VAMP 11V

Voltage and Frequency Protection Relays

VAMP 11V is a basic numerical relay that provides reliable and effective voltage or voltage and frequency protection with automation, control and measurement functions. It may be applied to all low voltage or medium voltage applications as a primary or back-up protection device.

VAMP 11 series is one of the latest additions to the Vamp range, which has always been strongly linked to flexible and easy-to-use protection relays. VAMP 11 series inherits and will eventually take over the well known MiCOM Px11 series. With attention to simplicity and cost effectiveness, the new VAMP 11 series becomes the reference for the most efficient devices for standard protection applications.

Thanks to a fantastic cost to functionality ratio, the VAMP 11 series is an innovative solution that is tailored to user's needs and can be applied in any type of low or medium voltage network where voltage or frequency protection is required.

Many selectable options embedded in the relay offer a high level of flexibility in terms of application and maintenance. VT ratio, communication protocol, HMI language or independent settings of hysteresis for under or over-voltage protection are all selectable in the menu. Moreover, only 3 relay models are used to accommodate specific applications and operating conditions. This approach optimises the protection to the requirements and prevents wasted functionality and cost. A unique list of only 10 model variants (type designations) cover all model, voltage input range and auxiliary power supply options, meaning that ordering and spares holding is simplified for ease of use.

Switchable serial communication (IEC 60870-5-103 or Modbus) allows the device to connect to almost any kind of SCADA system. A front USB port and multilingual HMI makes Vamp 11V user-friendly with reduced maintenance costs.

VAMP 11 series is housed in a standard flush mounting case which can be complemented by two optional accessories:

- Wall mounting adaptor
- Secure front cover to prevent unauthorised access

Customer benefits

- Easy-to-use with 7 language HMI
- Easy-to-install with small installation footprint
- Easy-to set by user-friendly HMI or USB port
- Easy-to-communicate via IEC 60870-5-103 and Modbus protocols
- Easy-to-operate with in-built CB control keys
- Easy-to-order, only 10 hardware viariants

Schneider Electric

Ease of use

User-friendliness has always been a feature of VAMP products, and the VAMP 11V is no exception. A great deal of effort and experience has gone into the design of operational aspects of the product.

Efficient HMI
It informs the user about settings, measurments & faults. Easily configured & set without need for a software tool. 7 operation languages available: English, German, French, Spanish, Russian, Turkish and Polish

IP54 protection degree
Front panel is resistant to dust and dripping water

Easy maintenance
Simplification of daily work with dedicated maintenance & circuit breaker control keys

Flexible LEDs
Makes maintenance easy. 6 LEDs can be programmed according to user needs

Front communication port
USB port for easy setting & maintenance

Effortless navigation
An intuitive pull-down menu structure makes navigation easy and quick. All disabled functions are hidden to maximise the effictivness of use

QR code
Fast access to additional information (based on model and serial number information)

All functions, automation, communication, inputs and outputs can be programmed and modified directly from either front panel or setting software

The free-of-charge MiCOM S1 Studio (v5.1.0 or above) provides full support for configuration of the relay by PC.

The configuration file can be prepared off-line and installed during commissioning via the front USB port.

This allows fast integration, especially where fast installation is a key performance factor.

PC connection has never been so easy thanks to a mini-USB front port.

Communication

VAMP is an expert in communication with vast experience working with different system integrators, SCADA, RTUs, PLCs and gateways.

VAMP 11V offers a non-communicating (Model L) and two communicating variants (Model N and A) with standard serial protocols (IEC 60870-5-103 and Modbus).

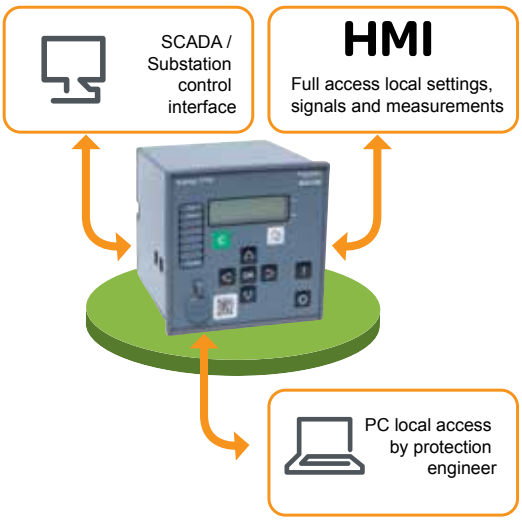
Communicating models have both protocols embedded to enable selection in the menu. They have 2 ports available:

> A rear port for remote communication (RS 485)

> A front port for local communication (mini-USB)

This RS 485 port can be connected to virtually any SCADA system to access settings, measurements, alarms or records.

Additionally, Model A provides a USB powered solution for the HMI and menu. This allows setting, configuration or event and disturbance record extraction even when there is no auxiliary voltage supply.



Synchronisation

VAMP 11V incorporates an internal clock with 1ms accuracy for the time-tagging of alarms, events, faults and disturbance records. To maintain accuracy of time-tags, it is necessary to periodically synchronise the internal clock, by one of three ways:

> Substation control system via rear communication port (RS 485)

> External clock triggering a dedicated digital input

> Setting software (USB port)

The internal clock will retain a backup power supply for up to 3 days in the event of an auxiliary voltage disconnection.

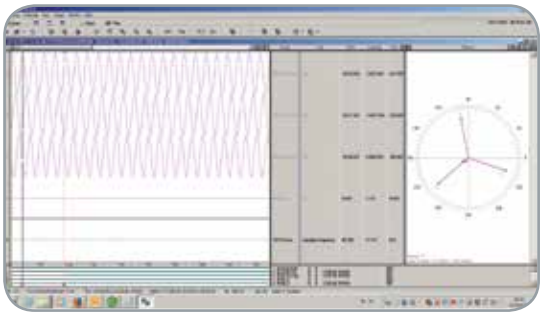
MiCOM S1 Studio

Setting and configuration

VAMP 11V voltage and frequency protection relay is supported by the free-of-charge setting software MiCOM S1 Studio (version 5.1.0 or higher).

MiCOM S1 Studio is a user friendly tool that allows parameter setting and configuration of the Vamp 11V relay. Thanks to this tool, all relay parameters, configurations and recorded data can be exchanged between PC and the relay.

