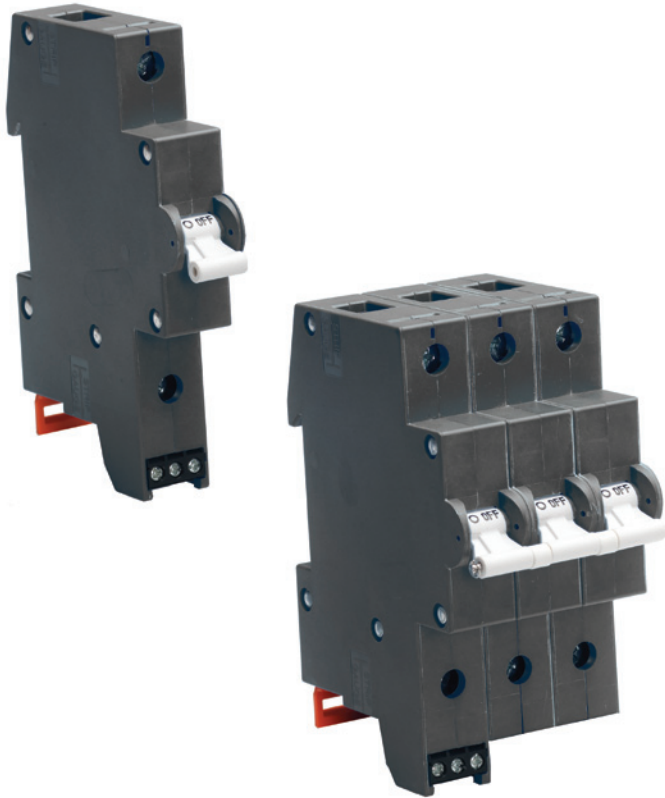


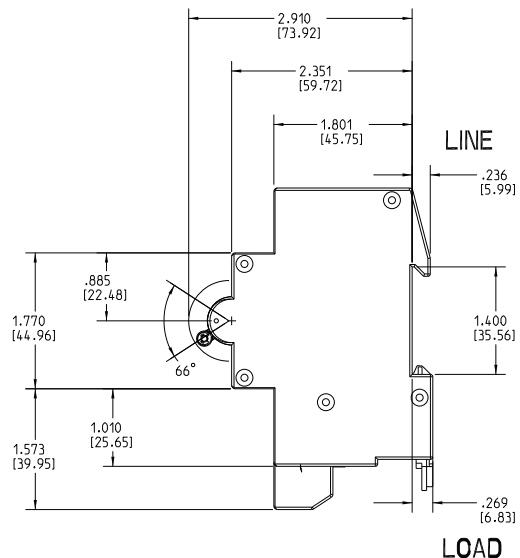
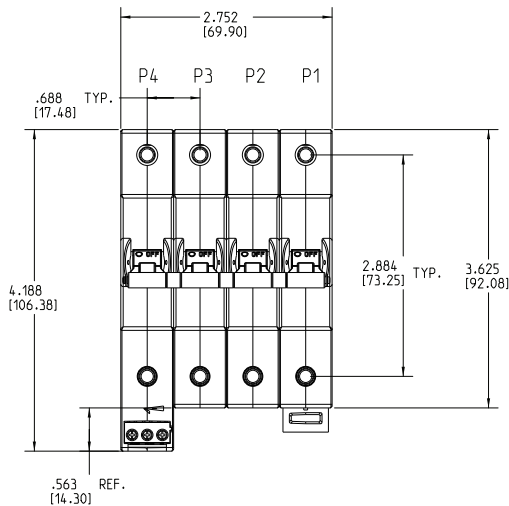
Introducing: G-Series HYDRAULIC/MAGNETIC DIN RAIL CIRCUIT BREAKER



Carling Technologies' G-Series hydraulic/magnetic circuit breakers offer the highest quality solution to your circuit protection requirements. The G-Series is designed to sense over-current conditions and protect an electrical system's wires and equipment. When left unchecked over-current conditions will result in fires and costly damage. Hydraulic/magnetic circuit breakers are considered to be temperature stable and not adversely affected by temperature changes in their operating environment. As such, de-rating considerations due to temperature variations are not required, and heat-induced nuisance tripping is avoided.

Features:

- 1-4 poles
- 0.02 - 63 Amps
- 80 VDC, 240 VAC, 480 VAC
- Mid-trip actuator indication
- Precise temperature independent operation
- Wiping contacts – mechanical linkage with two-step actuation – cleans contacts and ensures longer contact life
- Wide choice of trip time delay curves
- Optional integrated auxiliary contacts
- Unique terminal bus connection system
- DIN rail mounting
- Finger safe terminals
- Suitable for reverse feed
- Common trip linkage between poles – ensures that an overload in one pole will trip all adjacent poles



Notes:

- 1 All dimensions are in inches [millimeters].
- 2 Tolerance ± 0.020 [.51] unless otherwise specified.

Product Bulletin #132 / September 2010

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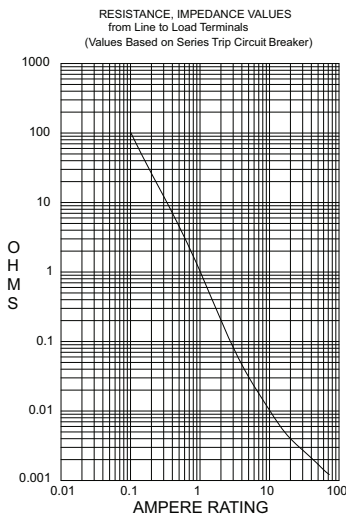


Carling Technologies™

Innovative Designs. Powerful Solutions.

