301C PRODUCT SUBMITTAL ORDERING INFORMATION

301C Controller

VA301C Gas detection controller with display and plastic housing.

VA301C-DLC Gas detection controller with data logging, display and plastic housing.

301C-DLC-W Wireless controller with datalogger

VA301C-DLC-BIP Gas detection controller with data logging and display, BACnet/IP output and plastic

housing.

301C-DLC-BIP-W Wireless Controller with Datalogger and BACnet/IP

VA301CDS Gas detection controller with data logging, display and industrial grade housing.

VA301C-CDS-BIP Controller, w/ Datalogger, BACnet/IP Output, Industrial Enclosure

Network Accessories

VA301R8 Relay module with 8 relays

301R8-W Wireless relay module with 8 relays

301R8-W-F Wireless relay module with 8 failsafe relays

VA301ADI Analog Digial Input converter (4-20 mA to Modbus RS-485)

VA301AP Annunciator panel for the VA301C

VA420I Digital analog output converter (RS-485 to 4-20 mA)
BC201C 301C/EM/EMRP/AP - heated enclosure (enclosure only)

301C - SPECIFICATIONS

Power requirements 17 -27 Vac, 50 or 60 Hz

24 - 38 Vdc, 500 mA

Response time: N/A
Accuracy: N/A
Detection technology N/A
Deadband: N/A

Operating temperature range: -20°C to 50°C (-4°F to 122°F)
Operating humidity range: 0 to 95% RH, (non-condensing)

Alarm levels: N/A

Outputs: 4 DPDT relays

Relay output rating: 5A, 30 Vdc or 250 Vac (resistive load)

Operating altitude Up to 3000 m (9843 ft)

Network capacity: Up to 96 transmitters, 32 per channel

Channel 1 and 2: Modbus & Vulbus

Channel 3: Modbus only

Channel 4: Slave communication (i.e.: for BACnet option)

Communication cable: Twisted and shielded 2-24 AWG (Belden 9841)

Length of communication lines: Up to 609 m (2000 ft.) per channel

T-tap maximum 20 m (65 ft) to a maximum of 40 m (130 ft) for all T-taps.

Time delays: 0, 30, 45 sec and 1 to 99 min.before/after delay

Warm-up delay: N/A

User Interface: Graphic 122 x 32 dot matrix backlit display

User friendly keypad

Visual indicators: Power On = Green LED

Alarm A = Red LED Alarm B = Red LED Alarm C = Red LED Fault = Amber LED

Tx = Amber LED (blinks when in use) Rx = Green LED(blinks when in use)

Audible alarm: 65 dBa at 1 m (3 ft)

Overvoltage category: II Pollution degree: 2

Battery: Lithium Battery, 3 Volts

Enclosure NEMA 4 X ABS - polycarbonate

Operating environment: Indoor use

Dimensions (HxWxD) Standard housing: 21.3 x 13.4 x 5.7 cm (8.4" x 5.3" x 2.25")

Industrial housing: 23.5 x 35.7 x 8.25 cm (9.5" x 14.06" x 3.25")

Weight Standard housing: 1.1 Kg (2.4 lbs.)

Industrial housing: 4.9 Kg (10.8 lbs.)

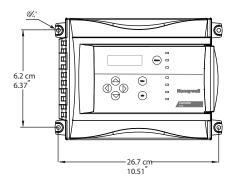
Certifications ANSI/UL 61010-1

CAN/CSA C22.2 No. 61010-1

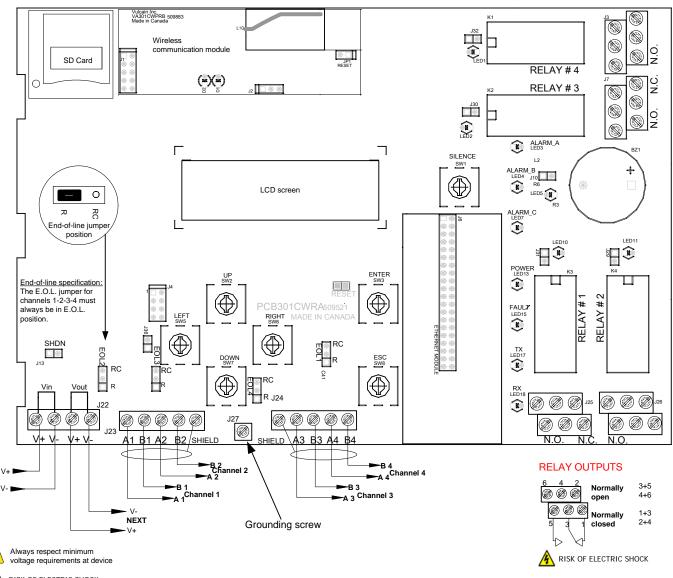
INSTALLATION INSTRUCTIONS

Installation instructions must be strictly followed to ensure the proper functioning of the equipment. Honeywell will not be liable or responsible for any malfunctions or incidents that may occur from improper installation:

