INSTALLATION

VANTAGE INSTALL GUIDES

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WireLink and RadioLink DIN LVRS — MODEL: LVRS8-DIN & STOLER821

Overview

Vantage's DIN *Low Voltage Relay Station* WireLink™ model, LVRS8-DIN and RadioLink™ model, STOLER821 feature 8 isolated, latching relay channels for switching low voltage or dry contact closures to third party systems or devices. The DIN LVRS does not produce or provide any power. Each relay is single-pole, double-throw, which offers a normally closed, normally open set of contacts for each relay. Each relay has an actuator button on the front of the LVRS which toggles the relay and is useful for testing wiring and operation without programming the system. Some examples for using a DIN LVRS would be: draperies, pumps, garage doors, HVAC dampers, lifts, screens, pool covers, sprinklers, showers, baths, security systems, etc.

Station Specifications

Description	Specification
Dimensions, HWD	85.7mm x 157.2mm x 61.9mm 3.38" x 6.19" x 2.44"
Weight	201g
Mounting	35 mm DIN Rail (EN 50 022: 1977)
Relay Inputs	8
Relay Actuators	8
Max. Current @ Relay	1A
Max. Voltage @ Relay	48VAC / 30VDC
Min. Voltage @ Relay	0VAC / 0VDC
Lightning Surge Protection Low Voltage	ITU-T K.20
Station Wiring configuration	Daisy-chain/Star/Branch
Station Bus Specification	2C, 16AWG / 1.31mm2, twisted, non-shielded, <30pF per foot. Separate a minimum of 12″ / 30.5cm from other parallel communication and/or high voltage runs.
Station Equivalent InFusion	0.5W on IC-24 / 0.5W on IC-36
Station Equivalent QLink	1 Station
Station Equivalent RadioLink	1 Station on RadioLink Systems
Station Bus connections*	24V / 36V Station Bus
LED Indicators	Status and Load State
Ambient Operating Temperature	0-35°C / 32-95°F
Ambient Operating Humidity	5-95% non-condensing
CE, UL and CUL Listed	YES

CAUTION: 36V stations have a ③⑥ symbol on the Serial Number sticker. Any station, not displaying this symbol, should not be connected to a 36Volt Station Bus.

Software/Firmware

The WireLink model is compatible with InFusion Design Center software or QLink 3.5 and Controller Firmware 6.5 or higher. The RadioLink model is compatible with InFusion Design Center or QLink 4.0 and Controller Firmware 7.0 or higher. For new projects it is recommended that firmware and software be kept to the most current release.

Installation/Mounting

Installation of Vantage products should be performed or supervised by a *Certified Vantage Installer.* The Low Voltage Relay Station installation is very simple. There are two methods of connecting the Station Bus to the Low Voltage Relay Station for the WireLink model:

a. Using the 2 wire pigtail connection located on the top of the DIN LVRS
b. Using the pins on the side of the Station to pass Station Bus (see Drawing) Part #VDC-0197

c. The *RadioLink* model needs a power supply connected. Vantage part VFA-0008, 12 Volt Plug-in Supply for use with RadioLink Products 12VDC 1500mA is nominal.
d. The DIN LVRS is mounted on a standard 35 mm DIN Rail (EN 50 022: 1977).
e. All low voltage connections to the LVRS relays are wired to removable screw terminal connectors. These relays may be given custom names in software to facilitate their use in the installation.

Connecting Device Requirements

Each individual low voltage contact is rated as follows:
Maximum Current = 1A
Maximum Voltage = 48Vac / 30Vdc

Station Set Up in Software

InFusion: First select the room, then click on *Vantage Objects* in the *Object Explorer* and expand *Stations, WireLink* or *Stations, RadioLink*. From the list of stations double click on the DIN LVRS to place it in the room. In the *Object Editor,* name the station and make sure it is on the correct station bus port.

QLink: First change to Wiring view, right click on the Main Controller and from the pop-up menu, select *Add DIN Stations* or *Add RadioLink Stations | Low Voltage Relay* from the station list. This will reveal the *DIN Relay Station Definition* Dialog Box. Type the name of the Station. Click OK to exit the Definition window. Right click on the station and select Add Low Voltage Relay to add the relay loads. In the Relay Definition window, name the relay and assign it to the correct floor and room.

