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.
7. 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.
8. The output terminals shall be loaded strictly as per the values / range specified by the manufacturer.

ELECTRICAL PRECAUTIONS DURING USE

Electrical noise generated by switching of inductive loads can create momentary disruption, erratic display, latch up, data loss or permanent damage to the instrument.

To reduce noise :

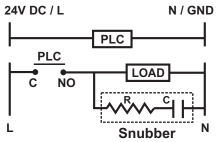
Use of Selec make Snubber across load is recommended.

Snubber Part no. : SNUBBER

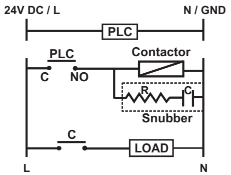
NOTE : Below mentioned diagram is applicable only for

Typical Connections For Loads :

For load current < 0.5A


24V DC / L
N / GND
PLC
PLC
C
NO
LOAD
R
C
L
Snubber
N

For bigger loads use interposing relay / contactor

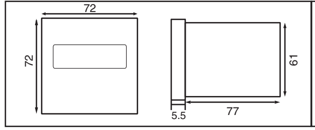

24V DC / L
N / GND
PLC
PLC
Contactor
C
NO
R
C
Snubber
C
LOAD
L
N

NOTE : Use snubber as shown above to increase life of internal relay.

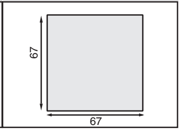
B) Use separate shielded wires for inputs.

MECHANICAL INSTALLATION

Outline Dimensions (in mm)


72
72
5.5
77
61

Panel Cutout (in mm)



For installing the controller

1. Prepare the panel cutout with proper dimensions as shown above.
2. 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 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

WIRING INSTRUCTIONS

⚠ CAUTION

1. To prevent risk of electric shock, power supply to the equipment must be kept OFF while wiring.
2. Terminals and electrically charged parts must not be touched when the power is ON.
3. Wiring shall be done strictly according to the terminal layout provided in the operating manual.
4. To eliminate electromagnetic interference use short wire with adequate ratings and twists of equal size.
5. The power supply connection cable must have a cross

FUNCTIONAL DETAILS

UNIX-1-230V is a PLC with built in HMI. The user can configure the product using SELPRO software.

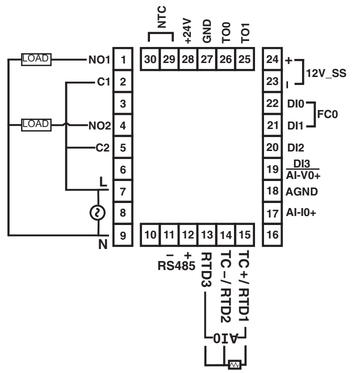
SELPRO has two sections :

1. Ladder logic programming section
2. Selec Machine Interface, used for configuration of HMI.

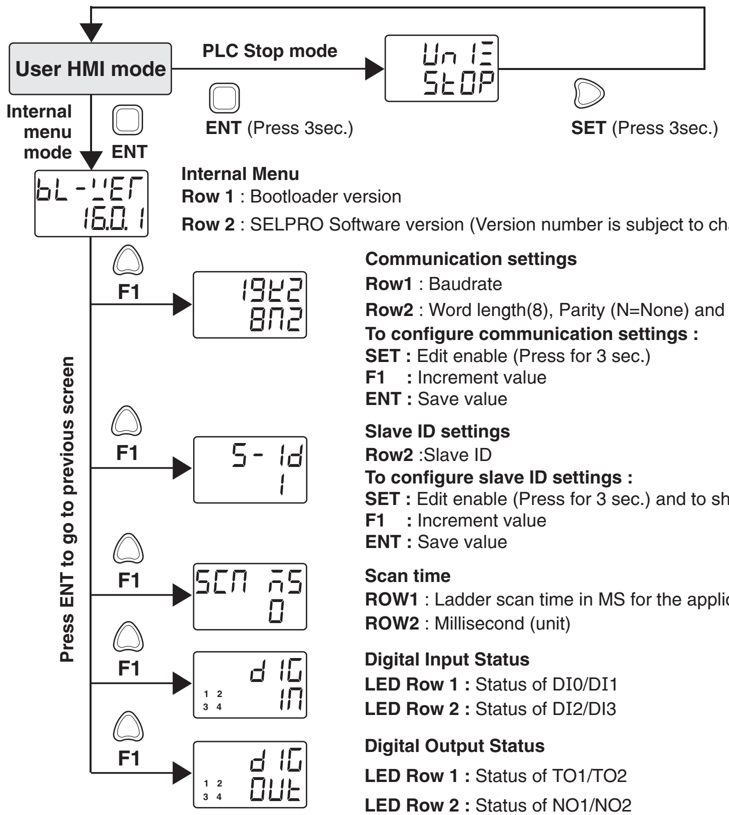
For details of the software, please refer to the

WIRING DIAGRAM

UNIX-1-230V


NTC
+24V
GND
TO0
TO1
30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
LOAD
NO1
C1
LOAD
NO2
C2
L
N
+
12V_SS
DI0
DI1
FC0
DI2
DI3
AI-V0+
AGND
AI-I0+
–
+
RS485
RTD3
TC –/ RTD2
TC +/ RTD1
AI0

MENU DESCRIPTION


User HMI mode
PLC Stop mode
Un 1E
StOP
ENT (Press 3sec.)
SET (Press 3sec.)
Internal menu mode
ENT
bL-VER
16.0.1
F1
19k2
8n2
F1
S- Id
1
F1
SCn mS
0
F1
dIG
In
1 2
3 4
F1
dIG
OUt
1 2
3 4
Press ENT to go to previous screen

Internal Menu

Row 1 : Bootloader version

Row 2 : SELPRO Software version (Version number is subject to change)

Communication settings

Row1 : Baudrate

Row2 : Word length(8), Parity (N=None) and Stop bits (2)

To configure communication settings :

SET : Edit enable (Press for 3 sec.)

F1 : Increment value

ENT : Save value

Slave ID settings

Row2 :Slave ID

To configure slave ID settings :

SET : Edit enable (Press for 3 sec.) and to shift cursor position

F1 : Increment value

ENT : Save value

Scan time

ROW1 : Ladder scan time in MS for the application downloaded.

ROW2 : Millisecond (unit)

Digital Input Status

LED Row 1 : Status of DI0/DI1

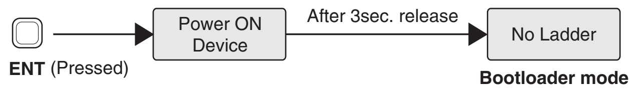
LED Row 2 : Status of DI2/DI3

Digital Output Status

LED Row 1 : Status of TO1/TO2

LED Row 2 : Status of NO1/NO2

Enter Bootloader mode


ENT (Pressed)
Power ON Device
After 3sec. release
No Ladder
Bootloader mode

ACCESSORIES (To be ordered separately)

ORDER CODE	DESCRIPTION
AC-USB-RS485-02	USB to RS485 cable (2 pin open wire)

? 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 : **Tel. No. :** + 91-7498077172 ;
Email : service@selec.com

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

Selec Controls Pvt. Ltd., India

Factory Address :
EL-27/1, Electronic Zone, TTC Industrial Area, MIDC, Mahape,
Navi Mumbai - 400 710, INDIA.
Tel. No. : +91-22-41 418 419/430 | Fax No. : +91-22-28471733
Toll free : 1800 227 353 (BSNL/MTNL Subscribers only)
Website : www.selec.com | Email : sales@selec.com