

EXPLOSION PROTECTION CONTROLLER (EPC)

DESCRIPTION

The Fike Explosion Protection Controller (EPC) is the cornerstone for Fike's explosion control system. The EPC continuously monitors the protected hazard, reacts to incipient explosions, and instantaneously actuates the explosion protection system. The system may include explosion suppression, isolation, or a combination.

The EPC can function as a stand-alone controller where a limited number of protection devices are required, or it can be interfaced with other EPCs for larger systems.



Fike P/N E10-0066

FEATURES AND BENEFITS

- Monitors and reports on 32 states, and stores up to 16 history records in relative time. With the optional Annunciator module, it is synchronized to real time
- Scalable with zoning capabilities
- System easily programmed in the field to accommodate process changes (i.e. adjustable pressure validation)
- System status LEDs and PC connection offers access to system status, history, pressure readings, and pre/post activation history
- PC programming
- Three Detection Inputs:
 - Two 4-20 mA supervised detection inputs for continuous process pressure monitoring for both static and rate of rise control
 - One supervised contact input for releasing conditions
- Available in two models:
 - E10-0066 EPC for GCA firing of HRD and SRD containers, or EIVs
 - E10-0119 EPC-SE for solenoid firing the EIPV's
- One supervised actuator output capable of firing up to six GCA's or one EIPV
- One supervised switch input for monitoring trouble conditions
- Supervised "Disable" contact input
- Two dry contact auxiliary relays for annunciation of "Trouble" and "Alarm" conditions to facilitate process interlocks and alarms
- Fire Bus for high-speed control and activation of other EPCs in the same protected volume/area, firing up to 192 actuators within 2 milliseconds (optional connection)
- Status Bus for Fike proprietary network communication of system conditions to other devices (optional wiring)
- DIN rail mount for flexibility during installation
- Optional field enclosure for installation in hazardous areas
- Input Voltage: 18 to 30 VDC, 300 mA maximum

APPROVALS:

- FM Approved
- CE marked (EMC - LVD tested and approved)
- ATEX Approved II 2/1 D/G when installed with Fike's optional enclosure
- CSA Approved (LR 091515)



SPECIFICATIONS

Power Consumption:	Normal: 275 mA Trouble: 300 mA Alarm: 200 mA
Series Fire Output: P/N E10-0066	6 protection components 10 ohms maximum loop resistance 50 VDC, 3.5 A
Solenoid Firing Circuit: P/N E10-0119	Operates a single 24 VDC solenoid or two 12 VDC solenoids 10 ohms maximum loop resistance 50 VDC, 3.5 A
Trouble/Alarm Contact Ratings:	DC, 2 amps @ 30 VDC AC, 0.5 amps @ 250 VAC
Temperature Rating: (without additional enclosure)	-18 to 60°C (0 to 140°F)
Humidity (non-condensing):	80% RH maximum
Operating Temperature Range:	0-300°F (17-149°C)
Size:	200mmL x 130mmH x 60mmD (7.7"L x 5.2"H x 2.3"D)*
Weight:	0.7 kg (1.5 lbs.)

* Dimensions are nominal

WIRING DIAGRAM

