

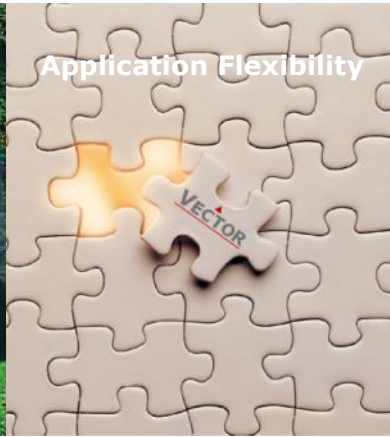
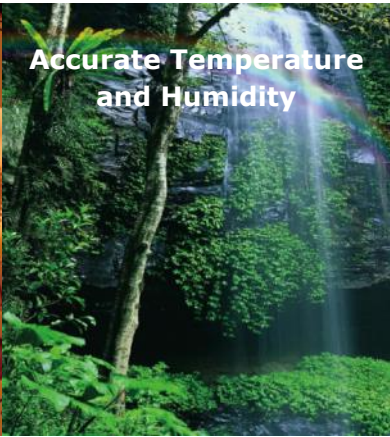
Product guide

Proven Quality

Accurate Temperature
and Humidity

Application Flexibility

Energy Efficiency



Reliable measurement and control technology for versatile HVAC applications from Vector Controls



An optimal climate, controlled by reliable and intelligent control elements, not only reduces energy consumption and maintenance costs, but also increases the quality of life at home and at work.

Our solutions for you include:

- ▲ Configurable humidity and temperature controllers
- ▲ Flexible and universal controllers with free assignment of inputs and outputs, suitable for a variety of applications
- ▲ Measurement of temperature, humidity, CO₂ and differential pressure for indoor, outdoor and air duct applications
- ▲ Wide range of temperature sensors

- ▲ Thermostats, hygrometers, universal PI-controllers (wall and cabinet mounting) with pre-programmed applications for pumps, comfort ventilation, air convectors, 2-pipe and 4-pipe systems etc.
- ▲ Temperature sensors, CO₂, air quality and temperature transmitters
- ▲ Flexible and reliable OEM-solutions
- ▲ Complete solutions for system integrators and distributors



Product guide

Company introduction

What began in 2001 with the founding of the Vector Controls Group by Rolf and Tanya Schweizer quickly developed into a success story: the initial specialization in ventilation controllers for the Asian market quickly led to further controller and sensor applications. The modular design of sensors, controllers and operator terminals laid the foundation for the universal, communicating controller and measurement solutions from Vector Controls.

Our aim is to offer efficient, simple and inexpensive HVAC controls. In addition, the indoor climate is to be optimized and resources conserved at the same time.

Our headquarters, with research & development, is located in Switzerland. Another production site is located in China. Sales and distribution of the Vector Controls Group are located in Switzerland, China and the USA. Our products are sold worldwide.

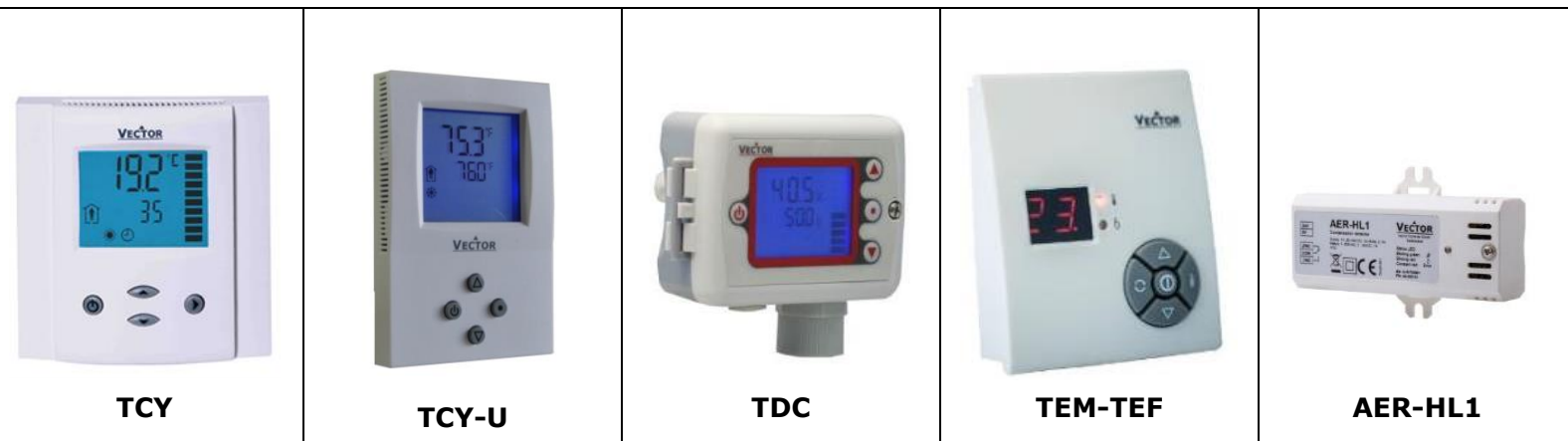
We enable projects from simple ventilation controllers to HVAC system solutions for entire buildings. The universally programmable controllers form the heart of all Vector applications. Supplemented by the wide range of sensors, the fieldbus connection of the controllers and the graphic display of the data with the GSM series (Gateway Server Module), any HVAC project can be optimally implemented with Vector Controls systems.

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Product guide

Control Systems Series TCY/TDC/TEM/TEF



TCY units control temperature, humidity or living comfort and are flush-mounted. A humidity regulator for duct mounting is the TDC-BH. TCY-MZ is a compact actuator for comfort ventilation. TEF and TEM are PI temperature controllers or actuators for surface mounting.

