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VECTOR

TCY-MT, TCY-FT

Product Introduction

LESS IS MORE!

Competitive PI controller series

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Product Pictures

TCY-MT-U, TCY-FT-U

TCY-MT, TCY-FT

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Contents

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- Applications
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Applications

- Temperature Control for
  - Radiator, Floor heating, Cooling Ceilings
  - Stand alone VAV outlets for pressure dependent control or in conjunction with VAV actuators: pressure independent control
  - Zone control for residential, offices, meeting rooms, hotels or schools.
  - For 0-10V/2-10V or 24VAC 3-point actuators

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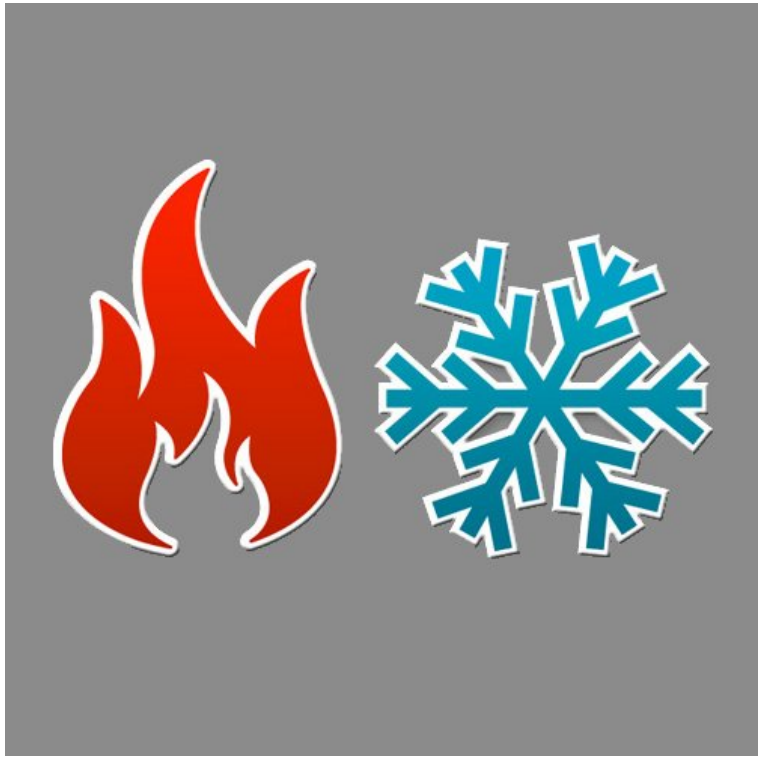
Main Features

- Specific temperature control
  Less programming, lower cost
- Auto detection for external control sensor
- Key card or occupation sensor input.
- Specific solution for 2-pipe or 4-pipe applications
- VAV solution for –MT type
- Plug & Play for standard applications. No need to setup anything.
- -MT: 0-10V/2-10V outputs
  -FT: 24VAC 3-point outputs
- Limitation of setpoints



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Product Range

- Housing types: Wall mounted.
  - TCY-MT, TCY-FT : Flush mount ø60mm
  - TCY-MT-U, TCY-FT-U : Flush mount 2” x 4”

- Configuration:

Name	System	Output	Input
TCY-MT2(-U)	2-pipe	1 0/2-10VDC	2 NTC / OC
TCY-MT4(-U)	4-pipe	2 0/2-10VDC	1 NTC / OC
TCY-FT2(-U)	2-pipe	2 24VAC TRIAC	2 NTC / OC
TCY-FT4(-U)	4-pipe	4 24VAC TRIAC	1 NTC / OC

