



SCF B900-D-U

EN 12845 – EN 17451- UNE 23500-UNI 10779

DISRUPTIVE TECHNOLOGY

 **wifi** COMMUNICATION

EMBEDDED WEB

AMAZING FEATURES

COLOURFULL DISPLAY

SMALL SIZE, ROBUST, EFFECTIVE



DIESEL ENGINE DRIVEN CONFIGURABLE-PROGRAMMABLE FIRE PUMPS SET CONTROL PANEL

SCF B900-D-U

DIESEL ENGINE DRIVEN CONFIGURABLE-PROGRAMMABLE FIRE PUMPS SET CONTROL PANEL



MAIN FEATURES

Standards and technical regulations

Compliance with standards and technical regulations	EN 12845 Ed.2015
	EN 17451 Ed.2024
	UNE 23500 Ed. 2012 / Ed. 2018 / Ed.2021
	UNI 10779 Ed. 2014
	CEA-4001 Sprinkler Systems
	UNE-EN 61439-1 Low-voltage switchgear

Electrical features and batteries

Incoming line voltage and frequency	From 85 Vac to 265 Vac 50-60Hz depending on the model	
Mains power consumption	2 ADC	
Battery consumption in the absence of mains power	0.5 ADC	
Nominal battery voltage	12 VDC	
Battery chargers	SCA A12030	SCA A12050
Rated charging current	3 ADC	5 ADC
Battery capacity (C10) supported	Up to 86 Ah	93<Ah<142 Ah
DIN power	41,4 W	96,6 W
Efficiency	85% at rated power	
Floating voltage deviation	< 1% from 0% to 90% of rated charging amps	
Supported battery types	Pb fluid open	
Charging current deviation	< 4% from 50% to 99% float voltage	
	< 1% from 0% up to 99% rated charging amps	

Pump and system protections

Total system alarms	48
---------------------	----

Design features

Enclosure	IP65 Protected from total dust ingress (NEMA 4)
	Impact rating: IK10 (except for display)
	Fireproof grade: Fire extinguishes <30s
Display	TFT colour 4.3" 480x272 px
Buzzer	75 dB measured at 1m
Wiring	Fire resistance: RZ1 according to EN50200 (830° during 90min)
Pressure transducer	1 pressure measuring device using pressure transducers 4-20mA
Pressure Switch	Monitored to prevent short-circuit or open-circuit faults
Working temperatures	Recommended: -10°C to 50°C (tested up to 60°C)
Relative humidity (non-condensing)	Functional: 20 to 95%.
Cooling:	Natural convection
Maximum altitude:	2000m
Pollution degree	2
Overvoltage category:	II
Electromagnetic environment	CEM-1

SCF B900-D-U

DIESEL ENGINE DRIVEN CONFIGURABLE-PROGRAMMABLE FIRE PUMPS SET CONTROL PANEL



Pump start methods

Automatic Mode		Pressure switch line: Low system pressure
Manual Mode		Manometer: system pressure
Test Mode		Water level contact: Low priming tank level
		Remote start contact
		"Battery A" and "Battery B" press buttons in front panel
		Manual start press button to evaluate the status of the emergency start button

Measuring instruments

Batteries	2 voltmeters, battery voltage
	2 battery charge current ammeters
Engine	Engine cooling temperature (water)
	Engine cooling oil temperature
	Oil pressure
	Fuel tank level
	Engine speed in rpm
General System	1 Thermometer: Pump room temperature
	1 Voltmeter: Supply voltage AC. Accuracy >1%
	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	Connection monitoring with start contactor coils with open-circuit and short-circuit alarms
Engine heating management by temperature reading	Control of cooling circuit operation
Maintenance service management	Download of logs: Events, Pressure history, Pump curves.
Pump room temperature management	

Communications

Wifi	Embedded Web access
Ethernet: Modbus / TCP-IP	SCOM903 optional module not included as standard
RS485 Modbus / RTU	SCOM901 optional module not included as standard
Voltage free contacts	6 potential free double relays: 250 VAC - 0.3A
	1 potential free double relay 250 VAC-10A

Languages

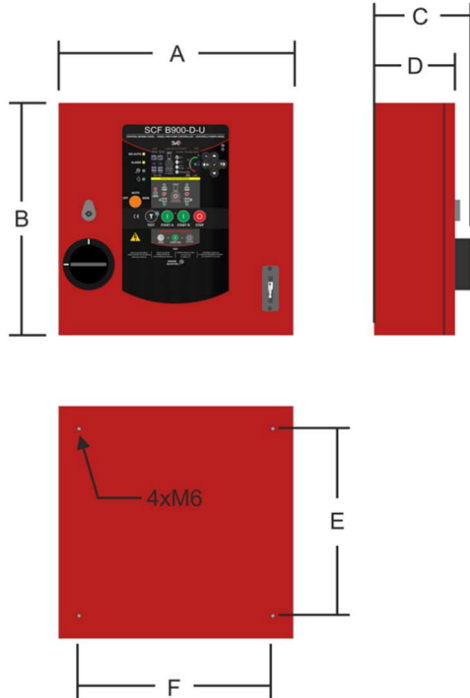
ESPAÑOL / ENGLISH / FRANÇAIS / ITALIANO / PORTUGUES / DEUTSCH / SVENSKT / NEDERLANDSE