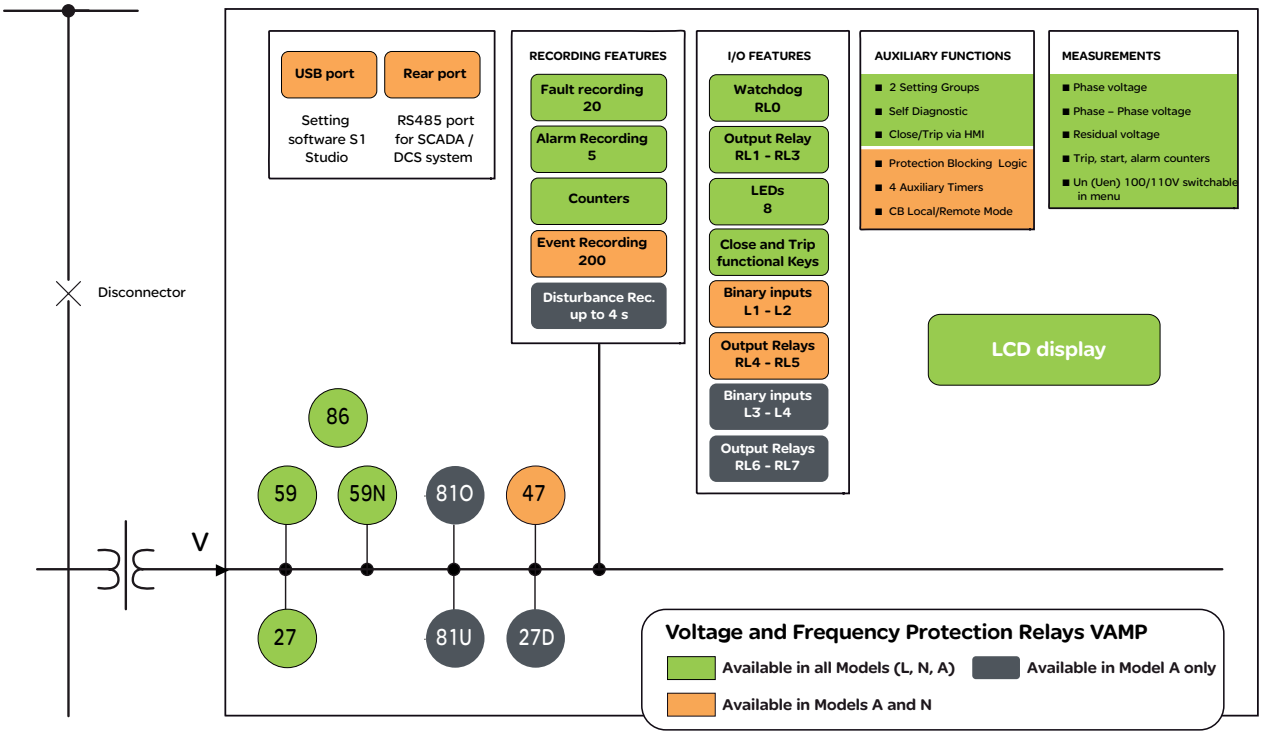
The disturbance records available in Vamp 11V (Model A) are stored in COMTRADE format in non-volatile FRAM memory. An integrated part of the software tool, WaveWin offers full analysis of recorded files.



Wavewin

Application

VAMP 11V relays provide fast and accurate protection for various applications requiring voltage or voltage and frequency protection. With a focus on tailoring to user's needs, Vamp 11V is offered in 3 hardware model variants.



Model L

Non-communicating, basic under or over voltage protection with derived voltage displacement, fault recording and two setting groups. With only 3 relay output contacts, this model provides the most economical solution for basic voltage protection. A perfect choice for retrofit of older technology devices in medium or low voltage substations.

Model N

Communicating device with basic under or over voltage protection with dedicated earth-fault analog voltage input, negative sequence over voltage protection, event and fault recording, blocking logic and two setting groups. It comprises 2 binary inputs, 6 relay outputs, a front USB and rear RS485 communication port with switchable IEC 60870-5-103 or Modbus protocol. Circuit breaker control is effected via front panel keys or remote communication port. This model is cost-optimised for essential protection functions that require serial communication. Perfectly suited to industrial or commercial sites and a good choice for MV/MV or MV/LV substation auxiliary under or over voltage protection or as primary protection for LV substations.

Model A

Communicating device with advanced under or over voltage and under or over frequency protection. It additionally provides positive sequence under voltage protection, event, fault and disturbance recording, CB supervision and VT supervision. It comprises 6 binary inputs, 7 relay outputs, a front USB and rear RS485 communication port. Circuit breaker control is effected via front panel keys, remote communication port or via binary inputs. This model is a complete voltage and frequency protection device housed in uniquely small case. The large number of inputs and outputs allows users to create more advanced schemes for medium and low voltage applications. This model provides the most cost-effective solution for load shedding or restoration and a good choice for retrofit of over or under frequency electromechanical protection relays.

VAMP 11V functional overview

IEEE device no.	Function	Model L	Model N	Model A
	Phase-to-neutral or phase-to-phase voltage protection	●	●	●
27	Phase under voltage (AND/OR logic)	●	●	●
59	Phase over voltage (AND/OR logic)	●	●	●
59N	Neutral voltage displacement		●	●
59N	Derived VO sequence over voltage	●	●	●
47	Negative sequence over voltage	-	●	●
27D	Positive sequence under voltage	-	-	●
81U/81O	Under/Over frequency	-	-	●
86	Output relay latching	●	●	●
	Blocking logic		●	●
	Settable hystheresis	●	●	●
	Binary inputs	0	2	6
	Output relays	3	5	7
	Watchdog contact	1	1	1
	Phase voltage inputs	3	3	3
	Neutral voltage	-	1	1
	Remote communication (RS485)	-	●	●
	Protocols	-	Modbus / IEC 103	Modbus / IEC 103
	Mini-USB	-	●	●
	Event recording	-	200	200
	Fault recording	20	20	20
	Distrurbance recording	-	-	4s
	Setting groups	2	2	2
	Time synchronisation (via digital inputs)	-	-	●
	VT Supervision	-	●	●
	CB Supervision	-	●	●
	CB control via front keys / RS485 / Digital input	● / - / -	● / ● / -	● / ● / ●

- All models can be ordered with one of two voltage input ranges:
  57V to 130V
  220V to 480V

Using higher voltage input ranges allows users to install Vamp 11V directly to the line, without the use of voltage transformers, further optimising costs.

