

ODC5R REED RELAY DIGITAL OUTPUT MODULE

Description

The ODC5R is a Form A mechanical relay I/O module. This module was designed for low-voltage DC loads that are purely resistive (no inrush current).

Typical applications for these modules include analog signal and communication line multiplexing. Because of their low 10 VA rating, these modules are not recommended for inductive or capacitive loads (even very small loads) because the inrush current is likely to exceed the 10 VA rating.

IMPORTANT: Applications using 120 VAC are typically NOT suited to this module. If you are considering using this module for any application other than low-voltage purely resistive loads, see the detailed notes and rating curve in the data sheet, and call Pre-sales Engineering for specific guidance.



ODC5R

Part Numbers

| Part | Description |
|-------|-------------------------------|
| ODC5R | Reed Relay Output, 5VDC Logic |



SPECIFICATIONS

| Item | Description |
|---|--------------------------------------|
| Contact type | Form A SPST-normally open |
| Line Voltage - Range | 0–100 VDC 0–130 VAC (see Note) |
| Current Rating | 0.5 Amps Switching (see Note) |
| Contact Rating | 10 VA (see Note) |
| Switching current | 0.5 amperes maximum ¹ |
| Carry current | 1.5 amps maximum |
| Contact on-resistance | 200 milliohms |
| Turn-on time | 500 microseconds |
| Turn-off time | 500 microseconds |
| Contact bounce | 250 microseconds |
| Mechanical life | 5 x 10 ⁶ cycles |
| Logic voltage range | 4.8–6 volts |
| Logic dropout voltage | 0.8 volts |
| Logic input current @ Normal logic voltage | 14 milliamperes |
| Isolation voltage Input-to-output | 1500 VDC |
| Temperature Operating | 0 to 70 °C |

NOTE: The application of the dry contact module must not exceed 10 VA under steady-state or momentary in-rush conditions.

For voltages at or below 20 volts, the current limit is 0.5 amps. For voltages above 20 volts, the maximum allowable current is determined by the following equation:
Maximum Current = 10 VA / Voltage

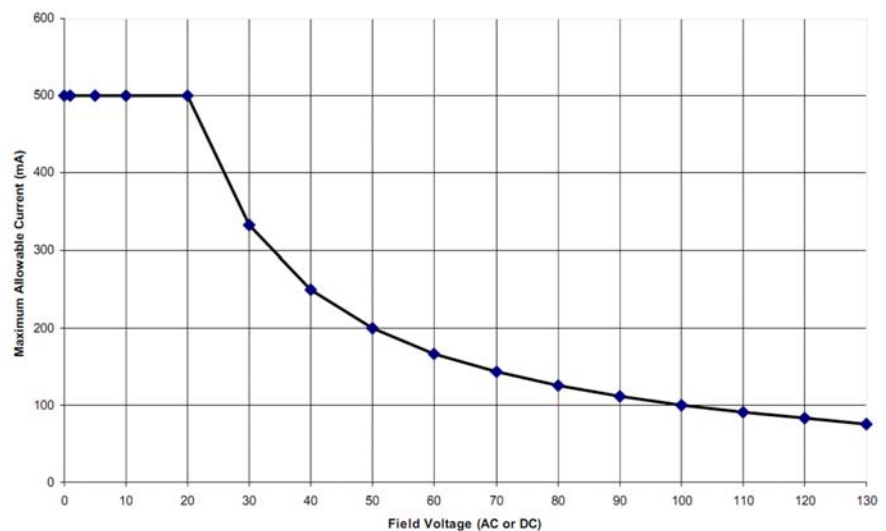
Current Limit at Key Voltages

| V | mA |
|------------------|-----|
| 5 | 500 |
| 12 | 500 |
| 24 | 416 |
| 100 ¹ | 100 |
| 120 | 83 |
| 130 ² | 76 |

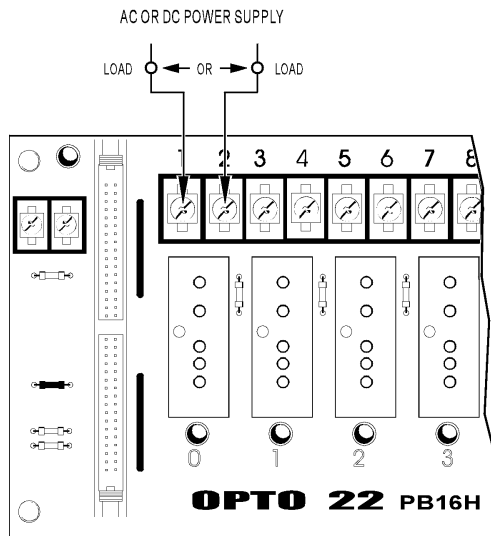
¹ Maximum DC voltage is 100 VDC

² Maximum AC voltage is 130 VAC

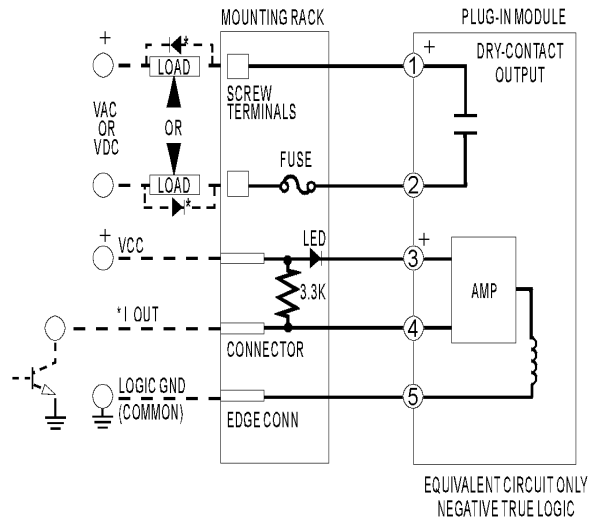
10 VA RATING FOR REED RELAY (DRY CONTACT) MODULES



CONNECTIONS



SCHEMATICS



* Commutating diode* must be used on inductive loads (Typical: 1N4005).
**Control line is compatible with totem pole or tri-state output device.

DIMENSIONS

