



UR20 Relay Output Modules

UR20-4RO-CO-255

The digital relay output module UR20-4RO-CO-255 can control up to 4 actuators each with a maximum of 6A. Each connector features a potential-free changeover contact. A status LED is assigned to each channel. The relay coils are supplied with power from the output current path (I_{OUT}).

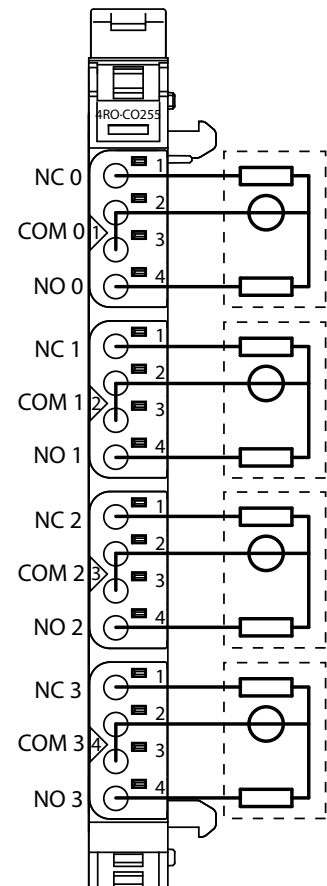
When using relay modules UR20-4RO-CO-255 in explosive atmosphere:

- The device must be installed in an environment free of condensation, corrosives and conductive dust.
- If the switching or input voltage exceeds 63V, a transient protection device must be provided that limits the transients to a peak voltage of 500V or less.
- Because relays wear, you must ensure that the temperature does not exceed the limits of temperature class T4. A contact resistance of more than 110 mΩ will be considered as a fault.



Technical Specifications - UR20-4RO-CO-255	
Price	\$145.00
Drawing	PDF
Outputs	
Number	4
Type	C0 contact
Response time	20 ms
Max. output current	5A per channel at 60 °C / 6A at 55 °C 20A per module at 60 °C / 24A at 55 °C
Switching frequency	5 Hz max.
Short-circuit-proof	No
Protective circuit	Requires an external 6A slow-blow fuse
Service life with AC-15 load and 1-A switching current	>300000 switching cycles
Module diagnosis	Yes
Individual channel diagnosis	No
Max. switching voltage	255 VAC, UL: 277 VAC, 277 VDC corresponding to derating curve (see UR20 manual for derating)
Supply	
Supply voltage for system, inputs and outputs	24 VDC +20% / -15%
Current consumption from system current path I_{SYS}	8 mA
Current consumption from output current path I_{OUT}	4 mA + 4 mA per active relay
Weight	
Weight (operational status)	106g

Terminal Connections





UR20 Module Specifications

Environmental Specifications - UR20 I/O Modules		
Degree of protection (IEC 60529)		IP20
Flammability rating UL 94		V-0
Material of power contacts and data contacts		Ni-Au, 3µm
Temperature	Operation	-20 + 60 °C [-4 to +140 °F]
	Storage, transport	-40 to +85 °C [-40 to +185 °F]
Humidity	Operation	95%, non-condensing as per IEC 61131-2
	Storage, transport	95%, non-condensing as per IEC 61131-2
Air pressure	Operation	≥ 795 hPa [11.5 psi] (altitude ≤ 2000 m) as per IEC 61131-2
	Storage, transport	≥ 700 hPa [10.2 psi] (altitude ≤ 3000 m) as per IEC 61131-2
Vibration resistance		5 Hz ≤ f ≤ 8.4 Hz: 3.5mm amplitude as per IEC 60068-2-6 8.4 Hz ≤ f ≤ 150 Hz: 1g acceleration as per IEC 60068-2-6
Shock resistance		15g over 11 ms, half sinewave, as per IEC 60068-2-27
Potential isolation	Test voltage	Max. 28.8V within one channel 500 VDC field/system (as per EN 60079-15:2017)
	Pollution severity level	2 (as per DIN EN 60664-1:2008)
	Overvoltage category	II (as per DIN EN 50178)
Approvals		CE, RoHS, UKCA, cULus E141197