- Integrated with three independent phase over voltage and phase under voltage thresholds, VAMP 11V provides efficient voltage protection for all typical applications like motor protection or generator protection. The configurable detection logic (AND, OR) allows the indication of voltage absence when under voltage protection is used.

- Zero sequence over voltage protection available allows:
  detection of earth faults at the neutral point of generators
  detection of earth faults in high impedance earthed or at the isolated neutral point of the system

- Models N and A include negative sequence over voltage, designed to detect unbalanced conditions. This destines these relays to protect motors when imbalance would lead to overheating and fault conditions.

- Model A incorporates 6 frequency thresholds, programmable as under or over frequency which can be used for automated load shedding or load restoration.

Protection functions

Three phase undervoltage (27) and positive sequence undervoltage (27D) protection

Three independent stages are available for undervoltage (27) and two independent stages for positive sequence undervoltage (27D). The user can set the first stage with definite time delay (DMT) or inverse time delay (IDMT) with different types of curves (see below). Each stage and related time delay can be programmed to provide maximum selectivity.

In both functions the first stage reset delay type can be selected between DMT or IDMT timer to reduce clearance times when intermittent faults occur.

The VAMP 11V relay has separate instantaneous and delayed indications for each stage. Output relays and LEDs can be configured to indicate the faulted phase(s). Each protection function can be disabled, enabled, configured to trip a circuit breaker or as alarm signal only. Each three phase voltage protection function in VAMP 11V (under, and overvoltage function) can be set to "OR Trip" or "AND Trip". This means that in case of "OR Trip" the protection function will operate when the pick-up condition is fulfilled for at least one of the three phases. In case of "AND Trip" protection function will operate when a pick-up condition is fulfilled in all three phases. Consequently, the relay will indicate alarms in the same way if the voltage protection functions are set to "OR Alarm" or "AND Alarm".

Three phase overvoltage (59) and earth fault overvoltage (59N)

Three independent stages are available both for phase and earth fault protection. For the first stage (59 and 59N) it is possible to set a definite time delay (DMT) or an inverse time delay (IDMT) with different types of curves (see below). Each stage and related time delay can be programmed to provide maximum selectivity. In both functions the first stage reset delay type can be selected similarly as it can in the undervoltage. Phase overvoltage protection function (59) can also be configured as the undervoltage function ("OR TRIP", "AND TRIP", "OR Alarm", "AND Alarm" etc.).

VAMP 11V models N and A have a dedicated neutral voltage analog input. In these models it is possible to choose whether neutral voltage is calculated from phase voltages “TRIP(Ua+Ub+Uc)" or measured from the analogue input "TRIP(measured)". **In model L** the earth fault overvoltage protection function operates only on earth voltage values calculated from phase voltages.

Negative sequence overvoltage (47)

This function is used for protection of the system against unbalanced voltage conditions in the network.

It offers two independent stages, first stage V2> can be set for definite time delay (DMT) or an inverse time delay (IDMT) with typical characteristics (see below). Second stage V2>> can be set to definite time delay only.

VAMP 11V offers 15 types of curves for protection functions 27/27D, 59/59N and 47. The characteristics available are:

- IEC_SI
- IEC_VI
- IEC_EI
- IEC_LTI,
- UK_STI
- C02_P20
- US_ C08,
- IEEE_MI
- IEEE_VI
- IEEE_EI
- RXIDG
- BPN EDF
- RI
- RECT
- C02_P40 curve

Frequency protection (81U/81O)

VAMP 11V is equipped with six stages, each freely configurable and can be set to under, or over frequency. The user can independently set all frequency protection stages to "Trip" or "Alarm" with any delay time from range (0-600 s). System frequency can be selected as 50Hz or 60Hz.

Command and control functions

Timers AUX1, AUX2, AUX3

Timers operate if the state of an input mapped to this function changes in such a way that the function will be triggered. Timers can be used for CB tripping or alarm signaling. This function is available when inputs are energised via an auxiliary power supply.

Blocking logic

When VAMP 11V is used in a critical network, it must take into consideration all surrounding devices. A blocking digital input can be independently configured to lock any combination of selected elements. This function allows the VAMP 11V to clear the fault quickly and correctly when applied in a cascading scheme.

Relay output latching (86)

All relay outputs may be latched freely. Latched outputs can be reset via the activation of a logic input, through the front panel interface or by remote communication.

Instantaneous information

Outputs and LEDs can be programmed with instantaneous information from freely selectable protection elements: with or without latching. Additionally, every start of a protection element is recorded in the event recorder and the instantaneous recorder. The instantaneous information is typically generated within 30 ms after the threshold has been exceeded.

Trip via binary inputs

Binary inputs are freely configured to timers AUX1 - AUX5. When an external voltage triggers the input, the protection function will operate. This external trip functionality may be used with a Buchholz relay or any other protection device.

Two setting groups

External conditions may require the need for different settings or input / output configuration. The VAMP 11V offers two independent setting groups to make life easy and efficient. The active setting group can be switched from the local HMI or remotely via a digital input state change, or SCADA system command. The two setting groups include protection settings, binary inputs, relay outputs and LEDs.

Input or output configuration

All inputs and outputs can be freely configured for available functions (blocking of protection element, LED reset, outputs reset, start, trip of every protection element, etc.).

All inputs and outputs can be assigned to any predefined function.

Relay maintenance mode

The VAMP 11V incorporates direct control of the output relays (without the need to inject any current). This functionality allows the user to quickly check the external wiring of the relay's output contacts for simplified commissioning.

Local/remote mode of CB commands

Local or remote operating mode can be enabled or disabled via a digital input, or via the RS 485 communication port. This operating mode can be indicated via the LED configuration. The goal of this feature is to ensure that commands sent remotely through the communication port (settings, control commends etc.) are blocked when in local mode. This prevents accidents or maloperation during maintenance work on site.

Circuit breaker or contactor commands

Depending on the model chosen, circuit breaker control is available from:

- Front panel user interface (open/close)
- Optically isolated digital inputs
- Remote substation communication.

Circuit breaker condition monitoring

The circuit breaker condition monitoring features include:

- Monitoring the number of breaker trip operations
- Monitoring the breaker operating time

An alarm signal is emitted if the above parameters exceed the settable threshold.

