

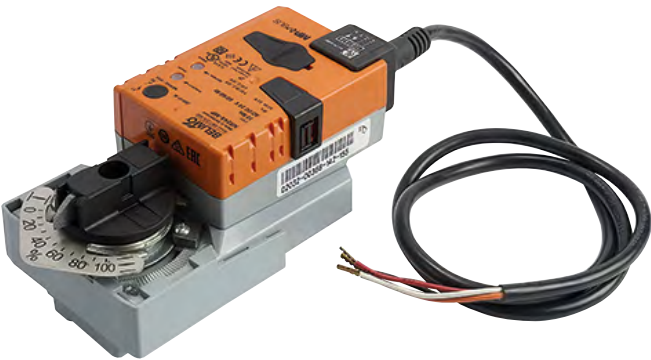
K274-3



Radiant Systems Energy Management

# Proportional actuator 2..10 V, for R206AFL PICVs

Datasheet  
1202EN 10/2025



Proportional actuator for R206AFL pressure independent control valves (PICV).

## Versions and codes

PRODUCT CODE	POWER SUPPLY	TYPE	FOR USE WITH VALVE
K274Y301	24 Vac/dc	Proportional 2..10 V	R206AFL (DN65, DN80)
K274Y302	24 Vac/dc	Proportional 2..10 V	R206AFL (DN100, DN125, DN150)

## Technical data

PRODUCT CODE	K274Y301	K274Y302
ELECTRICAL DATA		
Power supply	24 Vac/Vdc	
Power supply frequency	50/60 Hz	
Power supply range	19.2÷28.8 Vac / 21.6÷28.8 Vdc	
Power absorption	3.5 W	
Power absorption in stand-by	1.4 W	
Power	6 VA	
Connection cable	1 m, 4 x 0,75 mm²	

PRODUCT CODE	K274Y301	K274Y302
OPERATIONAL DATA		
Torque motor	10 Nm	20 Nm
Operating range Y	2..10 V	
Input impedance	100 kΩ	
Feedback position U	2..10 V	
Position accuracy	±5%	
Direction of rotation	Selectable with switch 0/1*	
Manual operation	With push-button, can be locked	
Rotation time	150 s / 90°	
SAFETY DATA		
Protection class IEC/EN	III Safety Extra-Low Voltage (SELV)	
Protection degree IEC/EN	IP54	
EMC	CE according to 2014/30/EC	
Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14	
Ambient working temperature range	-30÷50 °C	
Storage temperature range	-40÷80 °C	
Ambient humidity	Max. 95% RH, non-condensing	
PHYSICAL CHARACTERISTICS		
Weight	770 g	1100 g

\* With the selector in position 0, rotation occurs counterclockwise; in position 1, the rotation direction will be clockwise.

#### ⚠ WARNINGS.

- This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Outdoor application: only possible in case that no (sea) water, snow, ice, insolation or aggressive gases interfere directly with the device and that it is ensured that the ambient conditions remain within the thresholds according to the data sheet at any time.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with during installation.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- Cables must not be removed from the device.
- To calculate the torque required, the specifications supplied by the damper manufacturers concerning the cross-section and the design, as well as the installation situation and the ventilation conditions must be observed.
- The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

## ➤ Operation

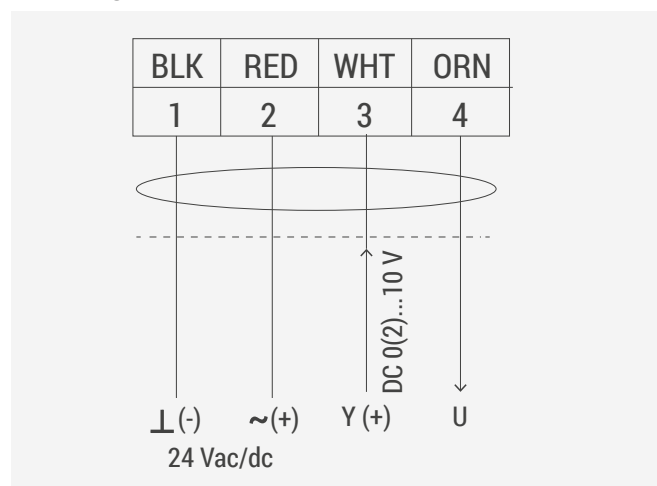
The actuator is controlled by a standard modulating signal of 2..10 V and moves to the position requested by the positioning signal. When powered for the first time (e.g., during initial startup), the actuator performs a synchronization. Synchronization occurs upon reaching the base position (0%). The actuator then moves to the position defined by the control signal.

