



SCF8C-E(X)-U

ELECTRIC MOTOR DRIVEN PROGRAMABLE – CONFIGURABLE FIRE PUMP CONTROL PANEL



SCF8C-EJ control panels are **small** user friendly and configurable instruments, useful for automatically operate **electric motor driven fire pumps** in any environment.

SCF8C-EJ control panels automatically start and stop **small main fire pumps (up to 7,5kW)** and/or **jockey pumps (up to 2,2 kW)** depending on the system's demand; protect them by means of the connected and controller-generated alarms, visualize the most relevant values and informations, also manage the communication of the operator and both the contour elements and the remoted manned centre.



STANDARDS AND TECHNICAL REGULATIONS

Standards / Technical regulations

EN 12845 Ed.12845

UNE 23500 Ed. 2021

UNI 10779 Ed. 2014

CEA-4001 Sprinkler Systems



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MAIN FEATURES

Electrics and pump motor	
Incoming line voltage	400 Vac
Electrics frequency	50Hz / 60Hz. (depending on model)
Electric pump motor size	Up to 7,5 kW
Jockey pump motor size	Up to 2,2 kW
Design features	
Enclosure	IP65 Protected from total dust ingress (NEMA 4)
	Impact rating: IK10 (except for display)
	Fireproof grade: Fire extinguishes <30s
Display	Transflective: Visible under direct sunlight
Wiring	Halogen free
	In compliance with UNE-EN 50525-3-31 Wires up to 1,5mm ² : H05Z1-K flame retardant. Power supply: H07Z1-K Fire resistant:(830° C during 90min)
Pump room temperature	20°F to 104°F (-5°C to 40°C) ,Tested up to 140°F (60°C)
Isolation rating between phases	500 Vac
Isolation rating between phases and ground	2.500 Vac
Isolation impedance between phases and ground	2M Ohm between one phase and ground
Earthing system	Does not required neutral connection
Electromagnetic environment	ECM-1
Pump protections	
Total system alarms	19
Electric pump protection	Fuses/Magnetic Breaker (depending on model)
	Overcurrent alarm
	Low Cos φ Alarm
	Undercurrent alarm
	Low water level alarm
	Pump start failure Alarm / Low discharge pressure
Jockey pump protection	Fuses
	Overcurrent alarm
	Low Cos φ Alarm
	Undercurrent alarm
Start up methods for electric pump	Tripped protection alarm with pump stop
	Low water level alarm. (Pump stop optional)
Automatic Mode	Pressure sensor Line 1: Low system pressure. Short and open circuit detection
	Water level sensor: Low priming tank level
	Monometer: System pressure 4-20mA (0-100bar)
Manual Mode	"Start" press button

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Start up methods for jockey pump	
Automatic Mode	Pressure sensor. Low system pressure.4-20mA (0-100bar) Monometer: System pressure
Manual Mode	"Start" press button
Measuring instruments	
General	3 Voltmeter: voltage for every phase L1-L2-L3
	1 pump rotation/phase rotation
	1 Electrics frequency meter
	1 Manometer pump discharge pressure (pressure sensor required with 4-20mA signal)
Electric Pump	1 Ammeter: pump current
	1 Active power in kW
	1 Power factor (Cos φ)
Jockey Pump	1 Ammeter: pump current
	1 Active power in kW
	1 Power factor (Cos φ)
Control module	1 Voltmeter: Incoming line voltage
Internal battery	1 Voltmeter: battery voltage
	1 Ammeter: battery charging electrical current
Other information in display	
Electric pump working hours	Active demands: pressure switches and sensor
Jockey pump start count & working hours	Active alarms
Battery and battery charger: charging process and status	Calibration of measuring instruments
Input & Output. Digital / Analog test on display	
Front panel alarms	
Operating modes Electric Pump	Off
	Auto
	Manual
Operating modes Jockey Pump	Off
	Auto
Electric pump status	Demand
	Start order
	Running with discharge pressure
Jockey pump status	Demand
	Running order
Alarm	Yellow led indicator lamp and 80dB buzzer
Incoming line voltage and phase connections	One led light for each phase / phase rotation
Buzzer	80dB 1 hour autonomy
Communications	
Micro USB connector B type	SAF8C-EJ ↔ PC Communication
Languages	

