



Diesel engine fire pump controller, supply 12-24VDC, built-in RS485, not expandable FFL...DP

Product designation

Product type designation

**Auxiliary supply**

Rated auxil. supply voltage 12/24VDC

Operating auxil. supply voltage range 7.5...33VDC

**Voltage inputs**

Rated voltage  $U_s$

min	VAC	100
Max	VAC	250

Measurement range V 50...264

Frequency range Hz 45...65

**Engine running input (D+) for pre-excited alternator**

Operating range VDC 0...33VDC

Maximum input current mA 0.5mA

Max voltage at D+ terminal VDC 12 or 24 VDC (battery voltage)

Pre-excitation current 210mA at 12VDC / 130mA at 24VDC

**Engine speed input (pick-up/W input)**

Input type AC coupling

Minimum reading frequency voltage

High sensitivity	$\geq 2.8V_{pp}$ ( $1V_{rms}$ ) at 40Hz $\geq 10V_{pp}$ ( $3.5V_{rms}$ ) at 20000Hz
Low sensitivity	$\geq 3.7V_{pp}$ ( $1.3V_{rms}$ ) at 40Hz $\geq 7V_{pp}$ ( $2.5V_{rms}$ ) at 2000Hz

Measuring input impedance  $> 100k\Omega$

Max input voltage 84Vpp (30Vrms)

**Pinion input**

Voltage range 0...33VDC

Input current  $\leq 8mA$

Threshold adjustable

Input delay adjustable

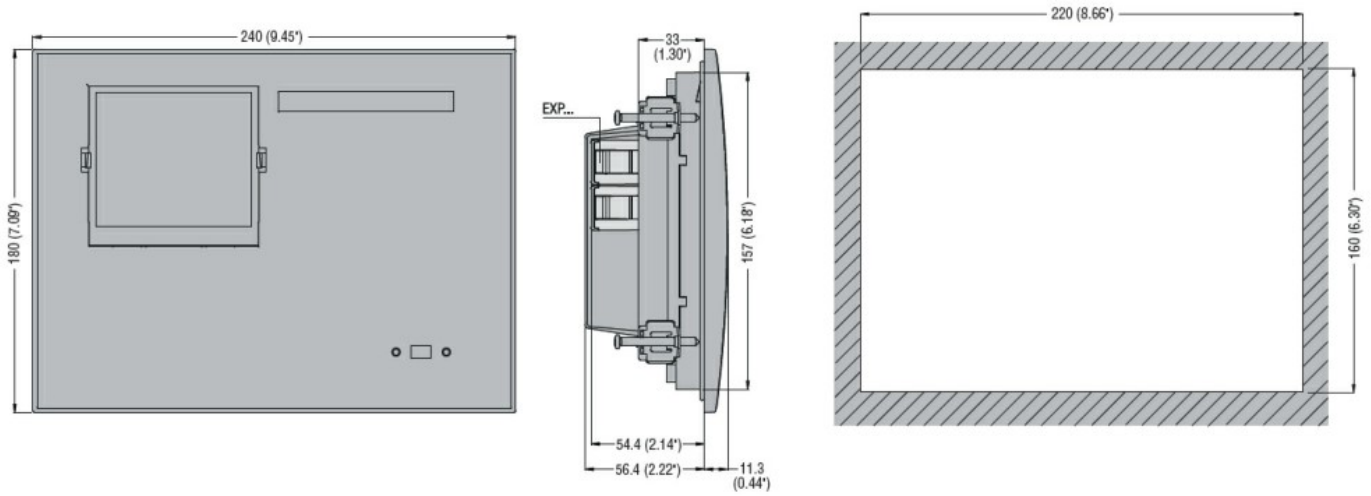
**NTC probe input**

Sensor type NTC (LOVATO code NTC01)

