (plug-in type: easy replacement).

○ Operation

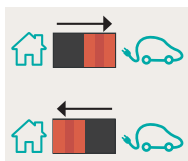
Overvoltage: When the voltage exceeds the voltage established in the standard, the equipment trips the MCB. The time it takes to trip will depend on the level of overvoltage detected (according to IEC 63052). When the voltage drops below 255V and is maintained for at least 10 seconds, the equipment will reclose the MCB by reconnecting the voltage to the mains.

Undervoltage: If the voltage drops below 180V for more than 10 seconds, the equipment will trip the MCB leaving the installation without supply. When the voltage stabilises above 210V for more than 10 seconds, the equipment will automatically reclose the MCB.

Reclosing function:

 Position, when the equipment runs out of voltage at the input, it trips the MCB and after 10 seconds it will reclose.

 Position, when the equipment runs out of voltage at the input, it trips the MCB, allowing it to be reset manually. Once the power supply is restored, it will automatically reset after 10seconds.



In the event of a transient overvoltage, the device absorbs it by diverting it to earth (PE), thereby preventing any damage to the devices connected to the network.

If the transient overvoltage renders the protection inoperative, the device will display a red warning window. In such case, the protection module will have been disabled and must be replaced. The module is plug-in type and easy to replace.

Status indicator:

The device is also equipped with an LED indicator that shows the voltage status:

- Solid green: Voltage within normal values.
- Flashing green: Timing for automatic connection.
- Fast flashing red: Overvoltage.
- Slow flashing red: Undervoltage.
- Solid red: Circuit breaker open due to overcurrent, short circuit, manual operation, or missing remote control signal.
- Off: No power supply.

Check the standards that our products comply with and download their declaration of conformity at:
toscano.es/standards