Self monitoring

Comprehensive self-monitoring procedures within the VAMP 11V ensure that any possible errors are identified before they can cause malfunction. A functional self-test is carried out whenever the auxiliary voltage is turned on.

The result of the fault diagnostics is stored in non-volatile memory and determines whether the protection unit will be blocked, alarmed, or healthy.

Measurements

The VAMP 11 series offers a complete set of measurement functions to replace the conventional metering functions of switchgear and controlgear installations.

The measurement functions cover phase and residual voltages, system frequency and harmonics from phase voltages. Condition monitoring continuously monitors trip circuits, breaker wear and voltage transformers. All measurements are available locally or remotely. Depending on the configuration of the VTs connected and chosen model, VAMP 11V provides full measurements and displays them as true RMS values on the screen:

- phase-to-neutral voltages Va, Vb, Vc
- phase-to-phase voltages Vab, Vbc, Vca
- neutral voltage VN (calculated in model L, measured or calculated in models N and A)
- frequency (model A)
- positive sequence of voltage (model A)
- negative sequence of voltage (models N, A)

Logs and records

All events, faults and disturbance records are time-stamped to 1ms accuracy by the internal real time clock. In the event of a loss of auxiliary power, a back-up of 3 days is provided in non-volatile memory. There is no battery inside the relay, which makes it environment friendly and easy to maintain. All records can be accessed locally, using the MiCOM S1 Studio setting software (USB), or remotely (RS485 port).

Event records

200 event records can be stored in the VAMP 11V. Events include input or output state changes, alarms and contact operations. When the memory is full, the oldest events are overwritten, allowing storage capacity for the most recent events.

The downloading of events records can be done via front USB port (MiCOM S1 Studio) or the rear RS485 port (SCADA system).

Fault records

The last 20 faults and 5 alarms records are stored in memory. Each fault includes: record number, fault time, active setting group, faulted phase, protection operation, and magnitude of inputs.

Fault indication helps the user to clearly identify the fault. Moreover, availability of fault data on the relay HMI or communication ports allows fine-tuning of relay settings and protection operation.

Disturbance records

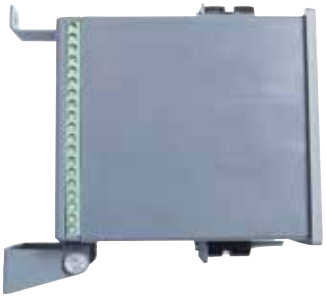
Up to 5 disturbance files can be stored in the relay (model A). While the total length of records is limited to 4 sec, each record length can be easily set independently. The user may set 1 record with 4 sec duration or 5 records with a total 4 sec duration. The pre-fault and post-fault duration is adjustable for each file. The records are stored in COMTRADE format. The disturbance recording function is triggered by any of the programmed thresholds or by an external input or through the communications.
All digital and analog information is stored in non-volatile memory and can be transferred using the front or rear communication ports, for later use by an external data analyser.

Hardware & case

Protection relays have never been so small and compact.

At only 106.5 x 106.5 x 113 mm and weighing less than 0.6kg, Vamp 11V can be installed virtually anywhere. Optional accessories allow increased versatility such as a wall mounting adaptor and a secure access cover to prevent unauthorised access.

Easy access

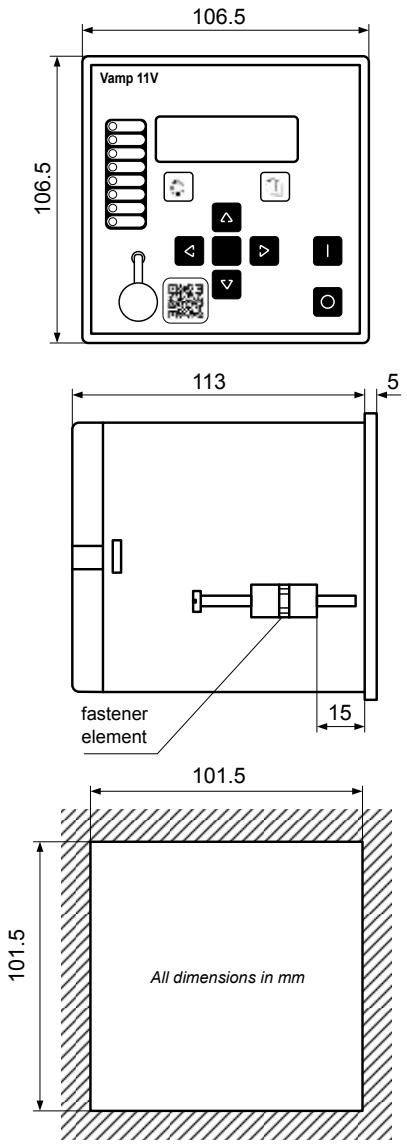


- Vamp 11V can be mounted on the wall (optional kit)
- Allows for quick and simple access to wiring

Safe access

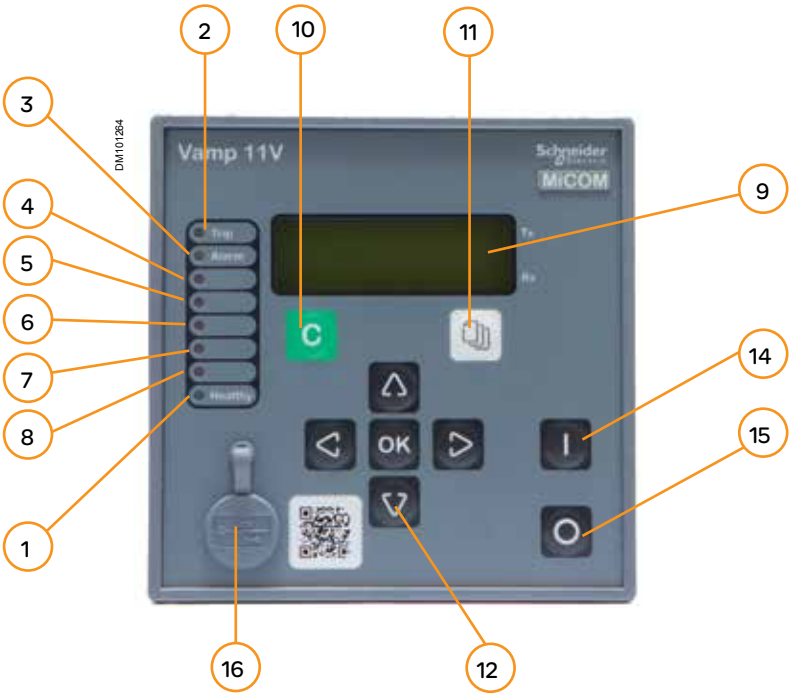
- Optional access cover prevents unauthorised access to the relay

