

OPT1-FC-Series (Swiss version) Operation terminal for TCX2, TCI2 and SxC2 controller

Features

Remote access to controller state, set points, inputs and outputs

- Resistive touch display with white backlit LCD
- Access to time schedule and clock settings
- Access to configuration parameters
- RS485 peer to peer communication according to proprietary protocol of Vector Controls GmbH
- The terminal adapts itself to the TCX2, TCI2 and SxC2 controller used.
- Internal temperature and -H version humidity sensor
- 1 passive input and 1 voltage input
- Fits to Feller EDIZIOdue® frames

Applications

- Configuration and operation of TCX2 controllers
- Remote supervision (RS485)

General description

The OPT1-FC-(H)TNV-VC is a remote display and operation terminal for TCX2, TCI2 and SxC2 series controllers for Feller frame (frame is ordered separately)

Types and Ordering

Product name	Product No.	Description/option
OPT1-FC-TNV-VC	40-50-0111	Swiss version of operation terminal for TCX2, TCI2 and SxC2 controller with peer-to-peer RS485 communication and 1 internal temperature sensor, 1 external passive and 1 voltage input. The single Feller EDIZIOdue frame and mounting plate package AMM-ED-W must be ordered separately
OPT1-FC-HTNV-VC	40-50-0110	Swiss version of operation terminal for TCX2, TCI2 and SxC2 controller with peer-to-peer RS485 communication and 1 internal temperature and humidity sensor, 1 external passive and 1 voltage input. The single Feller EDIZIOdue frame and mounting plate package AMM-ED-W must be ordered separately
<i>Accessories</i>		
AMM-ED-W	40-51-0086	Feller EDIZIOdue® frame and mounting plate




Safety



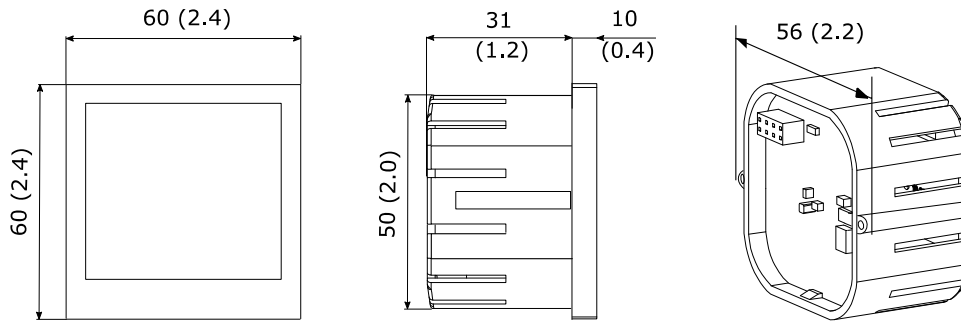
DANGER! Safety advice

This device is for use as operating controls. It is not a safety device! Where a device failure endangers human life and/or property, it is the responsibility of the client, installer and system designer to add additional safety devices to prevent a system failure caused by such a device failure. Ignoring specifications and local regulations may cause equipment damage and endangers life and property. Tampering with the device and misapplication will void warranty

