





NFPA 20 - FM 1321/1323 - NFPA 70





**DISRUPTIVE TECHNOLOGY** 

**WÎFI** COMMUNICATION

**EMBEDDED WEB** 

**AMAZING FEATURES** 

**COLOURFULL DISPLAY** 





DIESEL ENGINE DRIVEN CONFIGURABLE-PROGRAMMABLE FIRE **PUMPS SET CONTROL PANEL** 

# DIESEL ENGINE DRIVEN CONFIGURABLE-PROGRAMMABLE FIRE PUMPS SET CONTROL PANEL



#### **MAIN FEATURES**

Standards and technical regulat	tions
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NFPA 20 FM 1321/1323

Compliance with standards and technical regulations

NFPA 70

UNE-EN 61439-1 Low-voltage switchgear

#### Electrical features and batteries

Incoming line voltage and frequency	From 200 VAC to 240 VAC 50-60Hz depending on model					
Nominal battery voltage	Ambivalent for 12 VDC or 24 VDC batteries (selectable via jumpers)					
Battery chargers:	SCA B12100	SCA B2450	SCA 24100			
Nominal charging current	10 ADC	5 A	10 A			
Battery capacity (C10) supported	Up to 200 Ah	Up to 100 Ah	Up to 200 Ah			
DIN power	138,0 W	138,0 W	138,0 W			
Efficiency	85% at rated power					
Float voltage deviation	< 1% from 0% to 90% of rated load current					
Types of batteries supported	Open fluid Pb	VRLA Pb (AGM or GEL NiCd-(9-1	8 elements) NiCd-(10-20 elements)			

**Charging current deviation** < 5% from 50% to 99% of the float voltage

#### **Pump and system protections**

Total system alarms 65

#### Design features

Design reatures					
	IP65 Protected from total dust ingress				
Enclosure	NEMA Type 2				
Efficiosure	Impact rating: IK10 (except for display)				
	Fireproof grade: Fire extinguishes <30s				
Display	TFT colour4.3" 480x272 px				
Buzzer	75 dB measured at 1m				
Wiring	Halogen free				
wiring	Fire resistance: RZ1 according to EN50200 (830° during 90min)				
Pressure transducer	1 pressure measuring device using pressure transducers 0-100bar / 4-20mA It can be used to monitor the system pressure of the pump The demand pressure to start and stop the pump are configurable				
Pressure Switch	Monitored to prevent short-circuit or open-circuit faults				
Working temperatures	Recommended: -5°C to 40°C (tested up to 60°C)				
Relative humidity (non-condensing)	Functional: 20 to 95%.				
Cooling:	Natural convection				
Maximum altitude:	2000 m (Consult other altitudes up to 4,800 m)				
Pollution degree	2				
Overvoltage category:	II .				
Electromagnetic environment	CEM-1				
Vibration protection	EN60068-2-6:2008				









# DIESEL ENGINE DRIVEN CONFIGURABLE-PROGRAMMABLE FIRE PUMPS SET CONTROL PANEL



#### **Pump start methods**

**Automatic Mode** 

**Manual Mode** 

**Test Mode** 

AUTO UAN

Pressure switch line: Low system pressure

Manometer: system pressure

Remote start contact

"Battery A" and "Battery B" press buttons in front panel

Deluge valve opening detection

MANUAL start test button to evaluate the automatic start-up process

#### **Measuring instruments**

Batteries 2 voltmeters, battery voltage 2 battery charge current ammeters
Engine cooling temperature
Engine Oil pressure
Fuel tank level
Engine speed in rpm
1 Voltmeter: Supply voltage AC. Accuracy >1%
<b>General System</b> 1 Manometer: System pressure (4-20mA pressure sensor required)
1 Flow Meter (manual flow input / pulse output / 4/ 20 mA sensor)

#### Other features

Monitoring of pressure switch lines with short-circuit and open-circuit alarms	Monitoring of connection with starter contactor coils with open-circuit and short-circuit alarms $$
Engine heating management via temperature reading	Cooling circuit operation control
Maintenance service management	Log download: Events, pressure history, pump curves.
Pump room temperature management	

Wifi	Embedded Web access
Ethernet: Modbus / TCP-IP	E-IP optional module not included as standard
RS485 Modbus / RTU	E-485 optional module not included as standard
Voltage free contacts	6 potential free double relays: 30 VDC - 0.3 AAC 1 potential free double relay 230 VDC-10 AAC

