



Class 300 Equipment PRP 360 REVERSE POWER RELAY

DEVICE NUMBER 32

FEATURES:

- Adjustable current sensitivity
- Adjustable time delay
- Operates on 120, 240, 480 or 600 volts
- Models available for use with 50, 60 or 400 Hz systems
- 2 reset modes: automatic and remote manual
- Resets with input voltage interruption
- N.O. and N.C. relay switching contacts available
- Low input burden
- Reliable solid state design
- Ruggedly constructed
- Available from stock
- CSA approved

APPLICATION:

Power reversal into an AC generator which has lost its prime mover torque results in "motoring", a condition which can cause damage to both the prime mover and the generator. To prevent equipment damage under such conditions, Basler Electric Company has developed the PRP 360 solid state Reverse Power Relay. A typical application is pictorially represented in Fig. 1.

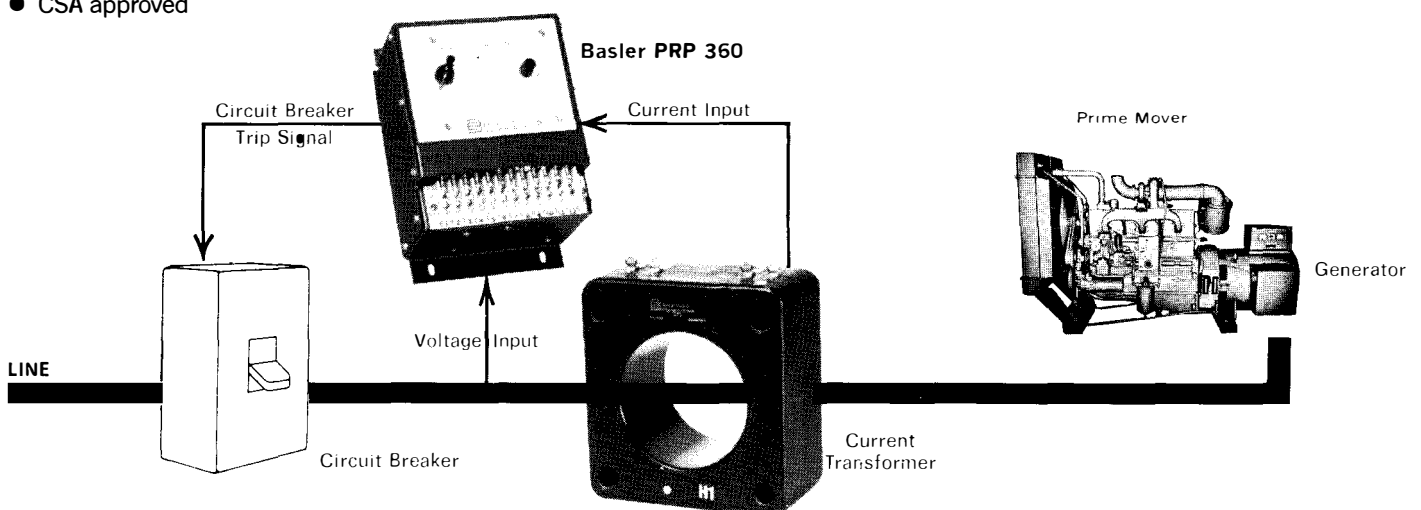


FIGURE 1 — APPLICATION DIAGRAM

B Basler Electric

P. O. BOX 269 HIGHLAND, ILLINOIS 62249, U.S.A. PHONE 618-654-2341 FAX 618-654-2351

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DESCRIPTION:

The PRP 360 Reverse Power Relay is actuated when a power reversal exceeds a preselected current level (trip point) and exists for longer than a predetermined time. The device provides continuously adjustable reverse power trip sensitivity from 1% to 5% of generator line current when a CT is selected that delivers 5 amperes at full load. The unit also employs an adjustable time delay control which is continuously variable between its upper and lower units. Both adjustments are front panel mounted for convenient access. The relay incorporates provisions for a remote reset capability. The device is solid state throughout (except for the output relay) and employs components selected with conservative derating to assure long-term trouble-free performance.