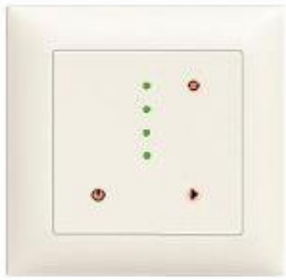
- ▲ LCD display for TCY, TDC
- ▲ LED display for TEM, TEF
- ▲ Programmable settings
- ▲ Low power consumption of <1 W
- ▲ TDC-BH-U with conduit connector, TDC-BH with cable gland
- ▲ 24 V AC/DC (TCY-FT only 24 V AC)
- ▲ Deluxe version with backlight and timer
- ▲ Energy saving with programmable hysteresis, set-back operation and set point limits
- ▲ IP 30, modern design, simple operation

Model	Variations	Features
TCY-BH TCY-BH-U	Humidistat wall mounted 2-point humidifying or dehumidifying with optional fan support	2 binary outputs (relays) 1 internal humidity sensor, accuracy 5 % 1 external temperature sensor input for setpoint reset
TDC-BH TDC-BH-U	Humidistat duct mounted 2-point humidifying or dehumidifying with optional fan support	2 binary outputs (relays) 1 internal humidity sensor, accuracy 5 % 1 external temperature sensor input
AER-HL1 AER-HL1-2	Condensation monitor for chilled beams, cool ceilings, etc. to prevent condensation	Compact device to switch a relay, if humidity exceeds 90 % RH, reactivates when RH falls below 85 % Device is programmable with min-max memory external operation terminal: OPA-S
TCY-MT2 TCY-MT2-U	PI-temperature controller 2-pipe system and modulating actuators	1 analog output 0 - 10 V DC 1 internal temperature sensor, 2 external inputs (passive)
TCY-MT4 TCY-MT4-U	PI-temperature controller 4-pipe system and modulating actuators	2 analog outputs 0 - 10 V DC 1 internal temperature sensor, 1 external input (passive)
TCY-FT2 TCY-FT2-U	PI-temperature controller 2-pipe system and 3-point actuators	2 TRIAC outputs for one 3-point drives 1 internal temperature sensor, 2 external inputs (passive)
TCY-FT4 TCY-FT4-U	PI-temperature controller 4-pipe system and 3-point actuators	4 TRIAC outputs for one 3-point drives 1 internal temperature sensor, 2 external inputs (passive)
TCY-MZ2	Compact positioner for comfort ventilation Ventilation controller, optionally with timer	2 analog outputs for 0 - 10 V DC with a resolution 1 external input (passive) for exhaust fan override or presence sensor
TEM	PI controller surface mounting, modulating PI-controller or actuator for modulating actuators	1 analog output 0 - 10 V DC 1 internal temperature sensor, 1 external input (passive)
TEF	PI controller surface mounting for 2- or 3-point actuators Thermostat or actuator for 2- or 4-pipe system for two single actuators with spring return or one 3-point actuator	2 binary outputs (relays) 1 internal temperature sensor, 1 external input (passive)

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Control Systems Series MZ



MZ3-V11



TCT-MZ



TCY-MZ2

Control of ventilation systems for the comfort area, for example for very well insulated living rooms, which must be properly ventilated.

- ▲ Design according to Feller EDIZIOdue®
- ▲ Manual operation with 4 steps, OFF or minimum, 1st step, 2nd step, maximum
- ▲ AUTO operation: the controller activates the ventilation based on an input and a controls curve. The controls curve may be adjusted.
- ▲ Touch activated only for model MZ3 and TCT
- ▲ Password protected controls settings
- ▲ One 0...10 V DC controls output to control the ventilation system
- ▲ One 0...10 V DC input to measure Co2 or other sensors
- ▲ Deluxe version with real time clock.

Model	Variations	Features
MZ3-V11-T4-W MZ3-V11-T4-S MZ3-V11-B1-T4-W MZ3-V11-B-T4-W	Controller & Positioner for comfort ventilation green LED, white frame, without lettering green LED, black frame, without lettering blue LED, white frame, lettering: Minimum, step I, step II, Maximum blue LED, white frame, lettering: Minimum, Middle, Maximum, Party	Compact positioner/controller in a Feller EDIZIOdue® white frame with each one 0-10 V DC in- and output for CO2 sensors or building automation. Programmable 4-step switches with touch panel and AUTO function.
MZ3-V11-B2-T3-W	blue LED, white frame, lettering: Unoccupied, Occupied, Party	Programmable 3-step switches with touch panel and AUTO function.
TCT-MZ2 TCT-MZ2-D	Touch-LCD positioner for comfort ventilation Without frame and control feature With real time clock	Compact positioner, designed for installation in a Feller EDIZIOdue® frame.
AMM-ED-W	Frame & Mounting plate	Feller EDIZIOdue® frame white & mounting plate for TCT-MZ (-D).
TCY-MZ2 TCY-MZ2-D	LCD positioner for comfort ventilation with real time clock	Conventional flush mounted positioner with 2 analog outputs to control supply and return air channels.
AEPS	Power supply for comfort ventilation systems	Allows the connection of 24 V supplied controllers, damper and valve actuators to the 230 V power supply. If demand a room controller, positioner or control switch can also be connected.

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Control Systems Series TCI



TCY-U



TCI-W



TCI-C

TCI series controllers are compact universal single and dual loop PI-controllers for flush wall or cabinet mounting.

- ▲ Universal controllers with up to two control loops
- ▲ Programmable
- ▲ Low power consumption of 1 W
- ▲ 24 V AC/DC
- ▲ Input/output configurable by jumpers (NTC or PT1000/Ni1000, VDC/mA)
- ▲ Switch cabinet or flush-mounted mounting
- ▲ Top hat rail mounting or front mounting for TCI-C

- ▲ Versatile special functions such as automatic activation, heating/cooling changeover, normal/lowering changeover due to external input
- ▲ Energy saving with reduced operation and set point limits
- ▲ Cascade control (for devices with two Control Loops)
- ▲ Alarms on all inputs with configurable output positions in alarm state
- ▲ Manual Control of the outputs also by timer (for -2x devices)