Programming the Relay Station

Because they are relays the eight buttons on the DIN LVRS cannot be programmed directly. Programmed Buttons, Time Controls or Host Commands in InFusion and V-Commands in QLink are used to control the relays. The relays are accessed by selecting the relay load in Programming.

Configuration with Wired Models

When the station is first connected to the Station Bus, the diagnostic LED will blink twice followed by a pause, meaning that the station is connected correctly but not yet configured. From Design Center, click on the Configure Stations button on the toolbar or from QLink, select System | Configure Stations and click on the radio Configure button in the Online Configuration section from the pull down menu. Highlight the DIN LVRS. The Status LED will blink 5 times followed by a pause and the button LEDs will blink rapidly indicating that the station is in configuration mode. To finish configuring press any button on the Station 3 times. The station may also be configured by typing the serial number in the project file, using this method the station will automatically be configured when the system is programmed. Once configured the Status LED will blink evenly and the buttons stop blinking.

Configuration with RadioLink*

RadioLink DIN LVRSRL stations need to be configured to associate which physical station goes with the station in software.

When the station is initially powered-up, the Status LED will blink three times followed by a pause - this means the station is powered correctly but not yet on the network. *Before* uploading the file to the Vantage system, do the following: From Design Center, click in the *Serial Number* section in the *Object Editor* and type in the serial number. From the menu bar in QLink, select *System/Configure Stations*. A list of all stations will be displayed on the screen. Manually enter the serial number for each RadioLink station to match it with the corresponding programming in QLink.

The serial number of each station is located on a permanent sticker on the front of the station. Record the number for easy reference when programming. The Main Controller will add to its network and configure all the RadioLink stations that it has serial numbers for. This may take several minutes depending on the number of RadioLink stations on the network. The Status LED will blink steadily when a station has been added to the network and configured.

*NOTE: A new feature with Design Center 2.3 and up is the ability to configure RadioLink stations the same way WireLink stations are configured, e.g., 3-button press. When configuring stations, if the *Exclude RadioLink Bus* check box, under *Settings | System Preferences,* is *not* checked, all RadioLink stations go back to non-programmed mode when the Configure Stations button on the tool bar is clicked. The station's LEDs will all blink while in configure station mode. After configuring stations and clicking the Configure Stations button again to turn configure stations mode off, all RadioLink stations need to log back on to the system before working as programmed. Allow time for this to occur.

Local Control

Local control of each relay is provided by pressing the corresponding actuator button on the front of the station. This allows testing of the DIN LVRS connections before it is programmed. Each relay has an LED to indicate if it is in the SET or RESET position.

Diagnostic and Test Information

Each DIN LVRS station has a status LED. The Status LED blinks steady on and off or 2, 3 or 4 blinks followed by a pause.

One Even Blink:	LVRS is operating correctly and is configured.
Two Blinks:	LVRS is operating correctly but is not configured (wired model).
Three Blinks:	LVRS is not communicating with the Main Controller, verify station bus wiring or if RadioLink it is not yet configured.
Four Blinks:	Factory problem. Please contact the factory.
Five Blinks:	Configuration mode.

Line Drawings

NOTE: RadioLink Model – Power Input Connection is 9-12V AC/DC, 200mA IN

W = 157.2mm / 6.19"

H = 85.7mm / 3.38"