NTC / OC = NTC temperature probe or open contact input

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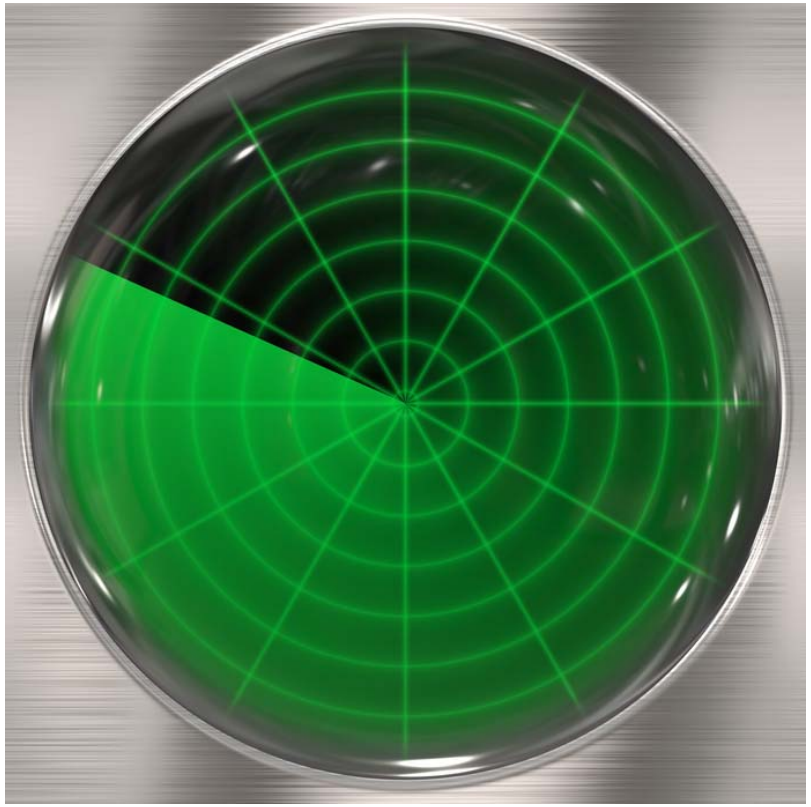
Plug & Play

- Auto detection of inputs
- The control signal will be taken automatically from the external sensor if a valid input signal is detected
- No need to program



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Control Modes

- The temperature controller operates a heating or cooling device.
  Select the control logic with one parameter:

- CP11 defines the control mode
  - 0 = Cooling mode: order preset with W01
  - 1 = Heating only mode: order preset with W02
  - 2 = 2-pipe mode: (Factory default for -2 products)
  - 3 = 4-pipe mode: (Factory default for -4 products)
    This option is only available on -4 products.

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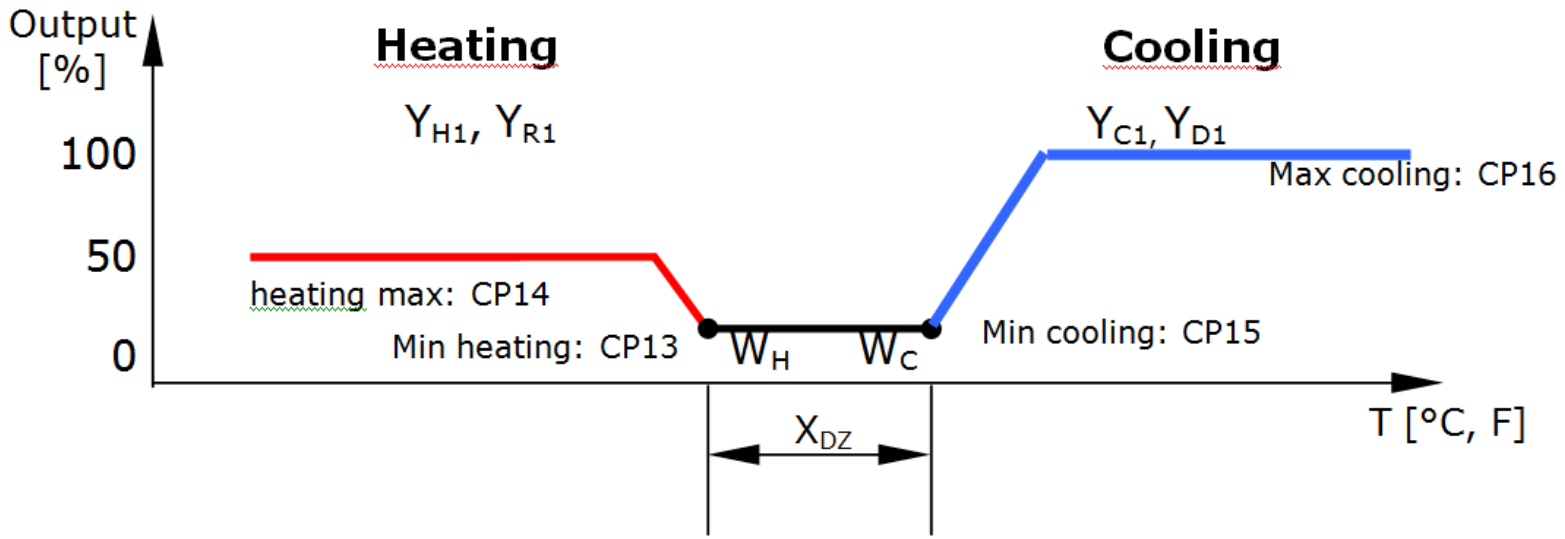
VAV Function on TCY-MT

