

Line Voltage Switching Relay Pack Controllers For Commercial and Lodging HVAC Fan Coil Applications

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Product overview

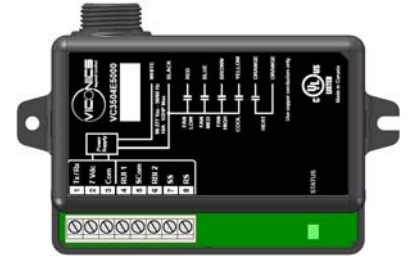
Viconics' innovative VC3000 Series Line Voltage Switching Transformer Relay Pack Controllers has been designed for silent control of typical high voltage fan coil device loads (90 to 277 Vac multi-voltage capable).

It uses advanced microprocessor-based circuitry with a built-in transformer that eliminates all typical required peripheral components when automating a Fan Coil unit with traditional building automation systems.

The VC3000 Series Line Voltage Switching Transformer Relay Pack(s) operate as slave unit(s) under the control of a single master VTR73XX Terminal Equipment Controller.

A single VTR73XX Terminal Equipment Controller can control up to 10 VC3000 Series Relay Pack. The VC3000 Series Relay Packs are line-powered units.

The extremely compact unit locally contains all the relay outputs for fan switching and valve control. Models are also available for extra monitoring / control inputs of the Fan Coil Units.



VC3000 Series Relay Pack

The additional following documents are available at: www.viconics.com

- PIR Hospitality application information and examples, are available on document: *APP-HOSPITALITY-PIR-VTR73-Guide-Exx*
- HVAC Fan Coil application information and examples, are available on document: *APP-VTR7300-PIR-Exx*
- Information on installation of the Terminal Equipment Controller (VTR7300), is available on document *LIT-VTR7300-PIR-Exx*
- PIR cover installation information is available on document: *PIR Cover Installation-Exx*
- Information on the BACnet models (VTR73xxX5x00B), is available on document *ITG-VTR73-PIR-BAC-Exx*
- Information on the Wireless models (VTR3xxX5x00W), is available on documents: *ITG-VWG-40-BAC-Exx* and *MAN Wireless Stat Driver Guide-Exx*

VC3xxxX relay pack models available

	VC3500E5000	VC3504E5000	VC3400E5000	VC3404E5000	VC3300E5000 Slave Fan Unit
Applications	2 pipes 2 pipes with reheat 4 pipes	2 pipes 2 pipes with reheat 4 pipes	2 pipes 2 pipes with modulating pulsed reheat	2 pipes 2 pipes with modulating pulsed reheat	Slave fan control only
Fan control	Up to 3 speed	Up to 3 speed	Up to 3 speed	Up to 3 speed	Up to 3 speed
Monitoring inputs	None	4 FCU remote inputs	4 FCU remote inputs	4 FCU remote inputs	None
Control types	On-Off line switched valve output control - 1 heat / cool output -1 cool output -3 fan outputs	On-Off line switched valve output control - 1 heat / cool output -1 cool output -3 fan outputs	On-Off line switched valve output control -1 heat / cool output -1 Modulating pulsed Vdc output for SSR electric reheat control -3 fan outputs	On-Off line switched valve output control -1 heat / cool output -1 Modulating pulsed Vdc output for SSR electric reheat control -3 fan outputs	Slave fan control only 3 fan outputs

Ordering Information Notes:

Please refer to the "Operation overview" section for related information on VTR73xxA and VC3xxxX arrangements and possible combinations.

- More than one VC3xxxX Relay Pack can be used for a single VTR73xxA Terminal Equipment Controller.
- Only one VC3x4X Relay Pack with monitoring inputs can be used for a single VTR73xxA Terminal Equipment Controller

Ordering examples:

- A VC3500E5000 is for a 90 to 277 Vac powered FCU mounted Relay Pack with the following outputs:
 - Three 90 to 277 Vac switching fan relay outputs
 - Two 90 to 277 Vac switching valve relay outputs

VC3xxX Relay Pack Specifications

Power supply: 90 to 277 Vac universal, 50-60 Hz

Fan line voltage contact electrical ratings: Brown, Blue, Red wires ½ HP maximum

Main heat and cool line voltage contact electrical ratings: Yellow wire 10A maximum

Isolated heat line voltage contact electrical ratings: Orange wires 10A maximum

VTR73xx terminal equipment

controller power output: 7.0 Vdc +/- 10 C% 2.4 watts minimum

Output ratings:

- Heat valve: 10 Amps @ 277 Vac maximum
(orange wire)
- Cooling valve: 5 Amps @ 277 Vac maximum
(yellow wire)
- Fan 1/2 HP @ 277 Vac maximum
(red, blue, brown wire(s))

Operating conditions: 0 °C to 50 °C (32 °F to 122 °F)
0% to 95% R.H. non - condensing

Storage conditions: -30 °C to 50 °C (-22 °F to 122 °F)
0% to 95% R.H. non - condensing

Approximate shipping weight: 0.75 lb (0.34 kg)

Agency approvals all models: cTUVus: UL 873 (US) and CSA C22.2 No. 24 (Canada)
CE: LVD 2006/95/EC (Europe Union)
CE: EMC 2004/108/EC (Europe Union)
CE for RF: RTTE 1999/5/EC
FCC: Compliant to: Part 15, Subpart B
FCC for RF: Compliant to: Part 15, Subpart C

Drawing & Dimensions

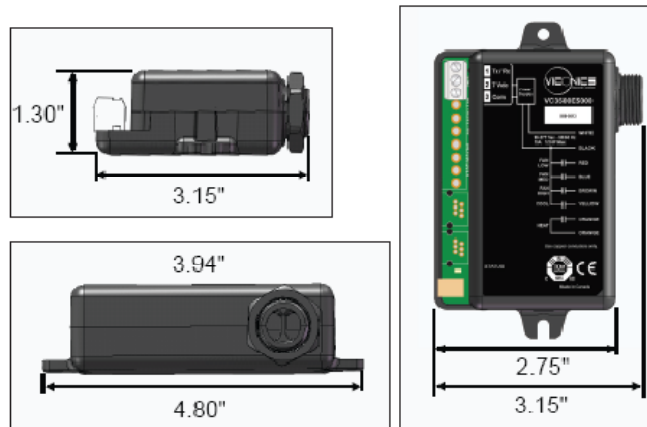


Fig.1 – Transformer Relay Pack Terminal Dimensions

Important Notice



All VC3000 series controls are for use as operating controls only and are not safety devices. These instruments have undergone rigorous tests and verifications prior to shipment to ensure proper and reliable operation in the field. Whenever a control failure could lead to personal injury and/or loss of property, it becomes the responsibility of the user / installer / electrical system designer to incorporate safety devices (such as relays, flow switch, thermal protections, etc...) and/or alarm system to protect the entire system against such catastrophic failures. Tampering of the devices or miss application of the device will void warranty.