OP404-V01

SELEC

FEATURES

- 3.5" LCD with Touch
- Built in Buzzer
- 10 password levels
- Modbus protocol
- Alarms
- Recipe Management
- Serial Printing
- Data Logging

Power Consumption	4W Max
Operating Temperature	0^0 to 55^0C
Storage Temperature	-30^0 to 80^0C
Humidity	95% RH
Certification	CE, UL (Pending)
Dimensions(WxHxD)mm	99 x 99 x 62.85
Panel Cutout(WxH)mm	92 x 92
Weight	275gms

SPECIFICATIONS

LCD MODULE	Display Type	3.5" TFT LCD (256 color), Resistive Touch Screen
	Resolution	320 x 240 pixels
	Display Size(WxH)mm	70.08 x 52.56
	Backlight	LED backlight
	Brightness Adjustment	Yes (Via Internal MMI)
Keys		System key X 1, Function keys X 5
MEMORY	**Internal** BMP	4 MB
	Font	4 MB
	Application	512 KB
	Upload	5.5 MB
	System Reserved	2 MB
	Total	16 MB (System Memory)
	External	Micro SD upto 2 GB (User Memory)
COMMUNICATION	Slave Port	RS232 (MODBUS RTU)
	Master Port	RS485 (MODBUS RTU)
	Printer Port	RS232 (LX300 Protocol)
Operation Voltage		18 - 30VDC
Real Time Clock (RTC)	Backup Battery	Replaceable 3V CR2032
	Battery Life	1 year at 25^0C
	Accuracy	+/- 10 min per Year
Buzzer	Type	Electro Magnetic Buzzer
	Sound Output	85 dB at 10cm
	Operation	Software Programmable

⚠ SAFETY PRECAUTIONS

This manual is meant for personnel involved in wiring, installation, operation and routine maintenance of the equipment.

All safety related conditions, symbols and instructions that appear in this operating manual or on the equipment must be strictly followed to ensure operator and instrument safety. Any misuse may impair the protection provided by the equipment.

⚠ **CAUTION :** Read complete instructions prior to installation and operation of the unit.
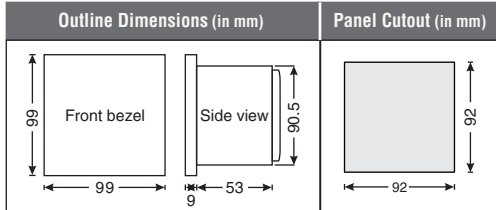
INSTALLATION INSTRUCTIONS

⚠ **CAUTION**
1. This equipment, being built-in-type, normally becomes a part of the main control panel and the terminals do not remain accessible to the user after installation.
2. Conductors must not come in contact with the internal circuitry of the equipment else it may lead to a safety hazard that may endanger life or cause electrical shock to the operator.
3. Circuit breaker or mains switch must be installed between the power source and supply terminals to facilitate power 'ON' or 'OFF' function.
4. The equipment shall not be installed in environmental conditions other than those specified in this manual.
5. Since this equipment forms part of the main control panel, its output terminals get connected to the host equipment. Such equipment shall also comply to EMI / EMC and safety requirements like CE standard procedure.
6. Thermal dissipation of equipment is met through ventilation holes provided on housing of equipment. Obstruction of these ventilation holes may lead to a safety hazard.
7. The output terminals shall be loaded strictly as per the values / range specified by the manufacturer.

WIRING INSTRUCTIONS

⚠ **CAUTION**
1. Wiring shall be done strictly according to the terminal layout provided in the operating manual.
2. To eliminate electromagnetic interference use short wire with adequate ratings and twists of equal size.
3. The power supply connection cable must have a cross section of 1sq.mm or greater and insulation capacity of at least 1.5KV.

MECHANICAL INSTALLATION

Outline Dimensions (in mm)	Panel Cutout (in mm)

For installing the controller
1. Prepare the panel cutout with proper dimensions as shown above.
2. Remove the clamp from the SMI.
3. Fix the unit into the cutout. Insert the clamp from both sides and tighten the screws.

⚠ **CAUTION**

The equipment in its installed state must not come in close proximity to any heating sources, caustic vapors, oils, steam, or other unwanted process by products.
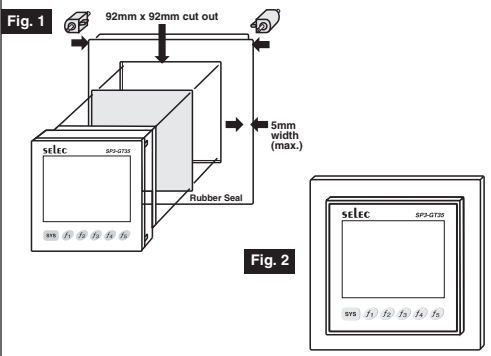
EMC Guidelines :
1. Use proper input power cables with shortest connections and twisted type.
2. Layout of connecting cables shall be away from any internal EMI source.
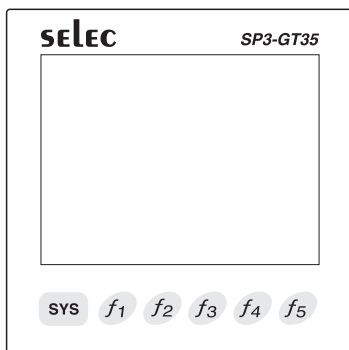
MAINTENANCE
1. To avoid blockage of ventilation holes, clean the equipment regularly using a soft cloth.
2. Do not use Isopropyl alcohol or any other organic Solvents for cleaning.

