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REPORT

on

COMPONENT - MOTOR CONTROLLERS, FLOAT- AND PRESSURE-OPERATED - COMPONENT

MA-TER SRL  
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## DESCRIPTION

## PRODUCT COVERED:

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

## "XP6 Series":

- Model No. XP6, followed by 0, followed by 0, 1, 2, 5.
- **Model No. XP61.**

## 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.14-05

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

## GENERAL:

The devices covered by this Report are pressure-operated single-pole switches intended for the direct command of single-phase circuit, indicated for use in steam generators and any pressure control systems, at a maximum operating ambient temperature of 125°C. This device has been subjected to 6,000 cycles of operation and it is intended for regulating use only. The pressure connection is made through an in-let 1/4 inch or 1/8 inch male thread (ISO7 or ISO228 or NPT) connector, or through an in-let "Rapid-coupling" connector, provided on the housing-base 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 "off" pressure is reached. The "off" pressure is adjustable, in the pressure range, acting on the regulation screw.

The contact will close if the applied pressure slow decrease under the "on" reset pressure value  $P_{on} = P_{off} - P_{diff}$ .

## RATINGS:

## 1. Electrical Ratings -

Pressure Switch Model Nos.	Electrical Ratings (covered by Micro-Switch ratings)
"XP6 Series"	5 A 125 / 250 Vac (6,000 cycles)

**Apart the model XP61 which is maximum rated 1A 125 / 250 Vac (6000 cycles).**

## 2. Environmental Ratings -

- Operating Ambient Temperature - 125°C max (**max. 85°C for model XP61**)

## 3. Operating Pressure Ratings -

3a) Operating Pressure Range: 0.05 ÷ 6.0 Bars (0.7 ÷ 87.0 PSI)

3b) Fixed Differential Pressure: 0.6 Bars (8.7 PSI)

3c) Maximum Pressure: 6.5 Bars (94.3 PSI)

## 4) Threaded Connector - Hydraulic-Nipple / "Tightening Torque" Ratings:

a) Polymeric Nipple - 0.5 Nm (0.05 Kg m)

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

Refer to Ills. 1 for details.

## NOMENCLATURE BREAKDOWN:

Model No.:	<u>XP6</u>	<u>0</u>	<u>0</u>
	I	II	III

I. Basic Pressure Switch Series, XP6

II. Variations for End-use Applications

- 0 = Basic Pressure Switch model.
- 1 = Connected by connector type Rast 2,5 model.**

III. Switch Housing Base Materials (**only for models XP60x**)

- 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