

Model : DRP-D

Description : Reverse Power Relay (3-Phase 4-Wire)

Utilization:

The DRP-D provides protection against reverse power for AC generators operating in parallel to each other or the mains. Two sets of contacts are provided: 21-24 is closed immediately upon supply and 11-12 is closed for normal forward current and opened upon reverse power (TRIP) condition.

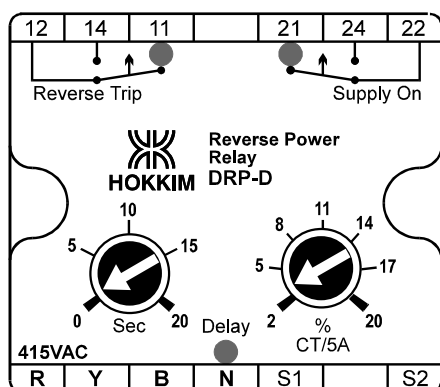
Trip point and time delay can be adjusted to prevent 'motoring' on engine failure and tripping from surges during synchronizing. The unit is calibrated for use with A/5 C.T.'s. The trip point setting is given as 2% to 20% of the reverse current detected. Thus a setting of 10% means tripping will occur when the C.T. current is 0.5A (i.e. 10% of 5A). Time delay is adjustable from 0 to 20 sec. Normal setting is 10 sec.

Power supply is taken from the generator voltage and current reference from the generator load current.

For opened circuit tripping, the tripping circuit must be connected to contacts 21-24 and 11-12 in series. In this case, tripping will occur upon reverse power condition (11-12 open) or supply failure (21-24 open).

For closed circuit tripping, the tripping circuit must be connected to contacts 21 - 22 and 11 - 14 in parallel. In this case, tripping will occur upon reverse power condition (11 - 14 close) or supply failure (21-22 close).

There are three LEDs to indicate Supply On (Green), Reverse Power Trip (Red) and Delay Count-down Start (Amber).



Technical Data

Supply Voltage	: □415VAC 3-Ph 4-Wire
Frequency	: 50Hz
Consumption	: 2VA
Current Rating	: 5A
ON-TRIP Hysteresis	: 3%
Reverse Power Adj.	: 2-20%
Time Delay Adj.	: 0-20 secs.
Repeatability	: 0.5%
Indication	: Green LED (Supply) Red LED (Reverse Power) Amber LED (Delay)
Output Contacts	: 5A 240V 50Hz AC1
Supply Off	11-14 Open 11-12 Close 21-24 Open 21-22 Close
Supply On / Normal	11-14 Open 11-12 Close 21-24 Close 21-22 Open
Supply On / Reverse Trip	11-14 Close 11-12 Open 21-24 Close 21-22 Open

Warning:

1. Relay cannot trip if Red Phase Supply Fail.
2. Relay not sensitive to trip if Yellow Phase Supply Fail.

Recommendation: Use DRP-D 1-Phase 2 Wire