SCF B900-D-U

DIESEL ENGINE DRIVEN CONFIGURABLE-PROGRAMMABLE FIRE PUMPS SET CONTROL PANEL

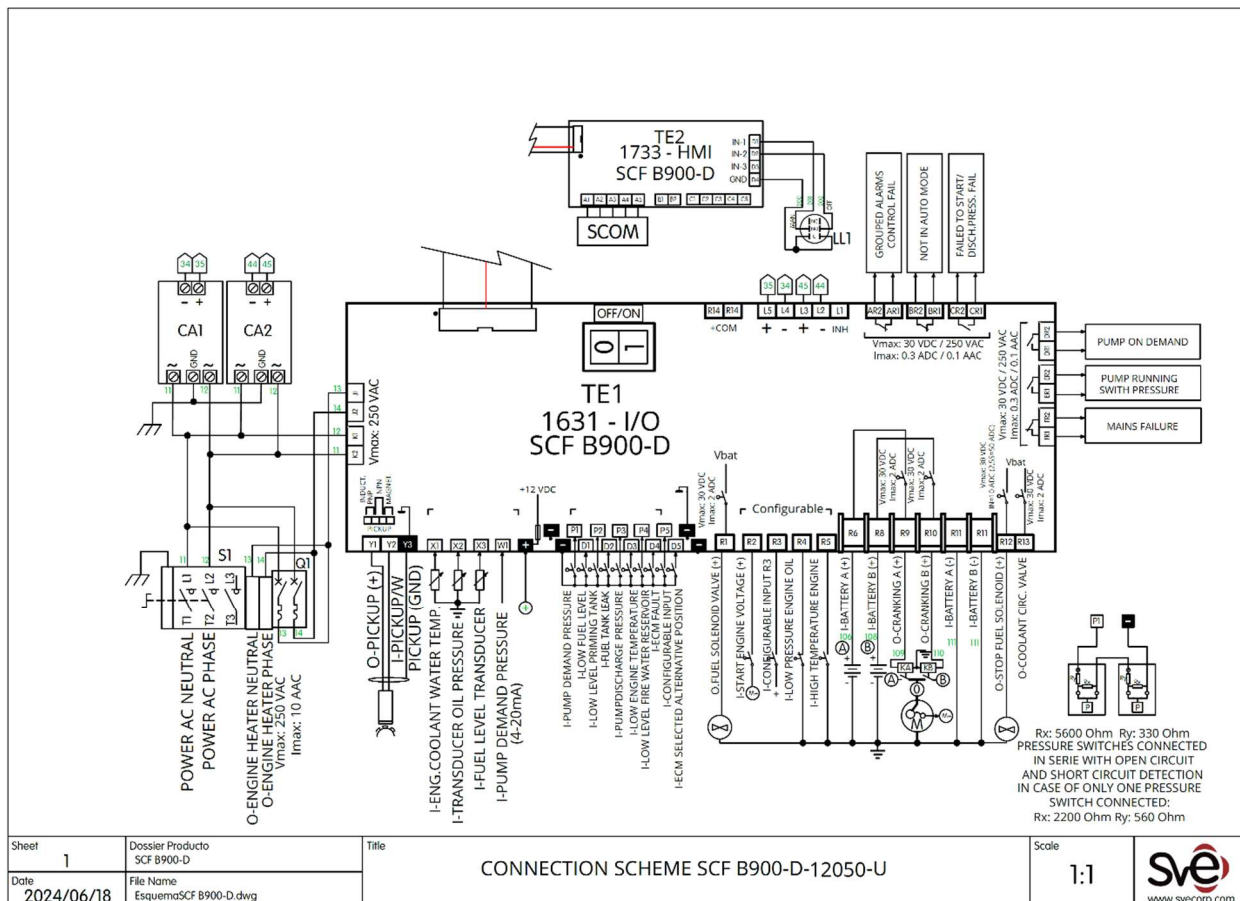


DIMENSIONS AND ANCHORING



A	B	C	D	E	F	Weight
360mm	360mm	170mm	130mm	270mm	275mm	10Kg

WIRING DIAGRAM



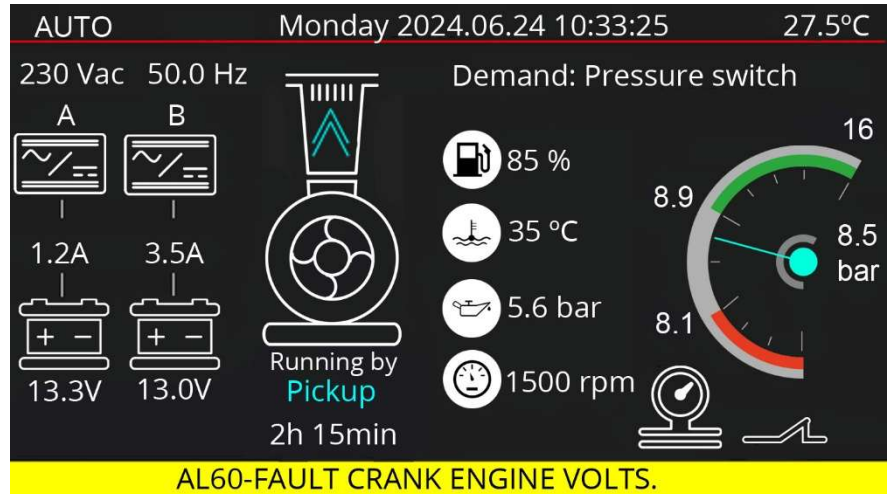
SCF B900-D-U

DIESEL ENGINE DRIVEN CONFIGURABLE-PROGRAMMABLE FIRE PUMPS SET CONTROL PANEL



CONTROL PANEL DISPLAYS

Main Screen

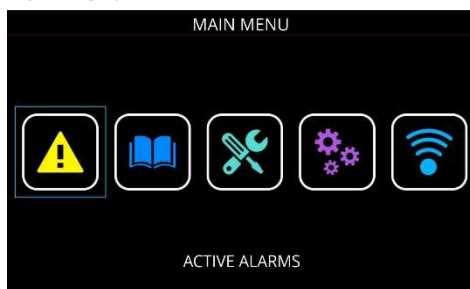


Available information

OPERATING MODE	MAINS VOLTAGE AND FREQUENCY
PUMP ROOM TEMPERATURE	ACCUMULATED PUMP RUNNING HOURS AND MINUTES
BATTERY VOLTAGE AND CHARGER CURRENT	PUMP DEMAND TRANSDUCER AND PRESSURE SWITCH
REMAINING TIME UNTIL BATTERY EQUALISATION	ALARM DISPLAY BAND