#### Languages

ENGLISH/ ESPAÑOL / FRANÇAIS /ITALIANO / PORTUGUES / DEUTSCH / SVENSKT / NEDERLANDESE





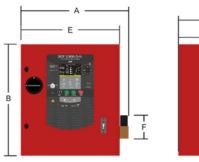


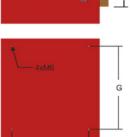






#### **DIMENSIONS AND FASTENERS**

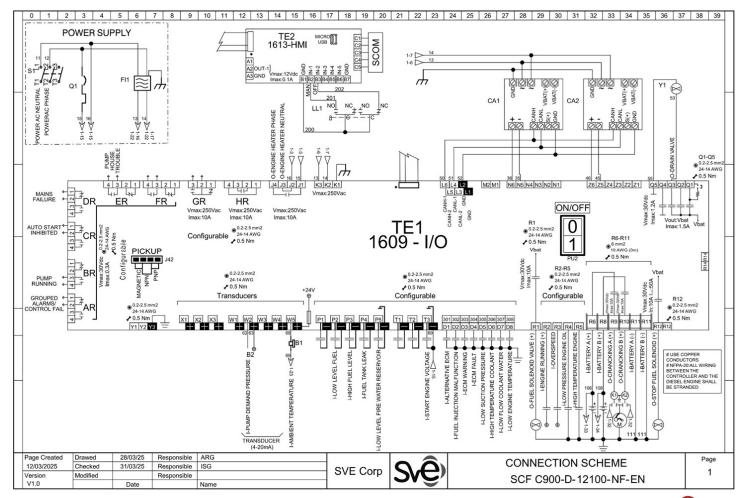




ĺ	N°	CONTROL PANEL	Α	В	С	D	Е	F	G	Н	Weight
ĺ	T1	SCF C900-D-NF 12100/ 24050 / 24100	490	510	250	210	450	140	380	350	15.6 kg

#### WIRING DIAGRAM

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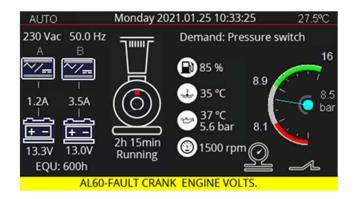


# DIESEL ENGINE DRIVEN CONFIGURABLE-PROGRAMMABLE FIRE PUMPS SET CONTROL PANEL



#### **CONTROL PANEL DISPLAY**

**Main Screen** 



Operating mode	Current date and time (accuracy s)
Pump room temperature	Mains voltage and frequency
Battery voltage and charger current	Cumulative pump operating hours and minutes
Time remaining until battery equalisation	Pump demand transducer and pressure switch
Engine measurement instruments	Alarm display range

### Other Screens

Main Menu



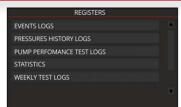
Wifi Communication



**System Alarms** 



Event logs, pressures and pump tests













# DIESEL ENGINE DRIVEN CONFIGURABLE-PROGRAMMABLE FIRE PUMPS SET CONTROL PANEL



#### **EMBEDDED WEB DISPLAY**

#### **Available information**

OPERATING MODE

PUMP ROOM TEMPERATURE

BATTERY VOLTAGE AND CHARGER CURRENT

REMAINING TIME UNTIL BATTERY EQUALISATION

MOTOR QUANTITY MEASURING INSTRUMENTS

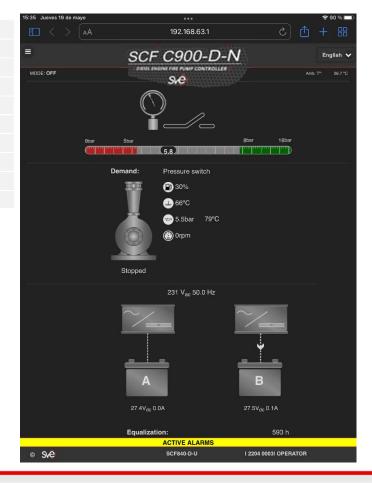
CURRENT DATE AND TIME (ACCURACY: S)

MAINS VOLTAGE AND FREQUENCY

ACCUMULATED PUMP RUNNING HOURS AND MINUTES

PUMP DEMAND TRANSDUCER AND PRESSURE SWITCH

ALARM DISPLAY BAND



#### **Other Screens**

#### Downloading Logs



#### **Pump Test Logs**



#### **System Alarms**



#### **Events Logs**















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