TCY-MZ2 Positioner for comfort ventilation



Functions

- Positioner for comfort ventilation with time schedules
- 2 analog outputs 0–10 V DC with 10 mV resolution
- 1 input for exhaust fan override or presence sensor
- Party mode with automatic setback; off mode with selectable ventilation interval and strength
- Setpoint in steps or percent; password-protected settings
- -D version: backlight and real-time clock with time schedules

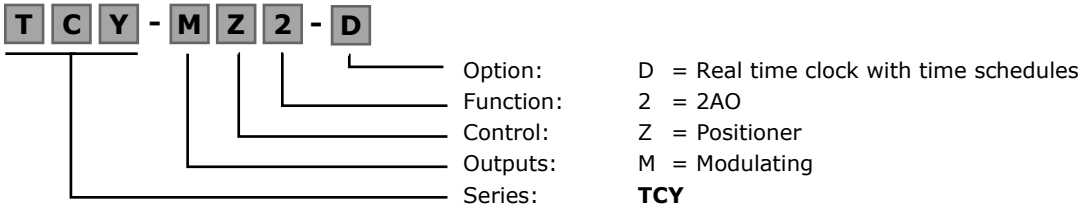
Applications

- Control of ventilation systems in comfort and industrial applications
- Residential ventilation with time-dependent airflow levels

General description

The TCY-MZ is a microprocessor-controlled precision positioner with real-time clock and time schedules. With user and control parameters it can be set up for most standard ventilation applications. It is configured with the standard operation terminal; no special tools or software are required.

Name



Ordering

Item Name	Item code	Control Type	Key-data
TCY-MZ2	40-10 0164	Positioner	Compact positioner with 2 analog outputs and 1 passive input
TCY-MZ2-D	40-10 0165	With clock function	

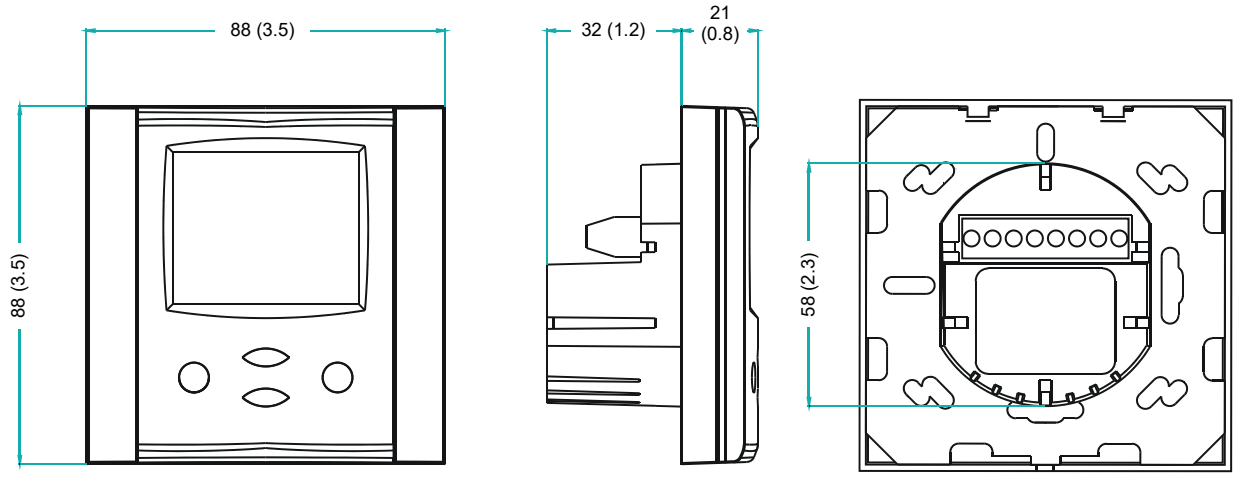
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Technical specifications

Caution! This device is intended to be used for comfort applications. Where a device failure endangers human life and/or property, it is the responsibility of the owner, designer and installer to add additional safety devices to prevent or detect a system failure caused by such a device failure. Vector Controls or its affiliates cannot be held liable for any damage caused by such a failure. Failure to follow specifications and local regulations may endanger life, cause equipment damage and void warranty.

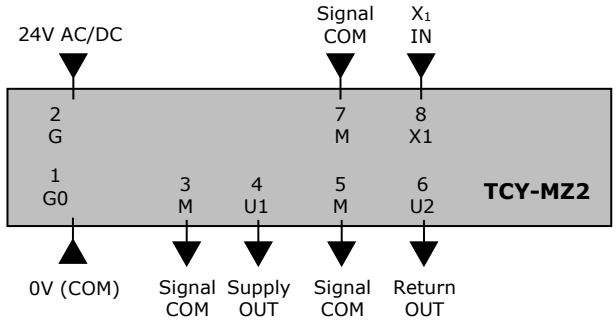
Power Supply	Operating Voltage	24 V AC/DC ± 10 %, 50/60 Hz, Class 2 48VA max
	Power Consumption	Max. 1.5 VA
	Electrical Connection	Terminal Connectors, wire 0.34-2.5 mm² (AWG 24…12)
Signal inputs	Temperature Input	
	Range	0-50 °C (32-122 °F)
	Accuracy	0.5 K
Signal outputs	Analog Outputs Output Signal Resolution Maximum Load	AO1, AO2 DC 0-10 V 9.76 mV (10 bit) 10 mA
Environment	Operation Climatic Conditions Temperature Humidity	To IEC 721-3-3 class 3 K5 0-50 °C (32-122 °F) <95 % r.H. non-condensing
	Transport & Storage Climatic Conditions Temperature Humidity Mechanical Conditions	To IEC 721-3-2 and IEC 721-3-1 class 3 K3 and class 1 K3 -25-70 °C (-13-158 °F) <95 % r.H. non-condensing class 2MT2
Standards	CE conform according to EMC Standard 89/336/EEC EMEI Standard 73/23/EEC	EN 61 000-6-1/ EN 61 000-6-3
	Product standards Automatic electrical controls for household and similar use Special requirement on temperature dependent controls	 EN 60 730 –1 EN 60 730 – 2 – 9
	Degree of Protection	IP30 to EN 60529
	Safety Class	III (IEC 60536)
	Cover, back part Mounting Plate	Fire proof ABS plastic (UL94 class V-0) Galvanized Steel
General	Dimensions (H x W x D)	Front part: 88 x 88 x 21 mm (3.5” x 3.5” x 0.8”) Power case: ø 58 x 32 mm (ø 2.3” x 1.3”)
	Weight (including package)	252 g (8.9 oz)

Dimensions [mm] (inch)



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Connection diagram



Description:

G0	Power supply:	0V, -24VDC, internally connected to signal common
G	Power supply:	24VAC, +24VDC
M	Signal common:	Common 0 potential for analog inputs and analog outputs.
X1	External passive input:	open contact to signal common
U1	Analog output supply air:	0…10 V DC
U2	Analog output return air:	0…10 V DC

Selection of actuators

Choose actuators with an input signal type of 0–10V DC or 2–10V DC.

Mounting and installation

Mount the controller on an interior wall, approx. 1.5 m above the floor, in a place with average room temperature. Avoid direct sunlight, heat sources, doors, outside walls and air outlets. The location is less critical if an external temperature sensor is used.
Mount and connect the controller as shown in the installation sheet supplied with the device, and wire it according to the connection diagram above.

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