VL VLMCII2 Voltage Relay

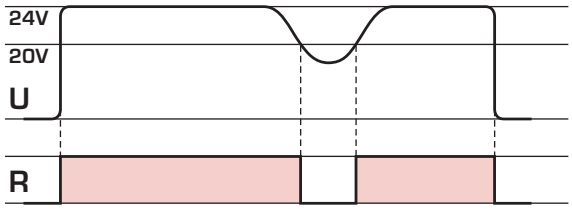
- COMPACT SIZE - 1 MODULE
- ENERGIZING IMMEDIATLY
- DE-ENERGIZING WHEN THE SUPPLY VOLTAGE DROPS BELOW 20V
- 1 RED LED INDICATOR FOR THE 2 RELAY
- 2 RELAY 1 POLE CHANGEOVER CONTACT
- ADVANCED DESIGN
- DIN RAIL MOUNTING EN50.022

Typical application for electric appliances.

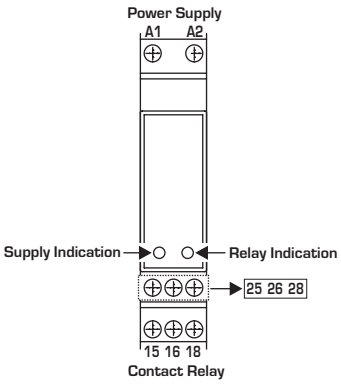
TECHNICAL DATA

	UNIT	VLMCII2
INPUT		
Supply voltage DC	VAC	24
Power consumption (max. DC)	W	0.3
Supply indication	-	Green LED **U**
OUTPUT RELAY (x2)		
Max. power rating relay	VA	2.000 Ac1
Rated current	A	8
Rated operational voltage	VAC	250
Breaking power	W	240
Contact life	Elettr. Mecc.	1×10^5 ops 1×10^7 ops
Inrush Current	A	10A < 3s
Min. Switching Load	VDC	5 (10mA)
Temperature work	-	1 Au+AgCdO
Output Indication	-	Red LED **R**
GENERAL		
Temperature work	°C	-10/+50
Storage temperature	°C	-30/+70
Electical Strength	kV	2
Protection degree	IP	40
Relative Humidity	RH%	95
Weight	g	65
Dimensions	mm	98 x 17.5 x 64
Conforms to	-	CE

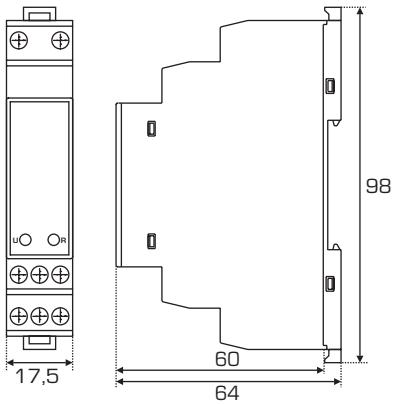
FUNCTIONS



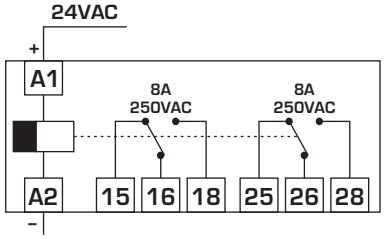
DESCRIPTION



DIMENSIONS (mm)



WIRING DIAGRAM



VL VL...MFND1/TGND1 Voltage Relay

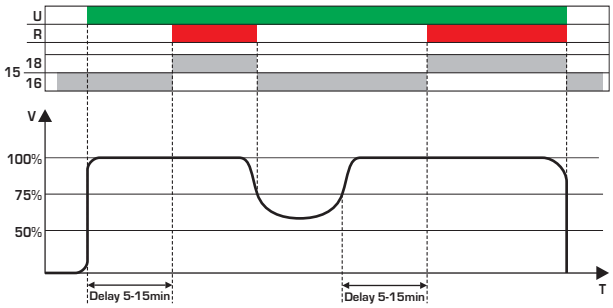
- COMPACT SIZE - 1 MODULE
- ENERGIZING AT THE END OF TIME DELAY
- DE-ENERGIZING WHEN THE SUPPLY VOLTAGE DROPS BELOW 75%
- TIME RANGE 5 - 15min.
- 1 POLE CHANGEOVER CONTACT
- ADVANCED DESIGN
- DIN RAIL MOUNTING EN50.022

Typical application for electric appliances.