Model	Variations	Features
TCI-W11 TCI-W11-U	Universal controller wall mounted One loop controller with two PI- and six 2-point sequences -H = internal humidity sensor with accuracy 3 %	2 binary outputs (relays), 1 analog output 1 universal input (NTC, VDC, mA) 1 internal temperature sensor
TCI-W13 TCI-W13-U	Universal controller wall mounted One loop controller with two PI- and six 2-point sequences -H = internal humidity sensor with accuracy 3 %	1 binary output (relays), 2 analog outputs 1 universal input (NTC, VDC, mA) 1 internal temperature sensor
TCI-W22 TCI-W22-U	Universal controller wall mounted, real time clock Two loop controller with two PI- and six 2-point sequences per loop -H = internal humidity sensor with accuracy 3 %	2 binary outputs (relays) 1 analog output 2 universal inputs (NTC, VDC, mA) 1 internal temperature sensor
TCI-W23 TCI-W23-U	Universal controller wall mounted Dual loop controller with two PI- and six 2-point sequences per loop -H = internal humidity sensor with accuracy 3 %	1 binary output (relays), 2 analog output 2 universal input (NTC, VDC, mA) 1 internal temperature sensor
TCI-C11	Universal controller cabinet mounted One loop controller with PI- and six 2-point sequences	2 binary outputs (relays), 1 analog output 2 universal inputs (NTC, VDC, mA)
TCI-C13	Universal controller cabinet mounted One loop controller with PI- and 2-point sequences	2 TRIAC outputs, 1 analog output 2 universal inputs (NTC, VDC, mA)
TCI-C14	Universal controller cabinet mounted One loop controller with PI- and 2-point sequences	2 binary outputs (relays), 1 analog output 2 universal inputs (PT1000/Ni1000, VDC, mA)
TCI-C15	Universal controller cabinet mounted One loop controller with PI- and 2-point sequences	2 binary outputs (TRIAC), 1 analog output 2 universal inputs (PT1000/Ni1000, VDC, mA)
TCI-C22	Universal controller cabinet mounted, real time clock Two loop controller	2 binary outputs (relays), 2 analog outputs 4 universal inputs (NTC, VDC, mA)
TCI-C24	Universal controller cabinet mounted, real time clock Two loop controller	2 binary outputs (relays), 2 analog outputs 4 universal inputs (PT1000/Ni1000, VDC/mA)
TCI-C25	Universal controller cabinet mounted, real time clock Two loop controller	2 binary outputs (TRIAC), 2 analog outputs 4 universal inputs (PT1000/Ni100, VDC/mA)
AMM-2	Mounting kit for front panel mounting	

Product guide

Control Systems Series TLC3



TLC3-U



TLC3



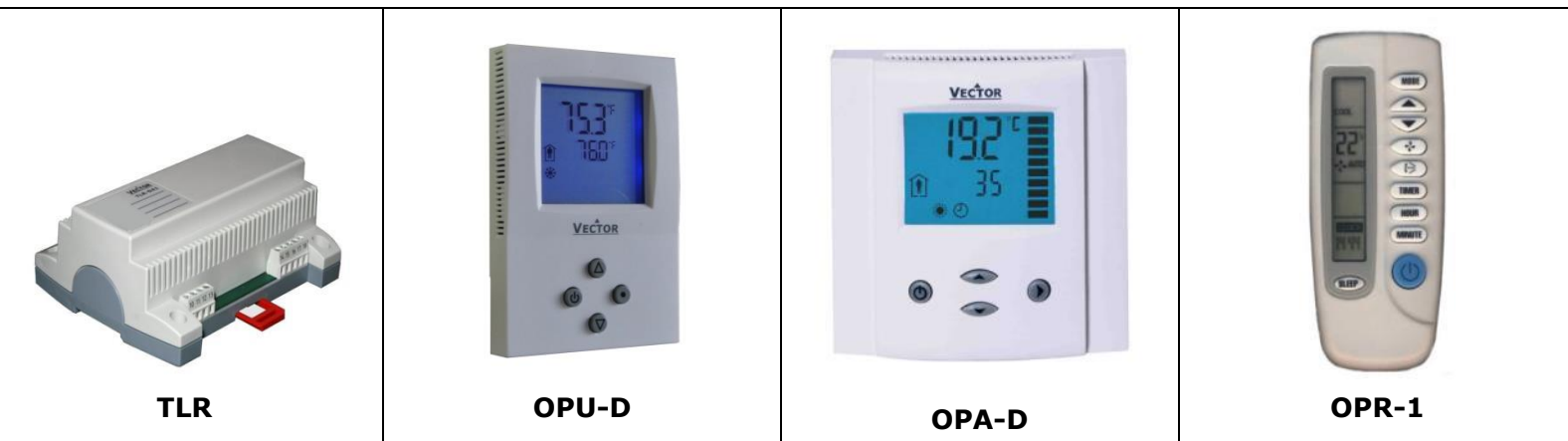
OPR-1

Compact controller for wall mounting (flush-mounted)		
<ul style="list-style-type: none"> ▲ Large LCD display ▲ Programmable user and expert parameters ▲ Low power consumption of 1 W ▲ Flush mounting ▲ AC 230 V -50/60 Hz or 24 V AC/DC ▲ Two different housing styles to fit most connector boxes 		<ul style="list-style-type: none"> ▲ Relay switching for binary outputs ▲ Energy saving with comfort and economy modes and automatics fan speeds switching for FCR models ▲ Special functions including frost protection, comfort/ economy mode change based on temperature input, and more ▲ Deluxe version with backlight, clock and infrared remote-control possibilities
Model	Variations	Features
TLC3-BCR-230	Thermostat Room thermostat for two on/off valves with spring return (4-pipe system) or one three-way valve (2-pipe system)	2 binary outputs (relays) for valve and/or fan 2 external sensor inputs (passive) 1 internal temperature sensor
TLC3-FCR-T-...	Fan coil controller 2-pipe system with external input	3 binary outputs (relays) for fan 1 binary output (relays) for valve with spring return 1 internal temperature sensor 1 external sensor input (passive)
TLC3-FCR-2R-24 TLC3-FCR-2T-230	Fan coil controller 4-pipe system	3 binary outputs (relays) for fan 2 binary outputs (TRIAC for -230, relays for -24) for valve 1 internal temperature sensor
TLC3-FCR-M2-...	Fan coil controller 2-pipe system	3 binary outputs (relays) for fan 1 analog output for PI control (0 – 10 V DC) 1 internal temperature sensor 1 external input
TLC3-FCR-M4-...	Fan coil controller 4-pipe system	3 binary outputs (relays) for fan 2 analog output for PI control (0 – 10 V DC) 1 internal temperature sensor 1 external input
TLC3 Variations:	-U = Rectangular version for 2x4 in connector box -D = deluxe version -24 = 24 V AC/DC -230 = 230 V AC -W01 = cooling only	With backlight, real time clock, support for OPR-1 Power supply 24 V AC/DC Power supply 230 V AC Fixed to cooling only mode
OPR-1	Infrared remote controller	Infrared remote controller for deluxe version

