Product Brochure
BR124076EN

Eaton DPCT Fire

Touchscreen based diesel fire pump controllers

Powering Business Worldwide

Product Description

The DPCT Fire features an advanced, 7" color touchscreen that utilizes the same design philosophy as the EPCT series controller.

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

The controller can be ordered with many functional options to cater to the customers' needs. These include additional output relays, MODBUS communications, and a secondary 4-20mA device card.

Product Features

Touchscreen Display

General

Speed of commissioning, configuration and troubleshooting are 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.

Commissioning Simplified

The Startup tab features all controller related commissioning tasks such as: Quick Setup, 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: MN124018.

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 fire pump controller related timers. These timers are: Minimum Run Time, Sequential Start Time, AC Power Failure, AC Power Failure Start, and Weekly Engine Test Timer.

Alarm Setpoints tab

There are four (4) programmable alarm points within this tab system: Source Voltage Alarm Settings, Battery Voltage Alarm Settings, Transducer Fail Engine Start, and Abort Engine Test.

Inputs/Outputs tab

The I/O board is capable of accepting ten (10) custom inputs that can be programmed for twenty (20) 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

Power Supply

The redesigned I/O board incorporates both the I/O functionality along with the engine connections. It is capable of accepting 12VDC to 24VDC battery voltage and 120VAC to 240VAC utility voltage.

Customer Input Connections

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

Output Relays

The I/O board features three (3), 250VAC, 8A, 2 Form-C relays and one (1) 250VAC, 10A, 2 Form-C relays designated for the following: Common Alarm, Low Fuel, Auto Mode, and Engine 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, and a secondary 4-20mA device board. The controller has provisions to allow future optional boards to be added with plug-and-play functionality.

Battery Chargers

AC Power Supply

The battery chargers are designed to work with 120VAC-240VAC, 50/60Hz; the battery chargers will automatically switch according to the incoming voltage.

DC Ouput

The battery chargers can output either 12VDC or 24VDC user selectable via a dipswitch located on the battery chargers. The chargers are capable of operating either lead acid or nickle-cadium battery types.

Three-step Charge

The battery chargers are designed with a three-step charging system to optimize the charging cycle. Bulk mode will deliver up to 10A charging until the batteries reach approximately 90% capacity. Over charge will reduce the charging current to 1.5A and will hold until the batteries reach 99% capacity. Float mode will trickle charge the batteries to keep them at 99%-100%.

Other Components

Drain Valve Solenoid

All DPCT Fire controllers are equipped with a drain valve solenoid used for manual or automatic engine tests.

External USB Port

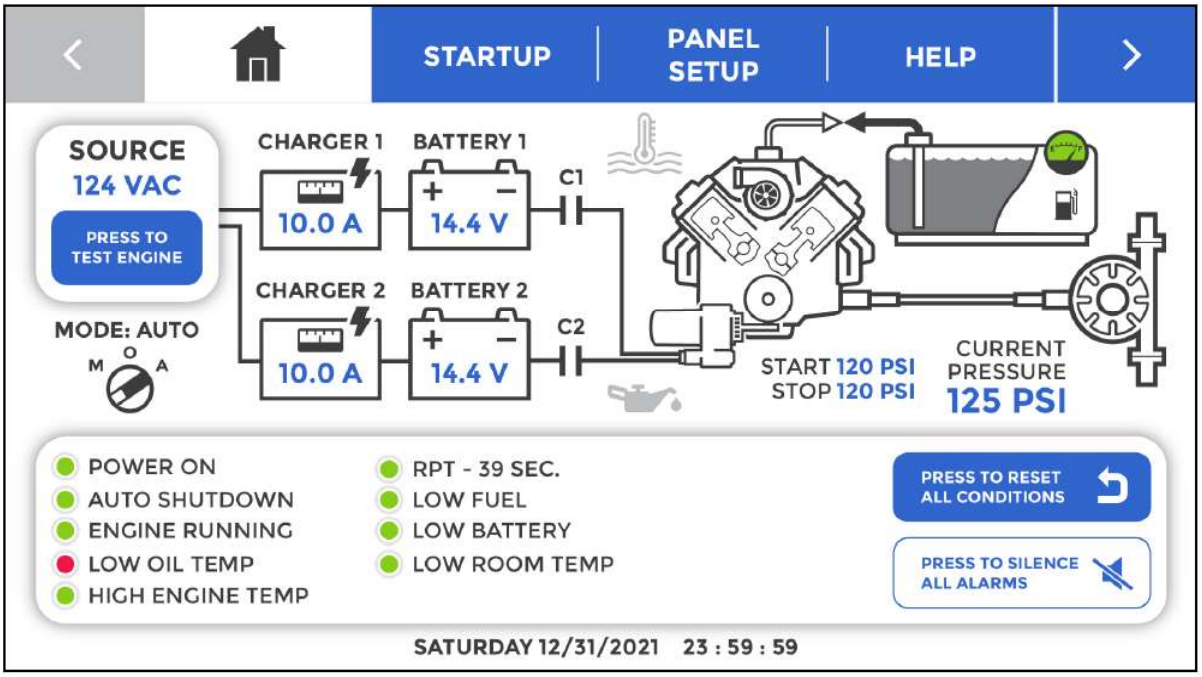
The USB port allows the user to download historical messages, statistics, diagnostic information, startup file, and current controller configuration to any USB device with FAT 16 or FAT 32 formatting.

Enclosures

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

Standards & Certifications

All DPCT Fire diesel fire pump controllers meet or exceed the requirements of Underwriters Laboratories and Underwriters Laboratories Canada [UL218], Factory Mutual, CE mark (optional), U.B.C./C.B.C. seismic requirements, and are built to the latest edition of NFPA 20 standards.



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