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



EN12845

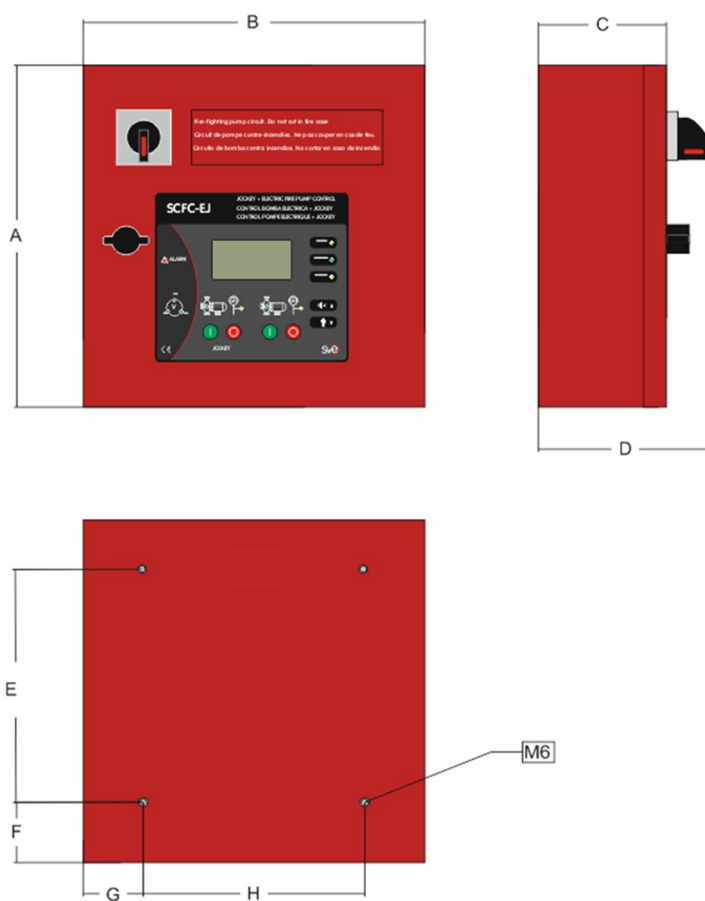


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DIMENSIONS AND FIXINGS



A	300 mm
B	300 mm
C	105 mm
D	145 mm
E	225 mm
F	45 mm
G	28,7 mm
H	242,46 mm

SCF8C-E(x)-U CONTROL PANEL COMPONENTS

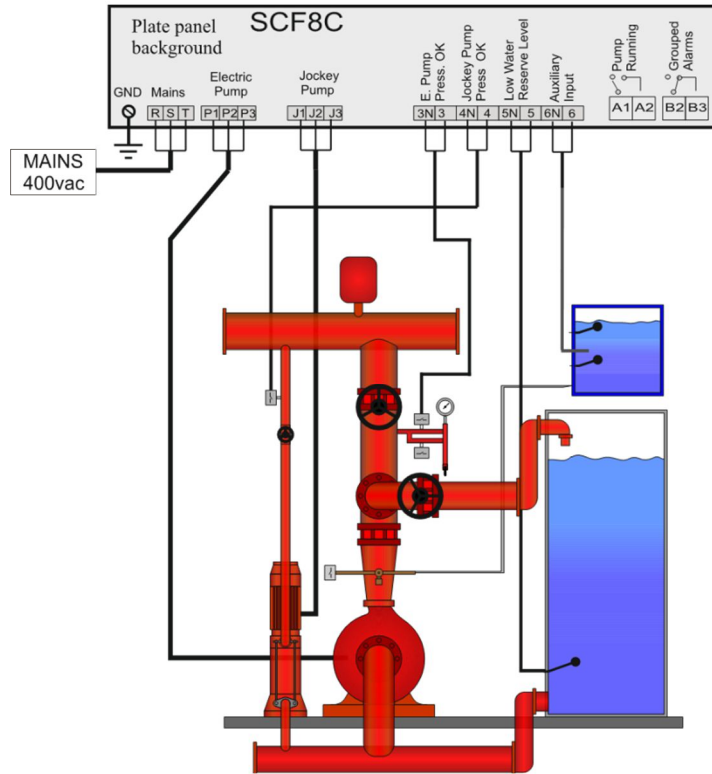
Component description	Nominative
Enclosure SCF8C-E(x)	ENV1
SAF8C-Control	TE2
SAF8C-Interface	TE1
Isolating switch III 400 VAC	S1
Contact breakers: Electric Pump (when direct on line, K2 and K3 are not installed)	K1, K2, K3
Contactors: Jockey Pump (if any)	K4
Electric pump protection fuses	F1,F2,F3