- Define individual min and max limits for heating and cooling on the analog outputs
- This is used to set min and max airflow on linearized VAV actuators.



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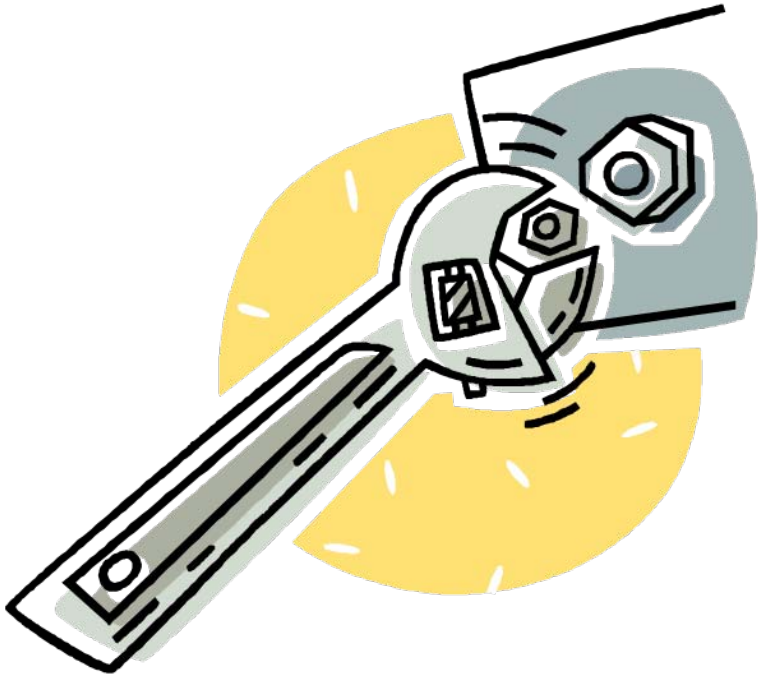
Manual Override

- Activate manual positioning for comissioning
- Set CP12 to ON to set the outputs into manual mode.
- On -4 products: To switch between heating and cooling outputs, change heat – cool mode of controller



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Limitations on outputs

- TCY-MT
  - 0-10V DC or 2-10VDC
  - 10mA load max
- TCY-FT
  - 24VAC 50...250mA
  - Running time: 5...255 Seconds

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Heat-Cool Change

- 2-pipe controllers need to change heating and cooling mode. They can be defined with three parameters: These options are available:

Change by:	CP22 Enable	CP23 Heating	CP24 Cooling
Key pad only	OFF		
Outdoor temperature	ON	25°C	15°C
Supply media temperature	ON	15°C	25°C
Open contact: Close = heating	ON	25°C	15°C
Open contact: Close = cooling	ON	15°C	25°C

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Features on Ext Input

- All products have at least one ext input. These are the features:
  - CP18 = 0: Auto detection mode. Use as control input, if the controller detects a valid input signal.
  - CP18 = 1: Occupation sensor: switch comfort – standby mode
  - CP18 = 2: Remote enable: Switch Comfort – OFF
  - CP18 = 3: Key card mode: Fixed setpoints if contact is open. Setpoints are fixed to CP20 in heating mode and CP21 in cooling mode.

