

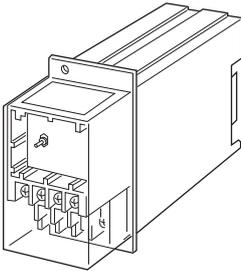
High-density Signal Conditioners 10-RACK

/C03: Rubber coating

CONTACT OUTPUT MODULE

Functions & Features

- Accepting status signals from a DCS
- Controlling valve operations
- External switches enables to switch valve operation to manual mode and to direct/reverse actions
- Internal switch enables manual operation under DCS control



MODEL: 10BOS-1-R[1]

ORDERING INFORMATION

- Code number: 10BOS-1-R[1]
- Specify a code from below for [1].
(e.g. 10BOS-1-R/Q)
- Specify the specification for option code /Q
(e.g. /C01)

INPUT

Status signal from DCS

OUTPUT

Relay contact (two)

POWER INPUT

DC Power

R: 24 V DC

(Operational voltage range 24 V \pm 10 %, ripple 10 %p-p max.)

[1] OPTIONS

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q

COATING (For the detail, refer to our web site.)

/C01: Silicone coating

/C02: Polyurethane coating

GENERAL SPECIFICATIONS

Construction: Rack-mounted; terminal access via screw terminals at the front and via card-edge connector at the rear; terminal cover provided

Connection

Input: M3.5 screw terminals (torque 0.8 N·m)

Output: M3.5 screw terminals (torque 0.8 N·m)

Power input: Supplied from card-edge connector

Screw terminal: Nickel-plated steel

Housing material: Flame-resistant resin (black)

Isolation: Input or power to output

Test switch: LED indicator

INPUT SPECIFICATIONS

Input: Status signal from DCS

Coil rating: 24 V DC @ 20 mA max.

OUTPUT SPECIFICATIONS

Output: Relay contact (two)

Rating: 220 V AC @ 5 A ($\cos \phi = 1$)

24 V DC @ 5 A (resistive load)

Electrical life $\geq 1 \times 10^5$ cycles

Maximum switching voltage: 264 V AC or 100 V DC

Minimum load: 5 V DC @ 10 mA

Mechanical life: 5×10^7 cycles

For maximum relay life with inductive loads, external protection is recommended.

MAN/DCS SW	INPUT				OUTPUT									
	MAN.SWITCH		SW	PULSE OUT. CARD		LED BACK	LED FWD	LED REV	OUTPUT					
	FWD	REV		FWD	REV				FWD	REV				
OFF	/	/	AUTO	ON	ON	OFF	ON	ON	ON	ON				
					OFF	OFF	ON	OFF	ON	OFF				
				OFF	ON	OFF	OFF	ON	OFF	ON				
					OFF	OFF	OFF	OFF	OFF	OFF				
				ON	ON	OFF	ON	OFF	ON	OFF				
					OFF	OFF	ON	OFF	ON	OFF				
			FWD			FWD	ON	ON	OFF	ON	OFF	ON	OFF	
								OFF	OFF	ON	OFF	ON	OFF	
								ON	ON	OFF	ON	OFF	ON	OFF
								OFF	OFF	ON	OFF	ON	OFF	OFF
								ON	ON	OFF	ON	OFF	ON	OFF
								OFF	OFF	ON	OFF	ON	OFF	OFF
REV			REV	ON	ON	OFF	OFF	ON	OFF	ON				
					OFF	OFF	OFF	ON	OFF	ON	OFF			
					ON	ON	OFF	OFF	ON	OFF	ON			
					OFF	OFF	OFF	ON	OFF	ON	OFF			
					ON	ON	OFF	OFF	ON	OFF	ON			
					OFF	OFF	OFF	ON	OFF	ON	OFF			
ON	ON	ON	/	/	/	ON	ON	ON	ON	ON				
		OFF	/	/	/	ON	ON	OFF	ON	OFF				
	OFF	ON	/	/	/	ON	OFF	ON	OFF	ON				
		OFF	/	/	/	ON	OFF	OFF	OFF	OFF				