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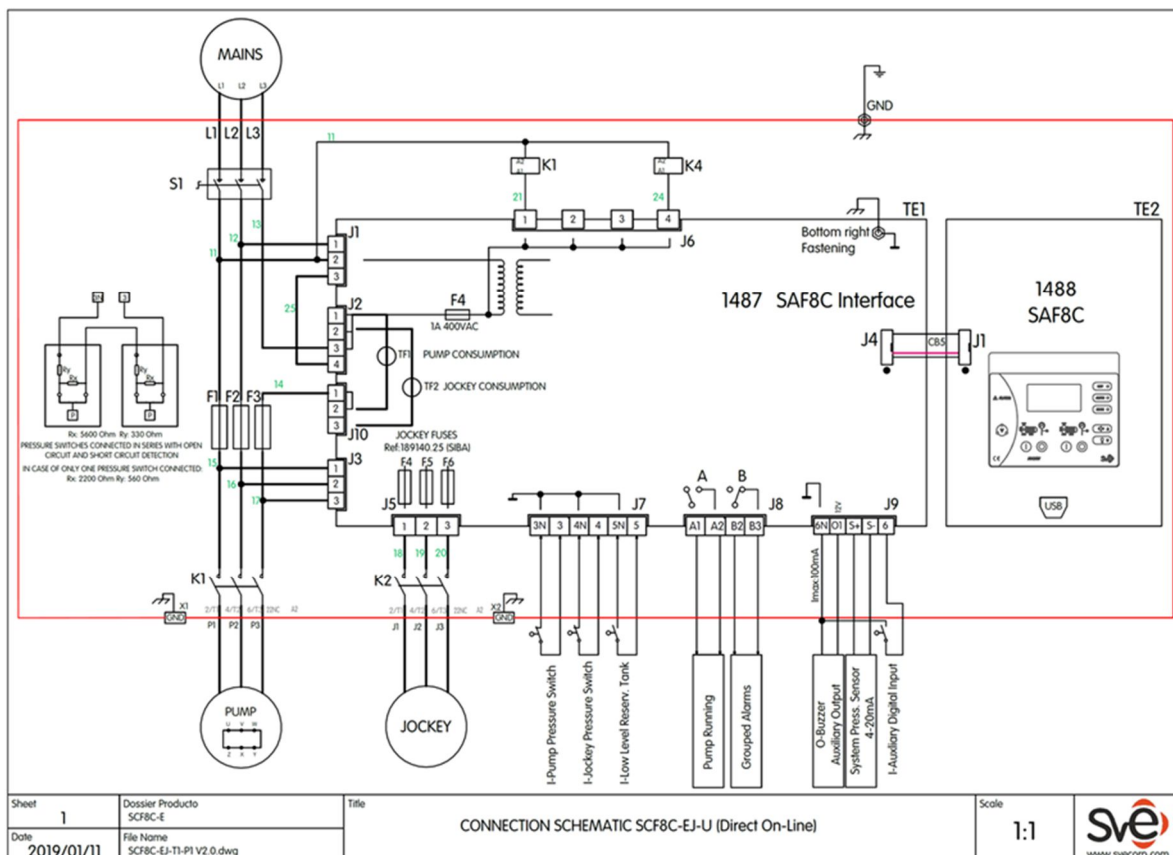
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EXTERNAL WIRING DIAGRAM



