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Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



BL2R Timers Syrline 17.5 mm - 2 Relays 8A

- > Multi-voltage 12 →240 V AC/DC
- > LED status indicator
- Possibility of external load connection in parallel to the control input
- > 3-wire PNP sensor compatible





Specifications						
Functions	Delay	Output	Nominal rating	Connections	Supply voltage	Code
L - Li	0,1 s →10 days	2 changeover relays	8 A	Screw terminals	12 →240 V ∿/	BL2R08MV1

Output relay		
Contact arrangement	2 CO (SPDT) (ChangeOver -Simple Pole Double Throw-)	
	R1: Follow timing function R2: Follow timing function	
Maximum switching voltage	250 VAC/ 8 A resistive / 250 VDC / 0.3 A resistive	
Switching current rate (resistive)	NO / NC : 8A 250 V AC / 8 A 30 VDC @ 25°C NO / NC : 5A 250 V AC / 5 A 30 VDC @ 60°C	
Minimum switching contact	10 mA / 5 VDC	
Maximum switching power (resistive)	2000 VA / 80 W @ 25°C	
Electrical life	10 ⁵ cycles min at 250 VAC/ 8 A resistive	
Maximum rate (at max switching power)	360 cycles /hour	
Mechanical life	10 x 10 ⁶ cycles	
Rated impulse voltage	5 kV (1.2/50µs)	
Dielectric strength between coil / contacts	IEC 60664-1: 5 kV /1 min / 1 mA / 50 Hz	
Dielectric strength between open contacts	2,5 kV /1 min / 1 mA / 50 Hz	

Timing	
Timing ranges (7 ranges)	0.5→10s, 0.05→1min, 0.5→10min, 0.05→1h,
	$0.5 \rightarrow 10h$, $0.05 \rightarrow 1day$, $0.5 \rightarrow 10days$
Minimum pulse duration typically (relay version)	IEC 1812-1: 30 ms / 100 ms with load
Maximum reset time by de-energisation typically (relay version)	IEC 1812-1: 120 ms
Repeatability	IEC 1812-1: ≤ ± 0,5 %
Repetition accuracy with constant parameters	IEC 1812-1: ≤ ± 10 %
Drift Temperature	≤ ± 0.05% / °C
Voltage-dependent drift	$\leq \pm 0.2\% / V$



