

ETIREL Control Equipment

Power relays VS116K, VS316K

Application: Control signals in low-power circuits, combined with buttons, switches, for automation systems

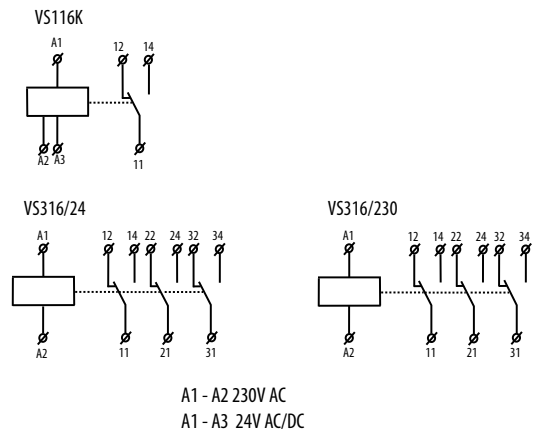
Advantages:

- // Voltage range AC230 or AC / DC 24V,
- // 1 module, DIN rail mounting
- // Changeover contact 1x16A or 3x16A,
- // Output status LED indication

Technical data

	VS116K	VS316/24	VS316/230
Supply terminals	A1 - A2		
Voltage range	230 V AC/50-60 Hz	24 V AC/DC/50-60 Hz	230 V AC/50-60 Hz
Burden	AC max. 7.5 VA/ 1W	1.6 VA/ 1.2 W	2.5 VA
Supply terminals	A1-A3	x	
Voltage range	24 V AC/DC (50-60 Hz)	x	
Burden	1 VA AC/ 1W DC	x	
Supply voltage tolerance	-15%; +10%		
Output			
Number of contacts	1 x changeover/ SPDT (AgSnO ₂)	3 x changeover/ 3PDT (AgSnO ₂)	
Current rating	16 A/ AC1	16A/ AC1	
Breaking capacity	4000VA/ AC1, 384W/ DC	4000VA/ AC1, 384W/ DC	
Inrush current	30 A/ <3s	30 A/ <3s	
Switching voltage	250 V AC1/ 24 V DC		
Min. breaking capacity DC	500 mW		
Output indication	high intensity of LED		
Mechanical life	3x10 ⁷	1x10 ⁷	
Electrical life (AC1)	0.7x10 ⁵	1x10 ⁵	
Time between switching	min. 2s	20 ms	50 ms
Other information			
Operating temperature	-20 °C ... +55 °C (-4 °F ... 131 °F)		
Storage temperature	-30 °C ... +70 °C (-22 °F ... 158 °F)		
Electrical strength	4 kV (supply-output)		
Operating position	any		
Mounting/DIN rail	DIN rail EN 60715		
Protection degree	IP 40 from front panel		
Overvoltage category	III.		
Pollution degree	2		
Max. cable size (mm ²)	max. 1x 2.5 / 2x1.5		
	max. 1x2.5 (AWG 12)		
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")		
Weight	54 g (1.9 oz.)	90 g (3.17 oz.)	92 g (3.25 oz.)
Standards	EN 61810-1, EN 61010-1		

Symbol

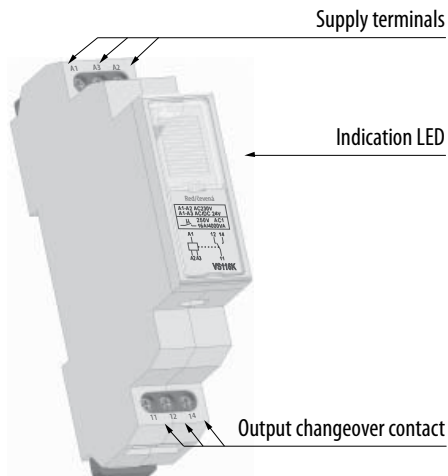


Notes

Max. time of changeover of contact is 10ms.
VS316/24 and VS316/230 enable switching of different phases or 3 phase voltage.

