

# VAM I/O units VAM10LSE

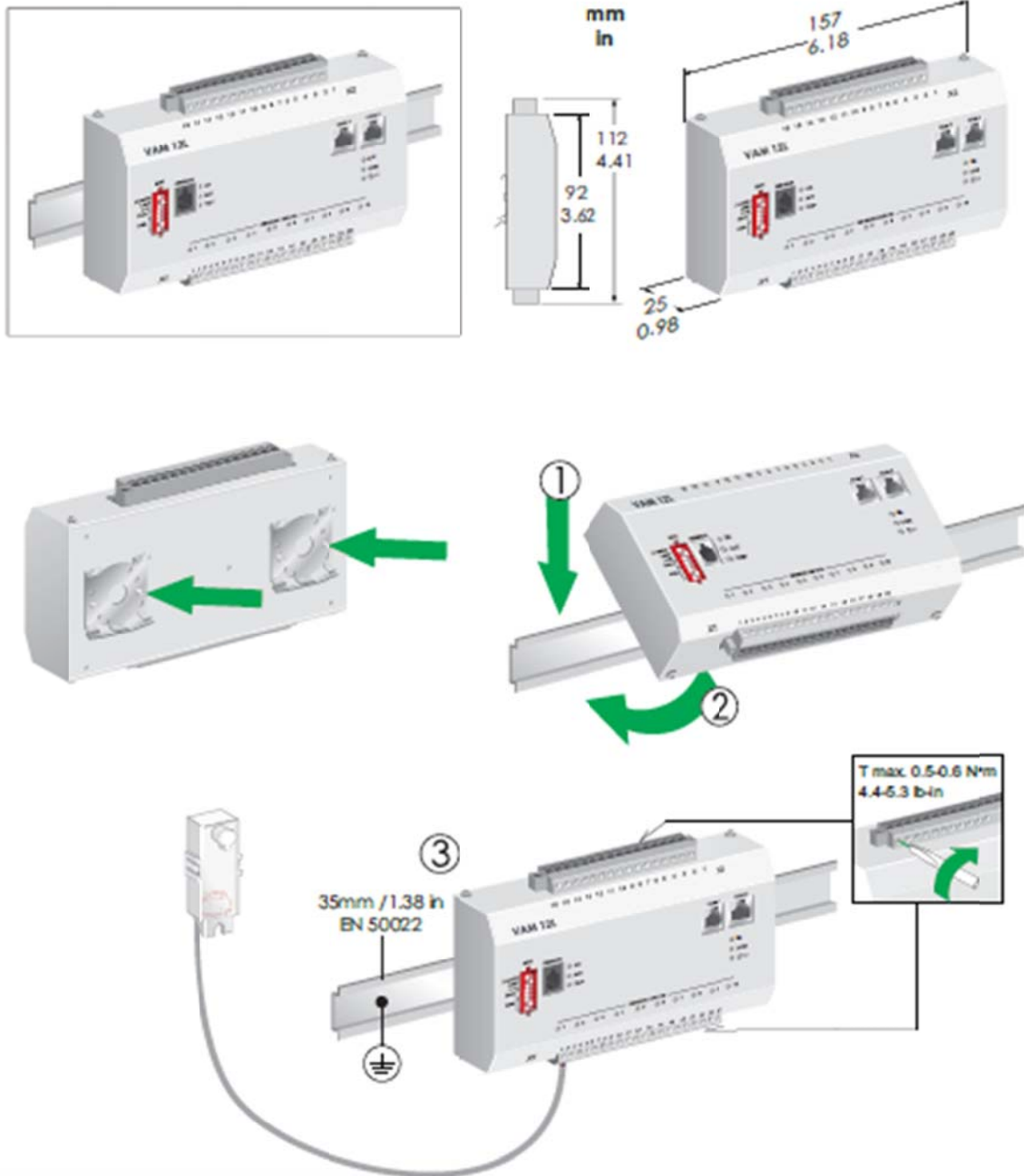
including MODULAR CABLE



## VAM10L POINT SENSOR I/O UNIT

- Auxiliary supply and communication via modular cable
- Ten (10) point arc sensor connections
- Continuous supervision of sensors
- Connection of portable arc sensor
- Indication of the sensor channel and trip relay activation
- One trip relay
- Two communication ports for central unit and I/O unit interconnection

## VAM 10L Din rail mounting



## Technical data

### ■ Connections

Sensor connections	10 arc sensors (type VA 1 DA or VA 1 EH) 1 portable arc sensor (type VA 1 DP)
Terminal: - MSTB2.5 - 5.08	Cross-section area of wire Maximum 2.5 mm <sup>2</sup> (13 - 14 AWG) Minimum 1.5 mm <sup>2</sup> (15 - 16 AWG)

### ■ Auxiliary power supply

Rated voltage U <sub>AUX</sub>	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 <sup>2</sup> (13 - 14 AWG) Minimum 1.5 mm <sup>2</sup> (15 - 16 AWG)

### ■ Digital inputs

Number of inputs	1 pcs L> in 1 arc fault trip 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 <sup>2</sup> (13 - 14 AWG) Minimum 1.5 mm <sup>2</sup> (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 <sup>2</sup> (13 - 14 AWG) Minimum 1.5 mm <sup>2</sup> (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	$\pm 2.5\text{kV}_p$ CM, $\pm 1.0\text{kV}_p$ 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 $\mu$ s, CM 1 kV, 1.2/50 $\mu$ s, DM
- Conducted HF field	EN 61000-4-6 Level 3 / IEC 60255-22-6	0.15 - 80 MHz, 10 V <sub>emf</sub>
- 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 $\mu$ s

## ■ 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

**Order Information**

Order code	Description	Note
VAM 10L	Point sensor I/O unit (VAMP221 and 321)	10 sensor inputs, 1 trip relays

