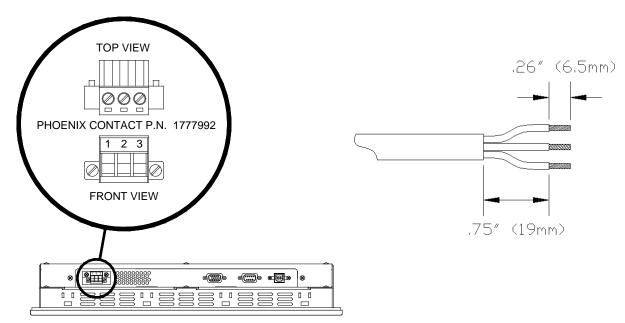
## Connecting Power to a Nematron ePC-Series, ePC-Plus, M-Series or nPC-Series Unit

The ePC-Series, ePC-Plus, nPC-Series and M-Series units are powered from 100-240 VAC, 50/60 Hz or optionally from 24 VDC (18-36 VDC). *Damage will occur if 100-240 VAC power is connected to a unit equipped with the 24 VDC input power option.* ePC-Series, ePC-Plus, and nPC unit's equipped with the 24 VDC option will have a "-DC" suffix in their model number such as ePC1200-N270-1GB-XP-DC or nPC100-N270-2GB-XP-DC. M-Series units equipped with the 24 VDC option will have a "-24" in their model number such as M1200T-24.

Because many of these units are UL 1604 listed for Hazardous Location use (Class I division 2), the units do not have a power switch for switching off supplied power. Consideration should be give to the installation of an appropriately rated external power switch if the application requires powering off the unit.

Power is connected to the units through a removable Phoenix Contact plug (Phoenix Contact P.N. 1777992) that allows for screw termination of field wiring. This plug is included with each unit and is keyed to prevent installation in a unit with the wrong input voltage rating. When Field Wiring to these terminals the use of 18 AWG or greater (12 AWG maximum) copper wire with 60°C or 60/75°C wire insulation and the terminal tightening torque of 7.0 lb/in. (0.79 Nm) is required. The terminal screws are shown in "Top View" below. Connect the field wiring according to the appropriate voltage in the table below. Strip the wire insulation back on each conductor 6.5 mm (0.26 in) and assure that the remaining wire is twisted together, not frayed, and clean. If an outer jacket over each conductor is utilized then strip the outer jacket back an additional 19.0 mm (0.75 in) as shown in figure below. When installing the conductors take care that there are not any stray strands of wire that can contact an adjoining connection. Tinning of each lead can be utilized to prevent frays if desired.

Optionally the included protective cover can be utilized to prevent electrical shocks when handling the power connector and provide strain relief for each conductor connection (see the following section for installation instructions). After the connections are made, make sure the plug retention screws (the two screws shown in the "Front View" below) are securely tightened. This will prevent the plug from pulling out. The use of these screws is mandatory when the unit is utilized in applications requiring hazardous locations approvals.



| 1 2 3  FRONT VIEW | PIN NUMBER | 100 VAC - 240 VAC INPUT | 18 VDC – 36 VDC INPUT   |
|-------------------|------------|-------------------------|-------------------------|
|                   | 1          | AC Line Input           | + DC Input              |
|                   | 2          | AC Neutral Return       | - DC Return             |
|                   | 3          | Protective Earth Ground | Protective Earth Ground |

## Protective Cover Installation (Optional if desired)

- Step 1: Gather the parts of the protective cover; top shell, bottom shell, label insert, and wire tie. The picture shows wire tie (top), label insert (right), bottom shell (left), and top shell (lower right).
- Step 2: Insert your pre-wired connector (with the screws facing up) into the bottom shell. (See manual for cable wiring instructions).
- Step 3: Insert the wire tie from the bottom shell, loop around the cable and come back out of the opposite hole in the bottom shell.
- **Step 4:** Tighten the wire tie around the cable and the bottom shell.
- Step 5: Seat the top shell onto the bottom as shown. Insert label strip (if desired) in slot on top shell and bottom shell.
- **Step 6:** Snap the top and bottom shells together.







