

Tech Note 102 Powering - 24 VDC Eddy Probes

All Eddy Probes or NCPUs (Non-Contacting Pickups) System's, Drivers or Proximitors in common use today require -24 VDC power. In transmitter based PLC and DCS monitoring systems with standard +24 VDC powering this requires an additional power supply be added to create -24 VDC. The +24 VDC wires cannot simply be reversed, as this will create a direct short across the power supply.

The following diagram shows how to wire two (2) 24 VDC power supplies to create both (+) and (-) voltages with a shared common. Although not required the power supplies should be as close to each other as possible to prevent differences in ground potential.

When ordering a CMCP500 Series Monitoring System using Eddy Probes order two (2) 24 VDC supplies. Wiring will be completed to supply both (+) and (-) 24 VDC in our integration shop.

Examples of Voltage and Amperage Requirements:

1. Eddy Probe Proximitors and Drivers, -24 VDC, 50 mA each.
2. CMCP540 or 545 Transmitters, +24 VDC, 50 mA each.
3. CMCP540A or 545A Monitors, +24 VDC, 100 mA each.