D = 61.9mm / 2.44"
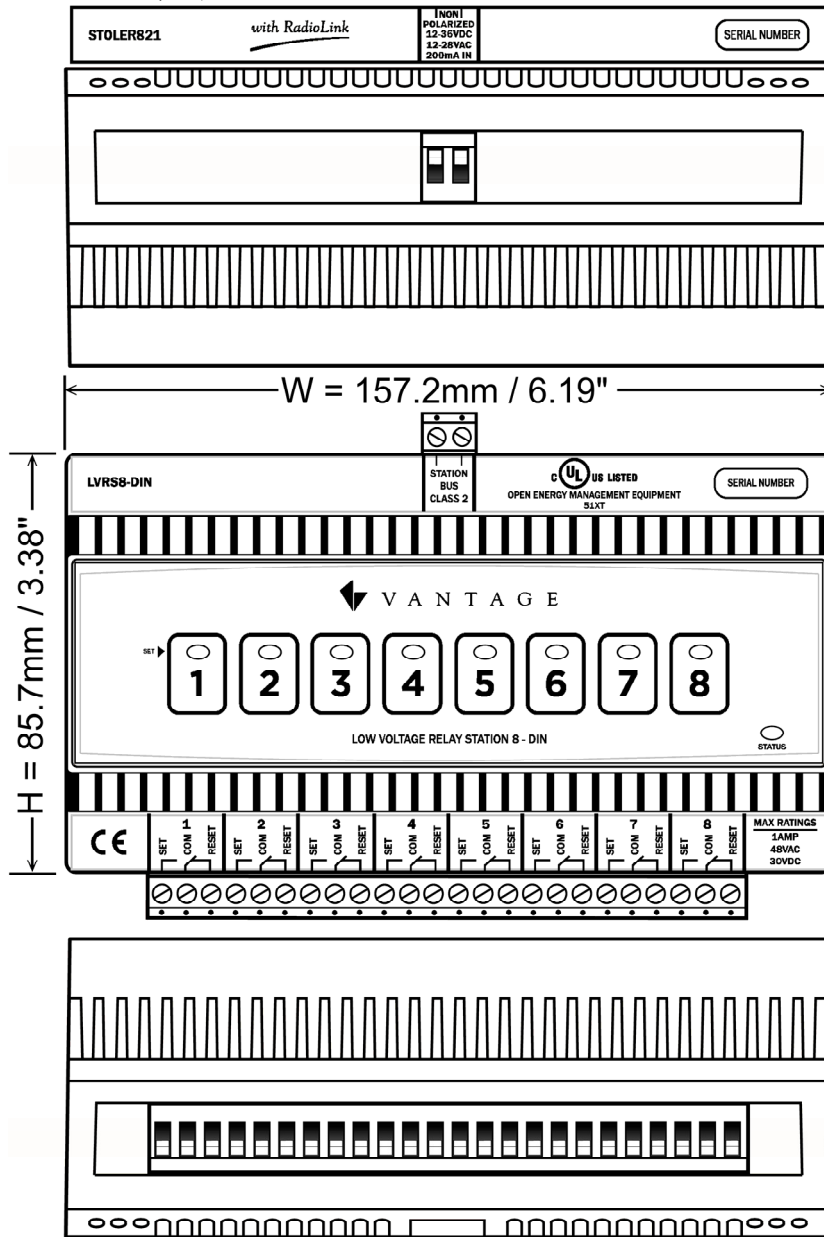
RadioLink Model FCC Information

This device contains transmitter module:
FCC ID: PII-VSUB075-1
IC: 3505A-VSUB0751
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications to this product not expressly approved by Vantage Controls could void the user's authority to operate this product.

Side Label Enlarged

LVRS8-DIN

Wire Gauge Max.	12 AWG
Screw Torque Max.	4.4 in/lb.
Enclosure	Type 1	IP20
Ambient Temperature Max.	95°F	35°C
Load Types	Pilot Duty
For Use With Copper Wire Only	
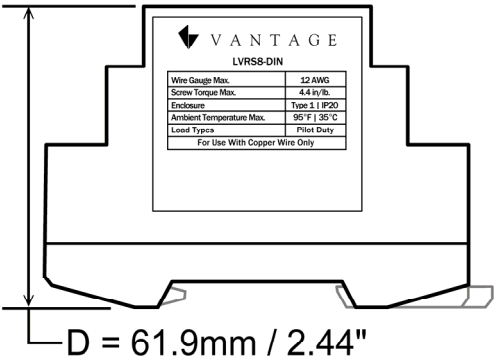
Strip back insulation 6.5mm / 0.25"

RECOMMENDED WIRE TYPE FOR CIS10-DIN SCREW TERMINALS

- *Loads:*
  Stranded - 0.75-3.31mm^2 / 20 -14 AWG, copper wire

- *Station Bus:*
  Vantage Station Bus (see specifications table)