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Control Systems Series TLR



Fan coil unit controller consisting of a cabinet mounted base unit and a surface mounted operation terminal/temperature sensor.		
<ul style="list-style-type: none"> ▲ LCD display ▲ Programmable ▲ Base cabinet mounted, terminal wall flush mounted ▲ Power supply 230 V AC or 24 V AC/DC ▲ Deluxe version with backlight, clock and infrared remote-control possibilities (requires OPR-1) 	<ul style="list-style-type: none"> ▲ High switching power for each output up to 10 (6) A 250 V AC ▲ Cost saving option with economy functionality and set point limitation, automatic fan control ▲ Base unit IP 20, Operation terminal IP 30 ▲ Master/slave options. 1 operation terminal may drive up to 8 base units. 	
Model	Variations	Features
OPA-Dx* OPA-Dx-D	Operation terminal for TLR Dx* = D5, D5F, D41, D5P -D = deluxe version Surface or flush mounting	1 internal temperature sensor -D: with backlight, real time clock and time schedules, benefit for OPR-1
OPU-Dx* OPU-Dx-D	Operation terminal for TLR Dx* = D5, D5F, D41, D5P -D = deluxe version flush mounting, rectangular housing for 2 x 3 in connection boxes	1 internal temperature sensor -D: with backlight, real time clock and time schedules, benefit for OPR-1
TLR-D5-...	Base unit fan coil controller for valve with spring return or on/off actuators 2- and 4-pipe-system	3 binary outputs (relays) for fan 2 binary output (relays) for valve 1 external sensor input for NTC (passive)
TLR-D5F-...	Base unit fan coil controller for 3-point actuator 2-pipe system	3 binary outputs (relays) for fan 2 binary output (TRIAC) for 3-point actuator 1 external sensor input for NTC (passive)
TLR-D42-...	Base unit fan coil controller for modulating actuators 2- and 4-pipe-system	3 binary outputs (relays) for fan 1 binary output (relays) for valve with spring return 2 analogue outputs for modulating actuators (0 – 10 V) 1 external sensor input for NTC (passive)
TLR-D5P-...	Package unit controller for air conditioner controller 4-pipe-Systems	1 binary output (relays) for fan 4 binary outputs (relays) for heating / cooling stages and reversing valves 1 external sensor input for NTC (passive)
OPR-1	Infrared remote controller	Infrared remote controller for deluxe version
TLR Variations:	-24 = 24 V AC/DC -230 = 230 V AC	Power supply 24 V AC/DC Power supply 230 V AC

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Product guide

Measurement Series S-/SD-/SDB-/SOD-/SRA-T



S-T

SD-T

SDB-T

SOD-T

SRA-T

Passive temperature sensors for a large variety of installation options and applications.		
<ul style="list-style-type: none"> ▲ Measure elements NTC, PT1000 and NI1000 ▲ Resistant housing ▲ IP 65 for SOD-T, SDB-T, S-T and IP 30 for SRA-T 	<ul style="list-style-type: none"> ▲ Large selection of sensing element types and curves ▲ Special elements or probe design available upon request 	
Model	Variations	Features
S-Txx*-2	Cable temperature sensor -2 = 2 m cable -Txx* = see probe selection Temperature sensor	Passive temperature sensor
SC-Txx*-2 SC-Tpx*	Contact temperature sensor -2 = 2 m cable -Txx* = see probe selection Temperature sensor	Passive temperature sensor for temperature detection on pipes and vaulted surfaces.
SD-Txx*-12-2 SD-Txx*-20-2	Duct temperature sensor with cable Probe length = 12 cm Probe length = 20 cm -2 = 2 m cable -Txx* = see probe selection Temperature sensor	Passive duct temperature sensor with cable
SDB-Txx*-12 SDB-Txx*-20	Duct temperature sensor Probe length = 12 cm Probe length = 20 cm -Txx* = see probe selection	Passive duct temperature sensor with housing
SOD-Txx*	Outdoor temperature sensor -Txx* = see probe selection Temperature sensor	Passive outdoor temperature sensor
SRA-Txx*	Room temperature sensor -Txx* = see probe selection Temperature sensor	Passive room sensor
*Probe selection (-Txx)		
-Txx	Sensing element	Features
-Tn3 -Tn10 -Tn11 -Tn20 -Tn100	NTC 3 kΩ at 25 °C NTC 10 kΩ at 25 °C NTC 10 kΩ at 25 °C NTC 20 kΩ at 25 °C NTC 100 kΩ at 25 °C	B35/50: 3935 B35/50: 3935 B35/50: 3630 B35/50: 4200 B35/50: 4200
-Tp1 -Tp2 -Tk5	PT100 PT1000 NI1000	EN 60751 EN 60751 5000 ppm/K

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Product guide

Measurement Series SRC, SDC, SOC/SOC-T1-Tp2



SRC



SDC



SOC



SCC-T1-Tp2

Active temperature and humidity measurement for a wide range of installation options and applications. A programmable and precise transmitter for PT1000 measuring elements is the SCC-T1-Tp2.

- ▲ 3-wire transmitters with selectable 0/2 – 10 V or 0/4 – 20 mA
- ▲ Programmable with OPA-S and OPC-S
- ▲ Resistant and modern housing
- ▲ Duct (SDC) and outdoor transmitters (SOC) have IP 54 housings. IP 63 with weather protection AMS-1. IP 30 for room sensor (SRC)
- ▲ 5 %, 3 % or 2 % humidity accuracy
- ▲ Cable gland for SDC and SOC
- ▲ Output signal and temperature Measuring range selectable, storage of minimum and maximum values, with the operating terminal OPA-S or OPC-S
- ▲ Immersion sleeves AMI (for duct transmitters)

Model	Variations	Features
SRC-T1 SRC-H1 SRC-H1T SRC-H1T1 SRC-C1	Room sensor Temperature transmitter Humidity transmitter Humidity transmitter with temperature sensor Temperature and humidity transmitter Indoor CO2 transmitter: 0 - 2000 ppm	Active transmitter with 3-wire connection Output signal selectable 0/2 – 10 V, 0/4 – 20mA Standard measuring element Accessory: transmitter AES3-HT
SDC-T1-x SDC-H1-x SDC-H1T-x SDC-H1T1-x SDC-C1	Duct sensor Temperature transmitter Humidity transmitter Humidity transmitter with temperature sensor Temperature and humidity transmitter CO2 transmitter -x = probe length: -8, -16, -24 (cm)	Active transmitter with 3-wire connection Output signal selectable 0/2 – 10 V, 0/4 – 20mA Standard measuring element Cable gland Accessory: transmitter AES3-HT
SOC-T1 SOC-H1 SOC-H1T SOC-H1T1	Outdoor sensor Temperature transmitter Humidity transmitter Humidity transmitter with temperature sensor Temperature and humidity transmitter	Active transmitter with 3-wire connection Output signal selectable 0/2 – 10 V, 0/4 – 20mA Standard measuring element Cable gland Weather shield AMS-1 Accessory: transmitter AES3-HT
SCC-T1-Tp2	Precision transmitter for PT1000 Measuring range -40...+ 400 ° C	Transmitter for PT1000 Sensor Output signal selectable 0/2-10 V, 0/4-20 mA Integrated operation terminal: OPC-S External operation terminal: OPA-S
OPA-S	Operation terminal SxA/SxC-Series	For programming the transmitters and as a display unit
OPC-S	Integrated operation terminal for SDC und SOC	For duct- and outdoor sensor series SDC and SOC

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Measurement Series SDA-P/SDE-P



SDA-P



SDE-P

The compact SDE-P is a dynamic pressure sensor with high sensitivity. SDA-P is a static differential pressure sensor with programmable output signal and min/max memory.

