

AR6 SERIES CIRCUIT PROTECTION

Single Pole Auto- Reset

•Technical data

- Current rating range 3~30A
- Input voltage rating 12/24 VDC
- Compliances SAE J553
- Contact Endurance 125Vac X150% of rated current >500 cycles
125Vac X200% of rated current >200 cycles
- Insulation Resistance >100MOHM (DC 500V)
- Dielectric Strength > 1,500VAC/min.
- Breaking Capacity 4 times rated current
- Automotive Type Auto- Reset; 12VDC Automotive Type I
- Reset Time Within 60 SEC

•Mechanical/Environmental Data

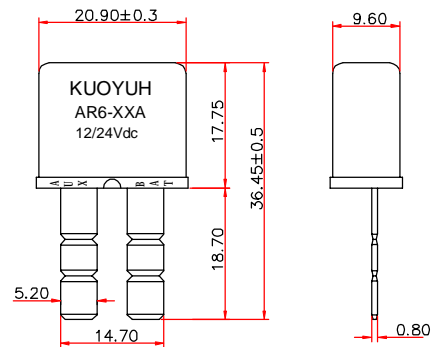
- Operating Ambient Temperature: -10°C to +60°C
- Storage Temperature Rating: -40°C to +100°C.
- Termination: 250"(6.3mm) quick connects or solder terminals

•Typical applications

Battery chargers, trucks, buses, RV's, trolling motors, etc.

•Calibration(at25°C)

- 100% of Rated Current: Hold , No Trip
- 150% of Rated Current: Trip Within 1 Hour.
- 200% of Rated Current: 5-25 sec Trip
- 300% of Rated Current: 1.5-5 sec Trip



•AR6 Order Guide

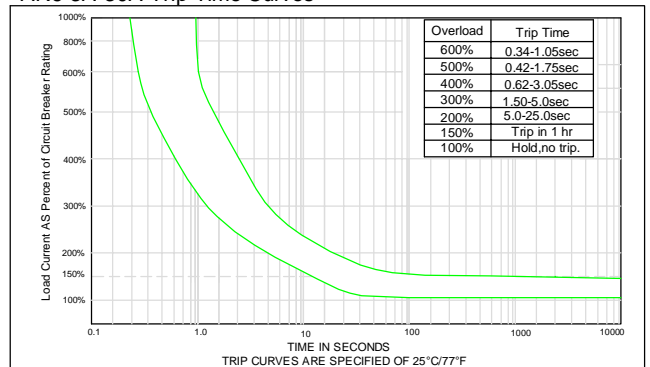
AR6 -**XXX** -**A** -**C**
Series no. Rating Amp Case Type Terminal Type

025= 2.5 Amp
050= 5 Amp
075= 7.5 Amp
080= 8 Amp
100= 10 Amp
125= 12.5 Amp
150= 15 Amp
175= 17.5 Amp
200= 20 Amp
225= 22.5 Amp
250= 25 Amp
300= 30 Amp

A=Matel(AL)

A=7.3±0.5
B=12.5±0.5
C=18.7±0.5

•AR6 3A-30A Trip Time Curves



•Ambient Temperature Correction Factor

Ambient temperature	-10°C	0°C	10°C	25°C	35°C	40°C	50°C	60°C
Multiplication factor	*1.30	*1.20	*1.10	1.00	*0.94	*0.85	*0.73	*0.68

The time/current characteristic curve depends on the ambient temperature prevailing. In order to eliminate nuisance tripping. Please multiply the circuit breaker current ratings by the derating factor shown below.

Example : Normal Continuous Current = 50A
Ambient Temperature = 45°C
Multiplication Factor = 0.85
Recommended Rating= 50A*0.85=58.8A