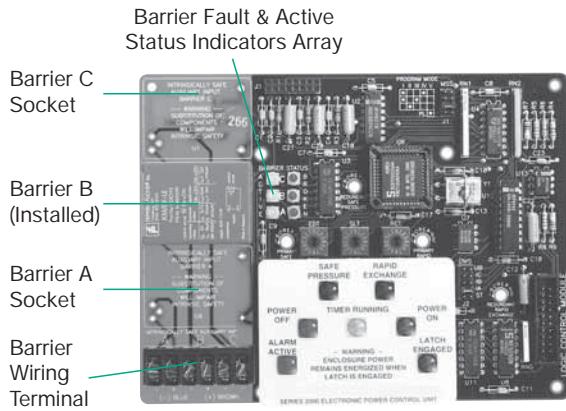


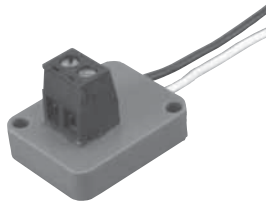
System Accessories

Type X EPCU Accessories

Model: ISB, SRM, NJ..., L, RP1 & RP2



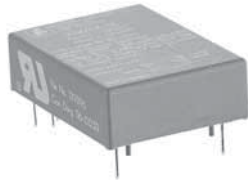
Typical EPCU Logic Module



Model SRM-4000
Switch Resistor Module



Model NJ...
NAMUR Proximity Sensor



MODEL ISB
Intrinsic Safety Barrier

Model ISB Operation

Barrier A (ISB-1) - when customer's switch opens

Disables start-up & Rapid Exchange® cycle, deenergizes enclosure power and alarm relays, Functions parallel to safe pressure switch

Typical Interface Devices

Door contact switch, remote pressure switch, emergency shutdown switch, gas detector

Barrier B (ISB-2) - when customer's switch opens

Disables Rapid Exchange® cycle, Functions parallel to Rapid Exchange® switch

Typical Interface Devices

Enclosure protection vent flow switch, remote pressure switch

Barrier C (ISB-3) - when customer's switch closes

Energizes Rapid Exchange® solenoid valve

Typical Interface Devices

Purgeable instrument access door switch, gas detector, temperature switch

Model ISB Description

Model ISB intrinsic safety barriers are factory installed and programmed galvanically isolated transformers that receive remote control signals to operate the EPCU (electrical power control unit) on Type X Systems. The EPCU logic module can accommodate up to three model ISB transformers, known as ISB-1, 2 and 3, located along the left side. The transformers are designed to function in conjunction with a customer furnished switch and Pepperl+Fuchs Model SRM-4000 switch resistor module, or a Pepperl+Fuchs model NJ... Proximity Detector. Each transformer develops an isolated low power signal, to create a two wire closed loop circuit. Operational status of each barrier is indicated by a pair of LEDs positioned to the left of ISB. The green LEDs show active (closed switch) status, and the red LEDs show barrier or wiring fault status. Isolated conduit entries, a solid body wireway with snap cover and lexan wiring partitions, provide a fully isolated customer wiring path to a six point terminal strip which provides input and output connections to each barrier. All barriers can be reprogrammed by the factory to duplicate other barrier functions, upon request.

Model SRM Description

Model SRM-4000 switch resistor module is an interface device that must be fitted between a customer's switch and Pepperl+Fuchs ISB barrier, to activate or deactivate the intended barrier. The Module consists of a ten-foot cable, a small plastic case and a 6" two-wire lead that is intended for the switch. When installed correctly, the module allows the ISB transformer to detect three distinct conditions as follows: (1) the switch is open, (2) the switch is closed and (3) the wire is broken. The long cable end of the module is typically installed through a dedicated entry on the side of the EPCU, and is routed to the customer's switch. The cable can be installed in free air tray or conduit, and must be isolated from all other power sources. The switch or relay contact that provides the switch signal must be fully isolated from all other power sources.

Model NJ... Sensor Description

The model NJ... NAMUR proximity sensor is offered as an alternative to using the model SRM-4000 switch resistor module and a customer furnished switch. It is an interface sensor that fits directly to the Pepperl+Fuchs ISB barrier and activates and deactivates the intended barrier. When placed within 1/16" of a metallic surface, the sensor closes and activates the intended barrier. As the detector moves away from the metallic surface, the detector opens and the barrier is deactivated.

NOTE: It is necessary to reprogram the EPCU when using the NJ...NAMUR proximity sensor.

OPTIONAL ACCESSORIES For Pepperl+Fuchs Type X Enclosure Power Control Units