

**HOKKIM**  
Giving You Control

# Control & Protection Relays

**Model : DAR-M**

**Description : Asymmetry Relay**

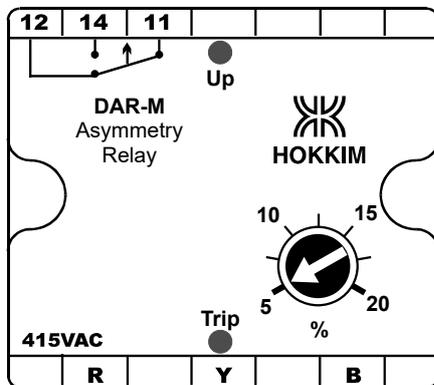
**Phase Failure, Phase Unbalance (Asymmetry) & Phase Sequence Protection for Motors.**

## Utilization:

The **DAR-M** monitors phase failure, unbalance and sequence of a 3-phase 3-wire supply connected to a motor. The unbalance trip point is adjustable from 5-20%.

When the above 3 factors are correct and present the relay will operate normally. Any deviation of one of the factors from normal will cause the relay to trip.

The **DAR-M** has one set of change-over contacts 11-14-12. Contacts 11-14 close under normal conditions and open upon failure or no supply conditions.



## Technical Data

Supply Voltage :  415V 3-Ph 3-Wire  
 200V 3-Ph 3-Wire

Frequency : 50Hz

Consumption : 2VA

ON Response Time : 0.5-5 sec.

TRIP Response Time : 100-500 msec.

Adjustment : 5-20% Phase Unbalance

Indication : Green LED (Relay ON)  
Red LED (Relay TRIP)

Output Contacts : 5A 240V 50Hz AC1  
Relay ON 11-14 Close  
11-12 Open  
Relay TRIP 11-14 Open  
11-12 Close

