CONDUCTIVE PROBE LEVEL CONTROL RELAYS

PRODUCT GROUP D

TYPES: YWRW, 11WRW, 8WRW, 8WRWO (spco)
YWR2W, 11WR2W (dpco)



FEATURES

- Din rail or plug in
- Available SPCO or DPCO output
- Control & automatic regulation of liquid levels
- Selectable "pump up" or "pump down"
- Adjustable sensitivity
- Isolated AC probe supply
- LED indication
- Special Japanese standard pin out version

DESCRIPTION & MODE OF OPERATION

Din rail mounted or 8/11 pin plug in conductive probe level control relays for the control of maximum and/or minimum levels of conductive liquids.

Regulation of two levels "pump down" mode -The relay is energised when the high level probe is reached and de-energises when the level falls below the low level probe.

Regulation of two levels "pump up" mode -The relay is de-energised when the high level probe is reached and energises when the level falls below the low level probe.

Regulation of one level "pump down" mode selected - Connect the maximum and common terminals together. In this case a single probe only is used and the relay energises when the probe is immersed. Or in "pump up" mode the relay operation is reversed.

Prove relay test feature/override (Din rail versions only)- With probes connected the front selector switches can be used to control the relay providing a permanent "ON" or permanent "OFF".

OTHER APPLICATION NOTES

1. On conductive vessels and tanks the chassis can be used as the "Common" electrode. If the vessel is non conductive a third probe is required as the "Common".
2. Probe cables up to a maximum of 100m need not be screened, above 100m screened cable is recommended. However, in any event it is not advisable to run the probe cables with power cables. When screened cable is used, the screen and the common should be connected together.
3. DC auxiliary supply units are available but not recommended as the probe supply is DC non isolated. DC on the probes runs a consequential risk of a possible electrolysis reaction, especially in solutions with a high mineral or contaminant contact. Whilst AC probes have a self cleaning effect.

SPECIFICATIONS

Supply & Measuring

Nominal supply tolerance:	±15%
Isolation AC versions:	Via transformer
Isolation level:	2KV AC between contacts, probes & supply
Isolation DC versions:	No
Probe supply:	20V AC (AC supply versions) 12V DC (DC supply versions)
Max probe current:	2mA
Power consumption:	3VA
Sensitivity range:	Adjustable 4.7 to 100 KOhms
Response time:	100 mSec on make

Relay output

Output contacts:	SPCO 10Amps/250V AC1
Mechanical life:	30 Million ops
Electrical life:	200K ops at max rated load

General

Operating temperature:	-20°C to +65°C
Storage temperature:	-20°C to +65°C
Max cable size:	4mm
UKCA & 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

ORDERING INFORMATION

TYPE	COIL VOLTAGE		
YWRW (Din rail SPCO)	440V AC	230V AC	*12V DC
11WRW (11 pin SPCO)	415V AC	110V AC	*24V DC
8WRW (8 pin SPCO)	400V AC	48V AC	*48V DC
8WRWO (8 pin SPCO)	380V AC	24V AC	
YWR2W (Din rail DPCO)			
11WR2W (11 pin DPCO)			

8WRWO has the Japanese standard pin out arrangement.

On request factory set sensitivity and mode of operation can be manufactured. Enter "F" after part number and specify exact requirements.

*** DC auxiliary supply units are possible but the probe supply is an un-isolated 12V DC with a consequential risk of a possible electrolysis**
reaction, especially in solutions with a high mineral or contaminant

CONNECTIONS & FUNCTION