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User Features

The following may be set with user parameters:

- Access to operation mode change
- Access to setpoint change
- Operation state after power failure
- Enable standby functionality
- Celsius/Fahrenheit
- Enable Frost protection

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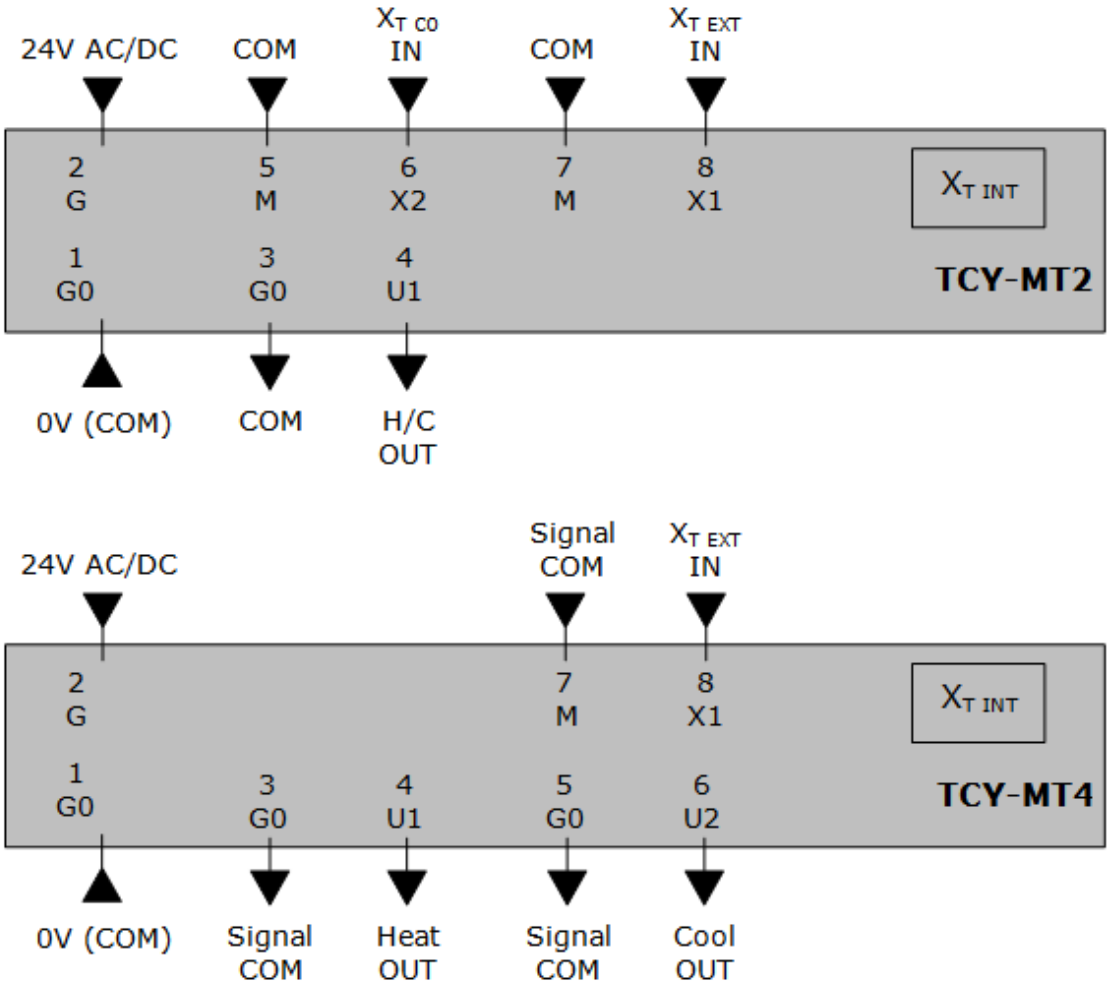
Connection TCY-MT



