

# KGD02 CONTINUOUSLY MODULATING TYPE DAMPER ACTUATOR (10, 15, 20, 30Nm)

### DESCRIPTION

KGD02 continuously modulating type damper actuator is controlled by DC 0(2)~10V or 4~20mA signal, and can provide 0~10VDC position feedback signal. They are widely applied for damper controls of HVAC systems and water systems, and also used for controlling global valve. There are 10, 15, 20, 30Nm models for optional.

### **CHARACTERISTICS**

VARIOUS SIGNALS CONTROL

Standard type: 0~10Vdc control; the setting position of J3 is at point V

If you want 2~10Vdc or 4~20mA control type, please inform about it in your order. We will adjust the PCB in factory. You can use J3 setting to switch the

control signals between 2~10Vdc and 4~20mA: point "V" is for 2~10Vdc control; point A is for 4~20mA control.

#### • SIMPLE INSTALLATION

Fix the damper actuator on the damper shaft by universal holder. (Various special actuator holding bracket are supplied according to customers' requirements.) The rotating angle of the actuator can be set by internal potentiometer (PT1). The match between working range and feedback signal is automatically done by the actuator.

#### MANUAL OPERATION

It can be operated manually if needed: press the manual button on the actuator, the gearings inside the actuator will break away. The damper can be operated manually when keep pressing the manual button. PLEASE DO NOT OPERATE WHEN POWER ON!

#### HIGH DEPENDABLE PERFORMANCE

KGD02 modulating type damper actuator uses bi-directional magnetic clutch synchronous motor. It has overload protection and overtime protection, and no limitator needed. The actuator will stop automatically when it runs to the end. And the damper actuator has a precision of 10° adjustable mechanical limitator.

#### SPECIFICATIONS AND TECHNICAL DATA

MODEL	KGD02-10024E	KGD02-15024E	KGD02-20024E	KGD02-30024E
TORQUE	≥10Nm	≥15Nm	≥20Nm	≥30Nm
OPERATION TIME(50Hz/90°)	pprox66s	pprox90s	pprox110s	pprox143s
NET WEIGHT	1.35kg 1.72kg			2kg
RATED VOLTAGE (50/60Hz)	24VAC±10%			
CABLE	0.5~1.5mm <sup>2</sup>			
POWER CONSUMPTION	5.5VA when operating			
CONTROL SIGNAL	DC0~10V or 4~20mA			
FACTORY SETTING	Working condition: DA (J1) Axle rotates to 0° (J4) when signal is lost			
POSITION PRECISION	±5%			
ROTATE ANGEL	90° < Mechanical limitation ≤ 95°			
NOISE LEVEL	Maximum 45dB(A)			
POSITION INDICATOR	Mechanical indication			
PROTECTION CLASS	IP 42			
AMBIENT TEMPERATURE	<b>-5</b> ℃ <b>~+50</b> ℃			
STORAGE TEMPERATURE	-30℃~+70℃			
USAGE LIFE	>60000 cycles			







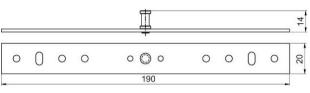
### DIMENSIONS

MODEL	DIMENSIONS (mm)					
	А	В	С	D	E	F
KGD02-1024E	108	174	70	39	26	31
KGD02-1524E	108	174	70	39	26	31
KGD02-2024E	124	196	69	39	26	35
KGD02-3024E	124	196	69	39	26	35

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## STANDARD SETTING BRACKET

В



## (M) CONTROLLER WIRING TERMINALS 2 T INPUT CONTROL SIGNAL 0-10V DC CO O-OR 4-20mA DC

SIGNAL (

SUPPLY AC24V

COM

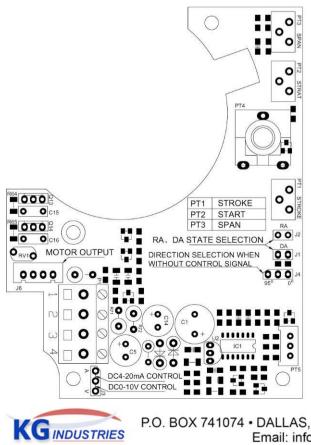
WIRING DIAGRAM

INPUT CONTROL SIGNAL		ROTATE	
DA	RA	DIRECTION	
INCREASING	DECREASING	C	
DECREASING	INCREASING	C	

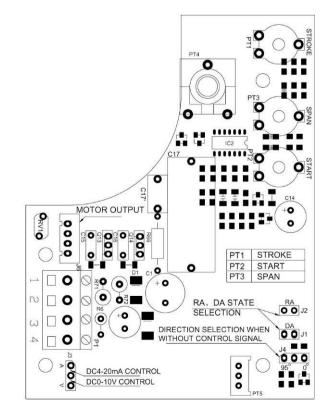
# PCB SETTING FOR 10Nm, 15Nm

4 CONTROL 0-10V DC

SIGNAL (



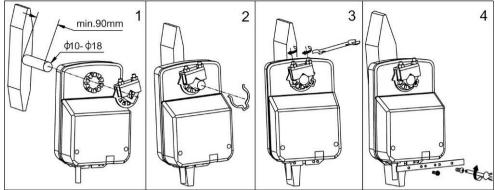
# PCB SETTING FOR 20Nm, 30Nm



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## **INSTALLATION DIAGRAM**



\* The accessories include 2 limitative baffles, 2 baffle setscrews (M3×6), and 1 actuator setting gasket.

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