

DESCRIPTION

PRODUCT COVERED:

USR, CNR: Component - Miscellaneous Motor Controllers, Series CW, followed by 24 or 48, followed by 10, 25, 50, 75, or 90, may be followed by - 10. May also be followed by additional numbers and/or letters.

GENERAL:

These components are Electronic Type Relays. The load is switched by dual SCR's and isolation is provided between the control circuit and the power circuit by Recognized Component - Optical Isolators. The CM devices offer panel mounting with finger proof terminal design. These devices have input status LED for power indication. These models are intended for use within complete industrial control equipment where the suitability of the combination has been determined by Underwriters Laboratories Inc.

ELECTRICAL RATINGS:

Model	Input	Output	Maximum Surrounding Air Temperature rating
CWA2410	120/240 V ac	24-280 Vac, 10A, General Use 240 Vac, 10A, Motor 240 Vac, 10A, Tungsten	40
CWD2410	3-32 V dc	24-280 Vac, 10A, General Use 240 Vac, 10A, Motor 240 Vac, 10A, Tungsten	40
CWA4810	120/240 V ac	48-660 Vac, 10A, General Use 600 Vac, 10A, Motor 277 Vac, 10A, Tungsten	25
CWD4810	3-32 V dc	48-660 Vac, 10A, General Use 600 Vac, 10A, Motor 277 Vac, 10A, Tungsten	25
CWA2425	120/240 V ac	24-280 Vac, 25A, General Use 240 Vac, 10A, Motor 240 Vac, 25A, Tungsten	40
CWD2425	3-32 V dc	24-280 Vac, 25A, General Use 240 Vac, 10A, Motor 240 Vac, 25A, Tungsten	40
CWA4825	120/240 V ac	48-660 Vac, 25A, General Use 600 Vac, 10A, Motor 277 Vac, 25A, Tungsten	25
CWD4825	4-32 V dc	48-660 Vac, 25A, General Use 600 Vac, 10A, Motor 277 Vac, 25A, Tungsten	25
CWA2450	120/240 V ac	24-280 Vac, 50A, General Use 240 Vac, 20A, Motor 240 Vac, 40A, Tungsten	25
CWD2450	3-32 V dc	24-280 Vac, 50A, General Use 240 Vac, 20A, Motor 240 Vac, 40A, Tungsten	25
CWA4850	120/240 V ac	48-660 Vac, 50A, General Use 600 Vac, 20A, Motor 277 Vac, 40A, Tungsten	25
CWD4850	4-32 V dc	48-660 Vac, 50A, General Use 600 Vac, 20A, Motor 277 Vac, 40A, Tungsten	25
CWA2490	120/240 V ac	24-280 V ac, 90A General Use	60
CWD2490	4-32 V dc	24-280 V ac, 90A General Use	60
CWA4890	120/240 V ac	48-660 V ac, 90A General Use	60
CWD4890	4-32 V dc	48-660 V ac, 90A General Use	60

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in (or with) complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

These components have been judged on the basis of the spacings required in the Standard for Industrial Control Equipment (UL 508), Sixteenth Edition, Paragraphs 34.1 and 193.1, which would covers the components themselves if submitted for unrestricted Listing.

These devices have also been evaluated to Canadian Standard C22.2 No. 14.

Conditions of Acceptability -

1. These devices should be used within their Recognized ratings as specified above. The rating specified depends on temperatures in the end-use. The 10A and 25A models were tested with heat sink model HE-54, Figure 3, and the 50A models were tested with heat *sink model HE-90, Figure 4.
2. Open type devices should be mounted in enclosures having adequate strength and thickness in the intended manner and with acceptable spacings being provided.
3. The screw type terminals have been evaluated for factory wiring only. The suitability of the connection should be determined in the end-use product.
4. *On motor rated devices, the Short Circuit test has been conducted at 5000A. For motor rated loads, the Solid State Relay shall be protected with a maximum 80A branch circuit protection device. In addition, model CWA4850 shall be protected with a 70A solid state protection fuse.
5. Consideration should be made for a temperature test in the end-product in order to determine the suitability of attached heatsink. From previous temperature testing, it has been shown that recorded temperatures on the output terminals measuring 60°C for 50 A models and 80°C for 25A models will not exceed the maximum allowable temperatures on the Optical Isolator and SCRs. However recording temperatures directly on these devices may provide a higher surrounding air limit.

<u>Component</u>	<u>Maximum Allowable Temperature</u>
Optical Isolator	100
SCR	105 (Limit based on Epoxy rating)