HOW TO ORDER: Refer to Table 1

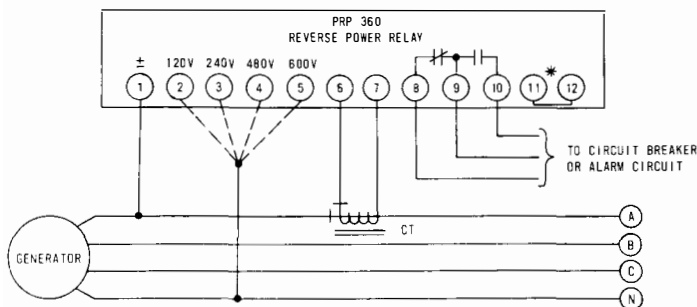
Table 1

| When the Generator Frequency (Hertz) is | And the Desired Time Delay (Seconds) is | Then Order This Model Reverse Power Relay |
|---|---|---|
| 50/60 | .25 to 1.5 | PRP 360 |
| | 1.25 to 7.0 | PRP 360-2 |
| 400 | .25 to 1.5 | PRP 360-1 |

SAMPLE SPECIFICATION:

A Reverse Power Relay (Device Number 32) shall be used to protect the power generating system from damage due to a power reversal into the generator. When a power reversal occurs, the device shall cause the generator to be removed from the bus. The relay shall be capable of operation on a 120 volt (or 240, 480, or 600), 60 Hertz power source. It shall provide adjustable current sensitivity between 0.050 and 0.250 amperes and an adjustable time delay between 0.25 and 1.5 seconds. The Reverse Power Relay shall incorporate a remote reset capability.

The Reverse Power Relay shall be Basler Electric Company Model PRP 360 or equivalent.



*To provide automatic reset operation this jumper is removed.
To provide a remote reset capacity, this jumper is removed and a normally closed pushbutton switch (not supplied) is connected between terminals 11 and 12.

FIGURE 2—TYPICAL INTERCONNECTION DIAGRAM

SPECIFICATIONS:

(Data applies to all models except where otherwise specified).

INPUT:

Voltage 120, 240, 480 or 600 volts

Frequency . . . PRP 360 and PRP 360-2: 50/60 Hz
PRP 360-1: 400 Hz

Voltage Burden 3 VA, I lags V by 36°

Current (max. continuous) 5 amperes

Current Burden 8 VA at unity P. F.

Overload Current Withstands currents up to 5 times nominal for short intervals of time.

OUTPUT: SPDT relay contact rated 10 amperes at 120 VAC; 10 amperes at 28 VDC, resistive: 0.75 amperes at 115 VDC, resistive.

CURRENT SENSITIVITY ADJUST LIMITS: 0.050 to 0.250 amperes.

TIME DELAY ADJUST LIMITS: PRP 360 and PRP 360-1: 0.25 to 1.5 seconds; PRP 360-2: 1.25 to 7.0 seconds.

SHOCK: Withstands up to 15 Gs.

OPERATING TEMPERATURE: -20°C to +50°C (-4°F to +122°F).

FINISH: Dark gray, lusterless, textured baked enamel.

DIMENSIONS: 9.88" x 6.56" x 5.12".

WEIGHT: Net - 6 pounds — Shipping - 7 pounds.

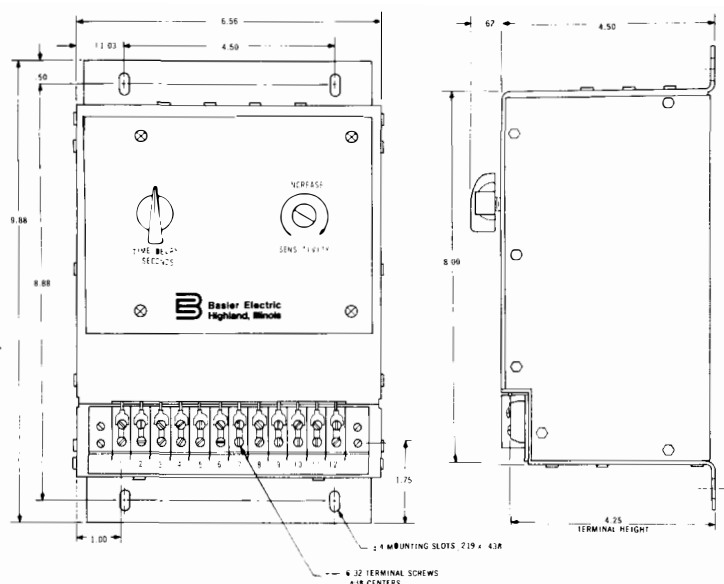


FIGURE 3—OUTLINE DRAWING

All drawings and data subject to change without notice.

Basler Electric

ROUTE 143, BOX 269, HIGHLAND, ILLINOIS U.S.A. 62249
PHONE 618-654-2341 FAX 618-654-2351

P.A.E. Les Pins, 67319 Wasselonne Cedex FRANCE
PHONE (33-3-88) 87-1010 FAX (33-3-88) 87-0808

<http://www.basler.com>, info@basler.com



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