PLC-5 Backup Communication and Expansion Modules (1785-BCM, -BEM)

The PLC-5 Backup-Communication Module (cat. no. 1785-BCM) helps increase the fault tolerance of Allen-Bradley PLC-5 programmable controller systems controlling I/O on a Universal Remote I/O link by providing backup of the PLC-5 processor used in programmable controller systems.

Each PLC-5 processor is located in its own local 1771 I/O chassis with its own 1785-BCM module and power supply. A high-speed serial link keeps the secondary PLC-5 processor updated. Upon detection of a fault, control of the DH+ and Universal Remote I/O links switches from the primary PLC-5 processor to the secondary PLC-5 processor in less than 50ms.

While the secondary processor continues control of the remote I/O, the faulted component (PLC-5 processor, power supply) of the primary system can be replaced without shutting down the I/O.

The 1785-BCM module provides switching for two communication networks: Universal Remote I/O or DH+. However, the PLC-5/40 and PLC-5/60 processors each have four ports for DH+ or Universal Remote I/O links. To configure a backup system with more than two links requires a 1785-BCM module plus a Backup-Expansion module (1785-BEM) for each. The 1785-BEM module provides the capability to switch two additional links between the primary and the secondary processors.

Specifications

Class I Div 2 Hazardous

Module location	1771 I/O chassis (local)
Backplane current 1785-BCM 1785-BEM	 1A @ 5V dc 0.6A @ 5V dc
Wiring arm	1771-WG (included)
Customer relay	0.25A @ 24V dc (resistive)
Environmental conditions	• Operational temperature: 0 to 60° C (32 to 140° F) • Storage temperature: -40 to 85° C (-40 to 185° F) • Relative humidity: 5 - 95% (without condensation)
Shock	Operating: 30g peak acceleration for 11 ± 1ms × duration Non-operating: 50g peak acceleration for 11 ± 1ms duration
Vibration	1 g @ 10 to 500 Hz 0.012 inches peak-to-peak displacement

Typical Configuration

