

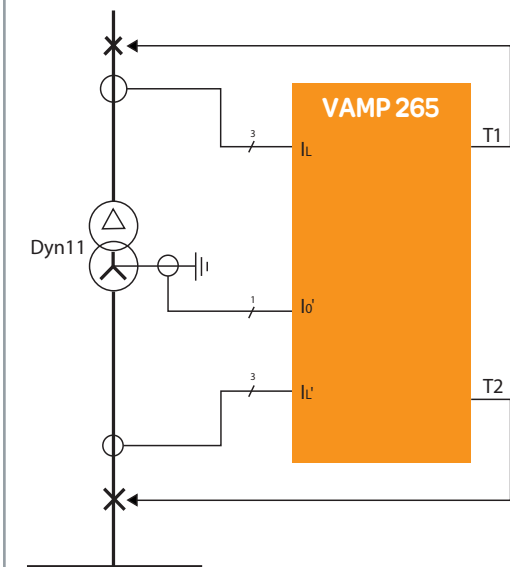
# VAMP 265

## Differential protection relay



Vamp protection relays are used for selective protection of subtransmission lines, medium voltage overhead and cable feeders, motor feeders, transformer feeders, capacitor banks, generators, reactors and busbars in power system distribution substations, power plants, industrial power systems, and marine and offshore installations. In addition to a comprehensive range of standard protection functions, the Vamp series also offers bay control, measurements, primary circuit monitoring and communication functionality.

### TYPICAL APPLICATION



The optional integrated arc flash protection provides new dimension to protection scheme

### MAIN CHARACTERISTICS

- Optimized for transformers
- High stability against through faults
- 2nd and 5th harmonic blocking
- Numerical CT ratio correction
- Selectable connection groups
- Disturbance recorder
- Optionally arc flash sensor interface for high-speed trip in case of cable termination faults
- Various communication protocols including SPA Bus, Profibus, Modbus, Modbus TCP, IEC 61850, IEC 60870-5-101, IEC 60 870-5-103, TCP/IP, DeviceNet, DNP 3.0
- VAMPSET, a user-friendly, free-of-charge relay management software for setting parameters and configuring.

## Main technical data / Vamp 265

|                                  |   |
|----------------------------------|---|
| Auxiliary voltage, Uaux          | 40...265 V ac / dc (optionally 18...36 Vdc) |
| Rated phase current In           | 1A or 5A                                    |
| - current measuring range        | 0...50 x In                                 |
| Rated neutral current Ion        | 1A or 5A                                    |
| - current measuring range        | 0...5 x In                                  |
| Thermal Withstand                | 4 x In (continuous), 100 x In (for 1 s)     |
| Rated frequency fn               | 45...65 Hz                                  |
| - frequency measuring range      | 16...75 Hz                                  |
| Digital inputs (wetting voltage) | 6 pcs                                       |
| - internal operating voltage     | +48 V dc                                    |
| Trip / control contacts          | 2 pcs                                       |
| Alarm contacts                   | 5 pcs                                       |
| - internal operating voltage     | +48 V dc                                    |
| Trip contacts                    | 2 pcs                                       |
| Alarm contacts                   | 5 pcs                                       |

| Tests and environment            |  |
|----------------------------------|--|
| Emission                         | EN 55022   |
| Immunity                         | IEC 60255-22-1, IEC 60255-11, EN 61000-4-6,<br>EN 61000-4-5, EN6100-4-4, EN 61000-4-3,<br>EN6100-4-2 |
| Insulation test                  | IEC 60255-5  |
| Surge voltage                    | IEC 60255-5  |
| Vibration shock                  | IEC 60255-21-1   |
| Operating temperature            | -10...+55° C   |
| Relative humidity                | <95 %, no condensation allowed   |
| Degree of protection (IEC 60529) | IP30, flush mounted, optionally IP54   |
| Weight                           | 4,2 kg   |
| Dimension (w x h x d)            | 209 x 155 x 225 mm   |

| Protection stages               |                                |
|---------------------------------|--------------------------------|
| Overcurrent protection stages   |                                |
| Differential overcurrent stages | DI >, DI >> 87                 |
| Overcurrent stages              | I >, I' >, I >>, I' >> 50 / 51 |
| Current unbalance stages        | I2 >, I'2 > 46                 |
| Thermal overload protection     | T > 49                         |
| Magnetising inrush              | I <sub>r2</sub> > 68F2         |
| Transformer overexcitation      | I <sub>r5</sub> > 68F5         |

| Earth-fault protection stages |  |
|-------------------------------|--|
| Earth fault stages            | Io >, Io >>, Io >>>, Io >>>> 50N / 51N |
| Restricted earth fault        | REF 50N / 51N                          |

| Programmable stage |          |
|--------------------|----------|
| Programmable stage | Prg1...8 |

| Arc protection (option) |                             |
|-------------------------|-----------------------------|
| Arc protection stages   | Arc I >, Arc I' > 50ARC     |
| Arc protection stages   | Arc Io1 >, Arc Io2 > 50NARC |

| Other                              |   |
|------------------------------------|---|
| Disturbance recorder               | All analogue channels and binary inputs / outputs |
| Phase unbalance                    | I'2 > 46  |
| Circuit breaker failure protection | CBFP 50BF   |
| Trip circuit supervision           | TCS   |
| Latched trip                       | 86  |

| Measurements                   |  |
|--------------------------------|--|
| Currents                       | IL1, IL2, IL3, L1 angle, L2 angle, L3 angle                            |
|                                | I'L1, I'L2, I'L3, L'1 angle, L'2 angle, L'3 angle                      |
| Winding current                | IL1, IL2, IL3, I'L1, I'L2, I'L3, IL1w, IL2w, IL3w, I'L1w, I'L2w, I'L3w |
| Differential currents          | dL1, dL2, dL3, DL1f, DL2 f, DL3 f                                      |
| Residual current               | Io (%)   |
| Current diagram <sup>(1)</sup> |  |
| - winding currents             | IL1, IL2, IL3, I'L1, I'L2, I'L3  |
| - differential currents        | DIL1, DIL2, DIL3   |
| Harmonics                      | IL1, IL2, IL3, I'L1, I'L2, I'L3  |

Note: 1) with VAMPSET software

| Communication protocols |   |
|-------------------------|---|
|                         | IEC 61850<br>IEC 60 870-5-101<br>IEC 60 870-5-103<br>Transparent TCP/IP<br>Modbus TCP<br>Modbus RTU<br>Profibus DP<br>SPA<br>DNP 3.0<br>DeviceNet |

### Schneider Electric Industries SAS

35, rue Joseph Monier  
CS 30323  
F - 92506 Rueil Malmaison Cedex (France)  
Tel.: +33 (0) 1 41 29 70 00  
RCS Nanterre 954 503 439  
Capital social 896 313 776 €  
www.schneider-electric.com

As standards, specifications and designs change from time to time, please ask for confirmation of the information given in this publication.

Design: Schneider Electric Industries SAS - Wilma  
Photos: Schneider Electric Industries SAS  
Printed in Finland