

Type: LMCVR-20V

Multifunction, Combined Voltage Relay



- *NEW* 17.5mm DIN rail housing
- Microprocessor based

- □ True R.M.S. monitoring
- □ 7 Selectable monitoring ranges (0.1 20V AC/DC)
 - Selectable Under or Over Voltage monitoring
- Selectable hysteresis or latch option
- Adjustable trip level and time delay
- ☐ Isolated Auxiliary supply (24 230V AC/DC)¹
- 1 x SPDT relay output 8A
- Green LED indication for supply status
- Yellow LED indication for alarm status
 - Red LED indication for relay status

FUNCTION DIAGRAMS Under Voltage Monitoring (with and without Latch enable 中[] 中 Supply A1, A2 * <u>_</u> * 1 * 1 Over Voltage Monitoring (with and v Over 2% 中 <u>.</u> 1 П

INSTALLATION AND SETTING

- BEFORE INSTALLATION. ISOLATE THE SUPPLY.
- Connect the Auxiliary and Monitored Inputs as required.

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Installation work must be carried out by qualified personnel.

Settina the unit.

- Set the "Hyst. / Mode" selector to the required position depending whether under or over monitoring is required. Select either a suitable hysteresis setting of 2% or 10% or choose Latch if required.
- Set the "Range" 6 to the required position (depending on monitored input voltage to be monitored).
- Set the "Trip Level %" **5** and "Delay" **4** to suit the selected monitoring range and delay to tripping period.

Applying power.

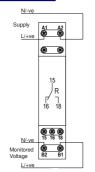
Apply power and the green LED will illuminate.

If Under voltage mode is selected:

- Relay energises / red LED 3 illuminate if the voltage is above the set "Trip Level". If the voltage falls below the
 "Trip Level", yellow LED 3 flashes for the set "Delay" then remains lit. Red LED extinguishes / relay de-energises.
 If Over voltage mode is selected:
- Relay energises / red LED 3 illuminate if the voltage is below the set "Trip Level". If the voltage rises above the
 "Trip Level", yellow LED 3 flashes for the set "Delay" then remains lit. Red LED extinguishes / relay de-energises.

Auxiliary supply voltage U (A1, A2):	24 - 230V	24 – 230V AC/DC ¹ (12 – 60V AC/ DC also available)			
Frequency range:	48 - 63Hz (A	48 - 63Hz (AC supplies)			
Supply variation:	+15%/ - 10	+15%/ - 10%			
Overvoltage category:	III (IEC 606)	III (IEC 60664)			
Rated impulse withstand voltage:	4kV (1.2/50μS) IEC 60664				
Power consumption (max.): AC: DC:	24V	48V	115V	230V	
	0.84 VA	0.82 VA	1.1 VA	1.4 VA	
	0.6 W	0.47 W	0.46 W	0.53 V	
Monitoring mode:	Under or O	Under or Over voltage (selectable)			
Hysteresis:		2 or 10% (selectable)			
Latch:	Enabled us	Enabled using Mode selector switch			
Monitoring ranges:	0.1 - 1V, 0.	.2 – 2V, 0.5 – 5\	, 1 – 10V, 2 – 20	OV	
Trip level:	10 - 100%	of selected mo	nitoring range		
Time delay (t):	0.1 - 30S (f	rom fault occur	ring to relay de	-energising	
Power up delay (Td):	1 second (f	1 second (fixed)			
Reset time:	100mS	100mS			
Accuracy:	\pm 1% of ma	\pm 1% of maximum full scale			
Adjustment accuracy:	< 5% of ma	< 5% of maximum full scale			
Repeat accuracy:	± 0.5% at c	$\pm0.5\%$ at constant conditions			
Drift with temperature:	±0.05%/°	± 0.05% / °C			
Drift with voltage:	$\pm0.2\%$ / V	•			
Monitoring input (B1, B2):		0.1 to 20V AC/DC			
Frequency:	,	DC, 48 – 500Hz			
Maximum input rating:	1.2 x 20V				
Overload:	TBC				
Overvoltage category:	TBC				
Rated impulse withstand voltage:	TBC				
Power on indication:	Green LED				
Alarm status indication:	Yellow LED	Yellow LED			
Relay status indication:	Red LED				
Ambient temp:	-20 to +60°	'C			
Relative humidity:	+95%				
Output (15, 16, 18):	SPDT relay				
Output rating:	AC1		250V 8A (2000VA)	
	AC15		250V 5A (no), 3A (no	
	DC1		25V 8A (2	00W)	
Electrical life:	≥ 150,000 (ops at rated loa	d		
Dielectric voltage:	2kV AC (rms) IEC 60947-1				
Rated impulse withstand voltage:	4kV (1.2/50μS) IEC 60664				
Housing:	Orange flame retardant UL94				
Weight:	63g				
Mounting option:	or direct su	On to 35mm symmetric DIN rail to BS EN 60715 or direct surface mounting via 2 x M3.5 or 4BA screw using the black clips provided on the rear of the unit			
Terminal conductor size	≤ 2 x 2.5mr	≤ 2 x 2.5mm ² solid or stranded			
Approvals:	CE and Rol	CE and RoHS Compliant. EMC: Immunity: EN 61000-6-2 (EN 61000-4-3 10V/m 80MHz - 2.7GHz)			

CONNECTION DIAGRAM



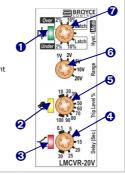
SETTING DETAILS

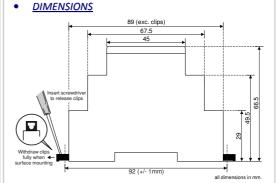
 Power supply status (Green) LED
 Alarm status (Yellow) LED

Relay output status
 (Red) LED
 Time delay adjustment

Trip level adjustment
 Monitoring range

7. Hysteresis / Mode selector





Fmissions: FN 61000-6-4