- Place each unit in a location that is easily accessible for service.
- · Avoid placing units near sources of vibrations.
- Avoid placing units near equipment that emits electromagnetic interference.
- Avoid any location where there are large temperature swings.
- Before installing, verify all local codes, standards or legislation that could impact choice of installation location.
- 1. Select installation location
- 2. Measure and mark mounting holes (as shown)
- 3. Pre-drill or prepare as required by mounting surface (drywall plugs, etc.)
- 4. Position unit and align mounting holes with markings and install necessary screws.



Wiring Details 301C



Wireless Communication:

ISM worldwide Indoor range 30m

RISK OF ELECTRIC SHOCK

COMMUNICATION

Communication Wire Gauge: 2-24 AWG (Belden 9841) Twisted and shielded cable 2000 feet (600 m) per channel T-tap: 65 feet (20 m) / T-tap 130 feet (40 m) total

Channel Specifications:

Channel 1-2: Modbus, Vulbus protocol Channel 3: Modbus protocol only Communicates only with Vulcain transmitters
Channel 4: Modbus output
Communicates only with VA301BDCM

*No transmitter can be connected to channel 4

BacNet/IP MODULE (-BIP option)

Ethernet: 10/100-compatible with 10Base-T interface, RJ-45

Visual Indicators: Green LED LINK Yellow LED ACT

Wiring Specifications

Power: The power requirement range is 17-27 Vac, 24-38 Vdc, 500 mA. In both AC or DC mode, the

polarisation is not important. The system must be grounded on the transformer. A dedicated circuit-

breaker should be used.

Communication: The communication cables have to be grounded using the shield terminal. Use twisted and shielded

Belden cable 24 AWG # 9841 for the connection. The network can be up to 2000 feet (600 m) per channel. The length of a T-tap can be a maximum of 65 feet (20 m). A maximum of 130 feet (40 m) for all

the T-tap must be respected.

Relay Output: The relay output will withstand up to 5 A at 30Vdc or 250Vac (resistive load only). They can be used to

activate horns and strobes. Refer to drawing below for proper wiring. Each relay can be configured in the

programming menu. Default setting is:

Relay 1 (J25) = A Relay 2 (J26) = B Relais 3 (J3) = C

Relay 4 (J7) = Fault 5 A, 30 Vdc or 250 Vac (resistive load)

BACnet/IP MODULE (-BIP option)

Specifications:

Ethernet Port: 10/100-compatible with 10Base-T interface, RJ-45

Visual Indicators : Green LED = LINK

Yellow LED = ACT

DATALOGGER (-DLC option)

The DLC option for the controller collects data automatically and stores it on a digital flash Multimedia Card (SDcard). If ever the SDcard gets full:

- the information logging is stopped
- no SDc flag is diplayed on the screen
- the SDcard LED blinks

WARRANTY AND LIMITS OF LIABILITY

Honeywell warrants to the original purchaser that its product, and the component parts thereof, will be free from defects in workmanship and materials for a period of one year from the date of purchase. Honeywell will, without any charge and at its option, repair or replace defective products or components upon their delivery to its Repair and Service Department. This warranty does not apply in the event of misuse or abuse of the product, or as a result of unauthorized alterations or repairs. Honeywell shall not be liable for any consequential damages, including, without limitation, damages resulting from loss of use. Every precaution for accuracy has been taken in the preparation of this document. However, Honeywell assumes neither responsibility for any omissions or errors that may appear, nor liability for any damages that may result from the use of the products in accordance with the information contained in this document.

To obtain warranty service, return the product, along with a complete description of the defect, transportation prepaid. Honeywell assumes no risk for damage in transit. Following warranty repair, the product will be returned to the buyer, transportation prepaid.