

Reverse Power Protection

Reverse power protection relays protect parallel operated generators against reverse current flows, tripping upon fault condition. The output relay trips when the monitored reverse current exceeds the user adjustable limit and the reverse power LED illuminates indicating a fault condition.

The trip point is adjustable from 2% to 20% of the nominal current through the front control knob. The relay also has a built-in time delay, adjustable from 0.2 to 20 seconds, used to avoid nuisance tripping.

The output relay is set to energise in reverse power conditions but can be supplied to de-energise if required. The relays are self powered, requiring no auxiliary power supply and LEDs indicate forward and reverse power conditions.



Models Available

B871/1 Single Phase / 3 Phase 4 Wire

B871/3 3 Phase 3 Wire

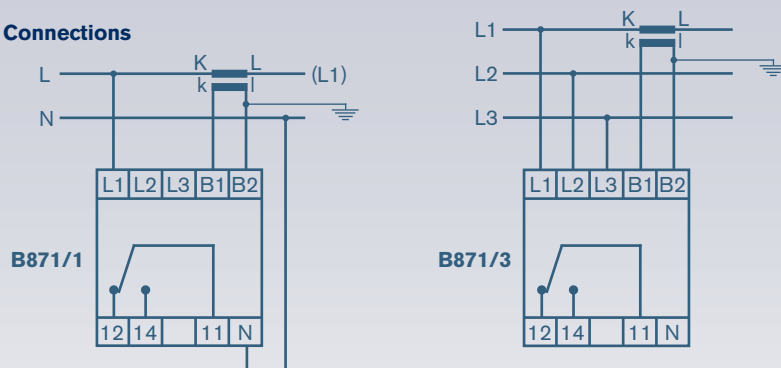
Product Features

- Protects against reverse power (from generators)
- LED indication

For dimensions see page 3

For protection against reverse current flows from parallel operated generators

Connections



Ordering information

Code	Relay Type	Nominal Current	Voltage
B871/1	Single Phase / 3 Phase 4 Wire Reverse Power	-	-
B871/3	3 Phase 3 Wire Reverse Power	-	-
Specify	-	1A or 5A from a CT	-
Specify	-	110 or 230VL-N (B871/1)	-
Specify	-	110, 380, 400 or 415VL-L (B871/3)	-
Example	B871/1	5A	110Vac

Specification

- Nominal Current, I_n :**
 - 1A or 5A from CT
- Nominal Voltage, U_n :**
 - 110, 230VL-N (B871/1)
 - 110, 380, 400 or 415VL-L (B871/3)
- Calibrated Scale:**
 - 2 to 20% reverse current (adjustable)
- Time Delay:**
 - 0.2 to 20 seconds (adjustable)
- Repeatability:**
 - Better than 0.5% of nominal
- Differential (Hysteresis):**
 - Fixed 1%
- Frequency:**
 - 50/60Hz (400Hz upon request)
- Overload:**
 - 2 x I_n continuous
 - 10 x I_n for 3 seconds
- Burden:**
 - Current circuit < 0.5VA
 - Voltage circuit < 2VA
- Weight:**
 - 300g

General Specification

Reference Standards

Performance: IEC 144 / BS 5420 / VDE/VDI 0435 / IEC 947 / EN60947

Environmental

Calibration Temperature: 23°C
 Operating Temperature: 0°C to 60°C
 Storage Temperature: -10°C to 70°C
 Temperature Coefficient: $\pm 0.03\%/^{\circ}\text{C}$
 Relative Humidity: 0 - 95% non-condensing

Relay Output

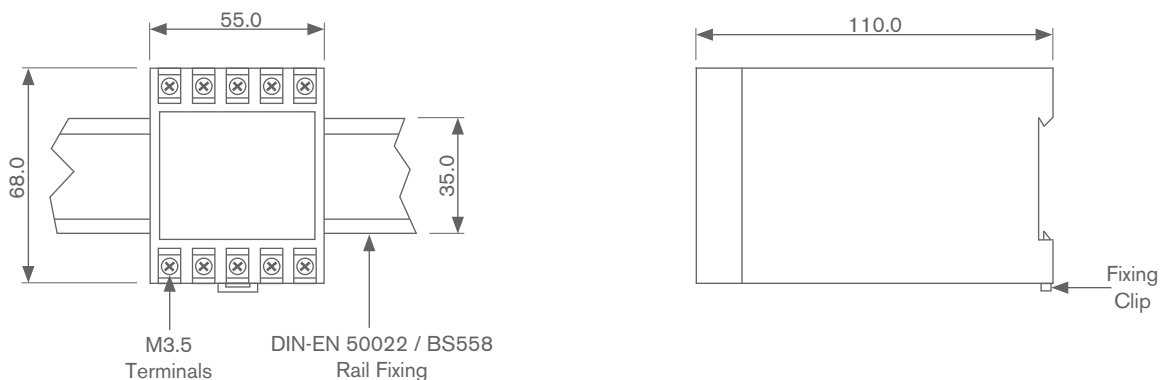
Relay Type: Single pole change-over
 (Except CST-100 has single pole normally open or normally closed)
 (Double pole change-over available on some models as an option)
 Contact Rating: 5A @ 250Vac (non-resistive), 1A @ 125Vdc (resistive)
 Contact Life: 1,000,000 at 5A, 10,000,000 at 1A
 Mechanical Life: 2,000,000 operations
 Dielectric Strength: 4kV coil/contact, 1kV contact/contact
 Optional Time Delay: 0.3-10 sec, 1-30 sec, 2-60 sec, 3-100 sec or 10-300 sec (delay on fault or reset)
 (Note if the voltage supply to the protection relay falls below 75% of the nominal the timer will fail to operate and the relay will trip instantaneously upon fault)

Enclosure

Enclosure: Flame retardant black ABS plastic with screw type terminals
 Enclosure Code: Case IP50, terminals IP10 to IEC529 and BS5490
 Insulation Test: 2kV rms 50Hz 1min (to IEC 414) between Input / Case / AC Auxiliary
 Mounting: 35mm DIN rail (DIN-EN 50022)
 Markings: CE marked

Specification subject to change without notice.

Dimensions



All dimensions in mm