

TCR/TCN-02 Series







Electric Actuator

- Ultra-small size, delicate appearance (L104-W70-H90)
- Rated torque: 20Nm
- Enclosure level: IP67
- Mechanical port: ISO5211 (F03/F04/F05)
- Output shaft: Male square 12X12, Female octagonal 8X8/11X11/14X14
- Adopt high performance brushless motor,
overall actuator could be used 20,000 times ^{*1}

※ TCR series means whole plastic casing: ABS/PC+PET

TCN series means die-casting aluminum casing, surface passivation spray-paint.



	Product Model	Rated Voltage	Time	Additional Function	Remarks
	TCR/TCN-02N Normal on/off model	DC12/24V AC24/110/220V AC/DC24V AC/DC95-265V	10S@DC Series 15S@AC Series 10S	HTR(anti-condensation heater) KT32(failsafe) HTR(anti-condensation heater)	Dry contactor feedback Feedback signal is asynchronous with actual arrival
	TCR/TCN-02C Intelligent on/off model	DC12V AC/DC24V AC/DC95-265V	10S	KT32(failsafe) A(alarm signal output) HTR(anti-condensation heater)	Feedback signal is synchronous with actual arrival ^{*2} PUL speed adjustment PWM speed adjustment 0.9/1.3" OLED screen Perform 2-way/3-way/4-way mode
	TCR/TCN-02T Intelligent modulating model	DC12V AC/DC24V AC/DC95-265V	10S	KT32(failsafe) A(alarm signal output) HTR(anti-condensation heater)	0.9/1.3" OLED screen Control feedback mode: 4-20mA/0-20mA/0-10mA 0-5V/1-5V/0-10V/2-10V ^{*3}
	TCR/TCN-02B Intelligent bus model	DC12V DC24V AC95-265V (No suggest) ^{*4}	10S	KT32(failsafe) HTR(anti-condensation heater)	RS485, CANBus2.0 0.9/1.3" OLED screen On/Off mode has PUL and PWM speed adjustment function Bus on/off model(ON/OFF/B33) Bus modulating model, modulate precision is 5‰
	TCR/TCN-02D Intelligent timer model	DC12V AC/DC24V AC/DC95-265V	10S	KT32(failsafe) HTR(anti-condensation heater)	0.9/1.3" OLED screen Internal with rechargeable batteries Could keep working for 60days after power-cut Pluse or Time timer mode Loop by days or weeks
	TCR/TCN-02R Intelligent wireless model	DC12V AC/DC24V AC/DC95-265V	10S	KT32(failsafe) HTR(anti-condensation heater)	Wireless ON/OFF model(ON/OFF) 0.9/1.3" OLED screen Wireless modulating model, modulate precision is 5‰ Communication frequency:433/868/915MHZ LORA: The max is 2.5km (cleared area) ENOCAN:20-100m ⁵

Notice: ^{*1}. Test condition: Rated load, test at factory environment of 25°C temperature and 50% humidity, lead the result from 2 times switching cycle, which will be influenced by different load and working environment.

^{*2}. The relay feedback is dry feedback signal, which will be disappeared when power-cut, and then will be recovery when power-on.

^{*3}. The control terminal adopts two ways independence input: One way is 0-10V,2-10V,0-5V,1-5V. The other is 0-20mA,4-20mA,0-10mA.Both could be selected by menu.

The feedback terminal also adopts two ways independence output: One way is 4-20mA, the default is output. The other is 2-10V, the default is output. Both of them could be changed to 0-20mA or 0-10V output.

^{*4}. For bus mode, it's not recommend to use AC95-265V, because AC power could influence the communication reliability of the whole network.

^{*5}. The OCEAN mode of wireless model provide self-powered telecontrol switch, while the LORA mode provide wireless centralized controller.

Wireless model doesn't have mechanical manual function. But under power-on condition it could be control valve on or off by key-press and menu in local.

ABS: Supply by CHIMEI from China Taiwan, which has excellent anti-temperature characteristics, -20-80°C.

PC+PET: Supply by LG Company, whose anti-temperature, anti-impact and chemical corrosion resistance characteristics are better than ABS, but it will be surely cost more.

PWM: The influence of speed adjustment to torque, the lower speed, the smaller torque, the max will be reduce more than 35%.

PUL: Speed V has little influence to torque, the torque would be reduce about 15%

HTR: Anti-condensation heater, built-in module, when the internal temperature is below 25°C, the actuator will turn on heating function, which power is 2W.

A: Means fault feedback signal, which is relay dry feedback signal.

KT32: Normal series only has power-cut close function, but Intelligent series could operate command(ON/OFF/KEEP) by menu after power-cut.



Ocean Controller



Lora Controller