INTERNAL WIRING DIAGRAM

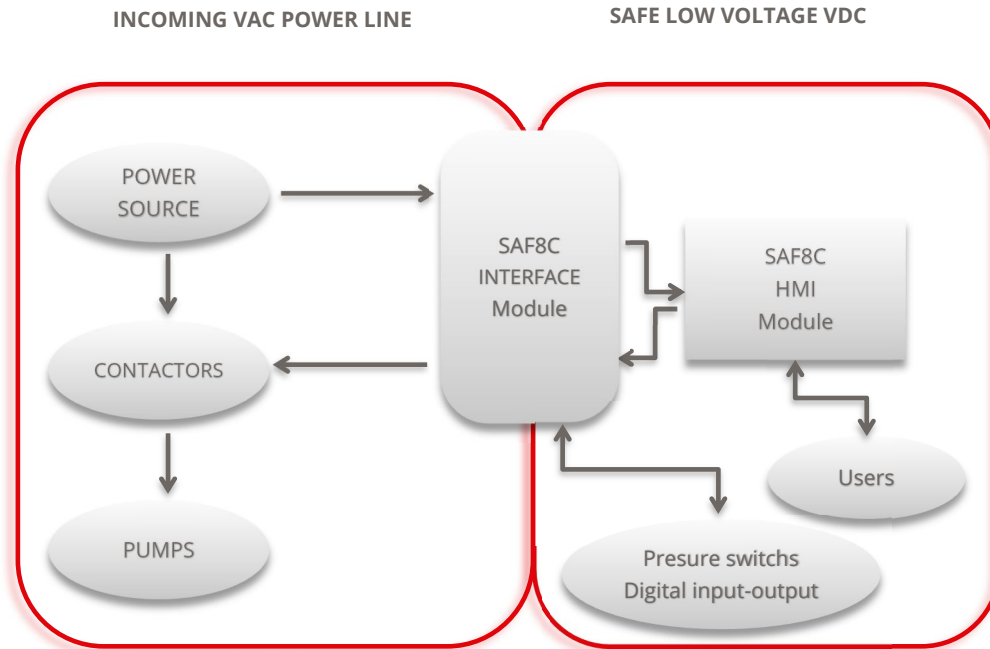


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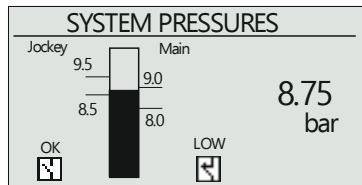


BLOCK DIAGRAM

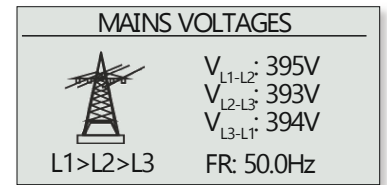


DISPLAYS

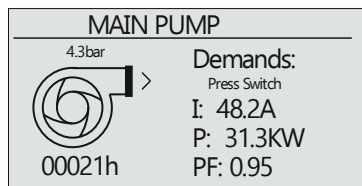
System pressures



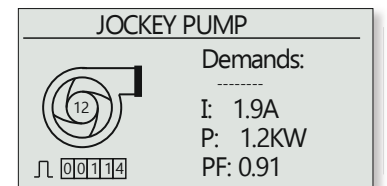
Incoming electric lines voltage and frequency



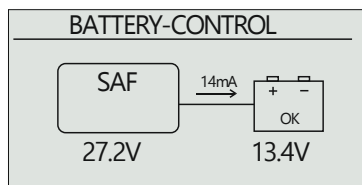
Electric pump parameters



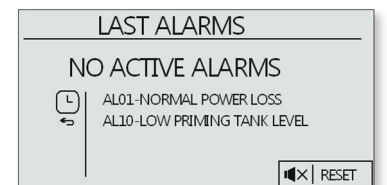
Jockey pump parameters



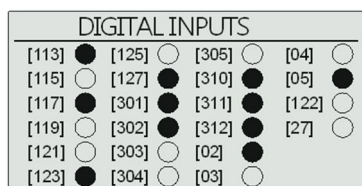
Battery control and current



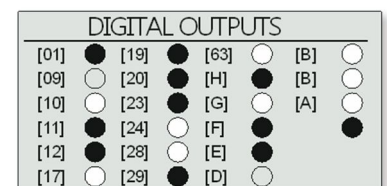
Last alarms



Digital input status



Digital output status





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