

# TA-MC50-C



## Actuators

High performance proportional actuator –  
500 N

# TA-MC50-C

High performance proportional actuators with automatic stroke adaptation which provide accurate modulating or 3-point control when used together with 2-way and 3-way control valves from IMI Hydronic Engineering.

## Key features

### > Easy commissioning

Automatic measurement and adaptation to the valve lift as well as load-dependent end position switch-off helps to reduce commissioning time and protect the valve and actuator from overloading.

### > Easy troubleshooting

Protected hand drive for a safe manual operation enables easy troubleshooting.

### > Ease of service

The actuator housing cover is easy to remove. Parameters can easily be changed on site.



## Technical description

### Functions:

24 VAC: Modulating or 3-point control.  
230 VAC: 3-point control.

### Supply voltage:

24 VAC/VDC  $\pm 10\%$   
230 VAC  $\pm 10\%$   
Frequency 50-60 Hz  $\pm 5\%$

### Power consumption:

24 V: 6 VA (AC) / 2,6 VA (DC)  
230 V: 3,5 VA

### Input signal:

24 V:  
0(2)-10 VDC,  $R_i \sim 20 \text{ k}\Omega$ .  
Signal direction and starting point adjustable by micro switches.  
3-point control.  
230 V:  
3-point control.

### Feedback signal:

24 V: 0 - 10V max. 5 mA - for 100% lift

### Control speed:

22 s/mm

### Adjusting force:

500 N

### Operation mode:

S1 100%ED

### End position switch-off:

Load-dependent

### Temperature:

Max. ambient temperature: 50°C  
Min. ambient temperature: 0°C

### Ingress protection:

IP40

### Protection class:

(according to EN 60730)  
24 V: III  
230 V: II

### Stroke:

Max. 10 mm

### Cable:

1,5 m, with wire end sleeve.  
24 V: 0,5 mm<sup>2</sup>  
230 V: 0,75 mm<sup>2</sup>

### Connection to valve:

Swivelling nut M30x1,5 of brass.

### Colour:

Black body and red cover.

### Marking:

IMI TA, CE, Article No, product name and technical specification.

### Weight:

0,20 kg

## Function

### Manual operation

Switch off the power supply and turn with 4 mm allen key.

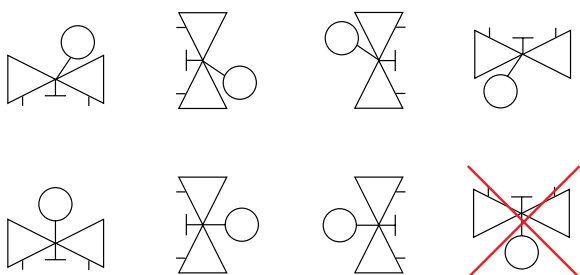
### Position indication

Orange pin

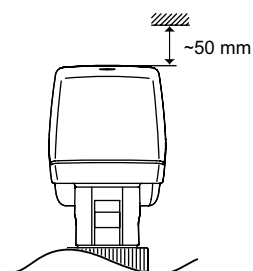
### Valve blocking protection

Can be switched on/off (24 V only)

## Installation



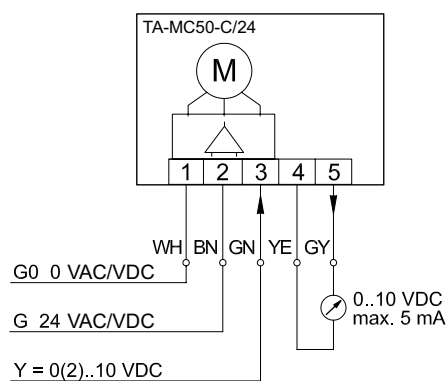
### Note!



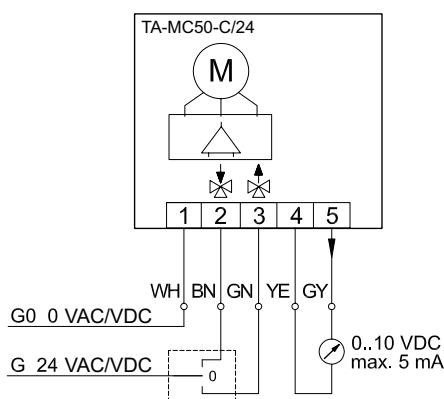
## Connection diagram

### 24 VAC/VDC

#### Modulating - 0(2)-10V

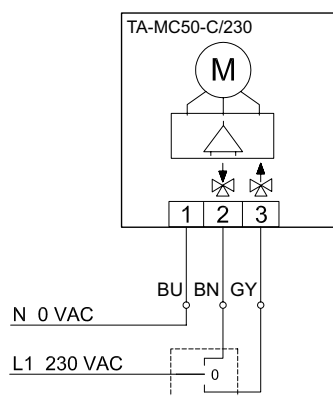


#### 3-point



### 230 VAC

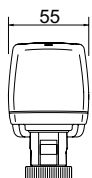
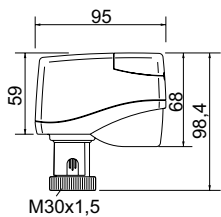
#### 3-point



For 24V in 3-point control, the actuating direction can be changed by exchanging the **green** and **brown** wires.

For 230V in 3-point control, the actuating direction can be changed by exchanging the **gray** and **brown** wires.

## Articles

**TA-MC50-C**

Supply voltage	Input signal	EAN	Article No
24 VAC/VDC	3-point, 0(2)-10 V	3831112527768	61-050-011
230 VAC	3-point	3831112527775	61-050-012