

# **CLM3820 30A -AS Series Device**

### **Description**

Current Limiting Module (CLM) is a chip type surface mountable device that can protect against both overcurrent and overcharging. It comprises a fuse element to ensure stable operation under normal electrical current and to cut off the current when overcurrent occurs. It also comprises a resistive heating element that could be used in combination with a voltage detecting means, such as IC and FET. When overvoltage is detected, the heating element is electrically excited to generate heat to blow the fuse element to achieve overvoltage protection.



#### **Features**

- · Halogen-free
- Overcharging protection
- · Overcurrent protection
- · Surface mountable
- · Fast response time

## **Application**

- Self Balancing
- E-Bike
- Power Tool

- · Automotive applications
- Energy Storage systems
- Drone

## **Agency Approval and Environmental Compliance**

Agency File Number Regulation Standard

E331807 Free IEC 61249-2-21:2003

TA 50428400

RoHS Directive: Compliance (This product complies with RoHS exemption requirements, since the high melting temperature solder and electronic ceramic parts include Lead.)

#### **Electrical Specifications**

Part Number	I <sub>rated</sub> (A)	Cells in series	V <sub>max</sub> (V <sub>DC</sub> )	I <sub>break</sub> (A)	V <sub>OP</sub> (V)	Resistance		Agency Approval	
						R <sub>heater</sub> (Ω)	$R_{\text{fuse}}$ $(m\Omega)$	c <b>71</b> 2'us	TÜVRheinlend
CLM3820P1230-AS	30	3	80	80	8.4 ~ 13.2	3.2 ~ 5.2	0.5 ~ 2.5	✓	✓
CLM3820P1430-AS	30	4	80	80	11.1 ~ 18.4	6.3 ~ 9.3	0.5 ~ 2.5	✓	✓
CLM3820P2030-AS	30	5	80	80	14.0 ~ 23.4	10.0 ~ 15.0	0.5 ~ 2.5	✓	✓
CLM3820P3030-AS	30	6~7	80	80	20.2 ~ 31.5	18.8 ~ 31.2	0.5 ~ 2.5	✓	✓
CLM3820P4030-AS	30	9~10	80	80	28.0 ~ 46.9	40.0 ~ 60.0	0.5 ~ 2.5	✓	✓
CLM3820P5030-AS	30	12~14	80	80	39.6 ~ 62.0	72.4 ~ 120.6	0.5 ~ 2.5	✓	✓



Page: 2 of 6 2021/6/4 Revision: D