Dimensions



Front panel description

1 Green "Healthy" LED : Watchdog
2 Red "Trip" LED : Protection trip
3 Yellow "Alarm" LED : Alarm signalling
4
5
6 Red programmable LEDs
7
8
9 Liquid crystal display (LCD)
10 CLEAR key
11 READ key
12 ENTER key and 4 ARROW navigation keys
14 CB CLOSE key
15 CB OPEN key
16 USB port for local connection

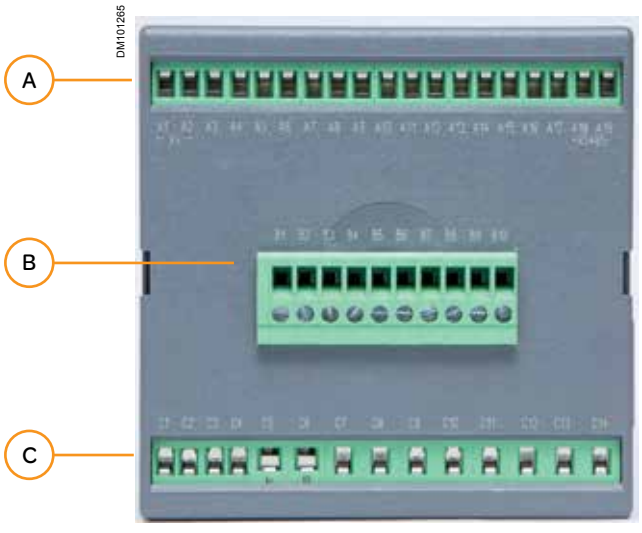


Rear panel description

A
- Auxiliary voltage Vaux
- Contact outputs: WD, RL1-RL3
- Binary inputs: L1, L2
- RS485 (model N and model A)

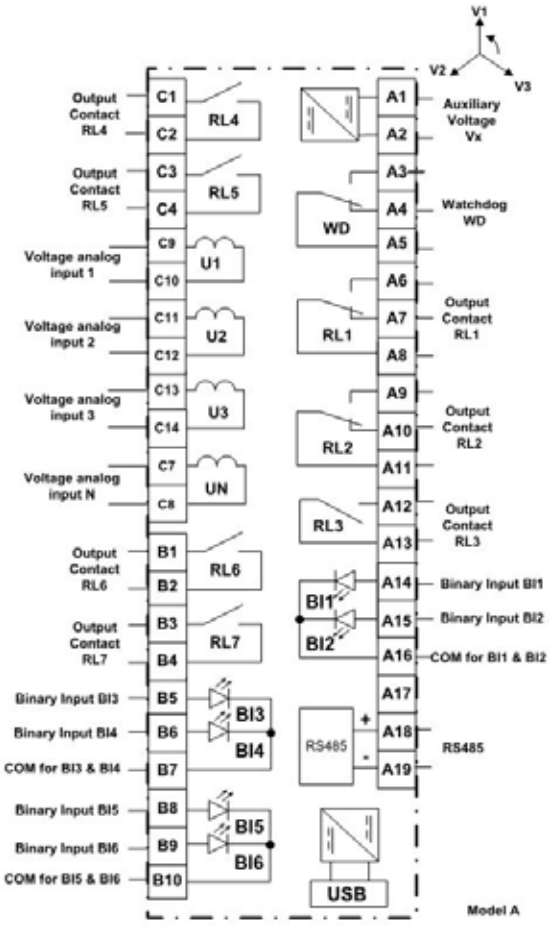
B
- Contact outputs RL6, RL7 (model A)
- Binary inputs: L3, L4, L5, L6 (model A)

C
- Phase voltage analogue inputs
- Earth voltage analogue input (model N and modelA)
- Output contacts RL4, RL5 (model N and model A)