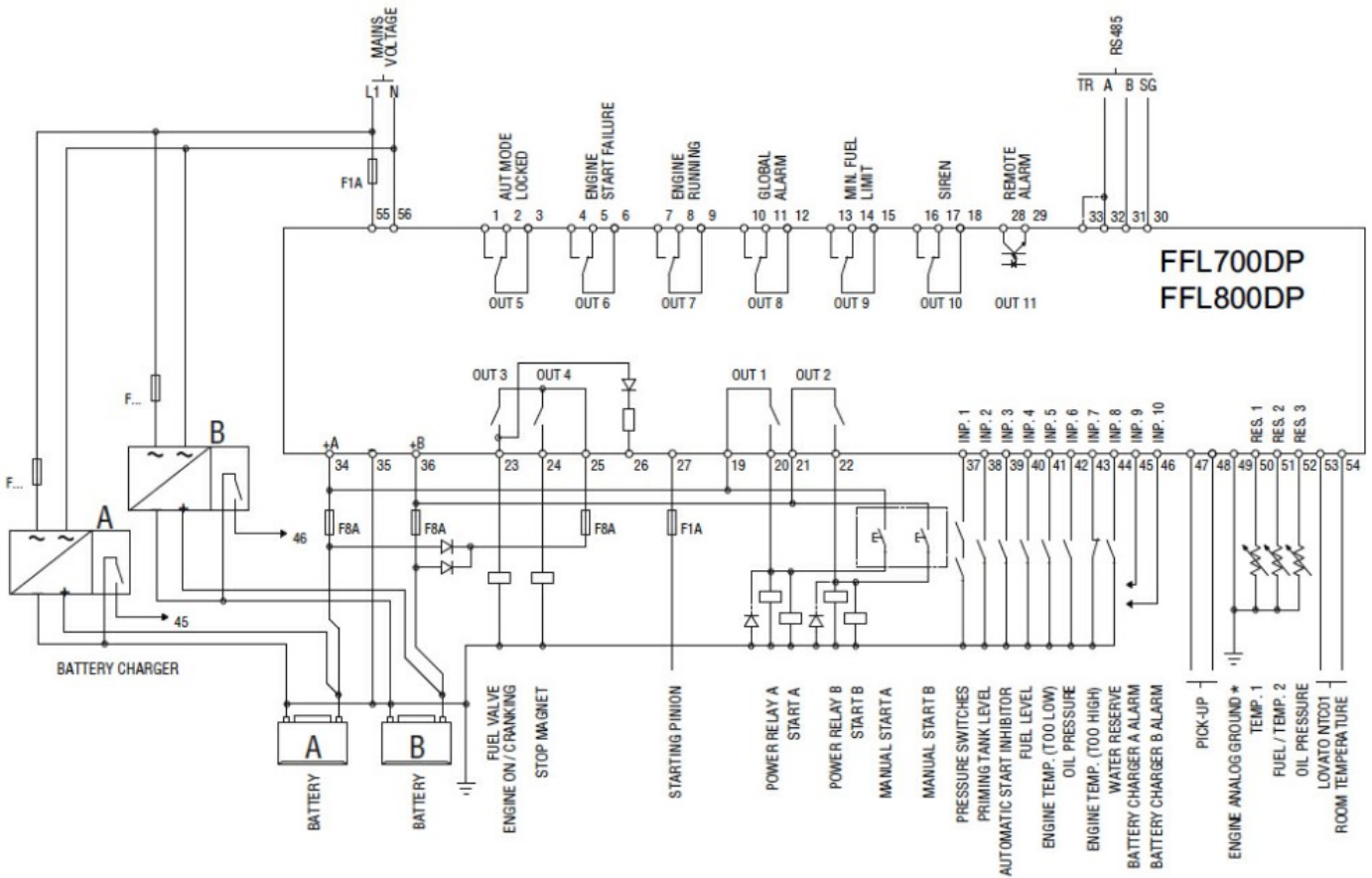
Measuring range  $^{\circ}C$  -40...+85

Maximum connection length		mt	3m
<b>Digital inputs</b>			
Number of digital input		Nr.	10
Digital input type			Negative
Digital input current		mA	≤6
High digital input signal		V	≥4.9V (typical 3.8V)
Low digital input signal		V	≤1.25V (typical 1.9V)
Digital input signal delay		ms	≥50
<b>Relay outputs</b>			
Number of relay output		Nr.	10
Mechanical endurance			10 <sup>7</sup>
Electrical endurance			10 <sup>5</sup>
<b>Static Outputs</b>			
Number of static output			1 (OUT11)
Static output type			NO
Operating voltage		V	10...30VDC
Maximum current		mA	50mA
<b>RS485 serial interface</b>			
Interface type			Isolated RS485 serial interface
Baud rate		bps	1200...115200
Insulation voltage (RS485-Vbatt)			1kVDC
<b>Connections</b>			
Type of terminal			Removable screw-type
Conductor cross section			
	AWG/Kcmil		
		min	AWG 24
		Max	AWG 12
	IEC		
		min	mm <sup>2</sup> 0.2
		Max	mm <sup>2</sup> 2.5
Tightening torque for terminals		max	Nm 0.56
		max	Ibin 5
<b>Ambient conditions</b>			
Temperature			
	Operating temperature		
		min	°C -25
		max	°C +70
	Storage temperature		
		min	°C -30
		max	°C +80
Relative humidity		%	<80% (IEC/EN 60068-2-78)
<b>Housing</b>			
Execution			Flush-mount
Material			Polycarbonate
Degree of protection			IP65 Frontal; IP20 on terminals
Dimensions (W x H x D)		mm	240 x 180 x 43.9
Weight		g	980

**Dimensions**



**Wiring diagrams**



**Certifications and compliance**

**Compliance**

- IEC/EN 61000-6-2
- IEC/EN 61000-6-3
- IEC/EN 61010-1
- IEC/EN 61010-2-030
- UNI EN 12845

**Certificates**

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**ETIM classification**

ETIM 8.0

EC002685 -  
Central fire alarm  
control panel