- ▲ Transmitter with 3-wire connection
- ▲ Selectable output signal (VDC, mA)
- ▲ Resistant housing
- ▲ External display and operation terminal by OPA-S

- ▲ Programmable
- ▲ Min. / max. memory for critical environmental monitoring
- ▲ Integrated display for SDC, SOC and SCC with OPC-S

Model	Variations	Features
SDE-P1 SDE-P2 SDE-P3 SDE-P4	Differential pressure transmitter Pressure range: 0...25 Pa 0...100 Pa 0...500 Pa 0...2.5 kPa	Active transmitter with 3-wire connection Output signal selectable 0 - 10 V, 4 - 20 mA Dynamic pressure sensor Accessory: External operation terminal OPA-S
SDA-P1 SDA-P2 SDA-P3 SDA-P4 SDA-P5	Differential pressure transmitter Pressure range: 0...300 Pa 0...500 Pa 0...1 kPa 0...3 kPa 0...5 kPa	Active transmitter with 3-wire connection Output signal selectable 0/2 - 10 V, 0/4 - 20 mA Static differential pressure sensor Accessory: External operation terminal OPA-S

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Product guide

X2-Devices Series TCI2/TRI2



TCI2



TRI2-FA



TRI2-FU

The TRI2 and TCI2 devices are communicating universal controllers with two control loops. Control cabinet or wall mounting.		
<ul style="list-style-type: none"> ▲ Universal controller with two control loops ▲ Programmable ▲ Communication for BACnet®, BTL listed and MODBUS via galvanically isolated RS485 interface ▲ Parameter exchange with PC via RS485/USB interface ▲ Programmable with EasySet 	<ul style="list-style-type: none"> ▲ Energy saving through set point limiting and set-back operation and "Economizer" function (free heating or cooling) Timer with 12-time programs. Manual outputs and set points can be time-controlled ▲ Optional: integrated operating terminal ▲ Alarms on all inputs with configurable response on each output ▲ Heating/cooling operation, switching between lowering/normal operation with or without door contact monitoring 	
Model	Variations	Features
TRI2-FA-TH-221.202C TRI2-FA-TH-221.202C-MOD TRI2-FA-TH-221.202C-BAC	Universal controller cabinet mounted 2 PI control loops, Power supply 24 V AC/DC with square Display	3 universal inputs (NTC, VDC), 3 sensor input, 2 analog outputs (mA, VDC) 2 binary outputs
TRI2-FU-TH-221.202C TRI2-FU-TH-221.202C-MOD TRI2-FU-TH-221.202C-BAC	Universal controller cabinet mounted 2 PI control loops, Power supply 24 V AC/DC with vertical Display	3 universal inputs (NTC, VDC), 3 sensor input, 2 analog outputs (mA, VDC) 2 binary outputs
TCI2-204.202UC-MOD TCI2-204.202UC-OP-MOD TCI2-204.202UC-BAC TCI2-204.202UC-OP-BAC TCI2-204.202UC-OP	Universal controller cabinet mounted 2 PI control loops, Power supply 24 V AC/DC	4 universal inputs (NTC, PT1000/NI1000, VDC, mA) 2 analog outputs (VDC, mA) 2 binary outputs
TCI2-204.202UC-OP-L TCI2-204.202UC-OP-MOD-L	Universal controller cabinet mounted 2 PI control loops, Power supply: 230 VAC	4 universal inputs (NTC, PT1000/NI1000, VDC, mA) 2 analog outputs (VDC, mA) 2 binary outputs
AEC-PM2	Backup-Parameter memory for TCI2, TRI2	Accessories for copying parameters contains four parameter sets
AEX2-BAC AEX2-MOD	BACnet Plug-In for TCI2 Modbus Plug-In for TCI2	Communications-Plug-In for BAC-net, MS/TP Communications-Plug-In for MODBUS-Slave-
AMM-2	Panel mounting set for TCI2-Serie	

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Product guide

X2-Devices Series TCX2



TCX2-OP



The TCX2 devices are communicating, cabinet-mounted universal controllers with up to four control loops. top hat rail mounting		
<ul style="list-style-type: none"> ▲ Universal controller with up to four control loops ▲ Programmable ▲ Communication for BACnet®, BTL listed and MODBUS via galvanically isolated RS485 interface ▲ Parameter exchange with PC via RS485/USB interface ▲ Special functions such as cascade control, set point shift, e.g. ▲ Programmable with EasySet 	<ul style="list-style-type: none"> ▲ Energy saving through set point limiting and set-back operation and "Economizer" function (free heating or cooling) Timer with 12-time programs. Manual outputs and set points can be time-controlled ▲ Optional: integrated operating terminal ▲ Alarms on all inputs with configurable response on each output ▲ Heating/cooling operation, switching between lowering/normal operation with or without door contact monitoring ▲ Lighting control 	
Model	Variations	Features
TCX2-40863(-OP) TCX2-40863(-OP)-BAC TCX2-40863(-OP)-MOD	Universal controller 4-PI control loops, real time clock Power supply: 24 V AC/DC	6 binary outputs (relays) 3 analog outputs (VDC, mA) 8 universal inputs (NTC, VDC, mA)
TCX2-23343-MOD TCX2-23343-BAC	VAV / Fan coil controller 2 PI control loops, Power supply: 24 V AC/DC	4 binary outputs (relays), 3 analog outputs (VDC) 3 analog (VDC) and 3 passive inputs (NTC)
TCX2-14050-MOD TCX2-14050-BAC	Fan coil controller 1 PI control loops, Power supply: 24 V AC/DC	5 binary outputs (relays) 4 passive inputs (NTC)
TCX2-13040-230-MOD TCX2-13040-230-BAC	Fan coil controller 1 PI control loops, Power supply: 230 V AC	5 binary outputs (relays) 4 passive inputs (NTC)
TCX2-24273 TCX2-24273-MOD TCX2-24273-BAC	Universal zone controller 2 PI control loops, Power supply 24 V AC/DC	4 binary outputs (relays 2 A) 1 binary output (relays 10 A) 2 binary outputs (TRIAC 24 VAC)
TCX2-24273-230 TCX2-24273-230-MOD TCX2-24273-230-BAC	230 V AC power supply with 5 VA 24 V AC output voltage	2 analog inputs (VDC) 4 passive inputs (NTC)
AEC-PM1	Backup-Parameter memory for TCX2	Accessories for copying parameters contains four parameter sets
AEX-BAC AEX-MOD	BACnet Plug-In for TCX2 Modbus Plug-In for TCX2	Communications-Plug-In for BAC-net, MS/TP Communications-Plug-In for MODBUS-Slave-
AMM-1	Panel mounting set for TCX2-Serie	

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X2-Devices Series SDC2/SOC2/SCC2



SDC2



SCC2



SDC2-OP

Universal controller and sensor with communication options. New function terminal with RH and temperature sensor with one passive and one active input.

