

CURRENT I/O units VAM4CSE

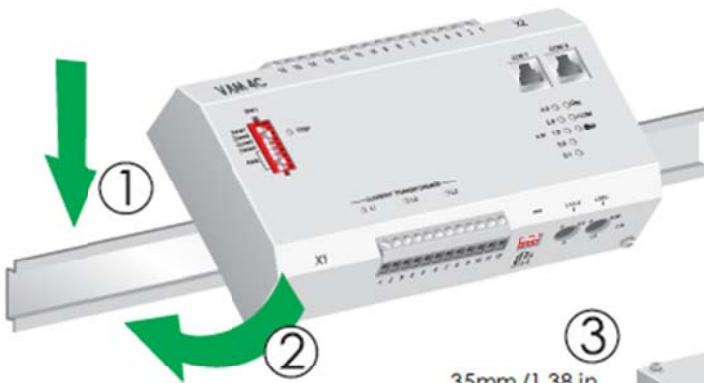
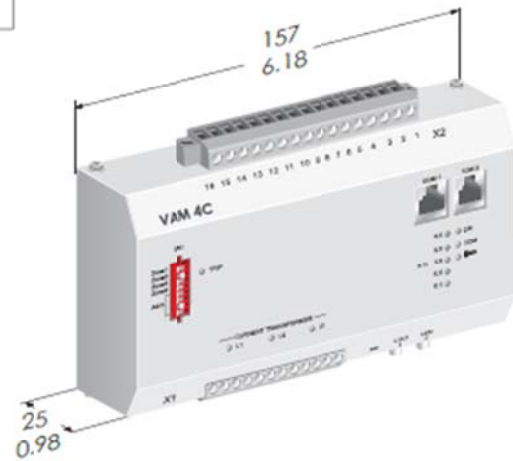
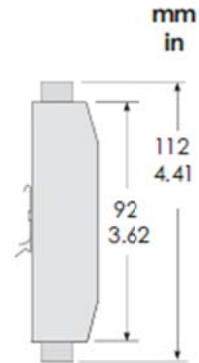
including MODULAR CABLE



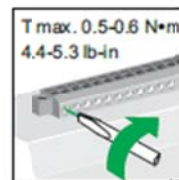
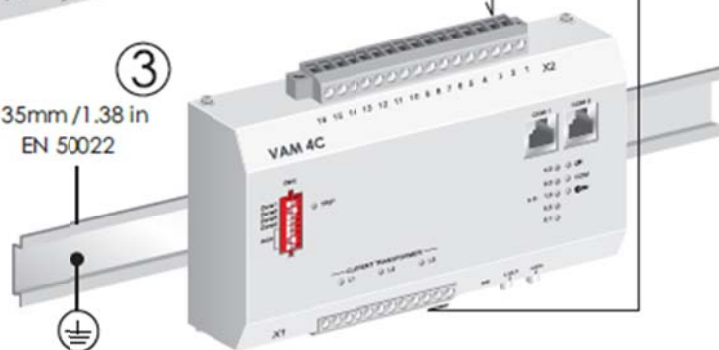
VAM4C CURRENT I/O UNIT

- Auxiliary supply and communication via modular cable
- 3-phase current measurement or 2-phase and zero-sequence current measurement
- Adjustable pick-up setting
- Indication of the current channel pick-up, current imbalance and trip relay activation
- One trip relay
- Two communication ports for central unit and I/O unit interconnection

VAM 4C Din rail mounting



③
35mm / 1.38 in
EN 50022



Technical data

■ Connections

| | |
|--|---|
| Rated current L1 / L3 - current measuring zone - thermal withstand capability - power consumption | 1 or 5 A (optional) 50/60Hz 0 – 6 A (0 – 6*I _N [I _N =1A]); 0 – 30 A (0 – 6* I _N [I _N =5A]) 300 A (for 1s) 100 A (for 10s) 20 A (continuous) <0.3 VA |
| Rated current L2 / I0 - current measuring zone - thermal withstand capability - power consumption | 1 or 5 A (optional) 50/60Hz 0 – 6 A (0 – 6*I _N [I _N =1A]); 0 – 30 A (0 – 6* I _N [I _N =5A]) 300 A (for 1s) 100 A (for 10s) 20 A (continuous) <0.3 VA |
| Terminal: - single or multi-strand wire | Cross-section area of wire Maximum 4 mm ² (11 – 12 AWG) Minimum 2.5 mm ² (13 – 14 AWG) |

■ Auxiliary power supply

| | |
|--|--|
| Rated voltage U _{AUX} | 24 V dc |
| Power consumption | < 1 W (in normal mode) < 1.5 W (output relays activated) |
| Terminal: - MSTB2.5 - 5.08 (RJ 45 when supply from central unit) | Cross-section area of wire Maximum 2.5 mm ² (13 – 14 AWG) Minimum 1.5 mm ² (15 – 16 AWG) |

