

# UMK 33 Relay Module

4PDT, 24Vdc or 120Vac Coil

Data Sheet 1802B

November 2003

## Description

The UMK RELAYs are industrial interface relays used in applications where low level control signals must switch high level loads. The 4PDT (Four Pole Double Throw) version allows switching of four loads with a single control signal.

With a current rating of 5 amps, the UMK 33 RELAY is ideal for general purpose relay applications.

## Features

- Compact size, 33.7 mm wide
- 5 amp 4PDT rating
- 24Vdc or 120Vac coil
- Pluggable relay
- DIN-rail mounted
- Coil status indication
- Built in damping diode circuit (DC coil)
- Universal foot
- Separation of coil and contact wiring
- Arc barriers between adjacent poles

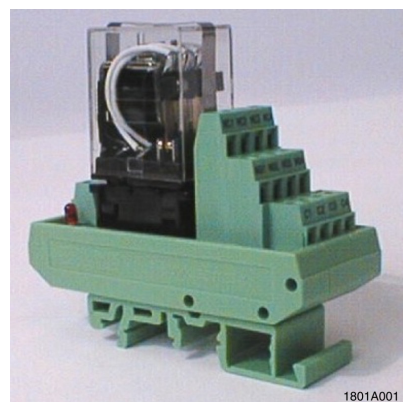


Figure 1. UMK 33, 4PDT General Purpose Relay

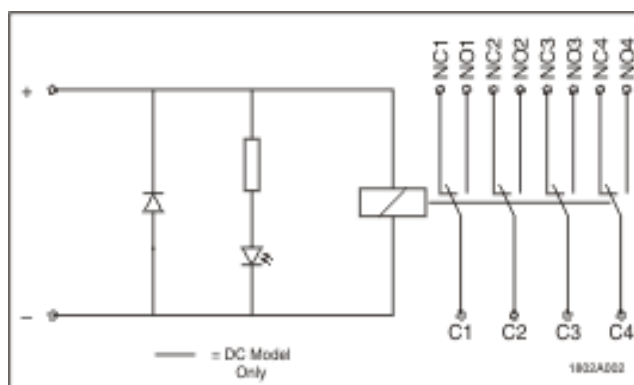


Figure 2. Connection Diagram

Table 1. Ordering Information

Description	Part Number	Type Description
24Vdc coil, 4PDT	5604028	UMK 33-REL 24/4x21-ST-W/RLY
120Vac coil, 4PDT	5604257	UMK 33-REL 120/4x21-ST-W/RLY

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**Table 2. Contact Specifications**

Contact material .....	Silver cadmium oxide, gold flashed
Contact ratings .....	4PDT, 5 amps @ 120/240 VAC, 30Vdc
.....	1/6 hp 120/240VAC, C300 pilot duty

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**Table 3. +24Vdc Coil Specifications**

Nominal input voltage .....	+24Vdc
Nominal Coil resistance @ 25°C .....	650Ω
Pull in voltage .....	<= 18Vdc
Dropout voltage .....	24Vdc - 10% minimum
Maximum voltage .....	110%
Coil Power .....	0.9 to 1.1 Watts
Insulation System .....	Class "B" (130°C per UL 1446
Maximum Coil Dissipation .....	2.3 Watts, 5 minutes maximum @ 40°C
Duty .....	Continuous

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**Table 4. 120Vac Coil Specifications**

Nominal input voltage .....	120Vac 50/60 Hz
Nominal Coil resistance @ 25°C .....	4430Ω
Pull in voltage .....	< or = 96Vac
Dropout voltage .....	120Vac - 30% minimum
Maximum voltage .....	110%
Coil Power .....	1.0 - 1.2VA (60Hz) AC @ 25°C
Insulation System .....	Class "B" (130°C per UL 1446
Maximum Coil Dissipation .....	2.55 VA (60Hz) AC, 5 minutes maximum @ 40°C
Duty .....	Continuous

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**Table 5. General Specifications**

Dielectric Strength	
Coil to frame .....	1500 Vrms
Across open contacts .....	1000 Vrms
Contacts to frame .....	1500 Vrms
Insulation resistance .....	100MΩ @ 500 Vdc
Temperature	
Operating .....	-40°C to +70°C
Storage .....	-40°C to 105°C
Life Expectancy	
Electrical .....	200,000 operations, 5 amp resistive load
Mechanical .....	10,000,000 @ no load

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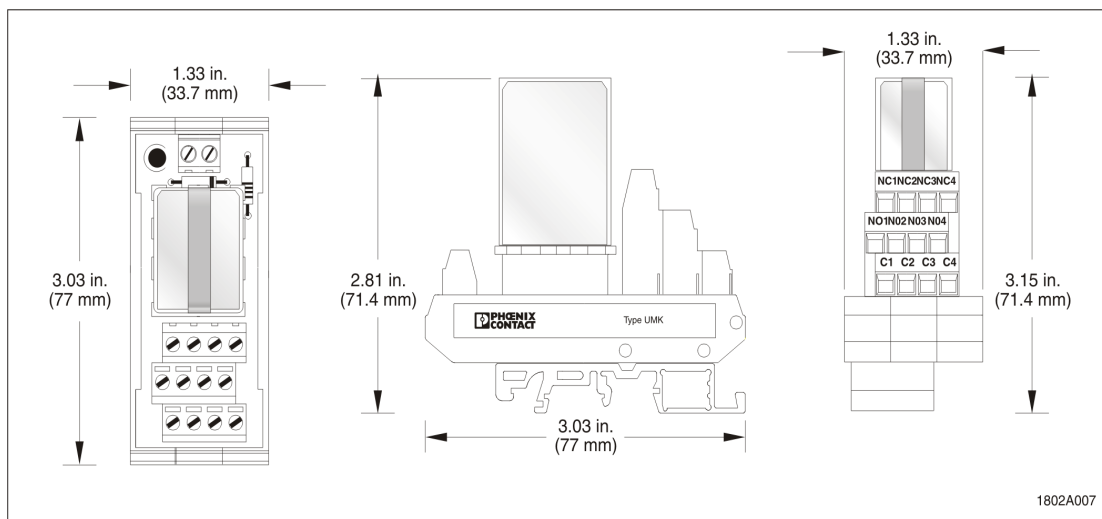


Figure 3. UMK 33 Relay Dimensions

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