

File E190598  
Project 08CA49010

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REPORT

ON

COMPONENT - MAGNETIC MOTOR CONTROLLERS

Dongguan Sanyou Electrical Appliances Co. Ltd.  
Guangdong, China

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## DESCRIPTION

## PRODUCT COVERED:

\* USR, CNR Component - Magnetic Motor Controllers, Type SMIH, followed by "-S" or "-SH", followed by -1, followed by 03 to 48, followed by "D" or "L," followed by "M" or Blank, followed by 1, 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) for 1 Form A relays with normally open contacts, single pole, double-throw (SPDT) and for 1 Form C relays, with normally open and normally close contacts. These devices are intended to be used in Industrial Control Applications.

## ELECTRICAL RATING:

## Contacts -

16 A, 250 V ac, Resistive, 100K cycles, N.O., 85°C.  
16 A, 250 V ac, Resistive, 100K cycles, N.C., 85°C.  
16 A, 250 V ac, General Use, 100K cycles, N.O., 85°C.  
16 A, 250 V ac, General Use, 100K cycles, N.C., 85°C.  
20 A, 120 V ac, Resistive, 6K cycles, N.O., 85°C.  
20 A, 120 V ac, Resistive, 6K cycles, N.C., 85°C.  
1/3 HP, 120 V ac, 30K cycles, N.O., 85°C.  
1/3 HP, 120 V ac, 30K cycles, N.C., 85°C.  
Pilot Duty: 3 A, 250 V ac, N.O., 85°C.  
                  1 A, 250 V ac, N.C., 85°C.  
8 A, 250 V ac, General Use, 100K cycles, N.O., 85°C.  
8 A, 250 V ac, General Use, 100K cycles, N.C., 85°C.  
TV-8, 240 V ac, 25K cycles, N.O., 80°C.  
TV-3, 240 V ac, 25K cycles, N.C., 80°C.

Coil - 3-48 V dc

Ambient Temperature: 85°C.

## Nomenclature -

<u>SMIH</u>	<u>S</u>	<u>1</u>	<u>12</u>	<u>D</u>	<u>M</u>	<u>Blank</u>	<u>F</u>	-	<u>XX</u>
I	II	III	IV	V	VI	VII	VIII		IX

I. Series Designation

II. Protective construction

SH: Sealed type washable  
S: Sealed type

III. Number of Poles

1: 1 Pole

IV. Coil Voltage

Any Voltage between 3 V dc through 48 V dc

V. Coil Sensitivity

D: Standard coil sensitivity, 0.72 W  
L: High coil sensitivity, 0.54 W

VI. Contact Form

Blank: 1 Form C  
M: 1 Form A

VII. Contact Material

Blank: AgSnO<sub>2</sub>

VIII. Insulation System

B: Class 130 (B)  
F: Class 155 (F)  
Blank: Standard Type

IX. Special Code

Additional numbers or letters, which don't affect 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.

USR indicates investigation to the Standard for Industrial Control Equipment, UL 508, 17th Edition, revision dated September 19, 2008.

CNR indicates investigation to the Standard for Industrial Control Equipment, CAN/CSA C22.2 No. 14-05, 10th Edition, revision dated April 2008.

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 September 19, 2008, 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.
3. These devices are suitable to be used in an ambient temperature of maximum 85°C.
4. The Dust Cover has not been evaluated as insulating barrier and should be considered in the end-use application with regards to spacing requirements to uninsulated live parts.
5. This device is suitable to be used with conductor rated at maximum 104°C, connected to the contact terminals.