MOTOR QUANTITY MEASURING INSTRUMENTS	

Other screens

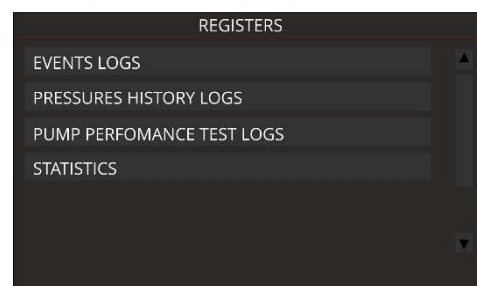
Main Menu



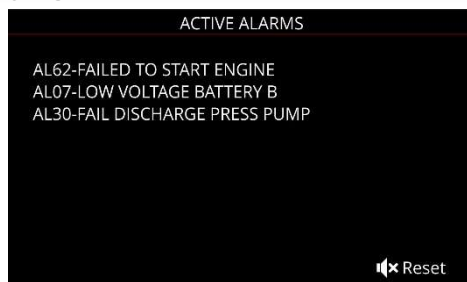
Wifi Communication



Events, pressures and pump tests logs



Alarms



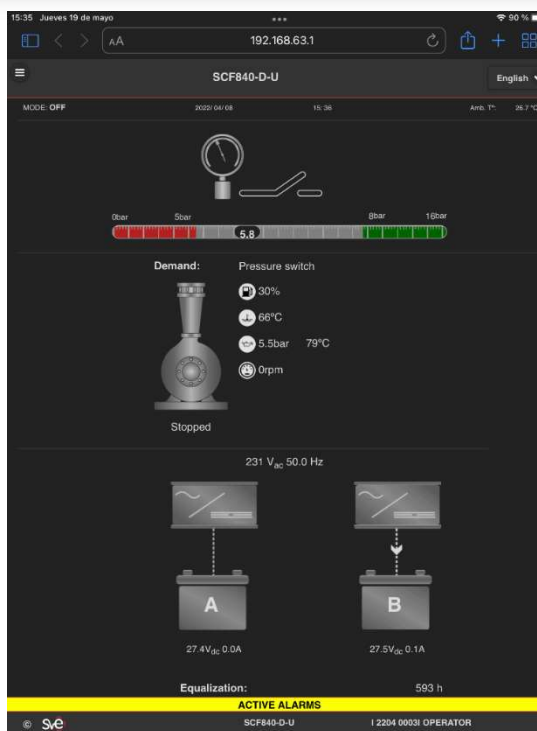
SCF B900-D-U

DIESEL ENGINE DRIVEN CONFIGURABLE-PROGRAMMABLE FIRE PUMPS SET CONTROL PANEL



EMBEDDED WEB

Main Screen



Available information

Operating mode	Current date and time (accuracy s)
Pump room temperature	Mains voltage and frequency
Battery voltage and charger current	Accumulated pump running hours and minutes
Remaining time until battery equalisation	Pump demand transducer and pressure switch
Engine quantity measuring instruments	Alarm display band