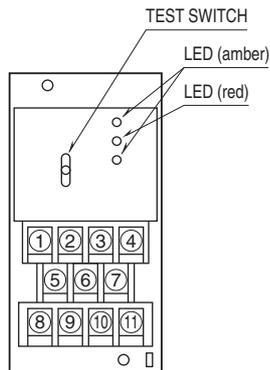
INSTALLATION

Current consumption: Approx. 40 mA
Operating temperature: -5 to +55°C (23 to 131°F)
Operating humidity: 30 to 90 %RH (non-condensing)
Mounting: Standard Rack 10BXx
Weight: 300 g (0.66 lb)

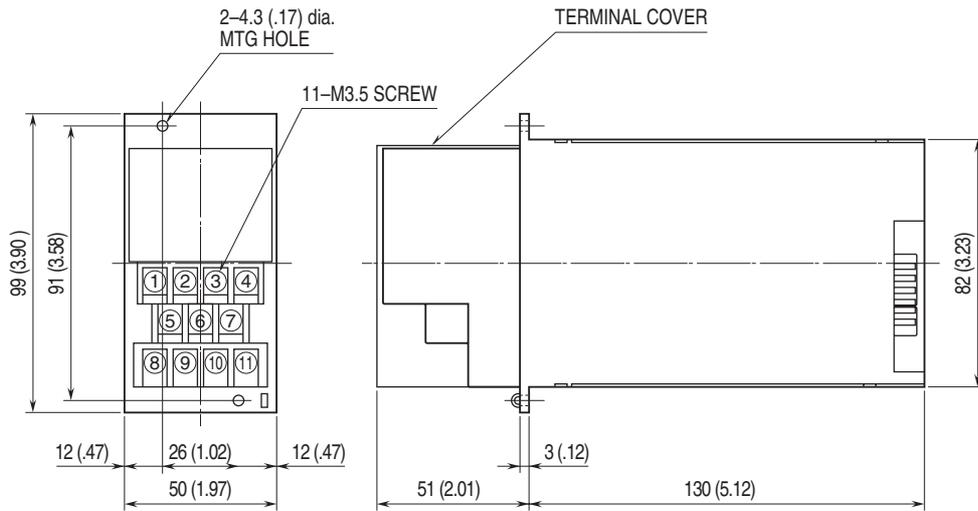
PERFORMANCE

Insulation resistance: $\geq 100 \text{ M}\Omega$ with 500 V DC
Dielectric strength: 1500 V AC @ 1 minute
 (input or output to power)
 1500 V AC @ 1 minute (output to ground)

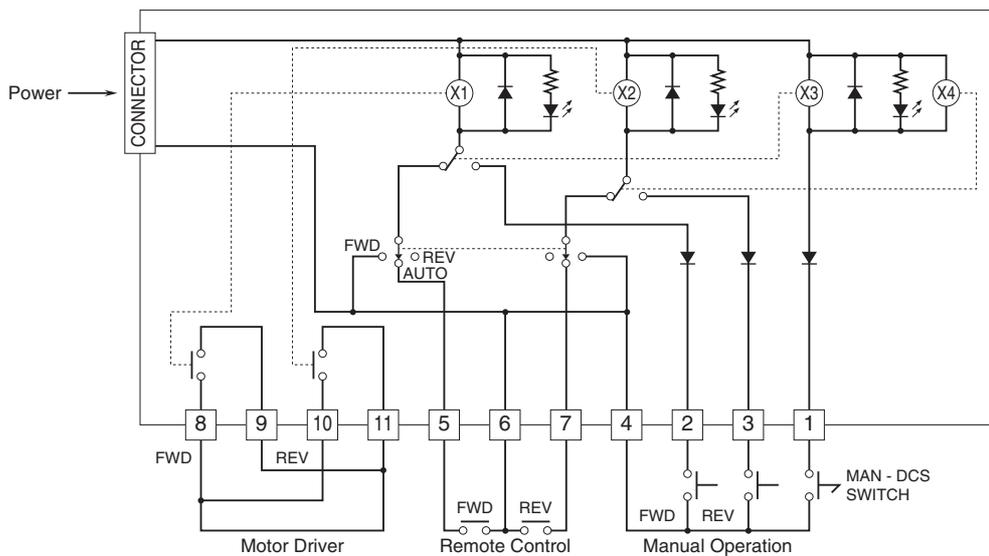
EXTERNAL VIEW



EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.