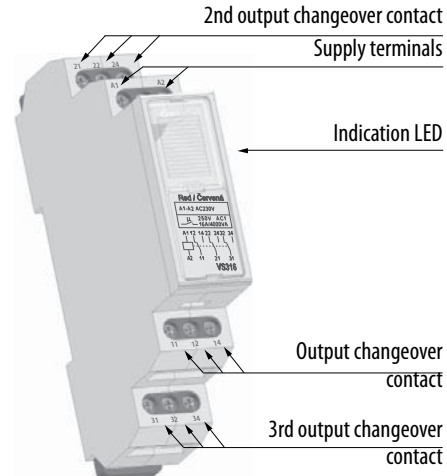
Description

VS116K





terminal A3 only for VS116K

VS316/24, VS316/230



Power relays VS116K, VS316K

Type	Code No.	Voltage U_n	Number of contacts	 g	
VS116K	002471211	AC230V / AC/DC 24V	1P	58	1/10
VS316/230 V	002471220	AC230V	3P	84	1/10
VS316/24 V	002471225	AC/DC 24V	3P	84	1/10



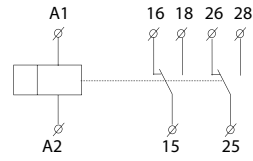
Multifunction time relay with supply voltage disconnection CRM-72TO

- // The relay keeps timing according to the set function even after the power supply is disconnected.
- // It can be used for delayed switching off of a backup power supply and systems in case of power failure (e.g. emergency lighting, emergency ventilation, electrically and automatically operated doors – lifts, escalators).
- // Comfortable and well-arranged time delay (t) setting by rotary switch.
- // Adjustable time delay from 0.1 s to 10 m is split into four ranges: (0.1 s – 1 s / 1 s – 10 s / 0.1 m – 1 m / 1 m – 10 m)
- // Power supply outages must be in the order of tens to hundreds of milliseconds.
- // Multifunction red LED flashes or shines depending on the operating states.

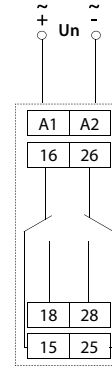
Technical data

CRM-72TO	
Supply terminals	A1 - A2
Supply voltage	12 - 240 V AC/DC (AC 50 - 60 Hz)
Consumption	1,9 VA / 0,9 W
Supply voltage tolerance	-15 %; +10 %
Time circuit	
Number of features	0.1 s - 10 min
Time delay	rotary switch and potentiometer
Time deviation	5 % - mechanical setting
Repeat accuracy	0.2 % - set value stability
Temperature coefficient	0.01 % / °C, at = 20 °C (0.01 % / °F, at = 68 °F)
Output	
Number of contacts	2x changeover (AgNi)
Current rating	8 A / AC1
Breaking capacity	2000 VA / AC1, 192 W / DC
Inrush current	10 A / <3 s
Switching voltage	250 V AC / 24 V DC
Power dissipation (max.)	1,2 W
Mechanical life	3x10 ⁷
Electrical life (AC1)	0.7x10 ⁵
Other information	
Operating temperature	-20 °C ... +55 °C (-4 °F ... 131 °F)
Storage temperature	-30 °C ... +70 °C (-22 °F ... 158 °F)
Dielectric strength	3,5 kV
Mounting/DIN rail	DIN rail EN 60715
Protection degree	IP 40 from front panel / IP 20 terminals
Operating position	any
Overvoltage category	III.
Pollution degree	2
Max. cable size (mm ²)	solid wire max. 1x2,5, 2x1,5 (AWG 14)
	stranded with ferrule max. 1x2,5 (AWG 14)
Dimensions	90 x 17,6 x 64 mm
Weight	69g
Standards	EN 61812-1

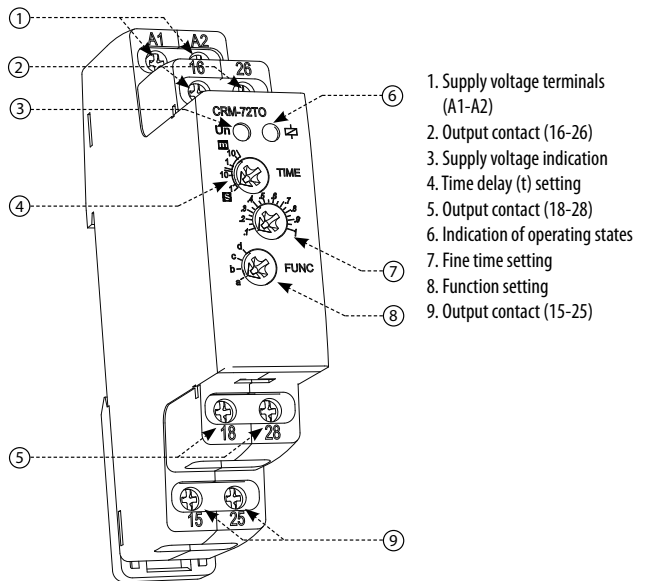
Symbol



Connection



Description



Multifunction time relay with supply voltage disconnection CRM-72TO

Type	Code No.	g	1/10
CRM-72TO UNI	002470096	82	1/10