- | | |
|---|--|
| <ul style="list-style-type: none"> ▲ separate MODBUS or BACnet communication ▲ Integrated operation terminal with LCD display ▲ Identical control as TCX2 ▲ Programmable with EasySet ▲ Modular concept allows flexible installation | <ul style="list-style-type: none"> ▲ Possible connection of an external operating element ▲ Operation terminal OPT1: ▲ An independent frame simplifies the adaptation to customer requirements and creates sufficient space for a customer logo, if desired |
|---|--|

Model	Variations	Features
SDC2-16-T-200.101U-1 SDC2-16-T-200.101U-MOD-1 SDC2-16-T-200.101U-BAC-1 SDC2-16-C-200.101U-1 SDC2-16-THQ-200.101U-1	Temperature sensor Temperature sensor Temperature sensor CO2 sensor Temperature-, humidity-, and CO2-sensor	1 binary output SPDT (relays) 1 analog output 0-10V/0-20mA 2 control loops
SDC2-16-TH-210.102U-1 SDC2-16-TH-210.102U-MOD-1 SDC2-16-TH-210.102U-BAC-1 SDC2-16-TH-210.102U-OP-MOD-1 SDC2-16-THCQ-210.102U-1 SDC2-16-THC-210.102U-MOD-1 SDC2-16-THC-210.102U-BAC-1 SDC2-16-THQ-210.102U-MOD-1 SDC2-16-THQ-210.102U-BAC-1 SDC2-16-THCQ-210.102U-MOD-1 SDC2-16-THCQ-210.102U-BAC-1	Temperature and humidity sensor Temperature and humidity sensor Temperature and humidity sensor Temperature and humidity sensor Temperature humidity VOC and CO2 sensor Temperature humidity and CO2 sensor Temperature humidity and CO2 sensor Temperature humidity and CO2 sensor Temperature humidity and VOC sensor Temperature humidity and VOC sensor Temperature humidity VOC and CO2 sensor Temperature humidity VOC and CO2 sensor	1 binary output SPDT (relays) 2 analog output 0-10V/0-20mA 1 passive input NTC 2 control loops
SOC2-TH-210.102U-1 SOC2-TH-210.102U-BAC-1 SOC2-TH-210.102U-MOD-1 SOC2-TH-210.102U-OP-1 SOC2-TH-210.102U-OP-BAC-1 SOC2-TH-210.102U-OP-MOD-1	Temperature and humidity sensor Temperature and humidity sensor Temperature and humidity sensor Temperature and humidity sensor Temperature and humidity sensor Temperature and humidity sensor	1 binary output SPDT (relays) 2 analog output 0-10V/0-20mA 1 passive input NTC 2 control loops
SCC2-C-200.101U-1 SCC2-Q-200.101U-1 SCC2-CQ-210.102U-MOD-1 SCC2-CQ-210.102U-BAC-1	CO2 sensor VOC sensor VOC and CO2 sensor VOC und CO2 sensor	1 binary output SPDT (relays) 1 or 2 analog output 0-10V/0-20mA 1 passive input NTC 2 control loops
-MOD -BAC -OP	with Modbus-communication with BACnet-communication with integrated operation terminal	
OPC2-S	Integrated operation and display accessories	for SDC2 / SOC2
AEC-PM2	Backup parameter memory for SDC2, SOC2, SCC	Accessories for copying parameters contains four parameter sets
AEX2-BAC AEX2-MOD	BACnet Plug-In for SDC2/SOC2/SCC2 Modbus Plug-In for SDC2/SOC/SCC2	Communication-Plug-In for BACnet, MS/TP Communication-Plug-In for MODBUS-Slave-

Product guide

X2-Operating Elements OP...



OPU2

OPA2

OPC2-S

OPT1

Smart and intelligent operating controls for X2 operating system devices. These are currently the TCX2, TCI2, SDC2 and SOC2 series.		
<ul style="list-style-type: none"> ▲ LDC-display ▲ OPT1 with variable mounting frame and Touch ▲ Works will all devices that use X2 operating system 	<ul style="list-style-type: none"> ▲ Parameter exchange with PC via RS485/USB interface ▲ Flexible and attractive 	
Model	Variations	Features
OPT1-FA-TNV-VC OPT1-FA-HTNV-VC	Operation terminal for X2 with temperature sensor with temperature and humidity sensor with square frame	For all controls with X2 operating system 1 passive input 1 voltage input. with peer to peer RS485 communication Touch Display with backlight LCD
OPT1-FU-TNV-VC OPT1-FU-HTNV-VC	Operation terminal for X2 with temperature sensor with temperature and humidity sensor with rectangular frame vertical mounted	
OPA2-VC OPU2-VC OPU2-TH-VC	Operation terminal for X2 with internal temperature sensor with internal temperature/humidity sensor	For all controls with X2 operating system Wall mounted operating terminal
OPA2-2T-VC OPA2-2TH-VC	Operation terminal for X2-controls with Temperature sensor with Temperature and humidity sensor	For all controls with X2 operating system with peer to peer RS485 communication 2 passive inputs
OPU2-2T-VC OPU2-2TH-VC	Operation terminal for X2 with Temperature sensor with Temperature and humidity sensor	For all controls with X2 operating system 2 passive input with peer to peer RS485 communication
AMM-AD-W AMM-UD-W	Frame and mounting plate for OPT1 For square connection box For horizontal and vertical connection box	
OPA2-MOD OPA2-MOD-H	Universal programmable MODBUS operator unit with RS485 communication with temperature sensor with temperature and humidity sensor	1 external temperature input 2 binary inputs Up to 5 zones or control loops
OPU-S	Operation terminal SxA/SxC-Series	For programming the transmitters and as a display unit

Product guide

Programmable Servers and Gateway



GSM-DSA



GSM-1000-BMX



GSM-2000-SMP V2.0

Visualize, operate and supervise your equipment with our latest series of servers, routers or gateways. The GSM range of products offer the right solution for every type of project: from residential, small, medium to large office buildings to hotels and hospitals.

