ASHE CONTROLS PVT LTD
an ISO 9001:2015 certified company

RD-10A-M

RD-Series Redundant ORing Diode Module



Overview

A Redundancy ORing Diode Module is used to decouple two DC power supplies to ensure uninterrupted load power in the event of a failure of either supply. In high-reliability control systems, redundant supplies are connected in parallel but electrically isolated to prevent a fault or voltage drop in one supply from affecting the other. This diode-based decoupling ensures continuous operation, maintaining system uptime and enhancing overall reliability.

The module uses ORing diodes to isolate the outputs of the two power supplies. During normal operation, both supplies may share load current according to their output characteristics. If one supply fails or its voltage falls below the acceptable threshold, the ORing diode instantly blocks reverse current and disconnects the unhealthy supply. The healthy supply continues to power the load without interruption, ensuring a stable and reliable DC bus. ORing diodes also allow automatic disconnection of a supply that cannot maintain sufficient output voltage, thus protecting the system from disturbance.

Beyond passive diode isolation, the module incorporates active monitoring of both input power sources. Each input is continuously checked for undervoltage or failure, and any abnormal condition is indicated through a potential-free relay changeover contact. This status signal can be used for alarms, PLC/SCADA inputs, or system diagnostics, providing clear and immediate information on the health of each supply. The relay indication reflects the failure or absence of either or both inputs, allowing timely fault response.

The ORing Diode Modules are maintenance-free, robust, and cost-effective, providing high availability for DC control and instrumentation systems. The unit is housed in a slim, rugged metal enclosure and is designed for reliable DIN-rail mounting in industrial panels

This product is backed by a full two-year warranty, covering all manufacturing defects and workmanship issues under normal operating conditions.

Specifications

Model	ASHE RD-10A-M.
Type	Redundant ORing Diode Module.
Input Voltage 1	24 VDC (Default)
	48 VDC (to be pre-specified)
	110 VDC (to be pre-specified)
	220 VDC (to be pre-specified)
Input Voltage 2	24 VDC (Default)
	48 VDC (to be pre-specified)
	110 VDC (to be pre-specified)
	220 VDC (to be pre-specified)
Output Voltage	24 VDC / 48 VDC / 110 VDC / 220VDC.
Load Current	10 Ampere.
Control Output	Two Relay change over contacts.
Indications	Green LEDs for Inputs & Output.
Dimensions	125 x 45 x 95 mm (H x W x D).
	(for 24VDC).
Execution	DIN Rail / Wall mounting.
Enclosure	Industrial grade metal enclosure.
Weight	Approximately 1 Kg.
Operating Temperature	0 to 55^{0}C.

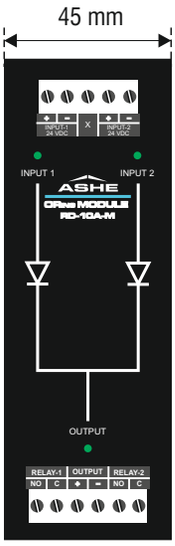
Features

- DC Power Supply Input Signals 24 VDC / 48 VDC / 110 VDC / 220VDC
- Output Signal 24 VDC / 48 VDC / 110 VDC / 220VDC
- Contact Rating : 10A @230 VAC (Resistive loads)
- Load Rating of 10 Ampere (continuous)
- Forced ventilation
- LED indications for Input signals and Output signal
- Rugged, Industrial grade Metal enclosure
- High Noise immunity
- DIN Rail / Wall mounting Execution
- High efficiency and high reliability
- Dual or Multiple Redundancy option
- Two-year Performance Warranty
- Proven track record of successful site installations

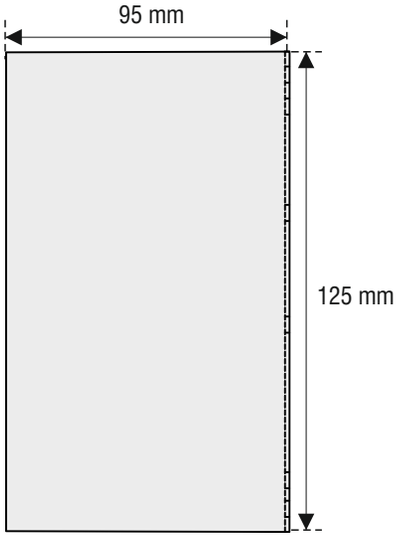
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RD-Series Redundant ORing Diode Module

Dimensional Diagram



FRONT VIEW



SIDE VIEW

How To Order

	REDUNDANT ORING DIODE MODULE	**RD-**				
	configuration and add-on options					
1	**Current Rating**					
▸	10 Ampere		10			
2	**Input Voltage**					
▸	24 VDC			A		
▸	110 VDC			B		
▸	220 VDC			C		
3	**EXECUTION**					
▸	Metal Enclosure					M

Our Other Products



FLOW TOTALIZER



SIGNAL ISOLATORS & TRANSDUCERS



TEMPERATURE SCANNER



FLAMEPROOF INSTRUMENTS



STATIC POWER SWITCHES

Designed and Manufactured by :

ASHE CONTROLS PRIVATE LIMITED

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