







TCR-05 Highspeed Series Electric Actuator

- Ultra-small size, delicate appearance (L132-W111-H121)
- Rated torque: 50Nm
- Enclosure level: IP67
- Mechanical port: ISO5211 (F05/F07)
- Output shaft: Female octagonal 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-05NH Normal on/off model	DC24V AC/DC24V AC/DC95-265V	5S	HTR(anti-condensation heater)	Dry contactor feedback Feedback signal is asynchronous with actual arrival
 TCR-05CH Intelligent on/off model	DC24V AC/DC24V AC/DC95-265V	5S	A(alarm signal output) HTR(anti-condensation heater)	Feedback signal is synchronous with actual arrival ^{*2} PUL speed adjustment PWM speed adjustment 1.3" OLED screen Perform 2-way/3-way/4-way mode
 TCR-05TH Intelligent modulating model	DC24V AC/DC24V AC/DC95-265V	5S	A(alarm signal output) HTR(anti-condensation heater)	1.3" OLED screen Control feedback mode: 4-20mA/0-20mA/0-10mA 0-5V/1-5V/0-10V/2-10V ^{*3}
 TCR-05BH Intelligent bus model	DC24V AC/DC24V	5S	HTR(anti-condensation heater)	RS485, CANBus2.0 1.3" OLED screen On/Off model has PUL and PWM speed adjustment function Bus on/off model(ON/OFF/B33) Bus modulating model, modulate precision is 5%
 TCR-05DH Intelligent timer model	DC24V AC/DC24V AC/DC95-265V	5S	HTR(anti-condensation heater)	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-05RH Intelligent wireless model	DC24V AC/DC24V AC/DC95-265V	5S	HTR(anti-condensation heater)	Wireless ON/OFF model(ON/OFF) 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 ^{*4}

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} 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 regulating has little adjustment 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.



Ocean Controller

Lora Controller

