

GRV8-SP/SN 3-Phase display voltage relay

Voltage relay

3-Phase display voltage relay **GRV8-SP/SN**



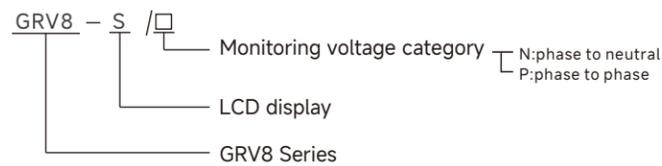
Applications

- Control for connection of moving equipment(site equipment,agricultural equipent,refrigerated trucks).
- Control for protection of persons and equipment against the consequences of reverse running.
- Normal/emergency power supply switching.
- Protection against the risk of a driving load(phase failure).

Feature

- Controls its own supply voltage(True RMS measurement).
- LCD display.
- Measuring frequency range:45Hz-65Hz.
- Voltage measurement accuracy<1%.
- 2-MODULE,DIN rail mounting.

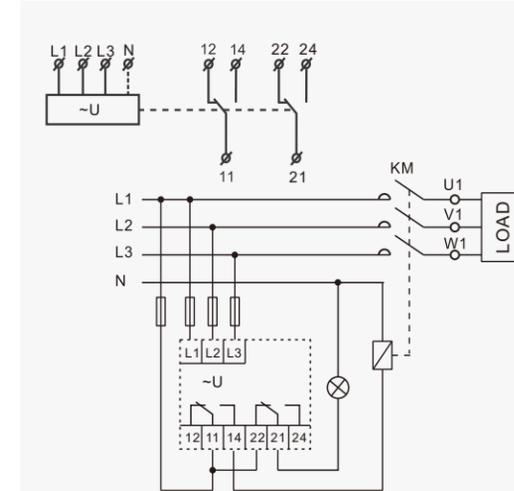
Model and connotation



Technical parameters

	GRV8-SN	GRV8-SP
Function	Monitoring 3-phase voltage	
Monitoring terminals	L1-L2-L3-N	L1-L2-L3
Supply voltage limits	70V-400V	130V-650V
Rated supply frequency	45Hz-65Hz	45Hz-65Hz
Voltage hysteresis	2% Un	2% Un
Measuring range	80V-350V	150V-600V
Measurement error	≤1%	
Phase failure	50% Un	
Start-reset delay time	0.3-30s	
Temperature coefficient	0.05%/°C,at=20°C(0.05%/°F, at=68°F)	
Output	2×SPDT	
Current rating	5A/AC1	
Switching voltage	250VAC/24VDC	
Min.breaking capacity DC	500mW	
Mechanical life	1x10 ⁷	
Electrical life(AC1)	1x10 ⁵	
Operating temperature	-20°C to + 55°C(-4°F to 131°F)	
Storage temperature	-35°C to + 75°C(-22°F to 158°F)	
Mounting/DIN rail	Din rail EN/IEC 60715	
Protection degree	IP40 for front panel/IP20 terminals	
Operating position	any	
Overvoltage category	III	
Pollution degree	2	
Max.cable size(mm ²)	solid wire max.1×2.5or 2×1.5/with sleeve max.1×2.5(AWG 12)	
Dimensions	90x18x64mm	
Weight	90g	
Standards	EN 60255-1, IEC60947-5-1	

Wiring Diagram

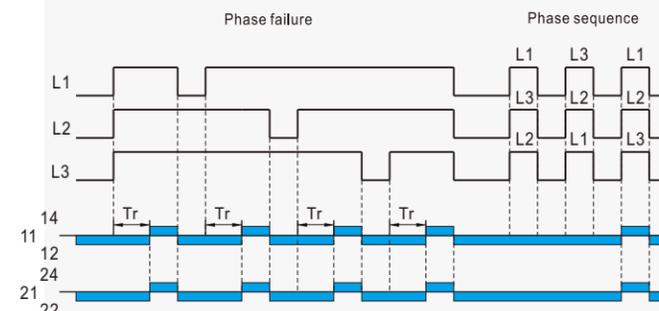


Parameters	Setting range	Step	Factory default	Remarks	
Rated voltage(Un)	127-132-138-220-230 -240-254-265(P-N)		220V	GRV8-SN	
	220-230-240-380-400 -415-440-460(P-P)		380V	GRV8-SP	
Over voltage	Operation value	OFF-(Un+1)...350	1V	253V	GRV8-SN
	Delay time	OFF-(Un+1)...600	1V	437V	GRV8-SP
Under voltage	Operation value	80...(Un-1)-OFF	1V	187V	GRV8-SN
	Delay time	150...(Un-1)-OFF	1V	323V	GRV8-SP
Asymmetry	Operation value	OFF-5%...20%	1%	8%	
	Delay time	0.1...20s	0.1s	2s	
Phase sequence protection	ON-OFF			ON	
Start-reset delay time	0.3...30s	0.1s	0.3s		
Auto-reset	ON-OFF			ON	

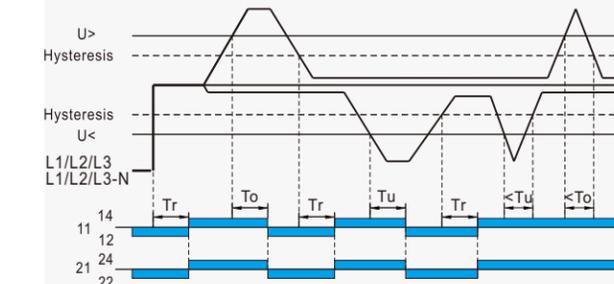
Note: "ON" means activating protection function,and"OFF" means inactivating protection function.

Functions Diagram

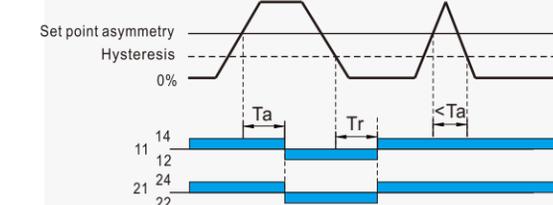
● Phase failure and phase sequence function diagram



● Overvoltage and undervoltage function diagram



● Asymmetry function diagram



To:Overvoltage threshold tripping delay.
Tu:Undervoltage threshold tripping delay.
Ta:Asymmetry threshold tripping delay.
Tr:Power up delay

Dimensions(mm)