## ➤ Electric connections

### ⚠ WARNINGS.

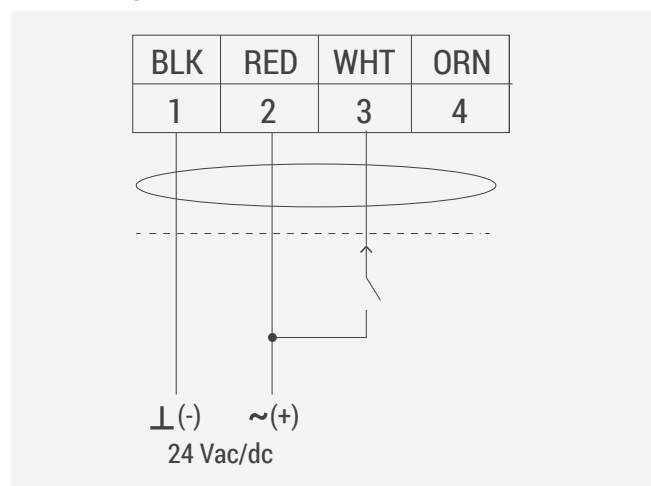
- Make sure to disconnect the power supply during wiring.
- Carry out and check wiring before powering the system. Short circuits or wires improperly connected may permanently damage the electrical components of the actuator.
- Do not touch, try to connect or disconnect the wires with power ON.
- Wiring must comply to the local standards and must be carried out only by qualified operators.
- Keep high and low voltage wires separated.
- Make sure the line voltage complies with the one shown on the device.
- Failure to comply with these instructions may cause injuries or damage the device.

### 2..10 V signal

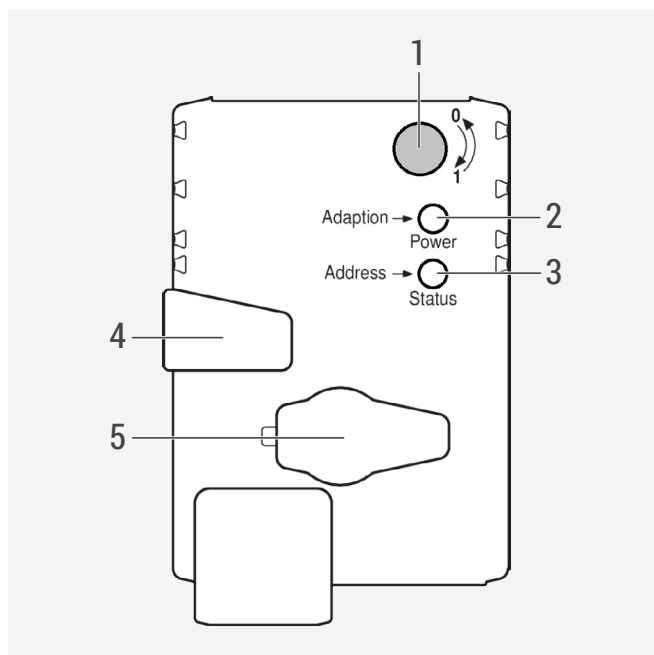


1	BLACK (BLK)	Common (-)
2	RED (RED)	Phase (+)
3	WHITE (WHT)	Control signal
4	ORANGE (ORN)	Feedback signal

### ON-OFF signal



## ➤ Operating controls and indicators



### 1) Direction of rotation switch

Switch over: direction of rotation changes.

### 2) Push-button and LED display green

Off: no power supply or malfunction.

On: in operation.