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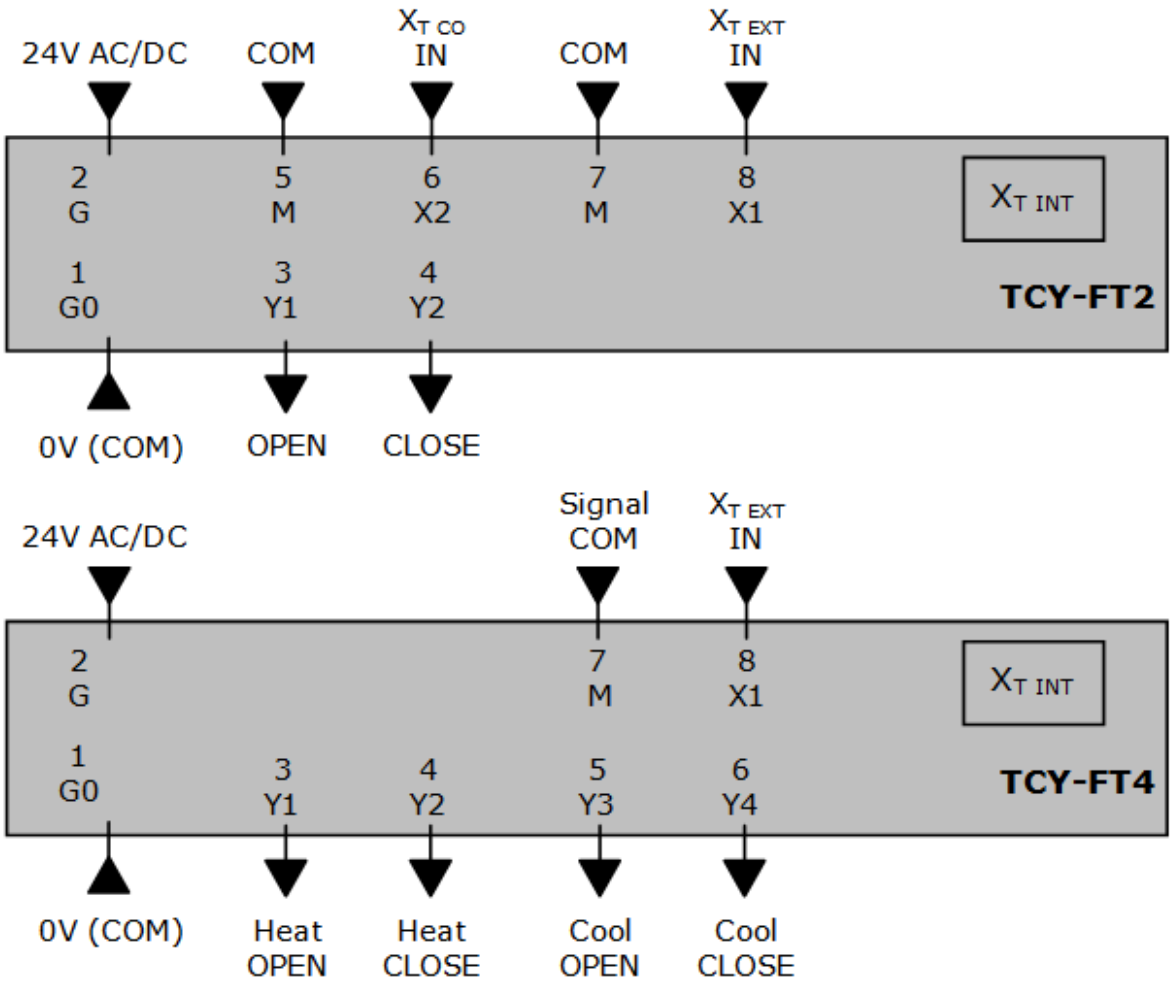
Connection TCY-FT



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