

Automotive Circuit Breakers 1160, 1610 and 1170 Reduce Vehicle Downtime.



Technical Information

Automotive Circuit Breakers 1160, 1610 and 1170.

E-T-A circuit breakers provide optimum protection against overload and short circuits for all automotive systems. As they are not affected by in-rush currents they are ideally suited to all load circuits including motors. Benefits of E-T-A circuit breakers include:

- Improved electrical protection
- Immediate resettability
- Clear trip indication
- Eliminate the need for spare fuses

Types 1160, 1610 and 1170 will discriminate between in-rush currents and sustained overloads, and their characteristics are stable with time. As a result the conductor does not have to be oversized. Types 1170 and 1610 are interchangeable with blade type fuses and will plug into the same holders, thereby providing an easy retro fit capability. Several versions of E-T-A automotive circuit breakers are available:

automatic reset version (SAE type I), modified reset (SAE type II), manual reset (SAE type III) with optional manual release.

Arrive on time every time. By choosing E-T-A for your electrical system you will enjoy the best circuit protection available and reduce vehicle downtime. **For all types of vehicle.**

Technical data 1160 SAE type II

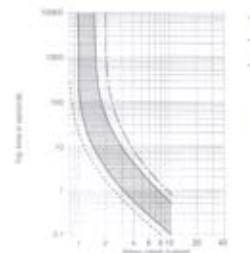
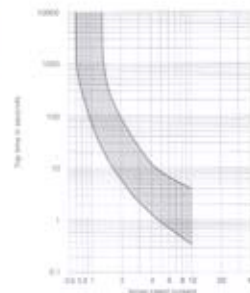
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|---|---------------------|
| Voltage rating | DC 12 V |
| Current ratings | 12...30 A |
| Ambient temperature | -30 ... +60 °C |
| Interrupting capacity (o-o-o) | 200 A, L/R = 2.5 ms |
| Reset time at 23 °C after 5 sec load with U_N | < 35 sec |

Technical data 1610 SAE type I + III

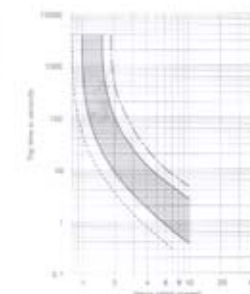
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|--|---------------|---|
| Voltage rating | SAE type III: | 1610-21/1610-H2: up to DC 32 V |
| | SAE type I: | 1610-92: DC 12 V |
| Current ratings | | 5... 30 A |
| Ambient temperature | | -30...+60 °C |
| Service short-circuit breaking capacity | | 300 operations at ≤ 50 A |
| Ultimate short-circuit breaking capacity | | ≥ 3 break operations at 150 A or ≥ 1 break operation at 2000 A |

Technical data 1170 SAE type III

| | |
|--|------------------------------------|
| Voltage rating | up to DC 32 V |
| Current ratings | 3...25 A |
| Ambient temperature | -30...+60 °C |
| Interrupting capacity I_{cn} | 400 A |
| Ultimate short-circuit breaking capacity | ≥ 1 break operation at 2000 A |



150 V
120 V
100 V
75 V
60 V



150 V
120 V
100 V
75 V
60 V




Circuit Protection & Control

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