

**RE 29 742/02.03**

Replaces 12.87

**Relay modules**  
**Types VT 11027 and VT 11028**

Series 1X



FF 87169

VT 11027

**Features**

VT 11027-1X and VT 11028-1X relay modules are used to cut electrical consumers in and out, e.g. electronic amplifiers, solenoids and resistive loads.

**They basically consist of:**

- Relays with LED lamp
- Capacitors with reverse polarity and overvoltage protection

**Ordering code**

**VT 110\_\_ -1X \***

Relay module 24 V = 27  
Relay module 12 V = 28

Series 10 to 19 = 1X  
(10 to 19: unchanged installation and connection dimensions)

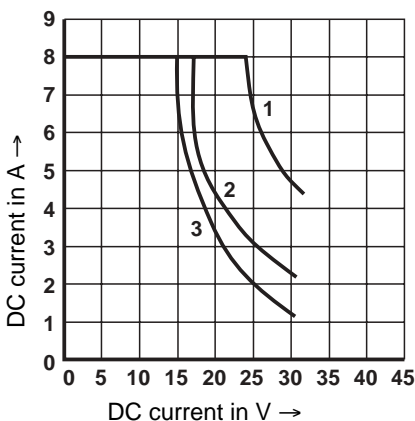
Further details in clear text

**Preferred types**

Material no.	Type
R900010989	VT11027-1X

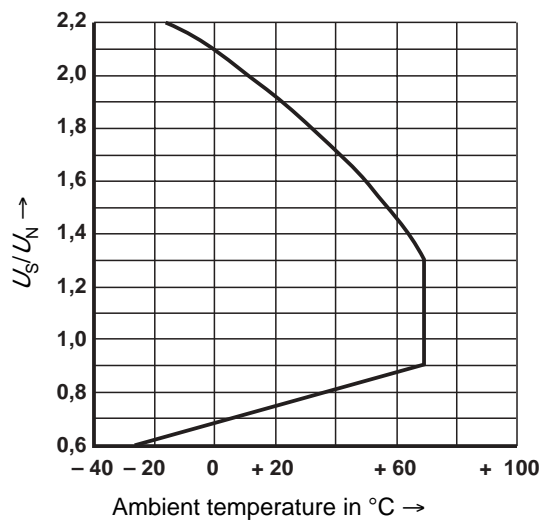
**Characteristic curves**

**Switching capacity with DC current (limit curve)**



- Curve 1: 1 make-contact, resistive load (relay coil or solenoid with free-wheeling diode)
- Curve 2: 1 make-contact, inductive load L/R = 30 ms
- Curve 3: 1 make-contact, inductive load L/R = 40 ms

**Max. control voltage of coil under nominal contact load**



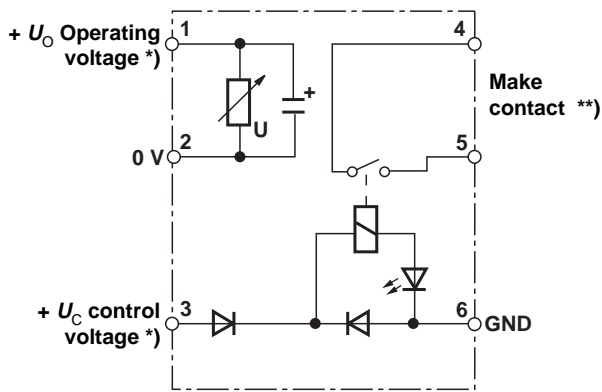
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## Technical data (for applications outside these parameters, please consult us!)

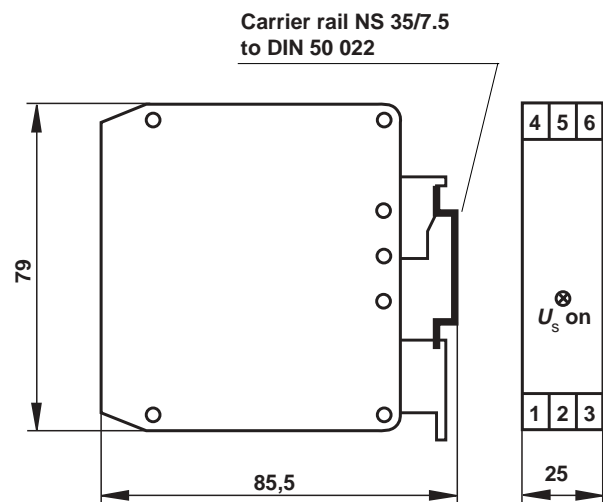
Contacts			
Number of contacts			1 make contact element
Contact version			Single contact
Switching voltage		$U_{\max} \sim$ : $U_{\max} =$ :	24 V + 20 % 36 V (see diagram)
Continuous current/breaking current		$I_{\max}$ :	See diagram
Contact material			AgCdO (this contact material is not suitable for switching small currents!)
– Coil			
Nominal voltage	– VT 11027	$U_N$ :	24 V
		$R_{\text{coil}}$ :	~ 720 $\Omega$
Nominal voltage	– VT 11028	$U_N$ :	12 V
		$R_{\text{coil}}$ :	~ 210 $\Omega$
Nominal power		$P$ :	ca. 500 mW
Voltage range			See diagram
Release voltage at 25 °C		$U_R$ :	$\geq 0.15 \cdot U_N$
– General data	Mechanical service life		$\geq 20 \cdot 10^6$ switching cycles
Maximum switching frequency	– mechanical		72000/h
	– electrical		3000/h
	Response time	$t$ :	ca. 4 ms
	Release time	$t$ :	ca. 6 ms
	Chatter time	$t$ :	ca. 2 ms
Technical data of capacitor:			
	General data		2200 $\mu\text{F}$ / 50 V (switching-resistant)
	Oversvoltage protection		VDR 39 V / 1 mA
Technical data of housing:	Installation position		Optional
Ambient temperature range		$t$ :	– 25 °C to + 70 °C
Weight (total)		$m$ :	ca. 0.1 kg

## Pin assignment and block circuit diagram



**Caution:** \*) With polarity reversal → short-circuit!  
 \*\*) Switch capacitive loads only with a sufficiently dimensioned series resistance!

## Unit dimensions (dimensions in mm)



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