OP566-V01

1. PRODUCT PROFILE

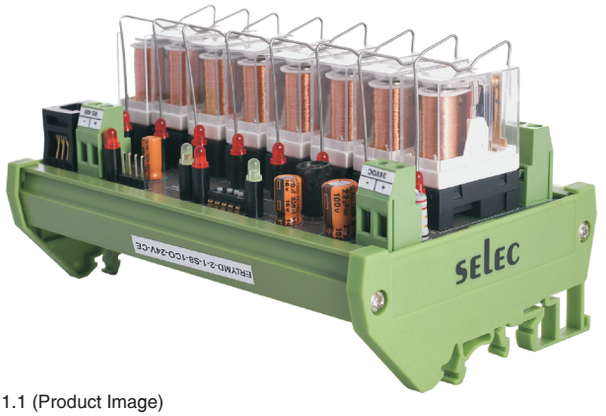


Figure 1.1 (Product Image)

2. DESCRIPTION

- ERLYMD-2-1-S8-1CO-24V is a module for use in conjunction with any PLC (With RS 485 master communication)
- Up to 7 number of such modules can be connected to a master PLC
- Four baud rate selections 9600, 19200, 38400, 57600 (User configurable)
- Seven Slave ID selection 1 to 7 (User configurable)
- Default baudrate 19200 and slave ID 1
- 12 LED indicators
- Five way DIP switch for Slave ID & Baud rate selection

3.TERMINAL CONNECTIONS

04	01	02	14	11	12	24	21	22	34	31	32	44	41	42	54	51	52	64	61	62	74	71	72
1NO	1C	1NC	2NO	2C	2NC	3NO	3C	3NC	4NO	4C	4NC	5NO	5C	5NC	6NO	6C	6NC	7NO	7C	7NC	8NO	8C	8NC

4. SPECIFICATIONS

Contacts	1 C/O
No. of Channels	8
Relay Specifications	
Nominal Coil Voltage	24V DC
Must Operate Voltage	18V DC
Max Coil Voltage	33V DC
Coil Current Per Channel	46 mA
Operate (Set) Time	15 ms max
Release (Reset) Time	5 ms max
Endurance	Mechanical : 10000000 ops
	Electrical : 100000 ops
Dielectric Strength	
Coil to contact	5000VAC for 1 minute
Open contacts	1000VAC for 1 minute
Relay Contact Rating	10A @ 277VAC / 30VDC
Operating Ambient	-40 to 70°C
Humidity	98% RH, 40°C
Terminations	
Coil Termination	Screw type, for 2.5 mm sq.wire
Contact Termination	Screw type, for 2.5 mm sq.wire
Mounting	35 mm DIN rail
Ordering information	ERLYMD-2-1-S8-1CO-24V
Dimensions	133(W) x 87(H) x 78(D) (in mm)
Weight	328.8 grams

5. DIP SWITCH SELECTION

Slave ID	DIP SWITCH				
	1	2	3	4	5
NA	X	X	OFF	OFF	OFF
1	X	X	OFF	OFF	ON
2	X	X	OFF	ON	OFF
3	X	X	OFF	ON	ON
4	X	X	ON	OFF	OFF
5	X	X	ON	OFF	ON
6	X	X	ON	ON	OFF
7	X	X	ON	ON	ON
Baud Rate					
9600	OFF	OFF	X	X	X
19200	OFF	ON	X	X	X
38400	ON	OFF	X	X	X
57600	ON	ON	X	X	X

6. LED Display

LED Name	LED COLOR	INDICATION
Power LED (PWR)	Green	Always ON when device is powered
Receive LED (Rx)	Green	Blinks when receives command from master
Transmit LED (Tx)	Red	Blinks when transmits response to master
Status LED (Stat)	Red	Will turn OFF if no command received within 10 secs
		Flashes for 500ms ON, 500ms OFF when SID = 0 (hardware setting), module is disabled

7. Communication

Communication Port	RS485 Slave
Communication Protocol	Modbus protocol
Baud Rate	9600, 19200, 38400, 57600 (User Configurable), Default 19K2
Fixed Settings	Parity (None), Stop bits = 1, Data Length = 8
Coil addresses	Starting from 0 to 7

⚠ DANGER

- Do not install in areas with excessive or conductive dust, corrosive or flammable gas, moisture or rain, excessive heat. regular impact shocks or excessive vibration.

8. DIN RAIL MOUNTING

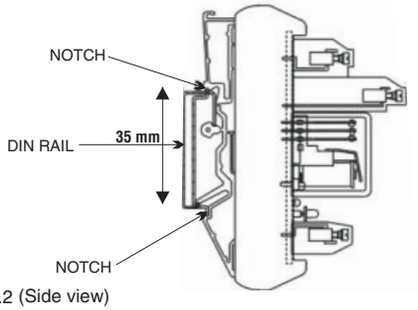


Figure 1.2 (Side view)

- Install the device as shown in the figure 1.2, such that module properly fits on the din rail within the notches, also allowing sufficient space around it for heat dissipation.