TECHNICAL DATA

	UNIT	VLMFND1	VLTGND1
INPUT			
Supply voltage DC	VAC	230	3 x 400
Power consumption (max. AC)	VA	6,2 (1,5W)	5,5 (1,3W)
Supply indication	-	Green LED **U**	
OUTPUT RELAY (x2)			
Max. power rating relay	VA	2.000 Ac1	
Rated current	A	8	
Rated operational voltage	VAC	250	
Breaking power	W	240	
Contact life	Elettr. Mecc.	1 x 10^5 ops 1 x 10^7 ops	
Inrush Current	A	10A < 3s	
Min. Switching Load	VDC	5 (10mA)	
Temperature work	-	1 Au+AgCdO	
Output Indication	-	Red LED **R**	
GENERAL			
Time Range	min	5 - 15 (+-10%)	
Temperature work	°C	-10/+50	
Storage temperature	°C	-30/+70	
Electical Strength	kV	4	
Protection degree	IP	40	
Relative Humidity	RH%	95	
Weight	g	55	
Dimensions	mm	98 x 17.5 x 64	
Conforms to	-	CE	

FUNCTIONS



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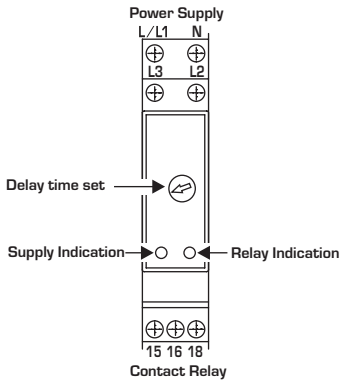
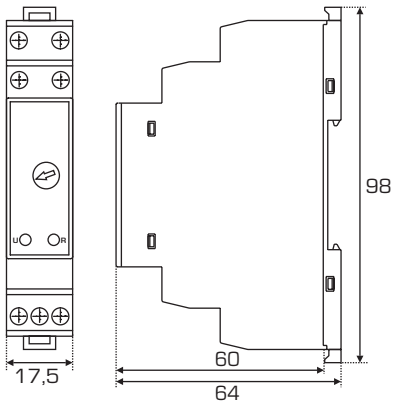
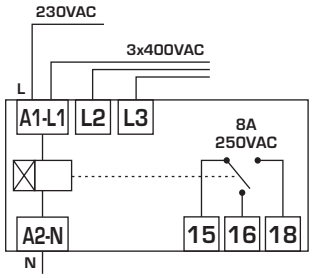


DIMENSIONS (mm)



WIRING DIAGRAM



FS FSTKII1S Phase Sequence Relay

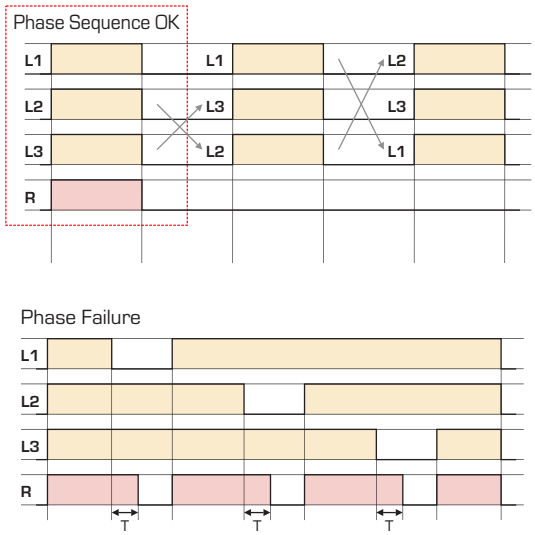
- COMPACT SIZE - 1 MODULE
- PHASE SEQUENCE/ROTATION CONTROL
- PHASE FAILURE/LOSS CONTROL
- UNIVERSAL THREE PHASE SUPPLY 3x200 - 450VAC
- 1 POLE CHANGEOVER CONTACT
- ADVANCED DESIGN
- DIN RAIL MOUNTING EN50.022

Typical application for equipments, system or machines for which the phase sequence must be correct to operate.