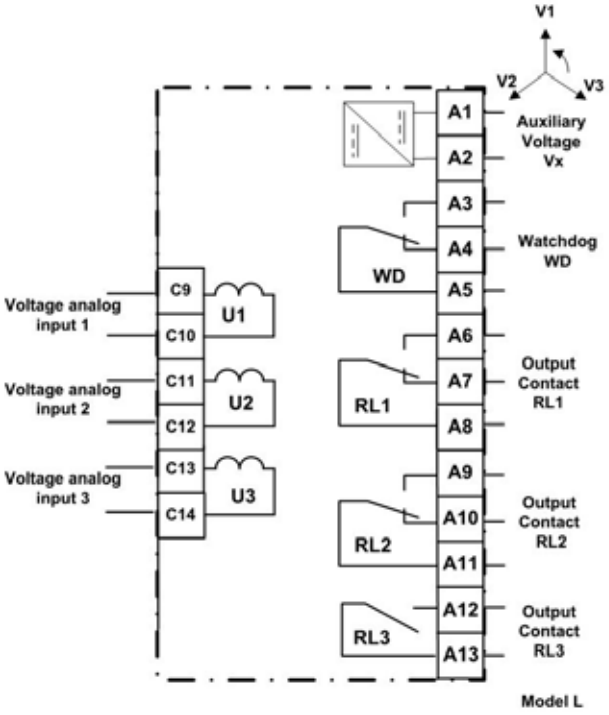


Connection diagrams

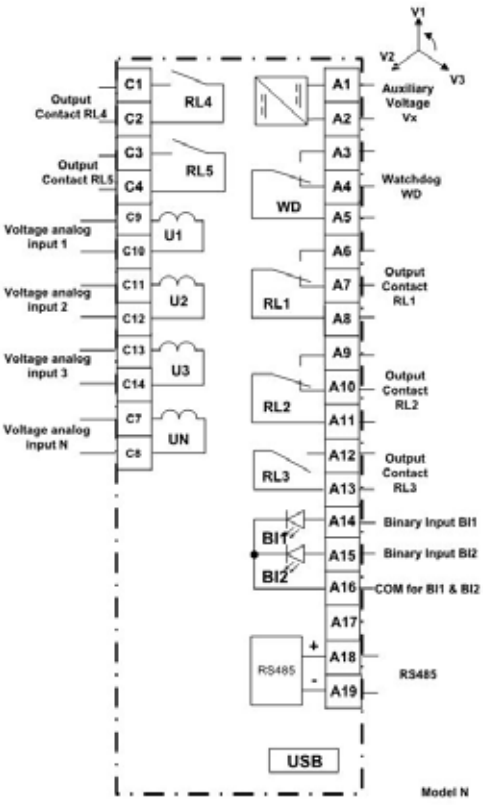
Connection diagram model A



Connection diagram model L

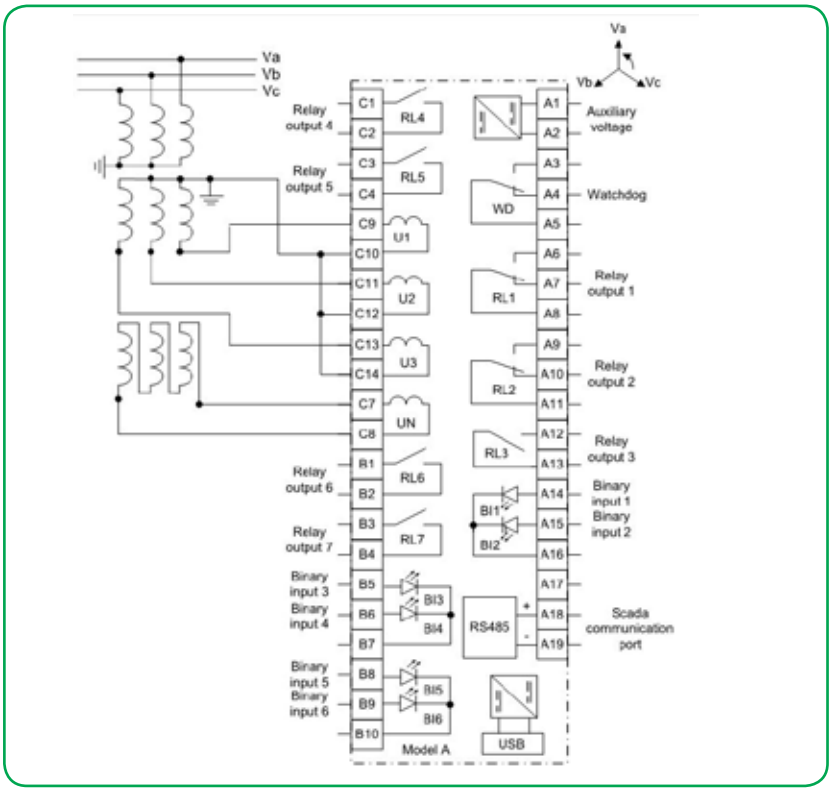


Connection diagram model N



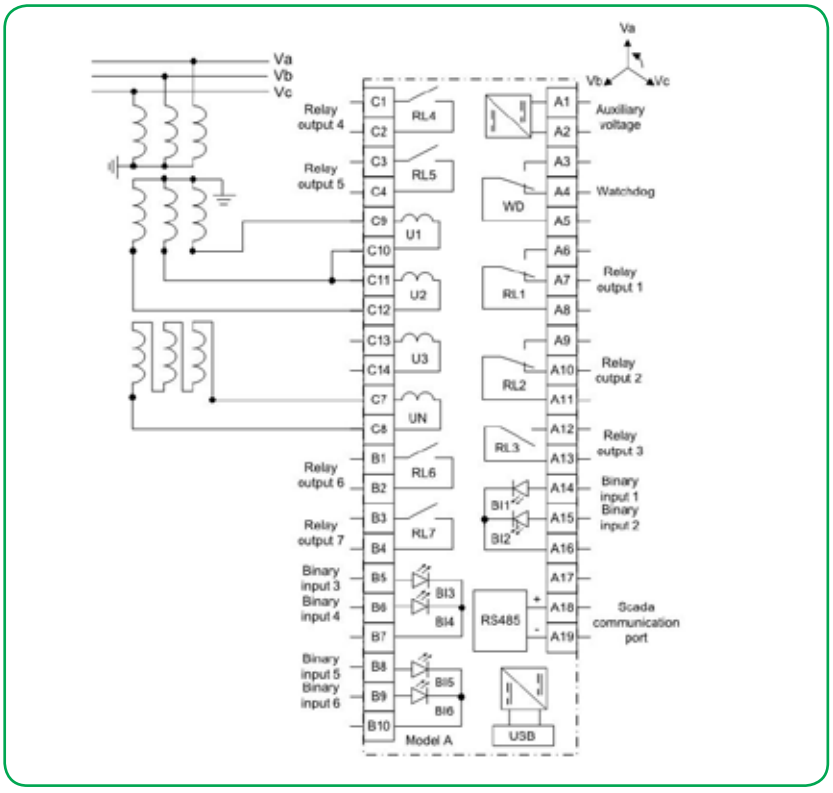
Typical applications diagrams

3Vpn + VN presented on VAMP 11V model A



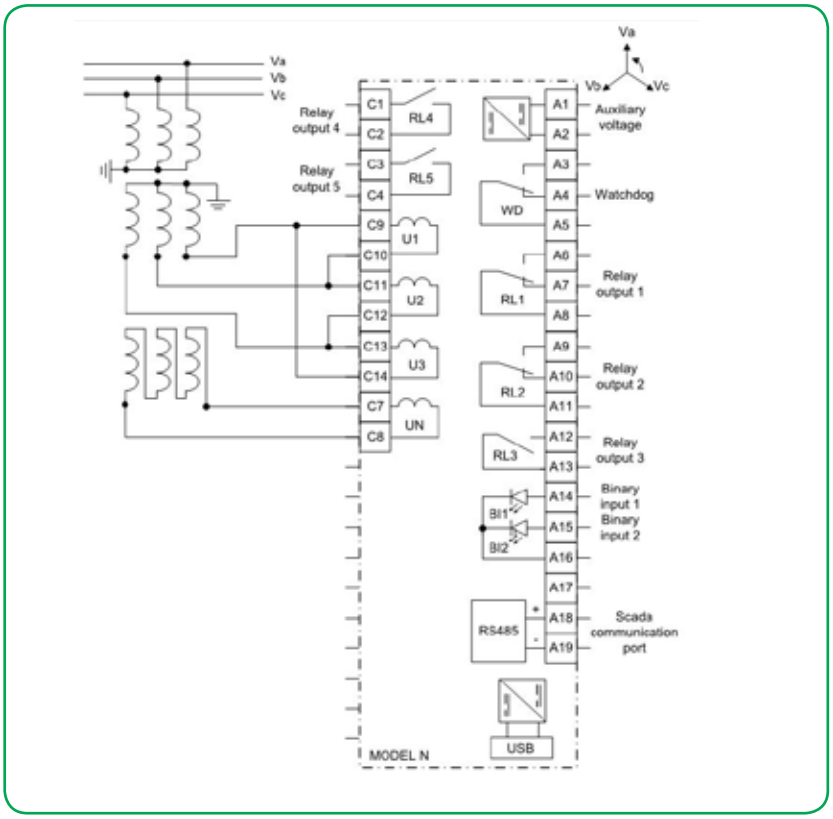
Voltages scaling mode	3Vpn+VN
Voltage measured by VTs	Va, Vb, Vc, VN
Calculated values	Vab, Vbc, Vca, V1, V2, $3V_0$, f

A2Vpp + VN presented on VAMP 11V model A



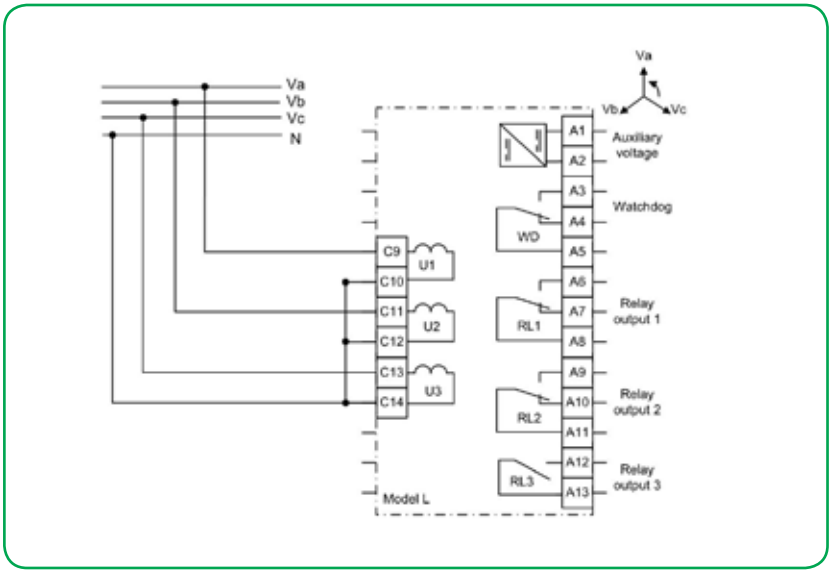
Voltages scaling mode	2Vpp+VN
Voltage measured by VTs	Vab, Vbc 2Vpp+VN Vab, Vbc (or two other pairs), VN
Calculated values	Vca (or other which is not measured), V1, V2, f

3Vpp + VN presented on VAMP 11V model N



Voltages scaling mode	3Vpp+VN
Voltage measured by VTs	Vab, Vbc, Vca, VN
Calculated values	V1, V2, f

LV networks 3Vpn presented on VAMP 11V model L



Voltages scaling mode	3Vpn
Voltage measured by VTs	Va, Vb, Vc
Calculated values	V1, V2, f Vab, Vbc, Vca, VN, 3V0, V1, V2, f

Main technical data

Auxiliary voltage	
Auxiliary voltage range	■ 24 – 60 Vdc/ac (A and N) ■ 90 – 240 Vdc/ac (A and N) ■ 24 – 240 Vdc/ac (L only)
Rated voltage Un	
Phase voltage measuring range	■ 5 - 200 V for range 57 - 130 Vac; ■ 20 - 720 V for range 220 - 480 Vac
Earth voltage measuring range	(5 - 135) V
Continuous voltage withstand for phase voltage input	■ 200 V for (57 - 130) Vac ■ 720 V for (220 - 480) Vac
Continuous voltage withstand for earth voltage input	135 V
Burden for phase voltage input	■ < 0.22 VA for (57 - 130) Vac; ■ < 0.3 VA for (220 - 480) Vac
