

# MASTER

## Model DEC Diesel Fire Pump Controller

MASTER Diesel Fire Pump Controllers are designed to the requirements of the NFPA 20, Underwriters Laboratories, and Factory Mutual Approvals.



### Standard Features

- NEMA 12 dusttight enclosure with all pressurized wet parts mounted on the outside of the enclosure.
- Large, highly visible display, to view all battery voltages and currents, the system pressure, engine and pump room alarms; as well as status, timing, and starting LEDs.
- Dual 10 amp, automatic float-equalize, current limited battery charger with Charger Failure alarms.
- Fail safe pressure transducer circuit. Immediately starts the fire pump if unplugged or disabled.
- Instant on circuitry. No programming required.
- Y-strainer provided to protect the test solenoid from debris.
- Mechanically protected circuit boards.

### Ordering and Shipping Information

When ordering a MASTER Diesel Fire Pump Controller, the following information must be included in the order to allow prompt order entry and delivery: Complete Model Number, Engine Make and Model, Engine Battery Voltage, Engine Polarity, A.C. Line Input Voltage and Frequency, Battery Type, Ultimate Destination, and Size of Fuel Tank.

Shipping carton measures 48 inches (122 cm) high x 32 inches (81 cm) wide x 20 inches (51 cm) deep. Average packed controller weighs 200 pounds (91 kg). Packed controller must not be stored outdoors.

**MASTER CONTROL SYSTEMS** P.O. Box 276 • 910 North Shore Drive • Lake Bluff, IL 60044-2295  
PHONE: 847-295-1010 • FAX: 847-295-0704 • [www.mastercontrols.com](http://www.mastercontrols.com)

- Modular design with plug-in circuit boards and cables.

### G3 Features that enhance performance

Option group G3 provides many features that exceeds NFPA 20 and enhances field start-ups. Highlights include:

- PN style digital pressure and alarm recorder with local display and custom Windows™ software. Recorder capable of storing over 4000 date points time and dated to the second. Software graphs pressure changes and links them to alarm events. Data is accessible through external ethernet TCP/IP connector.
- Sequence start, remote start, ac failure start and automatic stop.
- Simple weekly test circuit with oil and water shutdown in accordance with NFPA 20.
- Low Fuel Level and six pumphouse trouble alarms as shown on above display panel.
- Additional engine run form C contacts.
- Suitable for energize to start and energize to stop UL/FM approved engines.

### Optional Features

- DA – 20 amp, 12 volt, dual battery charger.
- M – Manual, non-automatic controller (removes the pressure starting and recording components).
- 7 – Basic 8 engine failure remote contacts.
- O – Custom pump trouble led light bars.
- Q – Individual remote contacts.

### Modification Codes

- 12\* – NEMA 12 Enclosure
- 3R\* – NEMA 3R Enclosure
- 4\* – NEMA 4 Enclosure
- 4XA\* – NEMA 4X Coated Enclosure
- 4XB\* – NEMA 4X 304 Stainless Steel (SS) Enclosure
- 4XC\* – NEMA 4X 316 SS Enclosure
- 5C – Brass Purge Fittings
- 5D – Stainless Steel Purge Fittings
- 8A – Conformal Coating on PCBs
- 8E – CE Declaration of Conformity
- 15 – 316 Stainless steel pressure transducer, drain valve solenoid, and wet parts
- 15A – Stainless steel pressure transducer, drain valve solenoid, and wet parts
- 16 – 600 psi Pressure transducer, DVS, and Wet Parts
- 17A – Additional Set of Engine Run Contacts
- 17B – Two Additional Sets of Engine Run Contacts
- 19A – Engine Heater Supply Circuitry



Model DEC-24N-115-XG3

- 20A – Strip Heater with Humidistat
- 32 – Low Pump Room Temperature Switch
- 83L – Low Suction Pressure Switch

\*Add "B" or "L" to enclosure type for 36" base cabinet or 18" legs

### Accessories

- 4817 – Low Fuel Switch
- 4817L – Long Rod Low Fuel Switch
- 6288 – High Fuel Switch

### Model Number Construction

| DEC         | 12N             | 115                     | XG3,12L                               |
|-------------|-----------------|-------------------------|---------------------------------------|
| Basic Model | Battery Voltage | AC Voltage              | Options                               |
| DEC         | 12N = 12 VDC*   | 115 = 115 VAC, 50/60 HZ | See list of options and modifications |
|             | 24N = 24 VDC*   | 230 = 230 VAC 50/60 HZ  |                                       |

\* Negative ground

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