TECHNICAL DATA

	UNIT	FSTKII1S
INPUT		
Supply voltage AC	VAC	3 x 200 - 450
Frequency range	Hz	47 - 63
Power consumption (max. AC)	VA W	9 [L1/L2] 1.2 [L3] 1,9 Total
OUTPUT RELAY		
Max. power rating relay	VA	2.000 Ac1
Rated current	A	8
Rated operational voltage	VAC	250
Breaking power	W	240
Contact life	Elettr. Mecc.	1 x 10^5 ops 1 x 10^7 ops
Inrush Current	A	10A < 3s
Min. Switching Load	VDC	5 (10mA)
Changeover contacts	-	1 Au+AgCdO
Delay Time	ms	100 **T**
Output Indication	-	Red LED **R**
GENERAL		
Temperature work	°C	-10/+50
Storage temperature	°C	-30/+70
Electical Strength	kV	4
Protection degree	IP	40
Relative Humidity	RH%	95
Weight	g	60
Dimensions	mm	98 x 17.5 x 64
Conforms to	-	CE

FUNCTIONS



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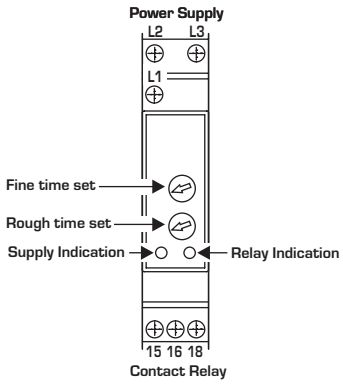
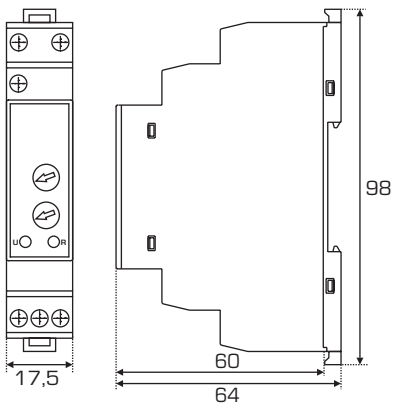
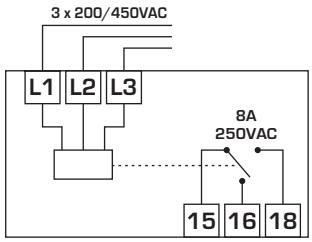


DIMENSIONS (mm)



WIRING DIAGRAM



MV MVTGBD1...S/N Under/Over Relay

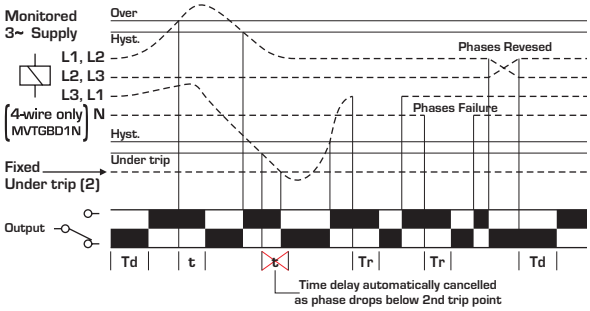
- COMPACT SIZE - 1 MODULE
- MONITOR OWN SUPPLY AND DETECTS IF ONE OR MORE PHASES EXCEED THE SET UNDER OR OVER VOLTAGE TRIP LEVELS
- MEASURES PHASE TO PHASE VOLTAGE
- ADJUSTAMENT FOR UNDER AND OVER VOLTAGE TRIP LEVEL
- ADJUSTAMENT FOR TIME DELAY (FROM UNDER OR OVER VOLTAGE CONDITION)
- NEUTRAL LOSS (only MVTGBD1N)
- 1 POLE CHANGEOVER CONTACT
- ADVANCED DESIGN
- DIN RAIL MOUNTING EN50.022

Typical application for control the Under/Over Voltage plus time delay, Phase Failure and Phase Sequence.

