TCT-FA-MZ2, TCT-FA-MK2 Controller for comfort ventilation

Functions

- Positioner and controller for comfort ventilation with time schedules
- LCD Touchscreen
- Two analog outputs for 0/2–10VDC with a resolution of 10mV
- TCT-FA-MK2 only: One control input for a measurement signal of 0/2-10 VDC
- One input for exhaust fan override or presence sensor
- Party mode with automatic setback
- Off mode with selectable ventilation interval and ventilation strength
- Selectable step or percentage setpoint resolution
- Password protected controls settings
- Blue background illumination
- Realtime clock with schedule events



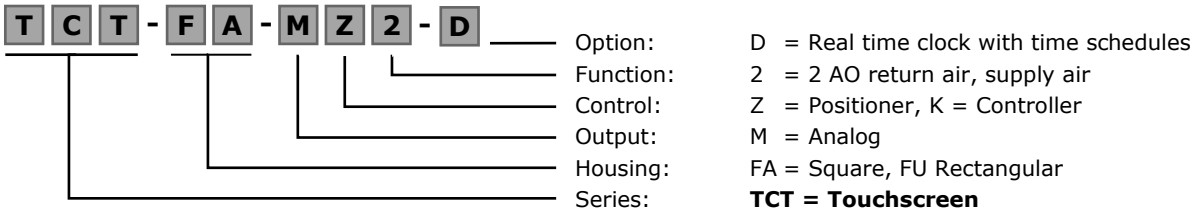
Applications

Control of ventilation systems for comfort and industrial applications.

General description

The TCT-MZ is a microprocessor-controlled precision positioner with a real time clock and time schedules. The TCT-MK2 also has a control function with which the ventilation can be controlled via a connected sensor signal.
Through user and engineering parameters the devices may be configured to work for most of the standard ventilation applications. They can be configured using the standard operation terminal. No special tool or software is required.

Name



Order

Item Name	Item code	Variant	Features
TCT-FA-MZ2-D	40-10 0237	Real time clock	Compact positioner with two analog outputs and one passive input
TCT-FA-MK2-D	40-10 0238	Real time clock and controller function	Compact positioner and controller with two analog outputs and one input each for one passive and one 0/2…10 VDC Signal

© Vector Controls GmbH, Switzerland
www.vectorcontrols.com

Technical Data

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.

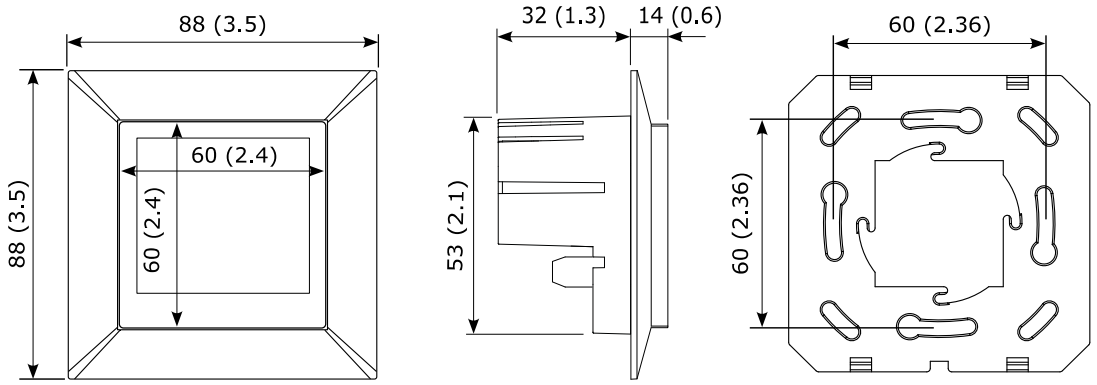
Power Supply	Operating Voltage Power Consumption Electrical Connection	24 V AC/DC ± 10 %, 50/60 Hz, Class 2 48VA max Max. 1.5 VA Terminal Connectors, wire 0.34…2.5 mm^2 (AWG 24…12)
Signal input	Passive input X1 For TCT-FA-MK2: Active input X2	For potential-free contact to ground 0….10 V DC
Signal outputs	Analog Outputs Output Signal Resolution Maximum Load	AO1 0…10 V DC 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 % rH 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 % RH non-condensing class 2MT2
General	Degree of Protection	IP30 to EN 60529
	Safety Class	III (IEC 60536)
	Housing material	Fire proof and impact resistant ABS plastic (UL94 class V-0)
	Dimensions (H x W x D)	88 x 88 x 31 mm (3.5” x 3.5” x 1.2”)
	Weight (including package)	190 g (6.7 oz)

