



Product designation

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

Product type designation

Auxiliary supply

Rated auxil. supply voltage	12/24VDC
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Operating auxil. supply voltage range	7.5...33VDC
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Voltage inputs

Rated voltage Us

	min VAC	100
	Max VAC	250

Measurement range	V	50...264
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Frequency range	Hz	45...65
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Engine running input (D+) for pre-excited alternator	VDC	0...33VDC
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Operating range	mA	0.5mA
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Maximum input current	VDC	12 or 24 VDC (battery voltage)
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Max voltage at D+ terminal		210mA at 12VDC / 130mA at 24VDC
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Pre-excitation current		
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Engine speed input (pick-up/W input)		
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Input type		AC coupling
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Minimum reading frequency voltage		
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	High sensitivity	≥2.8Vpp (1Vrms) at 40Hz ≥10Vpp (3.5Vrms) at 20000Hz
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	Low sensitivity	≥3.7Vpp (1.3Vrms) at 40Hz ≥7Vpp (2.5Vrms) at 2000Hz
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Mearusing input impedance		> 100kΩ
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Max iput voltage		84Vpp (30Vrms)
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Pinion input		
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Voltage range		0...33VDC
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Input current		≤8mA
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Threshold		adjustable
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Input delay		adjustable
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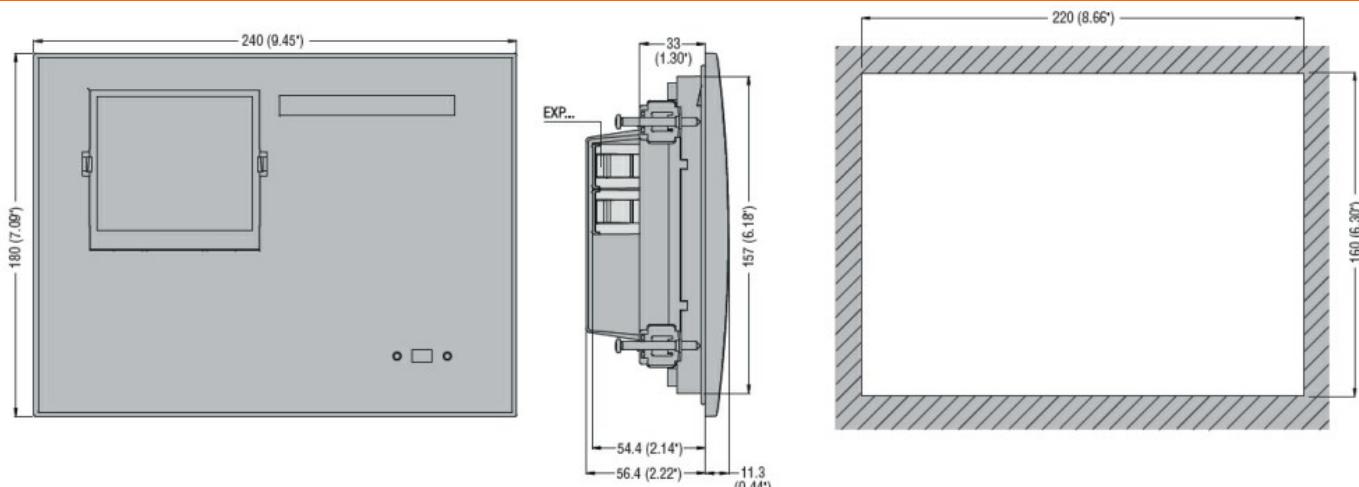
NTC probe input		
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Sensor type		NTC (LOVATO code NTC01)
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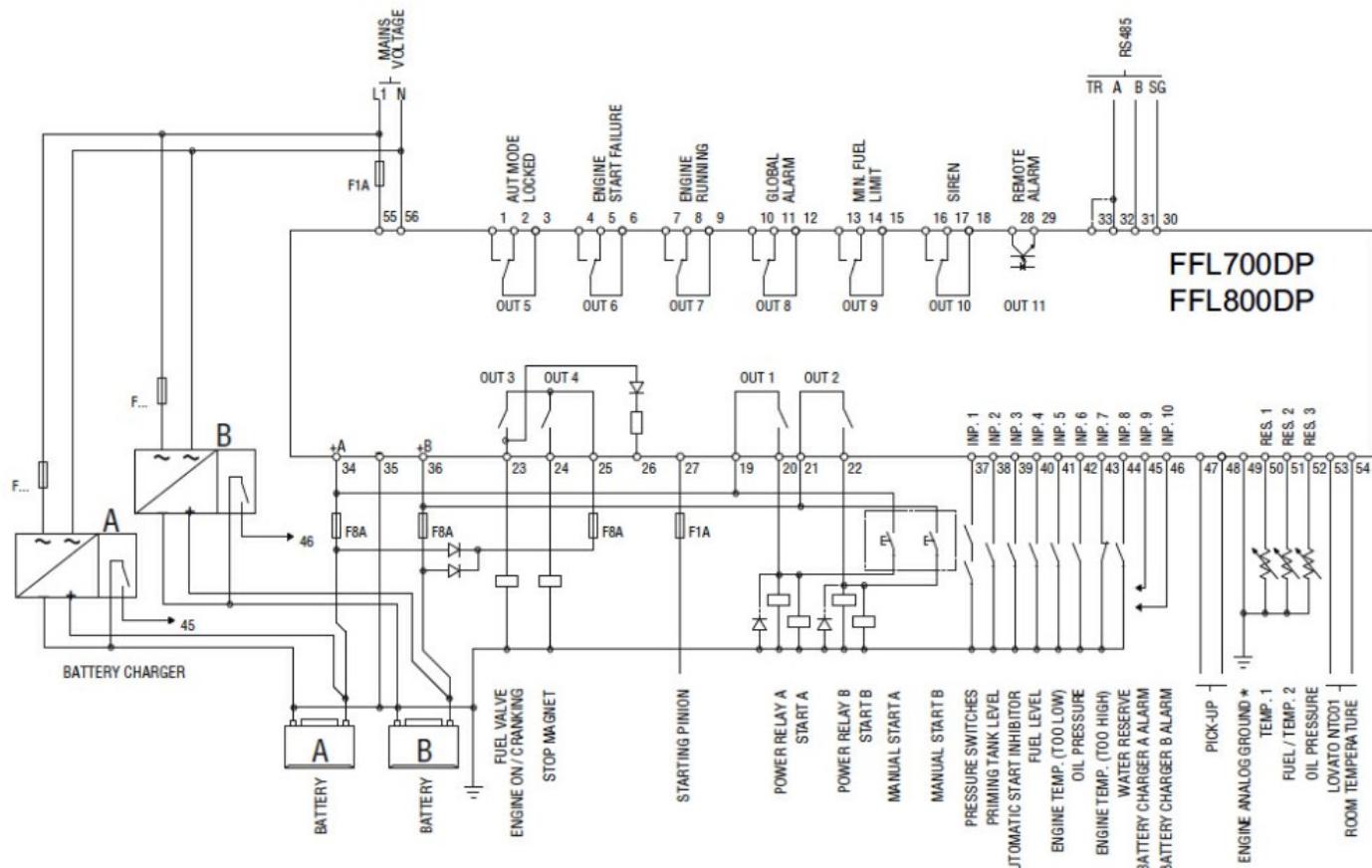
Measuring range	°C	-40...+85
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Maximum connection lenght	mt	3m
<b>Digital inputs</b>		
Number of digital input	Nr.	10
Digital input type		Negative
Digital input current	mA	≤6
High digital input signal	V	≥4.9V (typical 3.8V)
Low digital input signal	V	≤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