TECHNICAL DATA

	UNIT	MVTGBD1S	MVTGBD1N
INPUT			
Supply voltage AC	VAC	3 x 400	3 x 400+N
Frequency range	Hz	47 - 63	
Trip Levels	Under Over	75 - 95% of **U** 105 - 125% of **U**	
Range operating voltage	VAC	Un.165-293_Ov.295-500	
Power consumption (max. AC)	VA	15 (2,2W)	
Supply indication	-	Green LED **U**	
OUTPUT RELAY			
Max. power rating relay	VA	2.000 Ac1	
Rated current	A	8	
Rated operational voltage	VAC	250	
Breaking power	W	240	
Contact life	Elettr. Mecc.	1 x 10^5 ops 1 x 10^7 ops	
Inrush Current	A	10A < 3s	
Min. Switching Load	VDC	5 (10mA)	
Changeover contacts	-	1 Au+AgCdO	
Output Indication	-	Red LED **R**	
GENERAL			
Hysteresis (factory set)	%	+- 2 of trip level	
Response Time	ms	100	
Time Range	sec	0,2 - 10 (**t**)	
Delay from phase/neutral Failure	ms	100 (**tr**)	
Power on delay	sec	1 (**Td**)	
Temperature work	°C	- 10 / +50	
Electical Strength	kV	4	
Protection degree	IP	40	
Relative Humidity	RH%	95	
Weight	g	65	
Dimensions	mm	98 x 17.5 x 64	
Conforms to	-	CE	

FUNCTIONS



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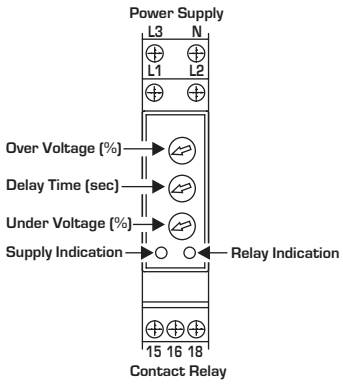
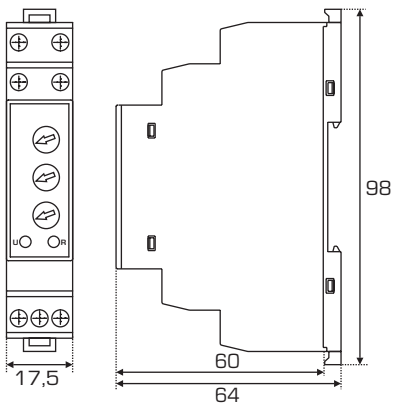
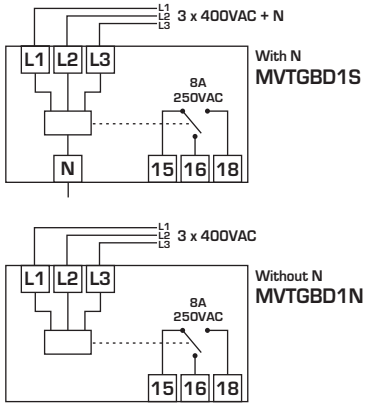


DIMENSIONS (mm)



