

Analog I/O Slave Units (Numerical indicator type) **CRT1-VAD02□□D/-VDA02□□D**

Analog slave unit with numerical indicator!
Ensure easy setting in system start-up

- Numerical indicator facilitates system start-up and maintenance work
- Ladder-free simple local control if combined with expansion unit (option)
- MIL connector and e-CON connector
- Testing function addition for system start-up



Ordering Information

| Name | Specifications | | Model |
|---|---------------------------------------|-----------|---------------|
| | Input/Output | Points | |
| Analog I/O Slave Units (Numerical indicator type) MIL Connector Type | Analog inputs (Channel Insulation) | 2 inputs | CRT1-VAD02MLD |
| | Analog outputs | 2 outputs | CRT1-VDA02MLD |
| Analog I/O Slave Units (Numerical indicator type) e-CON Connector Type | Analog inputs (Channel Insulation) | 2 inputs | CRT1-VAD02SD |
| | Analog outputs | 2 outputs | CRT1-VDA02SD |

Slave *External I/O Connections* in the appendix for applicable connectors.

Performance Specifications

| Items | Specifications |
|-------------------------------|--|
| Communications power voltage | 14.0 to 26.4 VDC |
| Noise immunity | Conform to IEC61000-4-4, 2 kV (power line) |
| Vibration resistance | 10 to 150 Hz, double amplitude 0.7 mm or 50 m/s ² |
| Shock resistance | 150 m/s ² (three times each in 6 directions of 3 axes) |
| Dialectic resistance | 500 VAC (between insulated circuits) |
| Insulation resistance | 20 MΩ min (between insulated circuits) |
| Ambient operating temperature | -10 to +55 °C |
| Ambient operating humidity | 25 to 85 % (with no condensation) |
| Ambient operating atmosphere | No corrosive gas |
| Storage temperature | -25 to +65 °C |
| Storage humidity | 25 to 85 % (with no condensation) |
| Installation method | DIN Track 35 mm or Mounting Bracket (for Expansion Units excluded) |

Input Section Specifications

| Item | Specification and Performance | |
|----------------------------------|--|--------------------------|
| | Voltage input | Current input |
| Input range (signal) | 0 to 5 V 1 to 5 V 0 to 10 V -10 to +10 V | 0 to 20 mA 4 to 20 mA |
| Maximum signal input | ±15 V | ±30 mA |
| Input impedance | 1MΩ min | approx. 250 Ω |
| Resolution | 1/6000 (full scale) | |
| Overall accuracy | 25 °C | ±0.3%FS |
| | -10 to + 55°C | ±0.6%FS |
| Conversion cycle | 2 ms per two points | |
| AD conversion data | -10 to +10 V range: F448 to 0BB8 hex full scale (-3000 to +3000) Others: 0000 to 1770 hex full scale (0 to 6000) AD conversion range: ±5 % FS of the above data range. | |
| Insulation method | Photocoupler isolation (between inputs and communications lines or input signals) | |
| Communications power consumption | 70 mA max. for 24-VDC power supply 105 mA max. for 14-VDC power supply | |
| Weight | CRT1-VAD02SD: 109 g CRT1-VAD02MLD: 113 g | |

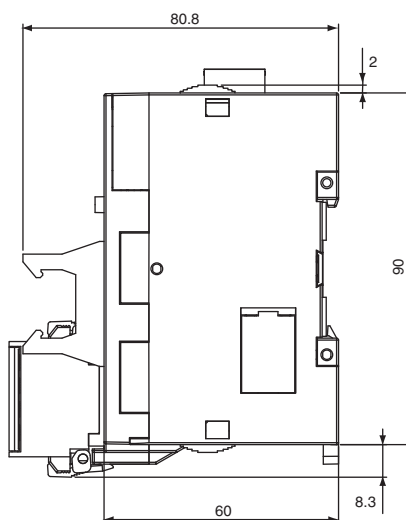
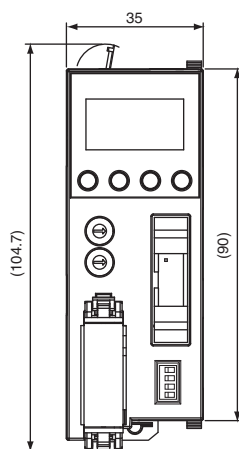
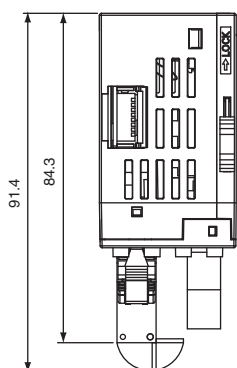
Output Section Specifications

| Item | Specification and Performance | |
|---|---|--------------------------|
| | Voltage output | Current output |
| Output range (signal) | 0 to 5 V 1 to 5 V 0 to 10 V -10 to +10 V | 0 to 20 mA 4 to 20 mA |
| External output permissible load resistance | 5 kΩ min | 600 Ω max |
| Resolution | 1/6000 (full scale) | |
| Overall accuracy | 25 °C | ±0.4%FS |
| | -10 to + 55°C | ±0.8%FS |
| Conversion cycle | 2 ms per two points | |
| DA conversion data | -10 to +10 V range: F448 to 0BB8 hex full scale (-3000 to +3000) Others: 0000 to 1770 hex full scale (0 to 6000) DA conversion range: ±5% FS of the above data range. | |
| Insulation method | Photocoupler isolation (between output and communications lines) No isolation between output signal wires | |
| Communications power consumption | 125 mA max. for 24-VDC power supply 195 mA max. for 14-VDC power supply | |
| Weight | CRT1-VDA02SD: 106 g CRT1-VDA02MLD: 112 g | |

* In current input mode of 0 to 20 mA, accuracy below 0.2 mA is not assured.

Dimensions

(Unit: mm)



Note: The numbers inside the parentheses are reference dimensions.

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