



VAMP 125

Unit for flexible arc flash protection

Modern society heavily depends on an uninterrupted supply of electric power. Prolonged power outages may cause loss of business to the power supplier and loss of production to the power consumer.

An arc flash protection unit is a protective device used to enhance the environment of the installation in different situations.

Schneider Electric's Vamp range is the pioneer in the field of arc flash protection with close to 15,000 arc flash systems and 300,000 sensors in service worldwide.



An arc flash protection unit is a protective device used to enhance the environment of your installation.

VAMP 125 at a glance

- **Dedicated unit for each bay**

VAMP 125 Arc flash protection units are versatile and independently operating devices for bay based protection.

- **Designed for partners**

They offer optimized and cost effective solution for panel builders and OEMs.

- **Hardware**

- Interface for 4 Arc flash sensors
- 2 output relays: 1 relay output,
1 high speed output
- 1 change-over output for self-supervision
- Wide range auxiliary power supply
- External inputs for remote control
- External input for current criteria

User benefits

- **Suitable product**

Fit to various customer segments like utilities, commercial and industrial buildings, mining, steel, cement and other industry, OEMs.

- **Easy to integrate**

- QR code for registration
- One type designation only:
various documented protection schemes

- **Easy to use**

- Easy entry to arc flash protection
- One variant with wide-range power supply
- Optimized for standard switchgear configurations
- Standard solution for panel builder

