

# FPS 0270 UNIVERSAL INTERFACE INSTRUCTIONS

### **OPERATION**

The universal interface is designed to allow the latest generations of light curtains to be interfaced with any elevator control system.

The interface can be powered by either 115V or 230V AC depending on the voltage configuration of the interface and the available supply.

Two sets of change over relay contacts are provided to connect the output of the interface unit to the elevator control.

To provide a fail safe response to power failure, the relay is normally in the energised state, and will drop out when any of the light beams are interrupted. The N/O (normally open) and N/C (normally closed) terminal markings on the printed circuit indicate the contact state when energised.

#### OVERLOAD PROTECTION

The output of the universal interface is protected against short circuits by a Polyswitch current sensor. This will isolate the output under fault conditions.

Once tripped the system can be reset by switching the AC supply off for ten seconds.

# **LED INDICATORS**

The green LED indicates that power is present.

The red LED illuminates to indicate that the system has identified an obstruction and the relay has dropped out.

# **INSTALLATION AND COMMISSIONING**

The interface box can be mounted to the elevator car by means of the external mounting holes and screws.

Connect the electrical supply and relay output contacts to the elevator system in a fashion that meets with local code requirements.

Switch on the supply, check that both the red and green LEDs are on. Connect the transmitter (Tx) and receiver (Rx) edges to the terminal blocks of the universal interface.

With the light curtain uninterrupted the red LED should be off and the relay should be energised.

### TROUBLE SHOOTING

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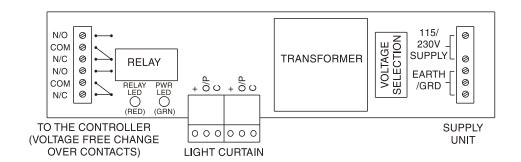
With the curtain of light connected and the system powered up, the output voltage should be between 18 and 28 volts (nominally 24V). With the curtain of

light disconnected the voltage should not be higher than 30V.

To check the operation of the universal interface, without the curtain of light connected, the curtain of light's signal may be simulated by connecting either of the 'o/p' terminals to either of the 'c'. The red LED should go off and the relay change state allowing the connection and response with the elevator system to be tested.

#### SUPPLY WIRING

- 1. All mains wiring must be routed through the holes provided adjacent to the point of connection.
- 2. All field wiring terminals are rated 60°C.
- 3. For all field wiring use copper conductors only.
- 4. Tighten all field wiring terminals to maximum 3.5lb ins (0.4Nm).



#### **SPECIFICATION**

| Item                 | Detail  | Additional comments                   |
|----------------------|---|---------------------------------------|
| Supply Voltage       | 230 or 115V AC (50Hz or 60)                         | Switch selected (SW1)                 |
| Signal Output        | Volt free change-over relay contacts                | Contacts rated / set, 240V AC 8A RES. |
| Fail Safe Conditions | Faulty cable or Supply Failure                      |                                       |
| Compatibility        | FCU 0500 & 0700 Series,                             |                                       |
| Power consumption    | 4.0VA (Typical)                                     |                                       |
| Indicators           | Supply present:<br>System beams / fault obstructed: | Green LED<br>Red LED                  |
| SYSTEM APPROVALS     | UL, cUL, CE (EMC)                                   | EN12015, EN12016.                     |