

**Part 1 General**

**1.1 REFERENCES - GENERAL**

- .1 Equipment, Products and Execution must meet all requirements detailed in Section 29 05 00.

**Part 2 Products**

**2.1 MISCELLANEOUS PANEL DEVICES**

- .1 Pilot Lights
  - .1 Provide LED transformer type pilot lights for extended lamp life, oil tight, push to test, complete with appropriate colour lenses. Normal colours used are run=red, stop=green, fault=amber. Refer to Division 26 for additional information
- .2 Terminals
  - .1 Provide strap screw type terminal blocks rated for 600 V.
  - .2 Identify each terminal block within an enclosure with a unique machine printed terminal block number. Cabinet chassis grounding terminal blocks to be identified by the electrical ground symbol.
  - .3 Connections to screw terminals to be locking fork tongue insulated crimp type wire connectors.
  - .4 Terminals to be Weidmuller or approved equal in accordance with B6.
  - .5 Provide a group of terminals for each of 120 VAC hot and neutral and 24 VDC positive and negative power. Distribution wiring to have a thermal magnetic circuit breaker upstream of all major blocks of loads, adequately sized to protect the connected load while not causing nuisance tripping.
  - .6 Provide Weidmuller disconnect type terminal blocks for each load or loop powered from the marshalling panels.
- .3 Nameplates
  - .1 Refer to Section 29 05 00

**2.2 Industrial Ethernet Switches**

- .1 Install rack mounted Ethernet Switch in separate network cabling termination cabinet mounted next to control panel located in valve chamber building meeting the following:
  - .1 5 - 10/100 Base T(x) RJ45 ports
  - .2 2 – 1000SX multimode port
  - .3 SC connectors
  - .4 Input power shall be 120 VAC.
  - .5 Switch shall be Ruggedcom RSG2200 or approved equal.

- .2 Install DIN rail mounted Ethernet Switch in exiting control panel located in pumphouse building meeting the following:
  - .1 2 - 10/100 Base T(x) RJ45 ports
  - .2 2 – 1000SX multimode port
  - .3 SC connectors
  - .4 Input power shall be 120 VAC.
  - .5 Switch shall be Ruggedcom RS900G or approved equal.
- .3 Switches shall comply with IEEE 802.3, 802.3u, 802.3x, 802.1D, IEC 61950-3.

### **2.3 Fibre Termination Panel**

- .1 Fibre termination panel suitable for the termination of one (1) 6-strand multimode fibre optic cables.
- .2 Termination panel shall be rack mounted, hinged front and rear doors, complete with grounding kit and cable strain relief.
- .3 Install in network cabling termination cabinet
- .4 Leviton DP-525 or approved equal.

### **2.4 Cat 5E Termination Panel**

- .1 Rack mounted termination panel suitable for the termination of 24 Cat 5E cables.
- .2 Install in network cabling termination cabinet.
- .3 Connect to PLC Ethernet module.

## **Part 3 Execution**

### **3.1 REFERENCES - GENERAL**

- .1 Refer to Section 29 05 00

**END OF SECTION**