Eaton EPCT Fire

Touchscreen based electric medium voltage controllers





Product Description

The EPCT Fire features an advanced, 7" color touchscreen that incorporates both the foam additive controller (FPC) and automatic transfer switch (ATS) functionality into one, intuitive display.

Designed solely with the consumer in mind, the EPCT Fire enables technicians to commission the foam additive controller faster; troubleshooting is made easier and is more effective through the use on-screen history filtering and diagnostic monitoring.

For over 50 years, Eaton has been the industry leader in Medium Voltage Motor Control. The FDM Medium Voltage Fire Pump Controller is based on the AMPGARD® controller design which incorporates Eaton's industry leading TRITON™ SL Series Medium Voltage Vacuum Contactor. The SL Contactor utilizes Eaton's vacuum interrupters that exhibit both a long electrical life and a high interruption capacity.

Product Features

Touchscreen Display

General

Speed of commissioning, configuration and troubleshooting are more critical to businesses today more than ever. Through the use of a 7" touchscreen, users can easily program all site specific setpoints through an intuitive menu structure, view all critical system information, and troubleshoot quickly and accurately via on-screen diagnostics.

Automatic Transfer Switch Integration

Going away from the multiple screen approach, the EPCT Fire touchscreen integrates both the Foam Additive Controller and Automatic Transfer Switch into one display enabling the user to effectively manage programming and operation from one source.

Commissioning Simplified

The Startup tab features all controller related commissioning tasks such as: Quick Setup, Setup Phase Reversal, Flow Test, Manual/Automatic Starts, and Test Alarms.

UL Type Rating

The touchscreen display has been tested in accordance with UL and achieves a type 4X rating.

Programming Menu

Startup tab

This tab system enables the user to complete all controller related commissioning tasks. Each sub-menu within the Startup tab guides the user through step-by-step, intuitive screens to quickly and effectively complete the startup and commissioning process.

Panel Setup tab

All variables relating to the panel, such as language, date and time, nominal voltage, etc., are located in the Panel Setup tab. For all programming points within the Panel Setup tab, refer to the instruction manual: MN124016EN.

Help tab

The help tab provides end users service contact information from the company that commissioned the unit (if programmed), factory contact information, and a QR code to download the instruction manual onto a mobile device.

Pressure Settings tab

Contains a variety of pressure settings that may be programmed to suit site requirements. Some key settings include: Start Pressure, Stop Pressure, Low Pressure Alarm, High Pressure Alarm, Low Suction Shutdown, Low Foam Shutdown, Pressure Units, and the ability to calibrate the transducer.

Timer Values tab

This tab system contains the programming point for all foam additive controller related timers. These timers are: Minimum Run Time, Acceleration Time, Sequential Start Time, Fail to Start Time, Fail to Stop Time, and Weekly Motor Test Timer.

Alarm Setpoints tab

There are seven (7) programmable alarm points within this tab system: Phase Reversal, Phase Failure Alarm Setpoint, Motor Overload Setpoint, Transducer Fail Pump Start, Abort Motor Test on Low Voltage, Voltage Alarm Settings, and Frequency Alarm Settings.

Inputs/Outputs tab

The I/O board is capable of accepting ten (10) custom inputs that can be programmed for seventeen (17) predefined conditions. The output relays can be programmed for sixty-one (61) separate conditions. Additional relays can be added through the use of a single or multiple optional relay boards.

History/Statistics/Diagnostics tab

This tab system allows the customer/technician to view historical data, controller statistics, controller diagnostics, and startup information. To assist, the controller can filter for specific events or between certain dates to speed up troubleshooting.

I/O Board

Customer Input Connections

Connection terminals are provided at the top of the I/O board for external customer connections that can be programmed through the touchscreen display.

Output Relays

The I/O board features four (4), 250VAC, 8A, 2 Form-C relays designated for the following: Common Alarm, Power/Phase Failure, Phase Reversal, and Pump Run. Each relay socket has a surface mount LED to indicate the relay's coil status.

Optional Boards

The controller can accept up to four (4) additional option boards: optional relay board, MODBUS communication board, secondary 4-20mA device board, and an alarm board. The controller has provisions to allow future optional boards to be added with plug-and-play functionality.

Other Components

Drain Valve Solenoid

All full-service EPCT Fire controllers are equipped with a drain valve solenoid used for manual or automatic motor tests.

External USB Port

The USB port allows the user to download historical messages, statistics, diagnostic information, startup file, and current controller configuration to any USB device with FAT16 or FAT 32 formatting.

Enclosures

The EPCT Fire controllers come standard with UL type 2 (drip-proof) enclosures. Optional enclosures are available and include: type, 3, 3R, 4, 4X, and 12.

Emergency Start Operator

A mechanically operated emergency start handle (ESH) will mechanically activate the motor contactor(s) independently from any electrical control circuits.

Standards & Certifications

All EPCT Fire medium voltage controllers meet or exceed the requirements of Underwriters Laboratories and Underwriters Laboratories Canada [UL218], Factory Mutual, the Canadian Standards Association, New York City building code, CE mark, U.B.C./C.B.C. seismic requirements, and are built to the latest edition of NFPA 20 standards.

Display Screens



Home tab



Common Alarm Settings



Message History



Home tab - pump run



Notification Area Settings



Customer Service Contact

Eaton 1000 Eaton Boulevard Cleveland, OH 44122 United States Eaton.com

Electrical Sector Canadian Operations 5050 Mainway Burlington, ON L7L 5Z1 Canada EatonCanada.ca CHFire.com

© 2018 Eaton All Rights Reserved Printed in Canada Publication No. BR124068EN / 001 January 2018

Eaton is a registered trademark.

All other trademarks are property of their respective owners.











