# FOXTAM 14 PIN 4PCO, 5 AMP RATED RELAYS

## TYPE: FRP3145/VOLTS

PRODUCT GROUP H



## FEATURES

- LED indication
- Flag indication
- Test button
- Locking facility
- DC coils with integral diode protection
- GP contacts as option
- UKCA & CE marked

## DESCRIPTION & MODE OF OPERATION

A high quality range of UKCA & CE marked standard pin out 4PCO 14 pin plug in relays, nominally rated at 5Amps/250V AC AC1. The relays benefit from every customer required option as standard, namely both mechanical and electrical indication via a mechanical flag and a high intensity LED. DC coil relays also have included within the relay a protection diode fitted across the coil as standard.

The relays can be manually tested by a momentary action push button, a lever can then be twisted to give a locking facility. Standard contact material is silver but on request the relays are available with gold plated contacts for long term assurance of low level signal switching (suffix part number GP) To differentiate between AC and DC coils in the same installation the push button is coloured red for AC coils and blue for DC coils. Available coil voltages are 12V DC, 24V DC, 24V AC, 110V AC and 230V AC. Clearly marked on the relay case are the connection details and the CE mark.

## IMPORTANT NOTE

With regards coil connection on DC coil relays which have both a protection diode and LED fitted as standard, coil polarity matters (+A1, 13) (-A2, 14).

## COIL DATA

| Coil rated voltage | Coil resistance at 20°C | |
|---|---|---|
| | DC | AC |
| Un(V)DC/AC | Rn(Ω) ± 10% | |
| 12 | 160 | |
| 24 | 650 | |
| 110 | | 160 |
| 230 | | 3400 |
| | | 13600 |

Drop out voltage DC 10% min
Pull in voltage DC 80% max
Drop out voltage AC 30% min
Pull in voltage AC 80% max

## CONTACT DATA

| | |
|---|---|
| **Contact form:** | FRP3145 (4PCO) |
| **Contact material:** | $AgSnO_2$ |
| **Rated current:** | 5A 250V AC AC1 / 30V DC |
| **Max. operating voltage:** | 250V AC, 110 V DC |
| **Max. Switching power:** | 600VA, 150W |
| **Max. operating duty:** | 360 operat./h at max rated load<br>18000 operat./h at min. load |
| **Mechanical life:** | $10^7$ operations (no load operation) |
| **Electrical life:** | $10^5$ operat. at max rated resistive load |

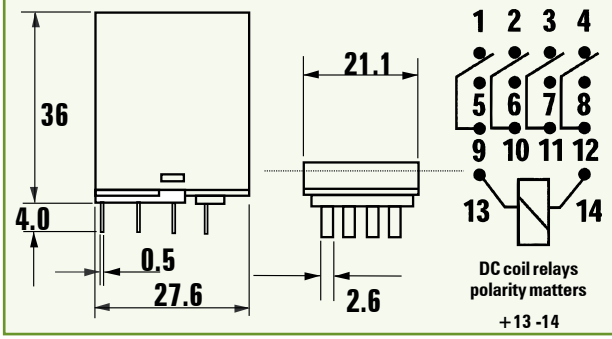
## ORDERING INFORMATION

| TYPE | COIL VOLTAGE |
|---|---|
| **FRP3145** | 12V DC, 24V DC, 24V AC, 110V AC, 230V AC |

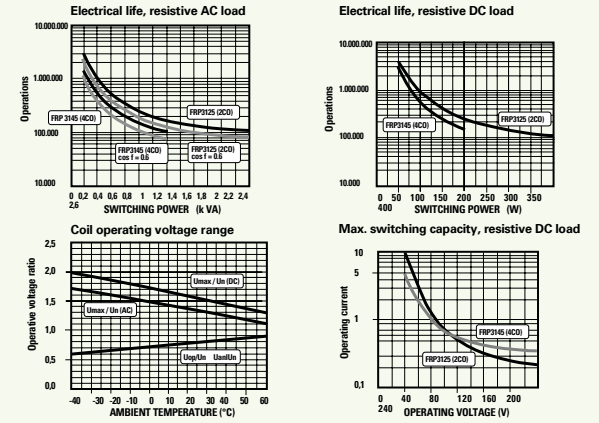
**ADD SUFFIX "GP" AFTER PART NUMBER FOR GOLD PLATED CONTACTS**

**Sockets see page 106 for full details.**

### DIMENSIONS




### PERFORMANCE GRAPHS




## GENERAL DATA

| | |
|---|---|
| **Rated Power Pull In Max:** | DC1.1W; AC 2VA |
| **Max Coil Temperature:** | 155°C |
| **Test voltage(1min.) contact-coil:** | ≥ $2kV_{rms}$ 50Hz |
| **Contact-contact:** | ≥ $1kV_{rms}$ 50Hz |
| **Between-contact 4CO:** | ≥ $1kV_{rms}$ 50Hz |
| **Operate time at Un:** | ≤25 ms |
| **Release time:** | ≤ 25 ms |
| **Insulation resistance (500V DC):** | 100 MΩ |
| **Vibration resistance (10-55Hz):** | Amplitude width 1.5mm |
| **Shock endurance:** | 1000 $m/S^2$ Min |
| **Ambient temperature for operating:** | -25°C to + 55°C |
| **Mounting position:** | As desired |
| **Relay weight:** | 35g |