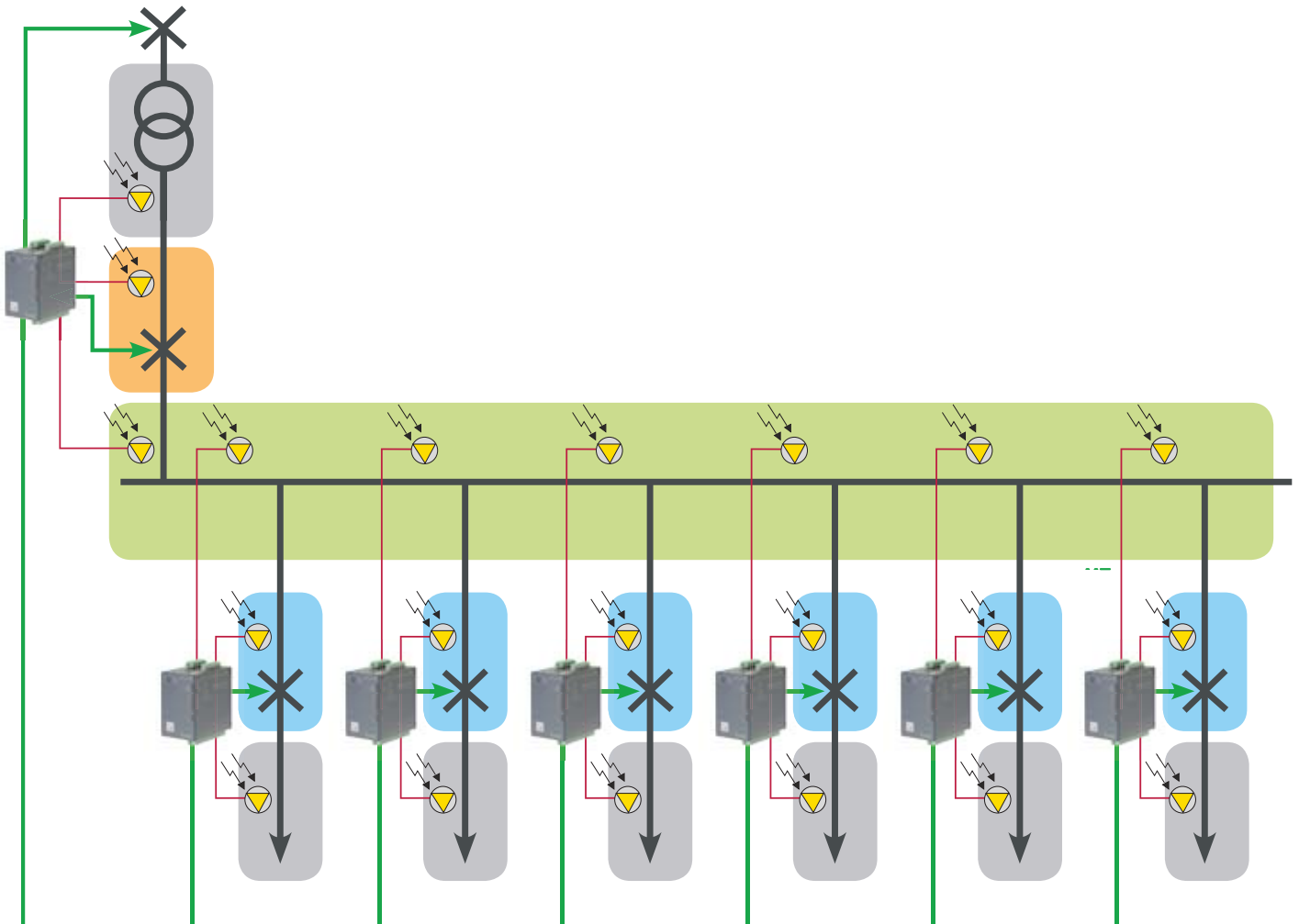


Traditional time-grading or blocking based system may not be suitable to address fast answer in the event of a detected error in the installation. Further, high-impedance type earth-faults may cause prolonged operation times of earth-fault relays leading to the significant release of arcing energy.

These facts pose a considerable risk to operation personnel and economical assets.

Highest risk for the arc flash phenomena occurs during commissioning and maintenance of the power system and after possible recommissioning of the power distribution boards.

Arc flash protection, utilizing detection of the arc flash, is designed to operate faster than traditional protection relays hence their performance enhance electrical installation's availability.





VAMP 125 - arc flash protection made compact, easy and effective

Operating status indications

- Power
- Blocking
- Service required

Sensor and trip output status

- Sensors S1, S2, S3 and S4
- T1 and T2

Binary input status

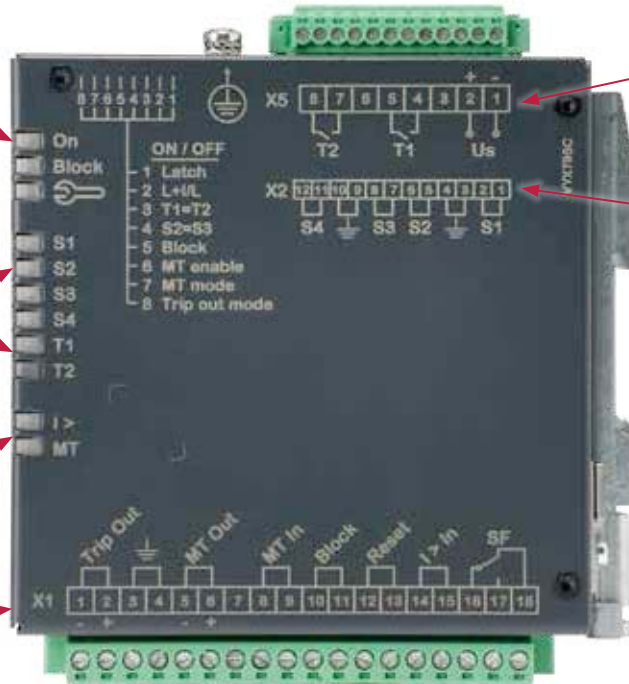
- External current
- External master trip

Terminal X1 and label texts

- Binary trip out
- Binary output ground
- Binary master trip output / input
- Block input
- Reset input
- Current status input
- Service status output

QR code

- Documentation tracking and product registration



Terminal X5 label texts

- T1 and T2
- Auxiliary power

Terminal X2 label texts

- Sensors S1, S2, S3 and S4

Reset / Install push button



Panel mounting

Optional door mounting bracket supports installation to a door for easy access of system status data.



Mounting bracket

- Order code REL52901
- Depth dimension behind door 126 mm
- Depth dimension can be reduced another 10 mm down to 115 mm in case the DIN rail mounting bracket is removed from the device.

One or two incomers and several outgoing feeders

The following applications are typically used for arc flash protection in MV power distribution in commercial buildings and light industries. The arc flash protection is commercialized using VAMP 125 arc flash protection units, VA1-DAX type point sensors and appropriate wiring between the units.

