

File E190598
Project 09CA40418

November 2, 2009

REPORT

ON

COMPONENT - MAGNETIC MOTOR CONTROLLERS

Dongguan Sanyou Electrical Appliances Co. Ltd.
Guangdong, China

Copyright © 2009 Underwriters Laboratories Inc.

Underwriters Laboratories Inc. authorizes the above named company to reproduce this Report provided it is reproduced in its entirety.

Underwriters Laboratories Inc. authorizes the above named company to reproduce that portion of this Report consisting of this Cover Page through Page 3.

DESCRIPTION

PRODUCT COVERED:

USR, CNR - Across the line magnetic motor controllers, intended for use in industrial control applications, type DI1U, followed by -1, followed by 5 through 48, followed by D, followed by M, followed by blank or K, followed by -B, -F or blank, maybe followed by any special codes.

GENERAL:

These devices are open type magnetically operated, single-pole, single-throw (SPST), 1 Form A relays, with normally open contacts. These devices are for use in Industrial Control Applications.

ELECTRICAL RATINGS:

Type DI1U (Standard terminal type):

25 A, 250 V ac, Resistive, 6,000 cycles.
15 A, 250 V ac, General Use, 6,000 cycles.

Type DI1U-K (Protection Quick connect terminal type):

20 A, 250 V ac, Resistive, 100,000 cycles, at 85°C.
20 A, 250 V ac, General Use, 100,000 cycles, at 85°C.
25 A, 277 V ac, Resistive, 50,000 cycles, at 85°C.
25 A, 277 V ac, General Use, 50,000 cycles, at 85°C.
25 A, 250 V ac, Resistive, 50,000 cycles, at 85°C.
25 A, 250 V ac, General Use, 50,000 cycles, at 85°C.
1.5 Hp, 240 V ac, 100,000 cycles, at 85°C.
TV-10, 120 V ac, 25,000 cycles, at 40°C.
Pilot duty: A300, 120 V ac & 240 V ac, 30,000 cycles, at 85°C.

Coil Voltage: Any voltage between 5 V dc and 48 V dc.

Ambient Temperature:

Maximum 40°C for relay model DI1U series.
Maximum 85°C for relay model DI1U-K series.

MODEL NOMENCLATURE:

$$\frac{DI1U}{I} - \frac{1}{II} \frac{12}{III} \frac{D}{IV} \frac{M}{V} \frac{K}{VI} - \frac{F}{VII} - \frac{XX}{VIII}$$

I. Basic Designation

II. Number of poles

1: 1 Pole

III. Coil Voltage

Any voltage between 5 V dc and 48 V dc

IV. Coil Sensitivity

D: 0.9 W

V. Contact Form

M: 1 form A

VI. Terminal Type

Blank: Standard type

K: Protection quick connect terminal type

VII. Insulation System

B: Class 130(B)

F: Class 155(F)

Blank: Standard Type, Class 105(A)

VIII. Special Code

Blank: Standard type

Additional numbers or letters: Special requirement, which don't effect construction.

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

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

This component has been judged on the basis of the required spacings in the Standard for Industrial Control Equipment, UL 508, Seventeenth Edition, revision dated July 11, 2005, which would cover the component itself, if, submitted for unrestricted Listing.

Conditions of Acceptability -

1. A suitable enclosure should be provided for these devices in the end-product.
2. The relay terminals are not suitable for field wiring. The relay terminals are to be factory-wired only and the suitability of the connection (including spacings between factory connectors) shall be determined in the end product.
3. The Dust Cover have not been evaluated as an insulating barrier and should be considered in the end-use application with regards to spacing requirements to uninsulated live parts.
4. Models DI1U-K series are rated at an ambient temperature of 85°C.