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REPORT

ON

COMPONENT - MOTOR CONTROLLERS, MAGNETIC

Dongguan Sanyou Electrical Appliances Co., Ltd.
Guangdong, China

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DESCRIPTION

PRODUCT COVERED:

USR, CNR - Motor Controllers, Industrial control, Type SFK -1, followed by 05 through 24; followed by DM, followed by P or blank, followed by -B, -F, -B-H, or -F-H or blank, maybe followed by any special codes excluding P, -B, -F or -H.

GENERAL:

This is an open type device, magnetically operated, single-pole, single-throw (SPST), Form A relays, with normally open contacts, intended for industrial applications.

ELECTRICAL RATINGS:

Models SFK-1vvDMp, SFK-1vvDMp-B or SFK-1vvDMp-F with standard contact gap:

Contact: 20 A, 250 V ac, Resistive, 6k cycles, at 40°C.
1 HP, 120 V ac, 100k cycles, at 80°C.
2 HP, 240 V ac, 100k cycles, at 80°C.
25 A, 277 V ac, Resistive, 100k cycles, at 80°C.
25 A, 277 V ac, General use, 100k cycles, at 80°C.
25 A, 250 V ac, Resistive, 100k cycles, at 80°C.
25 A, 120 V ac, Resistive, 100k cycles, at 80°C.
25 A, 250 V ac, General use, 100k cycles, at 80°C.
25 A, 120 V ac, General use, 100k cycles, at 80°C.
20 A, 250 V ac, Resistive, 100k cycles, at 80°C.
20 A, 120 V ac, Resistive, 100k cycles, at 80°C.
20 A, 250 V ac, General use, 100k cycles, at 80°C.
20 A, 120 V ac, General use, 100k cycles, at 80°C.
TV-10, 120 V ac, 25k cycles, at 40°C.
2 HP, 265 V ac, 100k cycles, at 80°C.

Models SFK-1vvDMp-B-H or SFK-1vvDMp-F-H with extra contact gap:

Contact: 22 A, 250 V ac, Resistive, 30,000 cycles, at 80°C.
22 A, 250 V ac, General use, 30,000 cycles, at 80°C.

Models SFK-1vvDMp-H with extra contact gap (Coil Class A insulation):

Contact: 22 A, 250 V ac, Resistive, 30,000 cycles, at 70°C.
22 A, 250 V ac, General use, 30,000 cycles, at 70°C.

Rated Coil Voltage: 5 V dc through 24 V dc.

Ambient Temperature rating: as indicated in contact ratings.

MODEL NOMENCLATURE:

*SFK	-	1	12	D	M	P	-	F	-	XX
I		II	III	IV	V	VI		VII		VIII

I. Basic Model

II. Number of Poles

1: Single Pole

III. Coil Voltage

Any voltage between 05 V dc through 24 V dc

IV. Coil Sensitivity

D: 0.9 W for standard gap, 1.4 W for extra contact gap

V. Contact Form

M: 1 Form A

VI. Terminal Type

P: PWB Terminal
Blank: Solder and PWB Terminals

VII. Insulation System

B: Class 130(B)
F: Class 155(F)
Blank: Standard Type & Standard contact gap
B-H: Class 130 (B) with extra contact gap, min. 1.5 mm
F-H: Class 155(F) with extra contact gap, min.1.5 mm

*

VIII. Special Code

Additional numbers or letters, which don't effect construction, excluding P, -B, -F or -H (exclusion to avoid confusion with codes VI-VIII).

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

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

USR - Indicates investigation to United States Standard for Industrial Control Equipment, UL 508, Seventeenth Edition, latest revision date September 19, 2008.

CNR - Indicates investigation to Canadian Standard for Industrial Control Equipment, CSA C22.2 No. 14, Tenth Edition, latest revision date April 2008.

CONDITIONS OF ACCEPTABILITY -

1. 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.
2. Contact gap of a representative sample of Models SFK-1vvDMp-H, SFK-1vvDMp-B-H and SFK-1vvDMp-F-H was measured and found to be 1.5 mm.
3. For Models SFK-1vvDMp, SFK-1vvDMp-B or SFK-1vvDMp-F with standard contact gap, the Endurance Test of rating "2 HP, 265 V ac, 100k cycles, at 80°C" was conducted as following method:
First 1000 cycles: 1/2 sec ON, 1/2 sec OFF;
Following 99,000 cycles: 1 sec ON, 9 sec OFF.
The suitability shall be determined for the end use application.