

File E175531
Project 09CA06316

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REPORT

on

PROGRAMMABLE CONTROLLERS

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DESCRIPTION

PRODUCT COVERED:

USL, CNL - Listed Open Type, Programmable Controller, cat. no. SPIDER II followed by 8TX, may be followed by a slash and a number and FX, may be followed by a dash and two letters, may be followed by EEC. Cat. no. Spider II Giga 5T, may be followed by a slash and a number and a S, may be followed by EEC.

GENERAL:

This device is an industrial Ethernet Rail Switch for use in industrial automation applications. It is microcomputer-based and communicates via interfaces through wire or optical port, to be supplied by a Class 2 source only.

ELECTRICAL RATINGS:

Main Supply Voltage: 9.6...32 Vdc, Class 2
Input Current: 880...250 mA

Max. surrounding air temperature: 60°C
For modules signed EEC: 70°C

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

CNL - Indicates investigation to Canadian National Standard(s)
C22.2 No. 142-M1987.

USL - Indicates investigation to United States Standard UL 508,
(Industrial Control Equipment).

Note: CNL = Canadian National Standards - Listed.
USL = United States Standards - Listed.

CONSTRUCTION DETAILS:

General - The details of construction are covered in the following photographs and accompanying descriptive pages and illustrations.

Corrosion Protection - All parts of corrosion resistant materials are painted or plated as corrosion protection.

Class 2 circuit - The investigation has been conducted under consideration of the Class 2 requirements. Regarding to table 32.0 of UL 508 no requirements to spacings for this device.

Any kind of Printed Wiring Board (ZPMV2/8) - rated min. 94V-2, 125°C can be used.

Installation Instructions - Shall be provided and include a wiring diagram. It must include a statement "Only for connection with a Class 2 power supply" or equivalent.

Warning Markings - See Section General for details.

Marking - Markings may be provided in French or English for Canadian markets. Ink-stamped label permanently secured to the device, including Listee's name or File Number, device catalog number, the electrical ratings and max. ambient temperature. In addition diagrams and instructions for installation shall be provided. Markings in the instruction manual:

- (i) Use 60/75°C or 90°C copper wire only" for every model of this section.
- (ii) Tightening torque for field wiring terminals.
- (iii) "For Use in a pollution degree 2 environment" or equivalent.
- (iv) "Use Class 1 wire only" or equivalent.

"For Use In Class 2 Circuits" or equivalent.

NOMENCLATURE:

The significance of the alphanumeric marking system is explained as follows:

NOMENCLATURE BREAKDOWN:

SPIDER II	8	TX	/2	FX-SM	EEC
I	II	III	IV	V	VI

NOMENCLATURE BREAKDOWN:

I: SPIDER II SPIDER family rail switch - generation II
 SPIDER II Giga SPIDER family rail switch - generation II,
 gigabit ports

II: No. of ports

III: Port type:

TX - Ethernet twisted pair 10/100Base TX, RJ45 sockets

T - Ethernet twisted pair 10/100/1000Base T, RJ45 sockets

IV: Optional ports:

/1 - additional mounted no. of ports: 1

/2 - additional mounted no. of ports: 2

V: Optional extensions (port type):

S - SFP slot, 1000 Mbits/s

FX - fiberoptic port, Duplex SC connector, multimode

FX-SM - fiberoptic port, Duplex SC connector, single mode

FX-ST - fiberoptic port, Duplex ST connector, multimode

VI: Optional extension:

EEC - extended temperatur range

MODEL SPIDER

FIG. 1, 2, 3, 4

General - Figure 1..4 show the rail switch series SPIDER and are for reference use only. Due to the use of Class 2 Source only, no evaluation of components was considered necessary except of the following:

1. Terminal Block (XCFR2/8), manufactured by RIA CONNECT INC, Type 313 NR. 313131XX, UG D, rated 300 V, 12 A, suitable for field wiring.