

Cole Facts

IMPORTANT
PRODUCT
INFORMATION

Circuit Breakers



CIRCUITS NEED PROTECTION.

All electrical circuits need protection so an overload condition can be detected and the circuit opened until the overload can be corrected. The inexpensive protection of a circuit breaker can save the failure of an expensive piece of equipment or an even greater loss due to an electrical fire.

The result of an electrical overload is the generation of heat. A fuse has a metal element which is designed to melt and open the circuit at a relatively low heat. A circuit breaker uses an element of two different metals. Heat causes the elements to bend and separate, thus opening the circuit. A melted fuse must be replaced, but a circuit breaker can continue to function after the cause of the overload is corrected.

Most electrical systems have a number of circuits, and since each circuit can operate independently, each needs protection. With direct current circuits in a battery powered vehicle, the need for circuit protection is important. When comparing the cost of an engine starter or other equipment in a car or truck to the cost of a circuit breaker, it is obvious circuit protection is not a choice but a necessity.

CIRCUIT BREAKERS ARE DESIGNED TO PROTECT EQUIPMENT.

Circuit breakers are the choice for protection in most heavy duty vehicles and equipment. Cole Hersee offers more than 20 types of breakers to suit the requirements of both equipment design engineers and aftermarket replacement, for vehicles on and off the road and equipment in the field or on the construction site.

Cole Hersee circuit breakers are manufactured and tested in accordance with SAE recommended practice J 553C.

Circuit breakers are available as follows:

Type I

Cycle or continuously reset until the overload is corrected.

Type II

Remain open as long as the overload exists. The unit resets when the situation is corrected. Power must be disconnected for the unit to reset.

Type III

Remain open until the unit is manually reset by pushing a button.



Cole Hersee Company

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CF-104

Cole Hersee Circuit Breakers

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Selection of a specific breaker depends on a number of factors including the degree of safety required, the need to continue to operate temporarily, and the amperage level in a particular circuit. High or low ambient temperature can affect breaker operation so the location of the breaker must be considered. A breaker is usually selected with the normal circuit load 75% to 80% of the breaker rating. Cole Hersee circuit breakers are designed for 6, 12 & 24 volt systems.

12 volt Circuit Breakers

Type I • Steel Housings

Series	Mounting	Terminals	Ampere Range
30055	Bracket: along case	Stud	6-50
30056	Snap-in*	Stud	6-50
30128	Bracket: across case	Stud	6-40
30137†	Snap-in*	Stud	6-40
30138†	Bracket: along case	Stud	6-40
30144	Snap-in*	Stud	6-40
30401	Snap-in*	Blade	4-20
30402	Bracket: across case	Blade	4-20
30404	Snap-in	Blade & Stud	10-30
30409	Plug-in	Blade	5-30

† Sealed circuit breakers

*Fit No. 30090 mounting brackets

Type I • Plastic Housings

Series	Mounting	Terminals	Ampere Range
30414	Bracket: across case	Stud	30-50

Type I • Plasticized Steel Housings

Series	Mounting	Terminals	Ampere Range
30063	None	10" leads	6-40
30062	Bracket: along case	10" leads	6-40

Type I • Steel Housings

Dual Breaker Assemblies for Higher Amperage

Series	Mounting	Terminals	Ampere Range
3088	Bracket: along case	Stud	50-80
30507†	Bracket: along case	Stud	50-80
30510	30090 bracket included	Stud	50-80

† Sealed circuit breakers



Bracket: across case.



Bracket: along case.

12 volt Circuit Breakers

Type II • Steel Housings

Series	Mounting	Terminals	Ampere Range
30144	Snap-in	Stud	6-40
30145	Bracket: along case	Stud	6-40

Type II • Plastic Housings

Series	Mounting	Terminals	Ampere Range
30403	Plug-in	Blade	15-30
30408	Plug-in	Blade	10-35

Type II • Plastic Housings • fuse clip mounting

Series	Mounting	Terminals	Ampere Range
30401	Snap-in	Fuse clip	10-40

Type III • Plastic Housings

Series	Mounting	Terminals	Ampere Range
30406	Snap-in	Stud	15-50
30407	Bracket: across case	Stud	15-50

24 volt Circuit Breakers

Type I • Steel Housings

Series	Mounting	Terminals	Ampere Range
30171	Snap-in	Stud	10-30
30172	Bracket: along case	Stud	10-30

Additional 24 volt circuit breakers available; please consult factory.

Circuit Breaker Mounting Brackets

Series	Construction	No. of Gangs	For Cole Hersee series nos.
30090	Steel	2-8	30056, 30137, 30401, 30144, 30404
87128	Nylon	2-12	30056, 30137

FOR MORE INFORMATION ON COLE HERSEE'S FULL LINE OF CIRCUIT BREAKERS PLEASE CONSULT MASTER CATALOG D-272, SECTION "P" OR OUR HEAVY DUTY CATALOG UNDER CIRCUIT BREAKERS.

CH Cole Hersee Co.

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