■ Digital inputs

| | |
|-------------------------------|--|
| Number of inputs | 1 pcs L> in 1 pcs I> out |
| Internal operating voltage | 24 – 48 V dc (BIO in) 24 V dc (BIO out) |
| Load capacity (max.) | 5 mA |
| Terminal: - MSTB2.5 - 5.08 | Cross-section area of wire Maximum 2.5 mm ² (13 – 14 AWG) Minimum 1.5 mm ² (15 – 16 AWG) |

■ Trip contacts

| | |
|----------------------------------|------------------------------|
| Number of contacts | 1 closing contact (relay T1) |
| Rated voltage | 250 V ac/dc |
| Continuous withstand capacity | 5 A |
| Make and carry for 0.5s | 30 A |
| Make and carry for 3s | 15 A |
| Breaking capacity, dc(L/R=40 ms) | |



| | |
|-------------------------------|--|
| At 48 V dc: | 1 A |
| At 110 V dc: | 0.44 A |
| At 220 V dc: | 0.22 A |
| Relay material | AgNi 90/10 |
| Terminal: - MSTB2.5 - 5.08 | Cross-section area of wire Maximum 2.5 mm ² (13 - 14 AWG) Minimum 1.5 mm ² (15 - 16 AWG) |

■ Disturbance tests

| Test | Standard & Test class / level | Test value |
|----------------------------------|---|---|
| Emission | EN 61000-6-4 / IEC 60255-26 | |
| - Conducted | EN 55011, Class A / IEC 60255-25 | 0.01 - 30 MHz |
| - Emitted | EN 55011, Class A / IEC 60255-25 | 30 - 1000 MHz |
| Immunity | EN 61000-6-2 / IEC 60255-26 | |
| - 1 Mhz damped oscillatory wave | IEC 60255-22-1 | ± 2.5kV _p CM, ± 1.0kV _p DM |
| - Static discharge (ESD) | EN 61000-4-2 Level 4 / IEC 60255-22-2 Class 4 | 8 kV contact, 15 kV air |
| - Emitted HF field | EN 61000-4-3 Level 3 / IEC 60255-22-3 | 80 - 2700 MHz, 10 V/m |
| - Fast transients (EFT) | EN 61000-4-4 Level 4 / IEC 60255-22-4 Class A | 4 kV, 5/50 ns, 5 kHz |
| - Surge | EN 61000-4-5 Level 3 / IEC 60255-22-5 | 2 kV, 1.2/50 μs, CM 1 kV, 1.2/50 μs, DM |
| - Conducted HF field | EN 61000-4-6 Level 3 / IEC 60255-22-6 | 0.15 - 80 MHz, 10 V _{emf} |
| - Power-frequency magnetic field | EN 61000-4-8 | 300A/m (continuous), 1000A/m 1-3s |
| - Pulse magnetic field | EN 61000-4-9 Level 5 | 1000A/m, 1.2/50 μs |

■ Electrical safety tests

| Test | Standard & Test class / level | Test value |
|---------------------------------|-------------------------------|------------------------|
| - Impulse voltage withstand | EN 60255-5, Class III | 5 kV, 1.2/50 ms, 0.5 J |
| - Dielectric test | EN 60255-5, Class III | 2 kV, 50 Hz |
| - Insulation resistance | EN 60255-5 | |
| - Protective bonding resistance | EN 60255-27 | |



■ **Environmental conditions**

| | |
|---|---|
| Operating temperature range | -10 – 55°C (14 – 131° F) |
| Transport and storage temperature range | |
| - VAM I/O units | -40 – 70°C (-40 – 158° F) |
| Relative air humidity | < 75% (1 year, average) < 90% (30 days per year, condensation not allowed) |
| Maximum operating altitude | 2000 m (6561.68 ft) |

■ **Casing**

| | |
|---------------------------|---|
| Housing class (IEC 60529) | IP21 |
| Housing class (NEMA) | NEMA 1 |
| Housing class (UL 508) | Open type |
| Dimensions (W x H x D) | 157 x 92 x 25 mm / 6.18 x 3.62 x 0.98 in |
| Material | 1 mm (0.039 in) steel plate |
| Weight | 0.52 kg (1.148 lb) |
| Colour code | RAL 7032 (housing) / RAL 70035 (back plate) |

■ **Communication Modular cable**

| | |
|--------------|-------------------------------------|
| Type | RJ45, Cat6 S/FTP ,Direct Connection |
| Cable Length | 10 m(VX001-10) |

Order Information

| Order code | Description | Note |
|------------|---------------------------------------|--------------------------------|
| VAM 4C | Current I/O unit (VAMP221 and 321) | 3 current inputs, 1 trip relay |