- | | |
|---|--|
| <ul style="list-style-type: none"> ▲ Fully programmable ▲ Smooth integration into a BACnet or Modbus system ▲ Wide-ranging applications ▲ Gateway and server for small and medium-sized systems | <ul style="list-style-type: none"> ▲ Reliable network integration ▲ GSM-DSA for IOT-application ▲ GSM-1000-BMX for complex BACnet systems ▲ GSM-2000-SMP is easy to program. Ideal for reliable small and medium-sized systems |
|---|--|

Model	Variations	Features
GSM-1000-BMX	Gateway server medium Free programmable. No license required.	Up to 35 BACnet devices to a BACnet/IP or BACnet Ethernet backbone. With 2 Ethernet and 1 RS485 interface.
GSM-2000-SMP V2.0	Cabinet mounted gateway server HMI, easy to configure webserver, predefined structure, free programmable graphics, easy integration of the controller	Supports LON works, Modbus 485/TCP, BACnet/IP and BACnet MS/TP RS485 integration of MODBUS and BACnet only with accessory
AEC-SMP-MOD AEC-SMP-BAC	Modbus RS485 interface for GSM-2000-SMP BACnet MS/TP RS485 interface for GSM-2000-SMP	
GSM-DAS GSM-100-DAS GSM-1500-DSA	Cabinet mounted gateway DSA server With embedded DGLUX5 licensed for 100 topics With embedded DGLUX5, licensed for 1500 topics	Supports Modbus TCP, BACnet/IP and many more for Linux operating system with 4 USB-ports and 1 Ethernet port Browser based programming RS485 support for MS/TP or Modbus possible with USB-RS485 interface.
AEC-USB-01	RS485 – USB interface	Use with EasySet or for GSM-DSA RS485 communication

Accessories on page 16

Product guide

Accessories



AM.. Mechanical accessories, AE... Electrical accessories		
▲ Immersion sleeves AMI (for duct temperature sensors and probes)		▲ Surface-mounted junction boxes TCI-W, TCY, TLC3
▲ Flush-mounting junction boxes for TCY, TLC3		
Model	Variations	Features
AMI-S5(-1) (-2) AMI-S10(-1) (-2) AMI-S20(-1) (-2) AMI-S40(-1) (-2)	Stainless Steel immersion sleeves Length 5 cm Length 10 cm Length 20 cm Length 40 cm	Stainless steel immersion sleeves with fixing screw for SD-T or SDB-T -1 with 1/2" NPT thread -2 with 1/2" BSP thread,
AMC-1 AMC-2	Cable protection gland Cable protection connector	Cable protection gland and - connector for SDC and SOC, SCC
AMS-1	Weather protection fitting for SOC, SDC	Option for SOC-H1, H1T, H1T1, T1
AMF	Duct mounting flange for duct sensors Ø 6 or 14mm	
AES3-HT-A5 AES3-HT-A3 AES3-HT-A2	Humidity sensors element for - H1, H1T1	5 % accuracy 3 % accuracy 2 % accuracy
AES3HTn3-A3 AES3-HTn10-A3 AES3-HTn11-A3 AES3-HTn20-A3 AES3-HTn100-A3	Humidity sensors element for -H1T probe NTC 3 kΩ at 25 °C NTC 10 kΩ at 25 °C NTC 10 kΩ at 25 °C NTC 20 kΩ at 25 °C NTC 100 kΩ at 25 °C	3 % accuracy B35/50: 3935 B35/50: 3935 B35/50: 3630 B35/50: 4200 B35/50: 4200
AES3-HTp1-A3 AES3-HTp2-A3 AES3-HTk5-A3	PT100 PT1000 NI1000	EN 60751 EN 60751 5000 ppm/K
AMB-001 AMB-005	Junction boxes for flush-mounted fitting Junction boxes for surface mounting	
AEC-USB-01	RS485 USB-interface	For use with EasySet or GSM-DSA RS485
AMM-ED-W AMM-AD-W	Frame and mounting plate for MZ3, OPT1 devices	Feller EDIZIODue® frame with mounting plate, frame and mounting plate for the square connection box
AMB-001 AMMB-005	Junction box for in-wall mounting Junction box for surface mounting	
AER-D13	Signal converter from analog output to digital outputs	Compact unit that switches at over 90% RH and below 85% to prevent condensation. Device can be programmed with a min/max value External operation terminal: OPA-S

Product guide



Vector Controls, Your reliable partner for measurement and control

Customer groups	Experiences
Building owners and managers	<p>„Reduced operating costs, increased life quality“</p> <ul style="list-style-type: none"> ▲ Automatic switching of occupied/unoccupied modes, heating/cooling, and set point shifts based on 7-day programmable time schedules, remote temperature or occupancy sensor input. ▲ Password-protected control settings no need for unattractive thermostat covers. ▲ Customizable minimum and maximum set points and mode shift levels save energy. ▲ Large customizable LCD display and attractive housings appropriate for any décor.
Distributors	<p>„Less inventory, more applications, clear sales channels, competitive pricing“</p> <ul style="list-style-type: none"> ▲ The Vector Controls parameter setting system allows one product to cover a wide range of applications, so you can keep stock levels down and turn-over up. ▲ Simple parameter based configuration that walks in customers can apply quickly and accurately to suite their applications. ▲ Full range of controllers and sensors. ▲ Competitive pricing and clear sales channels make Vector a reliable long term business partner.
Contractors	<p>„A solid product line I can count on“</p> <ul style="list-style-type: none"> ▲ A complete range of robust, accurate controllers and sensors that cover most HVAC applications from VAV to air handling to radiant systems; temperature, humidity and pressure control. ▲ Wall and cabinet mounted controllers with sophisticated easy to implement PI control features with no separate configuration tools required. ▲ Simple parameter based configuration that walks in customers can apply quickly and accurately to suite their applications.
Manufacturers	<p>„Reliable technology with a long-term partnership“</p> <ul style="list-style-type: none"> ▲ The Vector product platform is well suited to customization at large as well as medium volume levels. ▲ The Vector Controls engineering team in Switzerland provides professional assistance in developing creative solutions to product and engineering challenges. ▲ Parameter based configuration offers easy flexibility for basic and complex applications. ▲ A ten year record of success working with OEMs world-wide plus two-year warranty makes Vector a logical partner for controls and sensors.