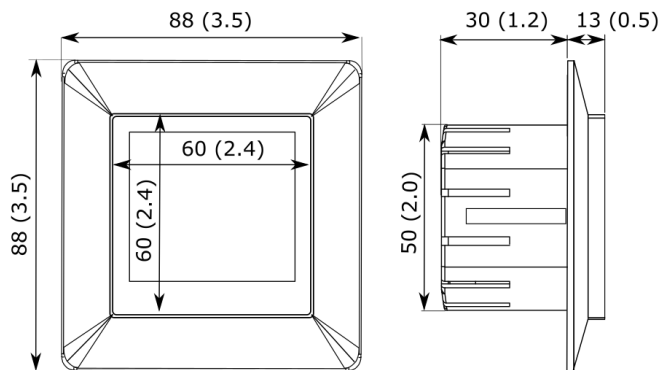
Technical specification

Power supply	Operating voltage	12-30 VDC
	Power consumption	Max. 1 VA
	Electrical connection	Terminal connectors, wire 0.34...2.5 mm ² (AWG 24...12)
Inputs	Temperature sensor	NTC
	Accuracy	0...50 °C (32...122 °F): 0.5 K
	Humidity sensor:	Capacitive sensor
	Measuring accuracy	From 10...90% RH ± 3%, outside ± 5%
	Hysteresis	± 1%
	Repeatability	± 0.1%
	Stability	< 0.5% / year
	Passive inputs	X1-NTC
Communication	Range	NTC 10kΩ@25 °C (77 °F) or open contact to M
	Analog input	X2-VDC
	Range	0...10 VDC
	Resolution	39 mV
	Impedance	98 kΩ
	Communication type	RS485, peer to peer,
	Protocol	VCPP: Vector Controls Proprietary Protocol
	Cabling acc. to EIA-485	Shielded Twisted Pair (STP)
Environment	Impedance	balanced 100 to 130 ohm
	Nominal capacitance	<100 pF/m 30 pF/ft. or lower
	Nominal velocity	65% or higher
	Maximum length	1200 m (4000 ft)
	Operation	To IEC 721-3-3
	Climatic conditions	class 3 K5
	Temperature	0...50 °C (32...122 °F)
	Humidity	<95 % RH non-condensing
Standards	Transport & storage	To IEC 721-3-2 and IEC 721-3-1
	Climatic conditions	class 3 K3 and class 1 K3
	Temperature	-25...75 °C (-13...167 °F)
	Humidity	<95 % RH non-condensing
	Mechanical conditions	class 2M2
	 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	EN 60 730 -1
General	Special requirement on temperature dependent controls	EN 60 730 - 2 - 9
	Pollution class	Normal acc. to EN 60 730
	Degree of protection	IP30 to EN 60 529
	Safety class	III
	Housing material:	Fire proof PC + ABS plastic (UL94 class V-0)
General	Dimensions (H x W x D)	Front part: 60 x 60 x 10 mm (2.4" x 2.4" x 0.4") Power case: 50 x 56 x 31 mm (2.0" x 2.2" x 1.2")
	Weight (incl. packaging)	100 g (3.5 oz)

Dimensions OPT1-FC mm (in)



Dimensions OPT1-FC with AMM-ED-W mm (in)



Mounting and Installation instructions



Mounting instruction is included in the product package or can be found in the install sheet "OPT1-FC-HTNV-VC", no. 70-00-0655 on our website www.vectorcontrols.com.

Connection diagram

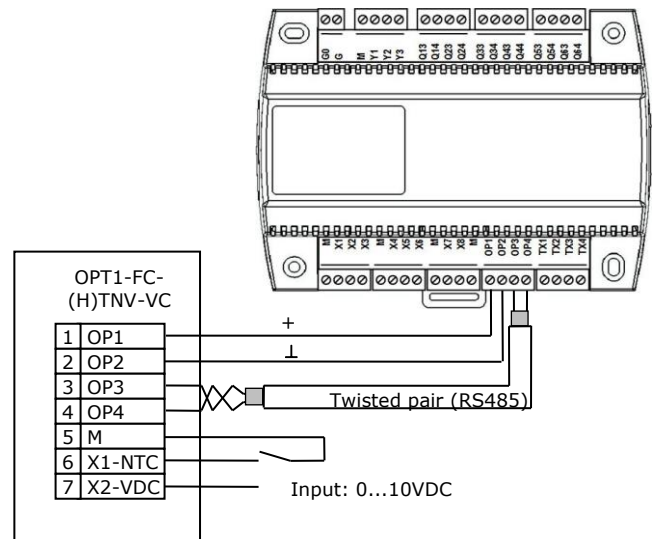
Description

OP1-OP4 Connection to TCX2, TCI2 and SxC2 controller via RS485

M Common for potential free contacts

X1-NTC Passive input:
NTC 10kΩ@25 °C (77 °F) or
dry contact: open 100%, close 0%

X2-VDC Voltage input:
Voltage input for active sensor 0...10VDC



Display and Operation



For information on how to operate the terminal see document "X2 operations manual touch displays", no. 70-00-0951 on our website www.vectorcontrols.com.



More detailed information on the X2 functions can be found in the "X2 Engineering Manual" document no. 70-00-0737 on our website www.vectorcontrols.com.

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