WIRING DIAGRAM



MV MV..MFBD1L/TGBD1L Under Relay

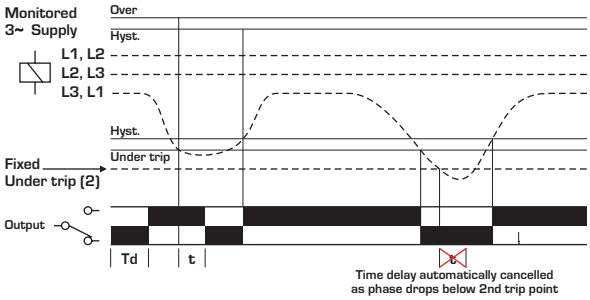
- COMPACT SIZE - 1 MODULE
- MONITOR OWN SUPPLY AND DETECTS IF ONE OR MORE PHASES EXCEED THE SET UNDER VOLTAGE TRIP LEVELS
- MEASURES PHASE TO PHASE VOLTAGE
- ADJUSTAMENT FOR UNDER VOLTAGE TRIP LEVEL
- ADJUSTAMENT FOR TIME DELAY (FROM UNDER VOLTAGE CONDITION)
- 1 POLE CHANGEOVER CONTACT
- ADVANCED DESIGN
- DIN RAIL MOUNTING EN50.022

Typical application for control the Under Voltage plus time delay

TECHNICAL DATA

	UNIT	MVMFBD1L	MVTGBD1L
INPUT			
Supply voltage AC	VAC	230	3 x 400
Frequency range	Hz	47 - 63	
Trip Levels	Under	75 - 95% of **U**	
Range operating voltage	VAC	Un.165-265_Ov.295-460	
Power consumption (max. AC)	VA	13 (1,5W)	15 (2,2W)
Supply indication	-	Green LED **U**	
OUTPUT RELAY			
Max. power rating relay	VA	2.000 Ac1	
Rated current	A	8	
Rated operational voltage	VAC	250	
Breaking power	W	240	
Contact life	Elettr. Mecc.	1 x 10^5 ops 1 x 10^7 ops	
Inrush Current	A	10A < 3s	
Min. Switching Load	VDC	5 (10mA)	
Changeover contacts	-	1 Au+AgCdO	
Output Indication	-	Red LED **R**	
GENERAL			
Hysteresis (factory set)	%	+- 2 of trip level	
Response Time	ms	100	
Time Range	sec	0,2 - 10 (**t**)	
Power on delay	sec	1 (**Td**)	
Temperature work	°C	- 10 / +50	
Electical Strength	kV	4	
Protection degree	IP	40	
Relative Humidity	RH%	95	
Weight	g	55	
Dimensions	mm	98 x 17.5 x 64	
Conforms to	-	CE	

FUNCTIONS



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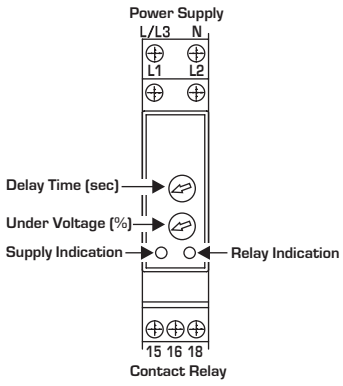
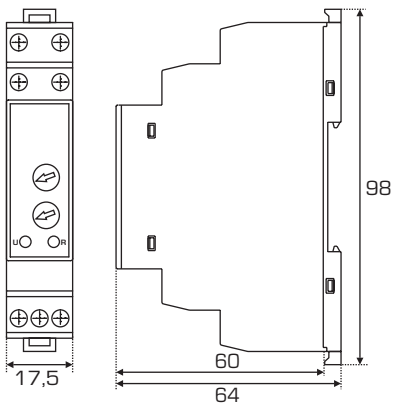
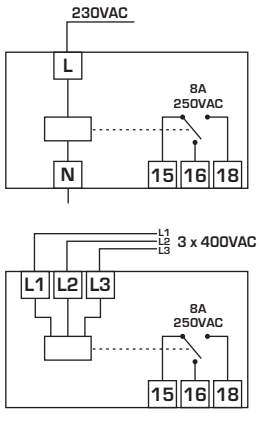


DIMENSIONS (mm)