Press button: triggers angle of rotation adaptation, followed by standard mode.

### 3) Push-button and LED display yellow

Off: standard mode.

Flickering: MP communication active.

On: Adaptation or synchronisation process active.

Flashing: request for addressing from MP client.

Press button: confirmation of the addressing.

### Check power supply connection

2) Off and 3) On: possible wiring error in power supply.

### 4) Manual override button

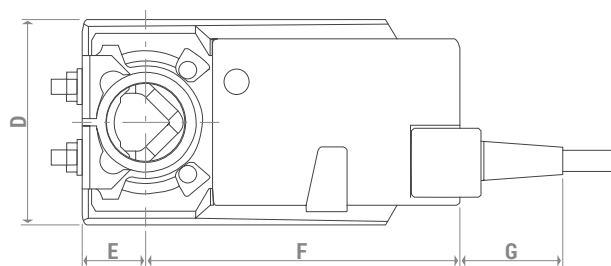
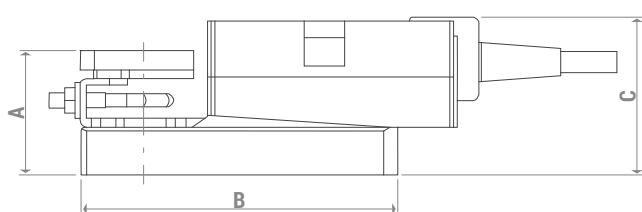
Press button: gear train disengages, motor stops, manual override possible.

Release button: gear train engages, synchronisation starts, followed by standard mode.

### 5) Service plug

For connecting configuration and service tools.

## ➤ Dimensions



PRODUCT CODE	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
K274Y301	52	124	62	80	25	121	41
K274Y302	58	139	64	88	30	131	41

## ➤ Reference standards

- CE marking
- EMC 2014/30/EU standard
- IEC/EN 60730-1 and IEC/EN 60730-2-14 certifications

## ➤ Product specifications

### **K274Y301**

2..10 V proportional actuator, for R206AFL pressure independent control valves (PICV) size DN65 and DN80. Power supply: 24 V; 50/60 Hz. Power absorption 3,5 W. Rotation time: 150 s/90°. Protection class IEC/EN: III Safety Extra-Low Voltage (SELV). Degree of protection: IP54. Ambient temperature: -30÷50 °C. Storage temperature: -40÷80°C. CE marking. In compliance with EMC 2014/30/EU. IEC/EN certifications: IEC/EN 60730-1 and IEC/EN 60730-2-14. Weight: 770 g.

### **K274Y302**

2..10 V proportional actuator, for R206AFL pressure independent control valves (PICV) size DN100, DN125 and DN150. Power supply: 24 V; 50/60 Hz. Power absorption 3,5 W. Rotation time: 150 s/90°. Protection class IEC/EN: III Safety Extra-Low Voltage (SELV). Degree of protection: IP54. Ambient temperature: -30÷50 °C. Storage temperature: -40÷80°C. CE marking. In compliance with EMC 2014/30/EU. IEC/EN certifications: IEC/EN 60730-1 and IEC/EN 60730-2-14. Weight: 1100 g.

**⚠ Safety Warning.** Installation, commissioning and periodical maintenance of the product must be carried out by qualified operators in compliance with national regulations and/or local standards. A qualified installer must take all required measures, including use of Individual Protection Devices, for his and others' safety. An improper installation may damage people, animals or objects towards which Giacomini S.p.A. may not be held liable.

**♻ Package Disposal.** Carton boxes: paper recycling. Plastic bags and bubble wrap: plastic recycling.

**ℹ Additional information.** For more information, go to [giacomini.com](http://giacomini.com) or contact our technical assistance service. This document provides only general indications. Giacomini S.p.A. may change at any time, without notice and for technical or commercial reasons, the items included herewith. The information included in this technical sheet do not exempt the user from strictly complying with the rules and good practice standards in force.

**♻ Product Disposal.** Do not dispose of product as municipal waste at the end of its life cycle. Dispose of product at a special recycling platform managed by local authorities or at retailers providing this type of service.