PANEL MOUNTING

Fig. 1
92mm x 92mm cut out
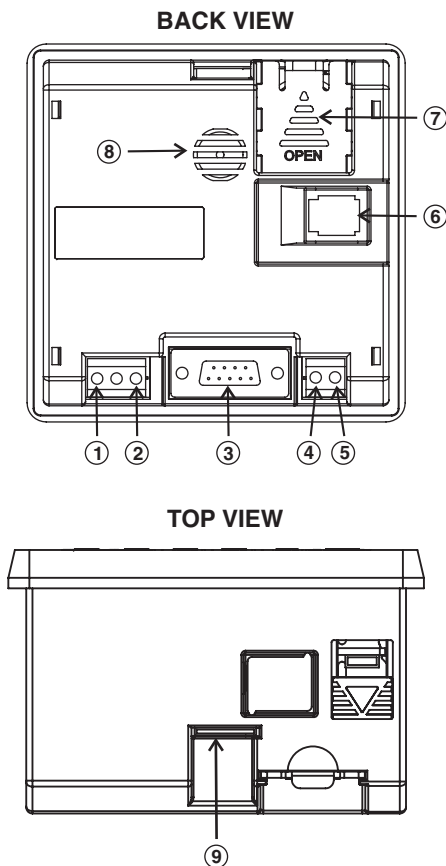5mm width (max.)
Rubber Seal
Fig. 2

1. Before you begin, note that the mounting panel cannot be thicker than 5 mm (0.197").
2. Make a panel cut-out measuring 92mm x 92mm (3.622" x 3.622").
3. Slide the controller into the cut-out, ensuring that the rubber seal is in place.
4. Push the 2 mounting brackets into their slots on the sides of the controller as shown in Fig. 1.
5. Tighten the bracket screws against the panel. Hold the bracket securely against the unit while tightening the screw.
6. When properly mounted, the controller is squarely situated in the panel cut out as shown in Fig. 2.

USER GUIDE

SP3-GT35

SYS f_1 f_2 f_3 f_4 f_5

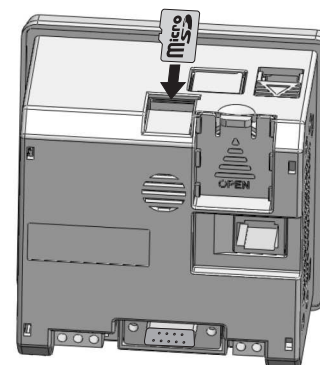| KEY	DESCRIPTION
SYS	Long press for 3 sec. to enter into internal menu for system info. Use for communications setting, backlight brightness control, touch calibration, to view memory usage and password setting.
f_1	Use for enter into calibration mode in internal menu and Programmable key in Run mode.
f_2 to f_5	Programmable keys in Run mode.

UNDERSTANDING YOUR DEVICE

BACK VIEW

OPEN

TOP VIEW

ITEM	DESRIPTION
①	+24V
②	GND
③	Slave Port
④	(−) RS485 Master Port
⑤	(+) RS485 Master Port
⑥	Printer Port
⑦	Battery Cover
⑧	Buzzer
⑨	SD Card Slot

PORT PIN CONFIGURATION

PORT	PIN	CONNECTION
SLAVE PORT	1	——
PIN 9 PIN 6	2	TXD
	3	RXD
	4	——
PIN 1 PIN 5	5	GND
	6	——
	7	——
	8	——
	9	——
PRINTER PORT	1	——
	2	GND
PIN 6 PIN 1	3	TXD
	4	RXD
	5	GND
	6	——

MEMORY INSTALLATION

- **Installing micro SD Card**
  ➢ Push the micro SD Card into the slot until it clicks.
  ➢ See Below figure for mounting direction.

micro SD
OPEN

- **Removing micro SD Card**
  ➢ Push on the micro SD Card until it clicks and is released.

ORDERING INFORMATION

ORDER CODE	SP3-GT35

ACCESSORIES

Window-Based Software for SMI
AC-USB-RS232-01 (For downloading from USB Port)
ACH-001 (For downloading from Serial Port)
ACH-002 (For Printer Port)
PS-CF-24V-1.1A

? SERVICE DETAILS

This device contains no user serviceable parts and requires special equipment and specialized engineers for repair.
Please contact service center for repair on the following numbers :
Toll free : 1800 227353 (BSNL / MTNL subscribers only)
Others : 91-22-40394200 / 40394202

NO WARRANTY ON UNIT DAMAGED DUE TO WRONG POWER SUPPLY.

(Specifications are subject to change, since development is a continuous process)

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