

## **1. GENERAL**

### **1.1 References - General**

- .1 Equipment, Products and Execution must meet all requirements detailed in Section 17010.

## **2. PRODUCTS**

### **2.1 Miscellaneous Panel Devices**

#### **.1 Pilot Lights**

- .1 Provide pilot lights of the transformer type for extended lamp life, oil tight, push to test, complete with appropriate colour lenses. Normal colours used are run=red, stop=green unless otherwise depicted elsewhere. Refer to Division 16 for additional information

#### **.2 Terminals**

- .1 Provide strap screw type terminal blocks rated for 600 volts.
- .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 Wiedmuller or approved equal.
- .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 Wiedmuller disconnect type terminal blocks for each load or loop powered from the marshalling panels.

#### **.3 Nameplates**

- .1 Refer to Section 17010 for nameplate specification.

### **2.2 Signal Current Isolator**

- .1 Isolator to provide galvanic isolation of milliampere transmission signals from transmitters with inadequately isolated output circuits.
- .2 Isolator to be housed in a NEMA 250, Type 4/7 conduit body and derive its operating power from the signal input circuit.

- .3 Input and output signals to be 4 to 20 mA, with an error not exceeding 0.1 percent of span. Input resistance will not exceed 550 ohms with an output load of 250 ohms.
- .4 Isolator to be Moore Industries.

### **2.3 Intrinsic Safety Barriers and Relays**

- .1 Provide intrinsic safety barriers where required for two-wire transmitters of the active, isolating, loop powered type; MTL Type MT3042, Stahl 9005/01-252/100/00, P+F ZG series, or equal.
- .2 Provide dual type intrinsic safety barriers for process switches; MTL 787, Panalarm 201-BR2.
- .3 Intrinsic safety relays to be Gems, or Warrick.

## **3. EXECUTION**

### **3.1 References - General**

- .1 Refer To Section 17010, Part 3.

**END OF SECTION**