Operation

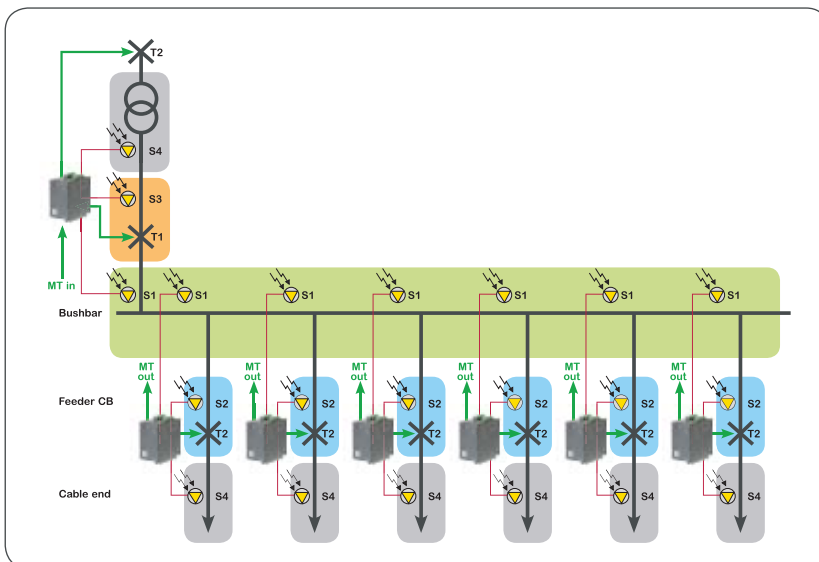
Incomer

Incomer cubicle has three sensors. Activation of sensor S1 operates T1 output. Should the arc fault happen in the CB compartment sensor S3 activates and controls upstream CB via T2 output. Equally, if the arc fault happens in the power transformer bushings, an upstream CB is tripped through T2.

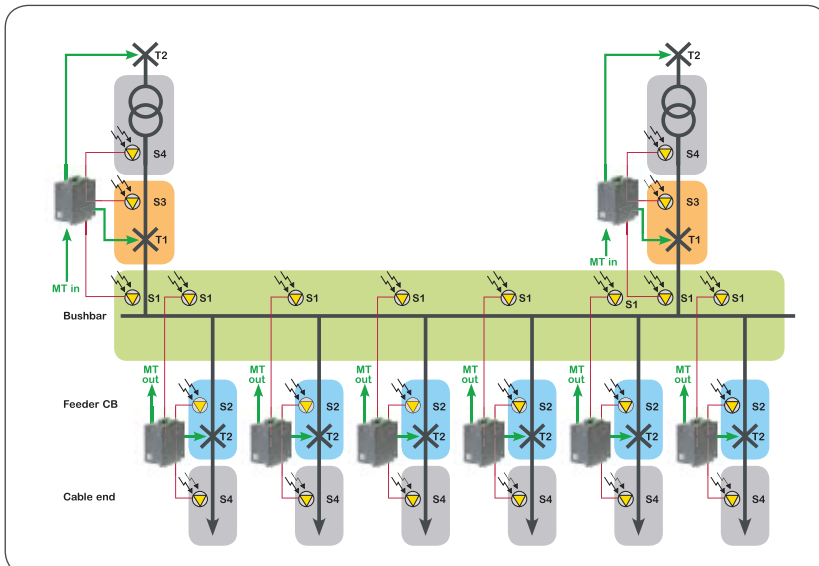
Outgoing feeder

All outgoing feeders have similar operation. Should the sensor S1 activate in the busbar compartment, the pick-up signal is transferred via MT out to VAMP 125 located in the incomer feeder and trips incoming feeder CB through T2 output. Equally, should the sensor S2 activate a pick-up, signal is transferred to incomer feeder CB. Possible arc fault in the cable termination is tripped by T2.

Single incomer feeder application





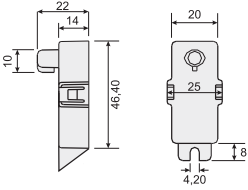
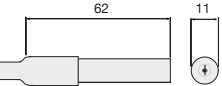
Operation of two incomer feeder application



Operation of the arc flash protection scheme is identical to the single incomer feeder application, except the activation of the arc flash fault in the bus bar or in outgoing feeder breakers are connected to both incomers.

Sensors and accessories

Sensors

Point sensor VA1DA	Point sensor VA1EH	Shielded arc sensor VA2DV
<ul style="list-style-type: none"> Typically used for MV and LV air insulated switchgears IP 20 Surface mounting Continuous self-supervision 	<ul style="list-style-type: none"> Typically used for MV air insulated switchgears and wind power installations IP 65 Tube mounting Continuous self-supervision 	<ul style="list-style-type: none"> Typically used for wind power installations in harsh environment IP 65 Placed in a hole and fixed with a nut Continuous self-supervision
		
		

Accessories

Sensor mounting plate Z-shaped, VYX001	Sensor mounting plate L-shaped, VYX002	Door mount bracket REL52901
<ul style="list-style-type: none"> Wall mounting to VA1DA-x sensors (no extra holes in the switchgear) 	<ul style="list-style-type: none"> Wall mounting to VA1DA-x sensors (no extra holes in the switchgear) 	<ul style="list-style-type: none"> Optional door mounting bracket supports installation to a door for easy access of system status data.
