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REPORT

ON

INDUSTRIAL CONTROL EQUIPMENT

COMPONENT - FLOAT AND PRESSURE OPERATED MOTOR CONTROLLERS

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D E S C R I P T I O N

PRODUCT COVERED:

USR, CNR - Open Type, Industrial Control Equipment, Component - Float and Pressure Operated Motor Controllers, Pressure Switches,

"XP Series":

- Model No. XP, may be followed by -L.
- Model No. XP1, followed by 0, 1, followed by 0, 1, 2, **5** may be followed by R, may be followed by -L.
- Model No. XP2, followed by 0, 1, followed by 0, 1, 2, **5** may be followed by A, may be followed by -L.

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

- USR - Indicates investigated to United States Standard for Industrial Control Equipment, UL508 (Seventeenth Edition).
- CNR - Indicates investigated to Canadian National Standard for Industrial Control Equipment, C22.2 No.14-95

Note: USR = United States Standards - Recognized
CNR = Canadian National Standards - Recognized

GENERAL:

The devices covered by this report are pressure-operated switches intended for use in steam generators and any pressure control systems, at a maximum ambient temperature of 125°C. This device has been subjected to 100,000 cycles of operation and is intended for regulating use only. The pressure connection is made through a 1/4 inch or 1/8 inch male thread provided on the housing of the device.

Since these devices are intended for use in steam generators and any pressure control systems, their actuation consists of a slow increase in the applied pressure until the actuating pressure is reached, and a slow decrease of the applied pressure to the reset pressure.

RATINGS:

1) Electrical Ratings -

Pressure Switch Model Nos.	Electrical Ratings (covered by Micro-Switch ratings)
XP XP1xxx XP2xxx	15 A 125 / 250 Vac (100,000 cycles)
XP-L XP1xxx-L XP2xxx-L	0.1 A 125 / 250 Vac (100,000 cycles)

2) Operating Ambient Temperature - 125°C max

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3. Operating Pressure Ratings -

3a) Operating Pressure Range:
- Mod.Nos. XP1(2)x0(2)**(5)**xx - 0.2 ÷ 6.0 Bars (2.9 ÷ 87.0 PSI)
- Mod.Nos. XP1(2)x1xx - 0.2 ÷ 10.0 Bars (2.9 ÷ 145.0 PSI)

3b) Fixed Differential Pressure: ≈ 0.2 ÷ 0.8 Bars (≈ 2.9 ÷ 11.6 PSI)

3c) Maximum Pressure:
- Mod.Nos. XP1(2)x0(2)**(5)**xx - 6.0 Bars (87.0 PSI)
- Mod.Nos. XP1(2)x1xx - 12.0 Bars (174.0 PSI)

4) Hydraulic-Nipple - "Tightening Torque Value:

- Polymeric Nipple - 0.5 Nm (0.05 Kg m)

- Metal Nipple / Metal Adapter - 8.8 Nm (0.90 Kg m)

NOMENCLATURE BREAKDOWN:

Model No.:	XP	1	0	0	R	-L
	I	II	III	IV	V	VI

I. Basic switch Series, XP

II. Switch Family Number

No digit = Basic model with one micro-switch
1 = Device with one micro-switch
2 = Device with two micro-switches

III. Variations for End-use Applications

0 = Basic model
1 = Model with micro-switch rotated 180°

IV. Switch Housing Base Materials

0 = Housing metal part constructed of Brass
1 = Housing metal part constructed of Stainless Steel
2 = Housing polymeric part constructed of R/C Plastic (QMFZ2)
5 = Brass / Polymeric Housing Base provided with an in-let "Rapid-coupling" connector

V. Pressure Control Means

No digit = Basic control means
A = Automatic control means
R = Adjustable control means

VI. Electrical Ratings

No digit = 15 A, 125 / 250 Vac
-L = 0.1 A, 125 / 250 Vac