WIRING DIAGRAM



MICROIDEA

MV MV..MFBD1H/TGBD1H Over Relay

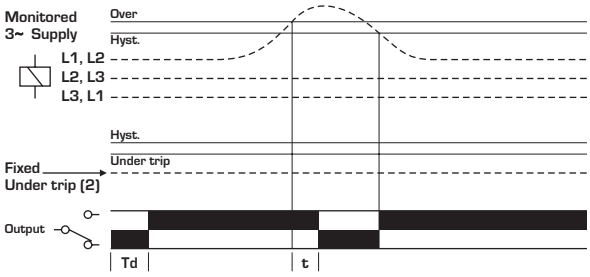
- COMPACT SIZE - 1 MODULE
- MONITOR OWN SUPPLY AND DETECTS IF ONE OR MORE PHASES EXCEED THE SET OVER VOLTAGE TRIP LEVELS
- MEASURES PHASE TO PHASE VOLTAGE
- ADJUSTAMENT FOR OVER VOLTAGE TRIP LEVEL
- ADJUSTAMENT FOR TIME DELAY (FROM OVER VOLTAGE CONDITION)
- 1 POLE CHANGEOVER CONTACT
- ADVANCED DESIGN
- DIN RAIL MOUNTING EN50.022

Typical application for control the Over Voltage plus time delay.

TECHNICAL DATA

	UNIT	MVMFBD1H	MVTGBD1H
INPUT			
Supply voltage AC	VAC	230	3 x 400
Frequency range	Hz	47 - 63	
Trip Levels	Over	105 - 125% of **U**	
Range operating voltage	VAC	Un.195-295_Ov.340-500	
Power consumption (max. AC)	VA	13 (1,5W)	15 (2,2W)
Supply indication	-	Green LED **U**	
OUTPUT RELAY			
Max. power rating relay	VA	2.000 Ac1	
Rated current	A	8	
Rated operational voltage	VAC	250	
Breaking power	W	240	
Contact life	Elettr. Mecc.	1×10^5 ops 1×10^7 ops	
Inrush Current	A	10A < 3s	
Min. Switching Load	VDC	5 (10mA)	
Changeover contacts	-	1 Au+AgCdO	
Output Indication	-	Red LED **R**	
GENERAL			
Hysteresis (factory set)	%	+- 2 of trip level	
Response Time	ms	100	
Time Range	sec	0,2 - 10 (**t**)	
Power on delay	sec	1 (**Td**)	
Temperature work	°C	- 10 / +50	
Electical Strength	kV	4	
Protection degree	IP	40	
Relative Humidity	RH%	95	
Weight	g	60	
Dimensions	mm	98 x 17.5 x 64	
Conforms to	-	CE	

FUNCTIONS



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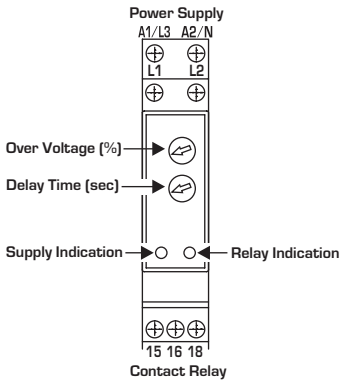
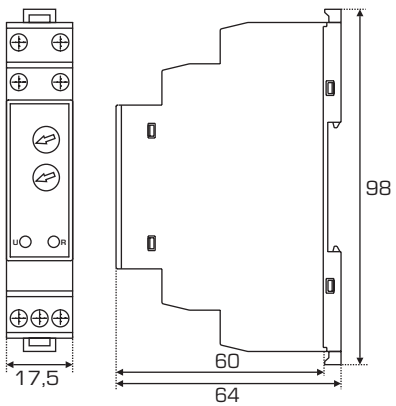
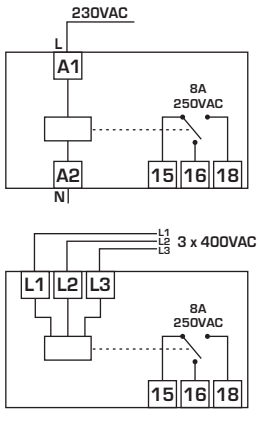


DIMENSIONS (mm)



WIRING DIAGRAM



MICROIDEA