Supply			
Multi-voltage power supply	12→240 V∿/		
Operating range	15%, +10%		
Operating frequency (Hz)	50 / 60 Hz ± 5 %		
Galvanic isolation	No		
Max. absorbed power	Approx. 3 VA (V∿) 1.5 W (V=)		
Immunity from micro power cuts	10 ms		
General characteristics			
Insulation voltage, IEC 60664-1	300 V		
Installation category (acc. to IEC/EN 60664-1)	Overvoltage category III; pollution degree 2		
Impulse voltage CEI/EN 60664-1	4 kV (1,2 / 50 μs)		
Clearance / Creepage distances	IEC 60664-1: 3 mm / 3.2 mm		
Breakdown voltage	EN-61812-1: 2,5 kV / 1 min / 1 mA / 50 Hz		
Insulation resistance	EN-01812-1: 2,5 KV / 1 min / 1 min / 50 Hz NFC 93 050: > 500 MΩ / 250 V $=$ / 1min		
Status indication	Un: green LED blinks when count, continuous ON when supplied		
Status indication	R: yellow LED continuous ON when the relay is ON		
Casing	DIN 43880: 17,5 mm		
Fixing: Symmetrical DIN rail	EN 50022: 35 mm		
Mounting position	All positions		
Housing material	Enclosure plastic type UL94 - V0		
Protection (IEC/EN 60529)	Housing: IP40 / Terminal block: IP20		
Terminal capacity Single-wire without ferrule	IEC 60947-1		
Terminal capacity single-wire without terrule	1 x 0.5 → 3.3 mm ² (AWG 20 → AWG 12)		
	$2 \times 0.5 \rightarrow 1.5 \text{ mm}^2 (AWG 20 \rightarrow AWG 16)$		
Max. tightening torque (Nm)	IEC 60947-1		
	0,5 N.m / 4,4 lbf.in		
Operating temperature range (°C)	IEC 60068-2: -20 °C →+60 °C		
Storage temperature range (°C)	IEC 60068-2: -40 °C → +70 °C		
Relative humidity no condensation acc. to IEC/EN 60068-2-30	93% without condensation		
Vibration resistance according to IEC/EN 60068-2-6	\pm 0.15 mm from 10 Hz \rightarrow 60 Hz 2g from 60 Hz \rightarrow 150 Hz		
Impact resistance	IEC 60068-2-27		
	15gn - 11ms; 3 x 6 axis (output OFF)		
	5gn - 11ms; 3 x 6 axis (Output ON)		
Drop to concrete floor	IEC 60068-2-32		
	High: 0.75m		
Weight: casing 17,5 mm	70 g		
	80 g with packaging		
Directives	2014/30/EU: EMC		
	2014/35/EU: low voltage		
Certifications	CE - cULus Listed Industrial Control Equipment - CCC		
Conformity to standards	CEI 60664-1: Insulation coordination for equipment within low-voltage		
	systems CEI 61812-1/ Specified time relays for industrial use		
	UL 60947-4-1/ Industrial Control Equipment (NRNT- Industrial Control		
	Switches)		
Conformity with environmental directives	2015/863/UE: RoHS		
	1907/2006: Reach		
	2012/19/UE: WEEE		
Electromagnetic compatibility IEC 61000-6-2, IEC 61000-6-3,	Immunity for industrial environment		
IEC 61000-6-4	Emission residential environment		
	Emission industrial environment		
Electromagnetic compatibility - Immunity to electrostatic discharges acc to IEC/EN 61000-4-2	Level III Air ± 8 KV / Contact ± 6 KV		



Immunity to radiated, radio-frequency, electromagnetic field acc. IEC/EN 61000-4-3	Level III 10 V/m (80 M Hz to 1 G Hz) 80% AM (1 k Hz) 3 V/m (1,4 →2 G Hz) 80% AM (1K Hz) 1V/m (2 →2.7 G Hz) 80% AM (1K Hz)
Immunity to rapid transient bursts acc. to IEC/EN 61000-4-4	Level III direct \pm 2 kV (power supply) / capacitive coupling clamp \pm 1 KV (command input and outputs)
Immunity to shock waves on power supply acc. to IEC/EN 61000-4-5	Level III line-to-earth ± 2 kV / line-to-line ± 1kV
Immunity to radio frequency in common mode acc. to IEC/EN 61000-4-6	Level III 10 Vrms (0,15 →80 M Hz) 80% AM (1 k Hz)
Immunity to voltage dips and breaks acc. to IEC/EN 61000-4-11	Industrial Class II: 0% residual voltage during 1cycle a.c. power ports 70% residual voltage during 25/30 cycles a.c. power ports 0% residual voltage, 250/300 cycles a.c. power ports Residential: 0% residual voltage during 10 cycle a.c.power ports 40% residual voltage during 10 cycles a.c. power ports
	70% residual voltage during 10 cycles a.c. power ports
Mains-borne and radiated emissions acc. to EN 55022 (CISPR22),	0% residual voltage, 250/300 cycles a.c. power ports EN 55022 / CISPR22 Class B (IT equipment)
EN55011 (CISPR11)	EN 55011 / CISPR11 Class B, Group 1 (Medical equipment)
Curves	
Function L	
Asymmetrical timing, off start Function Li Asymmetrical timing, pulse start	Y1 R1/R2 Toff Ton
	R1/R2
Connections	
1 changeover relay output A1 = Y1 for function L	