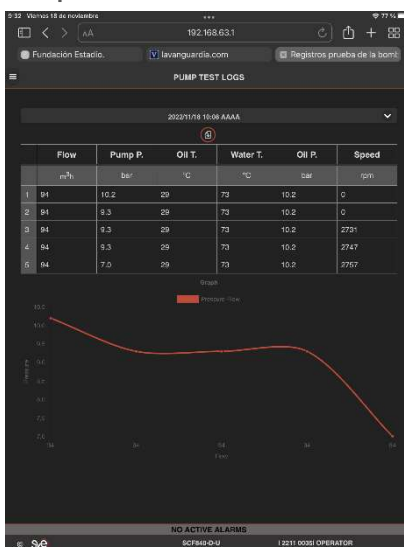
Other Screens

Maintenance Menu

The Maintenance Menu screen displays the following information:

- Top status bar: 0:57, Jueves 19 de mayo, 192.168.63.1, 53% battery.
- Header: lavanguardia.com, lavanguardia.com, Company and calendar.
- EMPRESA Y CALENDARIO.
- Información, Guardar la configuración, Mantenimiento Anterior.
- Versión Firmware.
- Interface: 1.3, HW: 1.5, WB: 1.2.
- Empresa Mantenedora.
- Identificador: SVE Corp-1, Teléfono: 00349437735.
- MODIFICAR EMPRESA.
- Aviso Mantenimiento.
- Habilitar: SI.
- Fecha último: 27/03/2023, Fecha próximo: 27/04/2023.
- Calendario mantenimiento (Meses): 1.
- Es necesario introducir la contraseña.
- GUARDAR.
- REGISTRAR MANTENIMIENTO.
- Puesta en Marcha.
- Puesta en marcha: SI, Fecha: 23/02/2023.
- ALARMAS ACTIVAS.
- Footer: SCF840-D-U, I 2204 0083 OPERATOR.

Pump test and curve



Weekly pressure log

The Weekly pressure log screen displays the following information:

- Top status bar: 0:38, Viernes 18 de noviembre, 192.168.63.1, 70% battery.
- Header: lavanguardia.com, lavanguardia.com, Registros prueba de la bomba.
- REGISTROS HISTÓRICO PRESIONES.
- Actualizar.
- Para actualizar los datos, pulse el botón.
- Table:

Hora	Fecha	Pres.	Arr.	Parada	Dem.	En Marcha
		bar	bar	bar		
09:38:53	2022/11/18	—	5.0	8.0	NO	NO
09:08:21	2022/11/18	—	5.0	8.0	NO	NO
08:59:49	2022/11/18	—	5.0	8.0	NO	NO
08:11:16	2022/11/18	—	5.0	8.0	NO	NO
07:42:46	2022/11/18	—	5.0	8.0	NO	NO
07:14:14	2022/11/18	—	5.0	8.0	NO	NO
06:45:42	2022/11/18	—	5.0	8.0	NO	NO
06:17:11	2022/11/18	—	5.0	8.0	NO	NO
05:48:39	2022/11/18	—	5.0	8.0	NO	NO
05:20:07	2022/11/18	—	5.0	8.0	NO	NO
04:51:36	2022/11/18	—	5.0	8.0	NO	NO
04:23:04	2022/11/18	—	5.0	8.0	NO	NO
03:54:32	2022/11/18	—	5.0	8.0	NO	NO
03:26:01	2022/11/18	—	5.0	8.0	NO	NO
02:57:29	2022/11/18	—	5.0	8.0	NO	NO
02:28:57	2022/11/18	—	5.0	8.0	NO	NO
02:00:25	2022/11/18	—	5.0	8.0	NO	NO
01:31:54	2022/11/18	—	5.0	8.0	NO	NO
01:03:22	2022/11/18	—	5.0	8.0	NO	NO
00:34:50	2022/11/18	—	5.0	8.0	NO	NO

- SIN ALARMAS ACTIVAS.
- Footer: SCF840-D-U, I 2211 0083 OPERATOR.



SVE, S. L.

Parque Tecnológico, Albert Einstein 36-B
01510 Miñano (Álava)
ESPAÑA

www.svecorp.com