Product guide

Locations



Worldwide distribution in more than 60 countries

Product guide

Terms and Conditions

General

Until otherwise arranged, in writing, the follow-in conditions are valid.

The terms stated in this Agreement take precedence over any conditions, which may appear on a standard order form of Buyer, and no such contradictory provisions or conditions, if any, of such form, except as expressly stated herein, shall be binding. Notice of objection to any additional or different terms or conditions is hereby given.

Price

Our prices are net, ex works factory Beijing, China or ex works factory Switzerland (EXW = Ex works Incoterms 2000) in USD according to agreement. Delivery costs will be charged at cost.

We are entitled to make partial deliveries, when necessary, which can be invoiced separately.

Packing for normal consignments is included in the price. Wooden crates, pallets, etc. will be charged separately. Wiring diagrams, installation and commissioning are not included in our prices.

The prices do not include tax of any type or custom duties and similar tariffs and fees, which may now or hereafter be applicable to, measured by, or imposed upon or with respect to the transactions described herein, the Products, the sale of the Products, their value, or their use, or any services performed in connection therewith. Buyer agrees to pay or, at Vector Controls option, reimburse Vector Controls for any such taxes and charges which Vector Controls or its subcontractors, suppliers or affiliates are required to pay.

Vector Controls is entitled to change its prices without notice. Quotations remain valid for 3 months from date of quotation unless specified otherwise.

Payment

Invoices are payable in USD according to agreed terms without any deductions. Payment is not affected by the date of receipt.

If, in the judgment of Vector Controls, the financial condition of Buyer, at any time during the manufacturing period or at any time before the applicable Products are shipped to Buyer, does not justify the terms of payment specified, Vector Controls may require full payment in advance.

An interest charge of 2% per month will be included on all overdue payments.

Shipments for new orders and warranty replacements will not be made if payment is overdue.

Delivery

We undertake to make every endeavor to adhere to our delivery promise(s), but do not accept cancellation of contract or liability for any direct or indirect losses which may arise, for any reason whatsoever, due to our failure to adhere to such promise(s).

If Vector Controls is late in delivery it is assumed that the Buyer still insists on delivery.

The day of delivery is the day the goods are collected from the factory.

In case the goods are not collected on the agreed date, Vector Controls is entitled to invoice the goods and store them on cost and risk of the Buyer.

Vector Controls reserves the right not to supply the products ordered in case they are not available anymore. In such a case Vector Controls will immediately inform the Buyer and refund an already made down payment.

Title and Risk

The products shall remain the personal property of Vector Controls until full settlement of all claims existing against the Buyer. The Buyer agrees to perform all acts which may be necessary or appropriate to perfect and assure the retention of title in Vector Controls of all of the Products until such point in time;

Title and risk pass to Buyer according to the agreed terms of delivery (Incoterms 2000).

Return of Goods

Standard goods received by the Buyer can be returned if agreed upon with Vector Controls and if goods are still part of the standard sales program, less than 6-month-old, unused, in original packaging and in good condition.

There is no obligation for Vector Controls to accept returned goods. A return for custom made products is not possible.

An overhead charge of 10% of the invoice value will be deducted.

Products are to be returned to a previously assigned Vector Controls Factory on the cost of the Buyer.

Specifications

The data which were published in Vector Control catalogues, brochures, websites, install sheets or other publications describe the nature and application of the products of Vector Controls, and are not a quality or durability guarantee. The make of the delivered products may differ in material, colour or shape from pictures or exhibits.

Vector Controls assumes no responsibility regarding the suitability or fitness of products for a particular purpose. Specifications communicated by Vector Controls are to be regarded as orientation guidelines. Vector Controls reserves the right to change product specifications without notice.

Warranty

Vector Controls guarantees that the Delivered products fulfil the specifications outlined in the associated datasheets. Other warranty aspects are excluded to extent permitted by law.

We undertake to replace or repair free of charge, any part or parts of equipment, which may develop defects, caused through faulty material or workmanship within 12 months from the date of invoice.

The consequences of ordinary wear and tear, damage due to negligence or improper use, or other causes beyond our control are excluded from this guarantee.

This guarantee shall be null and void should the Buyer or any other persons:

- Use the products in applications or environments which are not specified in datasheets, especially in areas where failure could lead to loss of life or property;
- Does not follow local rules and regulations or disregards technical specifications and mounting instructions;
- Use the products under special conditions, especially in an environment of aggressive gases or liquids or outside the permissible environmental parameters;
- modify or repair any part of our equipment;
- Store the products not appropriately.

Disclaimer

In the event of a breach of this warranty, Vector Controls sole responsibility shall be to furnish a replacement part EXW factory or, at the option of Vector Controls, to repair the defective part. Vector Controls hereby excludes all implied warranties of merchantability and fitness and all other express or implied warranties whatsoever with respect to the products. In no event shall Vector Controls be liable for loss of profit, loss of production, loss of business or goodwill, liability of Buyer or ultimate user to others, increased or uncovered operating or fixed costs, inefficiency, theft or any other consequential or indirect or remote damages in any manner directly, or indirectly, related to design, manufacturing, supply or use of the Products or any other act or failure to act by Vector Controls or its agents or contractors. All products are de-signed for use ONLY as operating controls. Where an existing control failure would result in personal injury and/or loss of property including property damage, it is the responsibility of the Buyer to add any devices (safety, limit controls) or systems (alarm, supervisory) that protect against, or warn of, control failure.

Indemnification

The buyer will fully indemnify Vector Controls on first demand against all third party claims, which they are facing. This also applies to claims under product liability.

Damage or Loss in Transit

Vector Controls shall not be liable for failure to perform or for delay in performance due to fire, flood or other natural cause, strike or other labour difficulty, act of any governmental authority or of Dealer or its agents or customers, riot, embargo, car shortage, wrecks or transportation delays or failure, inability to obtain necessary labour, materials, or manufacturing facilities from usual sources or due to any other unforeseen circumstance or cause beyond its reasonable control. In the event of delay in performance due to any such cause, the date of delivery or time for completion shall be postponed by such length of time as may be reasonably necessary to compensate for the delay.

Alterations of standard terms

Vector Controls reserves the right to change its terms and conditions of sales at any time without notification.

Efficacy in invalid clause

Should one or more provisions of these terms become invalid, the other terms and conditions herein are not affected and continue to be effective.

Proper Law and Jurisdiction

This contract is and shall be deemed to have been made in Switzerland, and shall in all respects, be governed by Swiss laws.

For any dispute resulting from the implementation and application of this contract, the place of jurisdiction are the courts based in Zürich, Switzerland.

Product guide

**Efficient use of energy -
For a better future**

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