## **(€ ISO9001**

## TCN-20/40/100/200 Series

## **Electric Actuator**

- O Ultra-small size, delicate appearance
- © Rated torque:200/400/1000/2000Nm
- © Enclosure level: IP67
- Mechanical port: ISO5211 (F05/F07)
- Output shaft: Female octagonal: 17X17@10 22X22@20/40
  Male square: 12X12@05 14X14@10 22X22@20/40 30X30@100/200
- Adopt high performance brushless motor, overall actuator could be used 10,000 times \*1
- \*\* TCN series means die-casting aluminum casing, surface passivation spray-paint.



TCN-20/40 (L223-W176-H132)



TCN-100/200 (L280-W190-H185)

	Product Model	Rated Voltage	Time	Additional Function	Remarks
	TCN Series-N Normal on/off model	DC24V AC24/110/220/380V	10S@05/10 10/30S@20/40 40S@100 80S@200 20S@05 30S@10/20/40 60S@100 100S@200	HTR(anti-condensation heater)	Dry contactor feedback Feedback signal is asynchronous with actual arrival
	TCN Series-C Intelligent on/off model	DC24V AC24/110/220V	10\$@05/10/20/40 40\$@100 80\$@200 20\$@05 30\$@10/20/40 60\$@100 100\$@200	A(alarm signal output) HTR(anti-condensation heater)	Feedback signal is synchronous with actual arrival <sup>2</sup> PUL speed adjustment PWM speed adjustment@DC Series 1.3" OLED screen Perform 2-way/3-way/4-way mode
	TCN Series-T Intelligent modulating model	DC24V AC24/110/220V	10S@05/10/20/40 40S@100 80S@200 20S@05 30S@10/20/40 60S@100 100S@200	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
	TCN Series-B Intelligent bus model	DC24V AC24/110/220V	10S@05/10/20/40 40S@100 80S@200 20S@05 30S@10/20/40 60S@100 100S@200	HTR(anti-condensation heater)	RS485, CANBus2.0 1.3" OLED screen On/Off model has PUL Bus on/off model(ON/OFF/B33) Bus modulating model, modulate precision is 1%
Town 0	TCN Series-R Intelligent wireless model	DC24V AC24/110/220V	10S@05 2/10S@10/20 10/30S@40 40S@100 80S@200 15S@05 4/30S@10/20 30S@40 60S@100 100S@200	HTR(anti-condensation heater)	Wireless ON/OFF model(ON/OFF) 1.3" OLED screen Wireless modulating model, modulate precision is 1% Communication frequency: 433/868/915MHZ LORA: The max is 2.5km (cleared area) ENOCEAN:20-100m <sup>14</sup>

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 0−10/,2−10/,0−5/,1−5/. 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 2−10/, the default is output . Both of them could be changed to 0−20mA or 0−10/ 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.

The influence of speed adjustment to torque, the lower speed ,the smaller torque ,the max will be reduce more than 35%. Speed adjustment has little influence to torque, the torque would be reduce about 15% Anti–condensation heater, built–in module, when the internal temperature is below 25%, the actuator will turn on heating function, which power is 2W. Means fault feedback signal, which is relay dry feedback signal.







Lora Controller