Burden for earth voltage input	< 0.43 VA
Rated frequency fn	■ 50 Hz operating range (40 - 60) Hz; ■ 60 Hz operating range (50 - 70) Hz

Binary inputs	
Maximum voltage input	■ 110 Vdc/78 Vac for aux voltage (24 – 60) Vac/dc ■ 300 Vdc/264 Vac for aux voltage (90 – 240) Vac/dc
Quantity of digital inputs	■ 0 for L model ■ 2 for N model ■ 6 for A model
Operating threshold	■ 16 Vdc/18 Vac for aux voltage range 24 – 60 Vac/dc ■ 66 Vac/dc for aux voltage range 90 – 240 Vac/dc
Relay outputs	
Rated voltage	250Vac
Continuous carry	5A
Numbers of outputs contacts (including watchdog contact)	■ 4 for L model ■ 6 for N model ■ 8 for A model

Disturbance tests	Standard	Test value
Emission	**EN 60255 - 26**	
Conducted	EN 55022: Class A (CISPR 22)	0.15 – 30 MHz
Radiated	EN 55022: Class A (CISPR 11)	30 - 2000 MHz
Immunity	**EN 60255 - 26: 2013**	
1MHz damped oscillatory wave	EN 61000-4-18: Level 3	2.5 kV CM, 1.0 kV DM
Static discharge (ESD)	EN61000-4-2: Level 3	8 kV air ; 6 kV contact
Fast transients (EFT)	EN6100-4-4: Level 3	2 kV CM, 5/50 ns, 5 kHz
Surge	EN6100-4-5: Level 3	2 kV CM, 1 kV DM
Conducted HF field	EN6100-4-5: Level 3	0.15 to 80 MHz, 10 Vemf
Emitted HF field	EN6100-4-3: Level 3	80 – 2700 MHz, 10 V/m:
Voltage alternative component	EN6100-4-17	15% of operating voltage (DC)
Voltage dips	EN6100-4-11 EN6100-4-29	100%, 24 V / 20 ms, 60 V / 50 ms, 90 V / 100 ms, 220 V / 500 ms (DC)
Voltage interruptions	EN6100-4-11 EN6100-4-29	100%, 5 s
Power-frequency magnetic field	EN6100-4-8: Level 4	30 A/m (continous), 300 A/m 1-3 s
Pulse magnetic field	EN6100-4-8: Level 5	1000 A/m