9. WIRING DETAILS

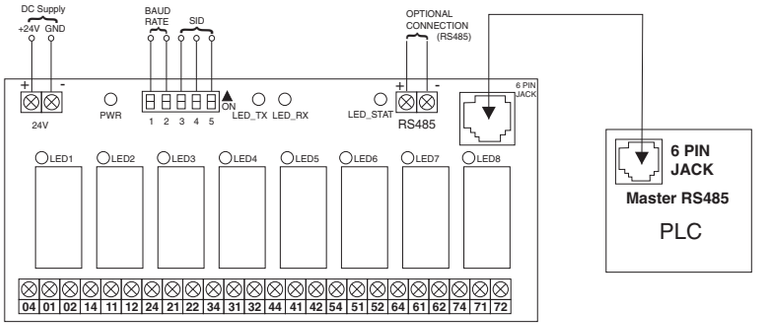


Figure 1.3 (Wiring Diagram)

INTERNAL PINOUT DESCRIPTION FOR 6 PIN JACK (PORT 1)

Pin	Description
1	RS485 Slave +ve
2	NA
3	NA
4	NA
5	NA
6	RS485 Slave -ve

⚠ CAUTION

- In situations of high transmission speed, long distance or high noise, the high quality twisted pair cable should be used. However in situations of low transmission speed and low noise, PVC twisted pair cable will be compatible.

⚠ WARNING

- The power supply connection cable must have a cross section of 1 sq. mm or greater and insulation capacity of at least 1.5 kV.

WIRING INSTRUCTIONS

- In PLC control system, many devices are controlled at the same time and actions of any device could influence each other, i.e. breakdown of any device may cause the breakdown of the entire auto-control system and danger. Therefore, we suggest you wire a noise protection circuit at the power supply input terminal.
- Use the shortest possible wire length.
- Use wire trays for routing where possible.
- To minimize voltage drops when wires must run a long distance, consider using multiple wires for the return line.
- Avoid running lower voltage wiring near higher voltage wiring.
- Avoid running input wiring close to output wiring where possible.
- Avoid running DC wiring in close proximity to AC wiring where possible.
- Avoid creating sharp bends in the wires.
- The output terminals should not be loaded more than the values/range specified by the manufacturer.
- Always use a continuous length of wire. Do not splice wires to attain a needed length.

SAFETY SUMMARY

⚠ DANGER

Indicates that death or severe personal injury will result if proper precautions are not taken.

⚠ WARNING

Indicates that death or severe personal injury may result if proper precautions are not taken.

⚠ CAUTION

With a safety alert symbol, indicates that minor personal injury can result if proper precautions are not taken.

NOTE :

Indicates that an unintended result or situation can occur if the relevant information is not taken into account.

SAFETY PRECAUTIONS

- This manual is meant for person involved in wiring, installation and operation of the equipment.
- Safety related conditions, symbols & instructions that appear in this operating manual or on the equipment must be strictly followed to ensure operator's and instrument's safety.
- Commissioning is absolutely prohibited until it has been completely ensured that the machine, in which the components described here are to be installed, is in full compliance with the provisions of the EC Machinery Directive.

⚠ DANGER

- Failure to comply with appropriate safety guidelines can result in severe personal injury or property damage. Always exercise proper caution when working with electrical equipment.
- Improper grounding may result in communication error, electric shock or fire.

⚠ WARNING

- Read complete instructions prior to installation and operation of the controller/card
- Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that product operate safely and without any problem.

⚠ CAUTION

- In addition to the danger and warning information provided in the manual, the applicable national, local and system specific regulations and requirements must be taken into account.
- If product and components from other manufacturers are used, these must be recommended or approved by SELEC Controls Pvt Ltd.

EMC GUIDELINES

- The permissible ambient conditions must be complied
- Power supply lines length to be maintained within 10m.

MAINTENANCE

- Clean the equipment regularly using a soft cloth.
- Do not use Isopropyl Alcohol or any other organic solvents for cleaning.
- Conductors must not come in contact with the internal circuitry of the controller or else it may lead to a safety hazard that may cause electrical shock to operator.

DISCLAIMER LIABILITY

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency However the information in this publication is reviewed and any necessary corrections are included in subsequent editions.

? 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

NO WARRANTY ON UNIT DAMAGED DUE TO WRONG POWER SUPPLY.

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

Selec Controls Pvt. Ltd., India

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