

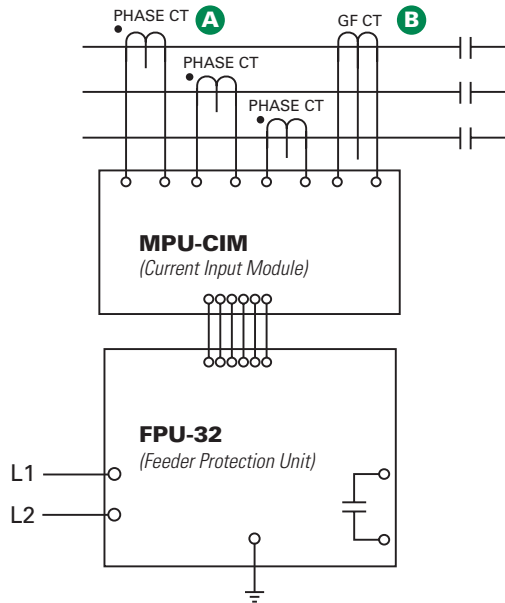
FPU-32 SERIES

Feeder Protection Unit



NOTE: The FPU-32 consists of the Feeder Protection Unit (pictured above) and the MPU-CIM Current Input Module (not pictured).

Simplified Circuit Diagram



Ordering Information

CATALOG/ SYSTEM NUMBER	COMMUNICATIONS
FPU-32-00-00	TIA-232
FPU-32-01-00	TIA-232 & RS-485
FPU-32-02-00	TIA-232 & DeviceNet™
FPU-32-04-00	TIA-232 & Ethernet

NOTE: One of the following is required: MPU-CIM-00-00 Current Input Module, or MPU-CTI-RT-00 Current Input Module with ring-torque terminals.

ACCESSORIES	REQUIREMENT	PAGE
Phase CTs	Recommended	49
Ground-Fault CT	Optional	49
MPU-16A-Y92A-96N	Optional	53

Description

The FPU-32 Feeder Protection Unit provides integrated protection, metering, and data-logging functions. It is an excellent choice for retrofitting and upgrading older relays because of its compact size and ability to use existing CTs. The FPU-32 is used to protect distribution feeders in processing, manufacturing, petroleum, chemical, and wastewater treatment facilities.

Features & Benefits

FEATURES	BENEFITS
IEC & IEEE Overcurrent Protection Curves	Definite and inverse time settings for system coordination; prevents catastrophic failures
Two Setpoint Groups	Create distinctive settings for maintenance or for two different loads
Reduced Overcurrent Mode	Maintenance mode setting to reduce the risk of arc-flash hazards
Data Logging	On-board 100-event recorder and remote data logging helps with system diagnostics
Overload	Prevents insulation failures and fires; extends motor life
Phase Loss/Phase Reverse (Current)	Detects unhealthy supply conditions
Unbalance (Current)	Prevents overheating due to unbalanced phases
Communications	Remotely view measured values, event records & reset trips

Accessories



Phase Current Transformers
Phase CTs are required to detect phase currents.



Ground-Fault Transformer
Zero-sequence current transformer detects ground-fault current. Available with 5-A and 30-A primary ratings for low-level pickup.

For detailed wiring diagram, see page 85.

Specifications

Protective Functions (IEEE Device Numbers)	Overload (49, 51)	Definite-time overcurrent (50, 51)
	Phase sequence (46)	Inverse-time overcurrent (50, 51)
	Unbalance (46)	Ground fault (50G/N, 51G/N)
	Phase loss (46)	RTD/PTC temperature (49)
Input Voltage	65-265 Vac, 30 VA; 80-275 Vdc, 25 W	
Power-Up Time	800 ms at 120 vac	
Ride-Through Time	100 ms minimum	
24-Vdc Source	400 mA maximum	
AC Measurements	True RMS and DFT, Peak 32 samples/cycle and positive and negative sequence of fundamental	
Frequency	50, 60 Hz	
Output Contacts	Three Form C	
Certification	CSA certified to US and Canadian standards	
Communications	TIA-232 (standard); TIA-485, DeviceNet™, Ethernet (optional)	
Analog Output	4-20 mA, programmable	
Conformally Coated	Standard feature	
Warranty	10 years	
Mounting		
Control Unit	Panel (standard) Surface (with MPU-32-SMK converter kit)	
Current Input Module	DIN, Surface	