VAMP 221/321 system in MCSet cubicle

Installation guide
01/2014
Installation guide: VAMP221 system in MCSet

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1- Introduction

The aim of this guide is to indicate the appropriate installation rules for the **VAMP Arc Flash protection system with point sensors** (Central unit + I/O units + point sensors) in MCSet Medium Voltage cubicles.

This guide does not take anything away from VAMP technical documents. It is aimed at providing further explanations and additional information on the installation rules that already exist in:

- “Operation and configuration instructions – Technical description” Ref : V221/EN M/A016
- “VAMP arc flash protection testing manual” Ref VARCTEST/EN M/A001

This document is available through Pi@net intranet site.

These installation rules contribute to guarantee the correct operation and performance levels of VAMP Arc Flash protection system in MCSet Medium Voltage cubicles.

2- Point sensor (VA 1 DA-x type)

VA 1 DA-x : x means 6 or 20 meters shielded cable to be specified in the order

Due to the wide detection range of the sensors and the light reflection inside the switchgear, the mounting position is not critical.

Note: If point sensors are used in open compartments (such as Busbar compartment), there should be a point sensor approximately every 5 meters.
3- Point sensor location in MCSet cubicle

The point sensors are located to supervise the cable compartment, the bus bar compartment and the circuit-breaker compartment.
4- Cable compartment

4.1- Point sensor mounting

Cable compartment at the back of MCSet cubicle

Cable compartment point sensor
VA 1 DA-x type
4.2. Cable compartment arc sensor support

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4.3- Point sensor cabling

Point sensor conductors run in the installation structure of the MCSet Medium Voltage cubicle (cable trunking, metal ducts, etc....)
5- Busbar compartment

5.1- Point sensor mounting

Busbar compartment point sensor VA 1 DA-x type

Busbar compartment at the back of MCSet cubicle
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5.2- Busbar compartment arc sensor roof cover
5.3- Point sensor cabling

Point sensor conductors run in the installation structure of the MCSet Medium Voltage cubicle (cable trunking, metal ducts, etc….).

Connected to VAM I/O unit located in the Low Voltage compartment

Running of point sensor conductors

Arc sensor roof cover

Top of MCSet cubicle
6- Circuit Breaker compartment

6.1- Point sensor mounting and cabling

Circuit breaker compartment with gaz channel from the back of MCSet cubicle

Connected to VAM I/O unit located in the Low Voltage compartment

Circuit Breaker compartment point sensor VA 1 DA-x type

Gaz channel from the top of MCSet cubicle
7- Low voltage compartment

7.1- VAMP 221 central unit mounting (ref : V221-A3AAA)
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7.2 - VAMP 321 central unit mounting (ref: V321 order code to be defined)
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7.3- VAM I/O units Din rail mounting

VAM12LSE point sensor I/O unit (same mounting for VAM10LSE point sensor I/O unit, VAM4CSE current I/O unit and VAMP4RSE trip multiplier relay)
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7.4- VAM I/O units flush mounting

VAM12LDSE point sensor I/O unit (same mounting for VAM10LDSE point sensor I/O unit and VAM4CDSE current I/O unit).
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<tr>
<td>V221/EN M/A016.pdf</td>
<td>Operation and configuration instructions – Technical description</td>
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<td>SMMCARC001.pdf</td>
<td>Mounting and Commissioning Instructions</td>
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<td>NRJED111072EN_VAMP 221 BR.pdf</td>
<td>VAMP221 system commercial brochure</td>
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<td>VARCTEST/EN M/A001.pdf</td>
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