

PROGRAMMABLE LATCHING, SEQUENCE & MEMORY RELAY



TYPES: UNI-4LRS (4 x spno)

FEATURES

- Din rail modular design
- Tri voltage 24VAC/DC, 110VAC, 230VAC
- 4 programmable relay outputs
- Programmable for 6 sequencing/latching functions
- Selectable memory function
- Dual LED indication

DESCRIPTION & MODE OF OPERATION

A din rail mounted tri voltage modular latching / sequence relay with a selectable memory option. Outputs are four individual single pole normally open contacts. The unit is programmed via three front selector switches. Switch 1 determines the number of relays in play, switch 2 the function of the latching / sequencing of the relays, switch 3 selects if the memory function is required.

The unit requires a permanent supply to the coil and operation is then achieved by using up to three volt free trigger commands from A1 onto terminals **FWD**, **BCK** or **RESET**. The unit reacts to the leading edge of a trigger input only. If required the trigger input can then be held continuously, if then a leading edge is then seen on any of the other inputs the unit will operate accordingly. A trigger to **FWD** will cause the unit to switch the relays in a forward manner, whilst a trigger to **BCK** will cause the unit to step back a position. A **RESET** trigger will cause the unit to reset back to the first (start) position.

Two LED's indicate the units operation, a green LED to indicate the connection of a supply voltage. The red LED will predominantly be not illuminated however, every 2 seconds it will blink quickly the number of relays energised.

SWITCH 1 - RELAYS

Determines the number of relays to be in operation

- A:** 0, 1 One relay, minimum relays on = 0
- B:** 0, 1, 2 Two relays, minimum relays on = 0
- C:** 1, 2 Two relays, minimum relays on = 1
- D:** 0, 1, 2, 3 Three relays, minimum relays on = 0
- E:** 1, 2, 3 Three relays, minimum relays on = 1
- F:** 0, 1, 2, 3, 4 Four relays, minimum relays on = 0
- G:** 1, 2, 3, 4 Four relays, minimum relays on = 1
- H:** All relays permanently off

SWITCH 2 - FUNCTION

Selects the relay operation pattern

- 1:** Repeat sequential i.e. 1 - 2 - 3 - 4 - 1 - 2 - 3 - 4 -
- 2:** Cycle sequential i.e. 1 - 2 - 3 - 4 - 3 - 2 - 1 - 2 -
- 3:** Limit sequential i.e. 1 - 2 - 3 - 4 - 4 - 4 - 4 - 4 -
- 4:** Repeat add i.e. 1 - 1&2 - 1&2&3 - 1&2&3&4 - 1 - 1&2 - 1&2&3 -
- 5:** Cycle add i.e. 1 - 1&2 - 1&2&3 - 1&2&3&4 - 1&2&3 - 1&2 -
- 6:** Limit add i.e. 1 - 1&2 - 1&2&3 - 1&2&3&4 - 1&2&3&4 - 1&2&3&4 -

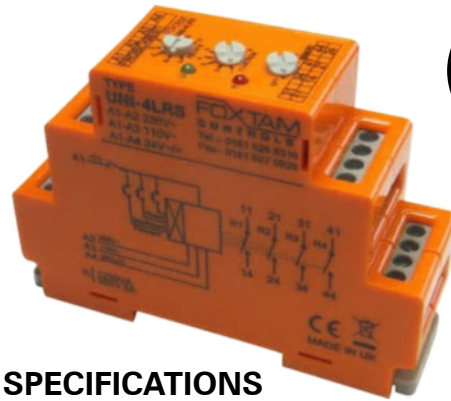
* If relay position **A, B, D** or **F** is selected then "0" (no relay energised), also is applicable to any of the above functions settings, i.e. the first (start) position is "0".

* The above functions depict a forward stepping only, if a **BCK** input is made the unit will move back a position.

SWITCH 3 - MEMORY (circa 1 month)

ON: On power up the unit will return to the last output state before power was lost

OFF: Will power up on minimum relays set at the beginning of the set pattern, i.e. relay switch set to "E" relay 1 will only energise, set to "A" no relays will be energised.



SPECIFICATIONS

Supply Voltage

Nominal supply: A1 to A2 (230VAC)
A1 to A3 (110VAC)
A1 to A4 (24 AC/DC)

Permanent tolerance: ± 15%

Power consumption: < 5VA

Insulation: 2.5KV 50Hz impulse

Trigger inputs:

Min input time: 25mSec

Max input time: Continuous

Relay outputs:

Output contacts: 4 x SPNO 5Amps/250V AC1

Mechanical life: 15 Million ops

Electrical life: 100K ops at max rated load

General:

Operating temperature: -20°C to +65°C

Storage temperature: -20°C to +65°C

Max cable size: 2.5mm

CE marked: Yes

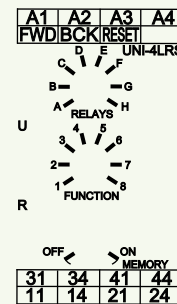
In accordance with: EN61000-6-1: 2007

EN61000-6-3: 2007

EN61010-1: 2002

Housing material: Polycarbonate, Auto extinguishable to UL 94 V-0

FUNCTION



CONNECTIONS