Mechanical tests	Standard & test class / level	Test value
Device in operation		
Vibrations	EN 60255-21-1: Class 1	0.5 Gn; 10 -150 Hz
Shocks	EN 60255-21-2: Class 1	5 Gn / 11ms
Seismic	EN 60255-21-3: Class 2	■ 2 G horizontal / 1 G vertical, ■ 1 – 35 Hz
Device de-energised (UK EN) or de-energized (US EN)		
Vibrations	EN 60255-21-1: Class 1	1 Gn; 10 – 150 Hz
Shocks	EN 60255-21-2: Class 1	15 Gn / 11 ms
Seismic	EN 60255-21-2: Class 1	10 Gn / 16 ms

Electrical safety tests	Standard & Test class / level	Test value
Impulse voltage withstand	EN 60255-27	5 kV, 1.2/50 µs, 0.5 J
Dielectric test	EN 60255-27	2 kV, 50 Hz
Insulation resistance	EN 60255-27	
Power supply burden	EN 60255-1	

Environmental tests	Standard & w test class / level	Test value
Device in operation		
Dry heat	EN 600068-2-2: Bd	+60°C (140°F)
Cold	EN 600068-2-1: Ad	-20°C (-40°F)
Damp heat, cyclic	EN 600068-2-30: Db	■ From 25°C (77°F) to 55°C (131°F) ■ >93% to 97% RH, duration 6 days
Damp heat, static	EN 600068-2-78: Cab	■ 40 C (104 F), 93% RH, duration 21 days ■ 60°C (140°F), 93% RH, duration 10 days
Change of temperature	EN 600068-2-14: Nb	■ 100 cycles, -20 C (-4 F) to 60 C (104 F)
Device in storage		
Dry heat	EN 600068-2-2: Bb	+70°C (158°F)
Cold	EN 600068-2-1: Ad	-40°C (-40°F)

Environmental conditions	Standard & test class/level
Ambient temperature, in service	-20°C to +60°C (-4°F to +140°F)
Ambient temperature, in storage	-40°C to +70°C
Relative humidity	< 95%, no condensation allowed
Maximum operating altitude	2000m (6561.68ft)

Casing	Standard & test class/level
Degree of protection (EN 60529)	■ IP 40 Protection for relay housing ■ IP 20 Protection for terminals. ■ IP 54 Protection for front panel
Dimensions (W x H x D)	106.5 x 106.5 x 113 mm
Weight (net)	Approx. 0.6 kg (model dependent)

Package	Value
Dimensions (W x H x D)	230 mm x 173 mm x 163 mm
Weight (gross, including terminals, packaging and installation guide)	1.1kg

DEVICE track record

- Schneider Electric's VAMP range specialises in protection relays, arc flash protection and measuring and monitoring units for power systems.
- VAMP's medium-voltage and sub-transmission protection relays are used in numerous applications, from overhead line feeders and substations to power plants and industrial power system. Their unique integrated arc flash fault protection functionality in some of the models enhances the safety of both people and property and has made VAMP a leading range in arc flash protection worldwide. VAMP products meet the latest international standards and regulations.

Ordering codes

Quantity of devices

This order form can be used to define a complete VAMP 11V configuration.
Check the boxes ☒ that match your choices.

■ Please indicate the Catalogue No. (for example: REL10070) to your Schneider Electric representative.

Ready-to-use configuration

Ordering has never been so easy, only 10 type designations and two accessories !

VAMP V11 type designations				
Catalog No.		Description		Cortec type
Model L: 3 voltage inputs, 4 binary outputs, without binary inputs and communication				
REL10070	☐	Un = 57-130 Vac	Vx = 24-240 Vac / 250 Vdc	V11VL10N1N2N0NN11N
REL10071	☐	Un = 220-480 Vac	Vx = 24-240 Vac / 250 Vdc	V11VL10N2N2N0NN11N
Model N: 4 voltage inputs, 6 binary outputs, 2 binary inputs, rear RS485 and front USB port, communication protocol switchable between IEC 60870-5-103 or Modbus				
REL10090	☐	Un = 57-130 Vac	Vx = 24-60 Vac / dc	V11VN11N1N1N1NN11N
REL10091	☐	Un = 220-480 Vac	Vx = 24-60 Vac /dc	V11VN11N2N1N1NN11N
REL10092	☐	Un = 57-130 Vac	Vx = 90-240 Vac / 250 Vdc	V11VN11N1N2N1NN11N
REL10093	☐	Un = 220-480 Vac	Vx = 24-240 Vac / 250 Vdc	V11VN11N2N2N1NN11N
Model A: 4 voltage inputs with frequency protection, 8 binary outputs, 6 binary inputs, rear RS485, front USB port with USB powered configuration, communication protocol switchable between IEC 60870-5-103 or Modbus.				
REL10080	☐	Un = 57-130 Vac	Vx = 24-60 Vac / dc	V11VA11N1N1N1NN11N
REL10081	☐	Un = 220-480 Vac	Vx = 24-60 Vac /dc	V11VA11N2N1N1NN11N
REL10082	☐	Un = 57-130 Vac	Vx = 90-240 Vac / 250 Vdc	V11VA11N1N2N1NN11N
REL10083	☐	Un = 220-480 Vac	Vx = 24-240 Vac / 250 Vdc	V11VA11N2N2N1NN11N
Accessories for VAMP 11V				
REL10030	☐	Wall or surface mounting adaptor for standard Vamp 11V flush case		
REL10031	☐	Secure front access cover for for standard Vamp 11V flush case		

Learn more about our solutions for energy automation
Visit www.schneider-electric.com/energy-automation today!

Schneider Electric

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 928 298 512 €
www.schneider-electric.com/energy-automation

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

Design: Schneider Electric - Sonovision
Photos: Schneider Electric
Printed: Altavia Connexion - Made in France

This document has been printed on recycled paper.

NRJED115657EN

12-2015