

File E185611
Project 98NK7104

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REPORT

on

PROCESS CONTROL EQUIPMENT

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Winona, MN

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DESCRIPTION

PRODUCT COVERED:

USL, CNL Process Controller, Model F4; followed by the letter S, D
or *P; followed by the letters H or L; followed by the letter
C, E, F or K; followed by the letter A, C, E, F or K;
followed by a letter or number or A, C, F or K; followed by
the letter or number A, C, K, F, any letter or number or 0
or 6; followed by the number 0, 1 or 2; followed by any
three letters or numbers. Auxiliary input or output
modules, Models Z100-0745, followed by -0001 through -0007.

GENERAL CHARACTER:

These devices are process controllers intended to control the manufacturing process.

The control of the desired process is obtained through one or two remotely installed output units. Non-optional "input units" are remotely installed in the event of input module failure. The output units are available with various functions and/or electrical ratings which are inserted into sockets provided on the output printed wiring board. These devices are intended to be panel mounted and only the front face (bezel) is considered an enclosure. The front face and gasket were evaluated to the requirements in UL 50, the Standard for Enclosures, and rated Type 4X indoor use only.

RATINGS:

Electrical -

- * Input - (Models with second suffix H) 100 to 240 V ac/V dc, 50-60 Hz, 39 VA maximum.
- * (Models with second suffix L) 24 to 28 V ac/dc, 50/60 Hz, 20 VA max.

Control Input/Output - See Designation System

<u>Module Name</u>	<u>Module No.</u>
Solid State Relay Output	Z100-0745-0001
Open Collector Output	Z100-0745-0002
Process Output	Z100-0745-0003
Dual Universal Auxiliary Input	Z100-0745-0004
Single Universal Auxiliary Input	Z100-0745-0005
Auxiliary Retransmit Output	Z100-0745-0006
Mechanical Relay Output	Z100-0745-0007

Temperature - Maximum operating ambient 55°C for Models F4S and F4D Series. Maximum operating ambient, 65°C for Model F4P Series only.

Environmental Protection - NEMA 4X, IP65.

DESIGNATION SYSTEM: Series F4 Model Breakdown Structure

F4	
Series F4	
Controller Type	
S - Single Channel Ramping Control, 4 Event Inputs, EIA232/485 Comms, 8 Event Outputs, 2 Alarms, 40 Files, 256 Steps	
D - Dual Channel Ramping Control, 4 Event Inputs, EIA232/485 Comms, 8 Event Outputs, 2 Alarms, 40 Files, 256 Steps	
P - Single Channel Temperature Process Control, 2 Alarms, EIA232/485 Comms, 4 Event Inputs	
Power Supply	
H - 100-240 V ac/V dc	
*L - 24-28 V ac/V dc	
Output 1A	
C- Open Collector/Switched DC, Class 2	
E- Mechanical Relay, 2A, 240 V ac, Form C (F4P only), Resistive	
K- Solid State Relay, 0.5A, 240 V ac, Form A, Resistive	
F- Process, 0-5, 0-10 V dc, 0-20, 4-20 mA, Class 2	
Output 1B	
A- None	
C- Open Collector/Switched DC, Class 2	
E- Mechanical Relay, 2A, 240 V ac, Form C (F4P only), Resistive	
K- Solid State Relay, 0.5A, 240 V ac, Form A, Resistive	
F- Process, 0-5, 0-10 V dc, 0-20, 4-20 mA, Class 2	
Software (F4S and F4P only)	
X- Any Letter or number	
Output 2A (F4D only)	
A - None	
C- Open Collector/Switched DC, Class 2	
K- Solid State Relay, 0.5A, 240 V ac, Form A, Resistive	
F- Process, 0-5, 0-10 V dc, 0-20, 4-20 mA, Class 2	
Auxiliary Input Module (F4P or F4S only)	
0- None	
6- Dual Universal Inputs, Class 2	
Output 2B (F4D or F4P)	
A- None (F4D only)	
C- Open Collector/Switched DC, Class 2 (F4D only)	
K- Solid State Relay, 0.5A, 240 V ac, Form A, Resistive (F4D only)	
F- Process, 0-5, 0-10 V dc, 0-20, 4-20 mA, Class 2 (F4D only)	
X- Any letter or number. Enhanced control/Operation (F4P only).	
Auxiliary Retransmit Module	
0- None	
1- Single Retransmit Output, 0-5, 0-10 V dc, 0-20, 4-20 mA, Class 2	
2- Dual Retransmit Outputs, 0-5, 0-10 V dc, 0-20, 4-20 mA, Class 2	
Language Option	
1-English	
2-German	
3-Spanish	
4-French	
Display/Custom Options	
XX- Any 2 letters or numbers	