Product testing and certification

CE Declaration of conformity

Information about the conformity of our products can be found on our website www.vectorcontrols.com on the corresponding product page under "Downloads"

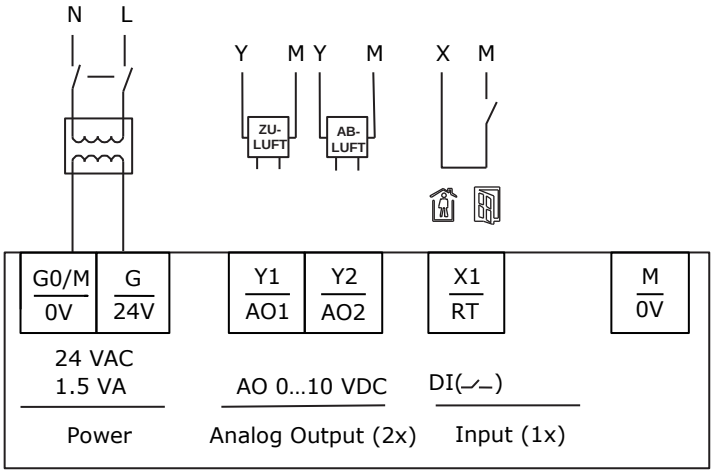
Dimension [mm] (in)



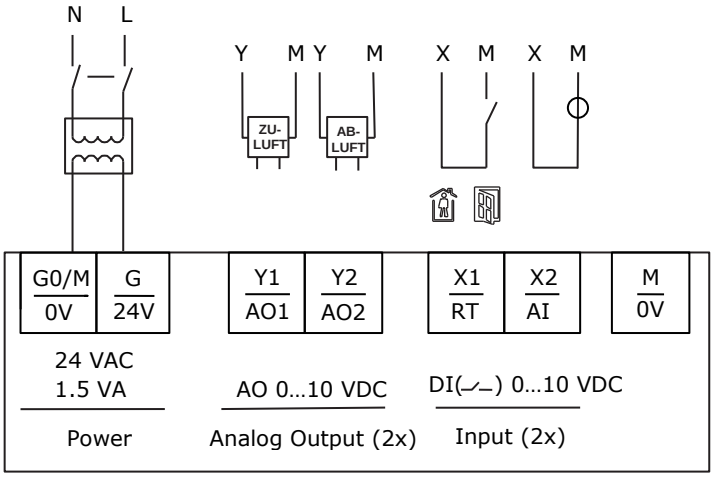
© Vector Controls GmbH, Switzerland
www.vectorcontrols.com

Connection diagram

TCT-FA-MZ2



TCT-FA-MK2



Description:

1	**G0/M**	**0V**	Power supply:	0V, -24VDC, internally connected to signal common
2	**G**	**24V**	Power supply:	24VAC, +24VDC
3	**Y1**	**AO1**	Analog output supply air:	0/2…10 VDC
4	**Y2**	**AO2**	Analog output return air:	0/2…10 VDC
5	**X1**	**RT**	External passive input:	open contact to signal common
6	**X2**	**AI1**	External active input:	0/2…10 V DC (only for TCT-FA-MK2)
7	**M**	**0V**	Signal common:	Common 0 potential for analog inputs and analog outputs

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 a flat, easily accessible interior wall. Avoid direct sunlight, heat sources, niches with poor air circulation and the direct air flow of ventilation outlets and fans.

See the TCT-FA-Mx2 installation sheet, document no. 70-000811 (www.vectorcontrols.com).

© Vector Controls GmbH, Switzerland
www.vectorcontrols.com

Smart Sensors and Controls Made Easy!

Quality - Innovation – Partnership

Vector Controls GmbH
Switzerland

info@vectorcontrols.com
www.vectorcontrols.com/

© Vector Controls GmbH, Switzerland
www.vectorcontrols.com