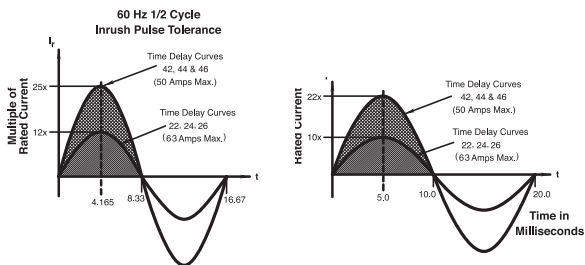
Electrical

Maximum Voltage	AC: 240VAC (single pole), 480VAC (3 poles, additional pole shall be dedicated for neutral break) DC: 80VDC (single pole and multi-pole)
Current Rating	0.2 – 63A. Other ratings available, see Ordering Scheme.
Auxiliary Switch Rating	(optional) Integrated, load side. SPST, 5A 125VAC, 3A 32VDC. Auxiliary switch senses the on & off position of circuit breaker handle, as well as contact arm position. Switch connections are screw terminals.
Insulation Resistance	Minimum of 100 Megohms at 500 VDC.
Dielectric Strength	UL, CSA: 1960 V 50/60 Hz for one minute between all electrically isolated terminals.
Resistance, Impedance	Values from Line to Load Terminal - based on Series Trip Circuit Breaker.



CURRENT (AMPS)	TOLERANCE (%)
0.100 - 5.0	15%
5.1 - 20.0	25%
20.1 - 63.0	35%

Pulse Tolerance Curves



Mechanical

Endurance	10,000 ON-OFF operations @ 6 per minute; with rated current & voltage.
Trip Free	All G-Series circuit breakers will trip on overload, even when actuator is forcibly held in the ON position.
Trip Indication	The operating actuator moves positively to the OFF position when an overload causes the breaker to trip. With mid-trip, the handle moves to the mid position on electrical trip of the circuit breaker. With mid trip handle with auxiliary switch, handle moves to the mid position and the auxiliary switch actuates when the circuit breaker is electrically tripped.

Physical

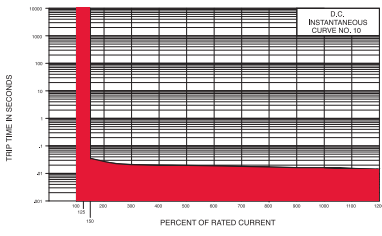
Number of Poles	1- 4
Weight	Approx. 172 grams/pole (4.13 oz).
Standard Colors	Housing: Black

Environmental

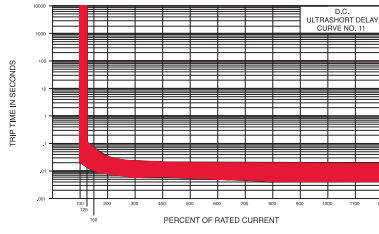
Designed and tested in accordance with requirements of specification MIL-PRF-55629 & MIL-STD-202 as follows:

Shock	Withstands 100 Gs, 6ms sawtooth while carrying rated current per Method 213, Test Condition "I". Instantaneous and ultrashort curves tested @ 90% of rated current.
Vibration	Withstands 0.060" excursion from 10-55 Hz & 10 Gs 55-500 Hz, @ rated current per Method 204C, Test Cond. A. Instantaneous & ultrashort curves tested @ 90% of rated current.
Moisture Resistance	Method 106D, i.e., ten 24-hour cycles @ +25°C to +65°C, 80-98% RH.
Salt Spray	Method 101, Condition A (90-95% RH @ 5% NaCl Solution, 96 hrs).
Thermal Shock	Method 107D, Condition A (five cycles @ -55°C to +25°C to +85°C to +25°C).
Operating Temperature	-40°C to +85°C

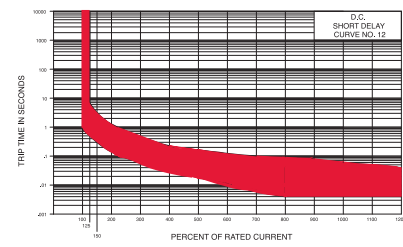
Instantaneous - DC 10



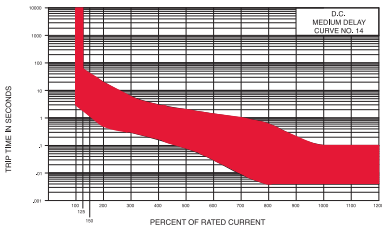
Ultrashort - DC 11



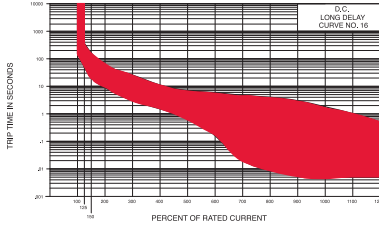
Short - DC 12



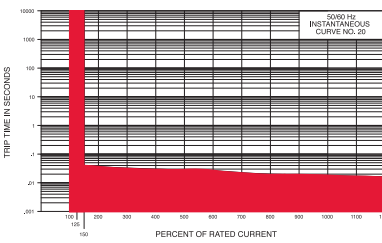
Medium - DC 14



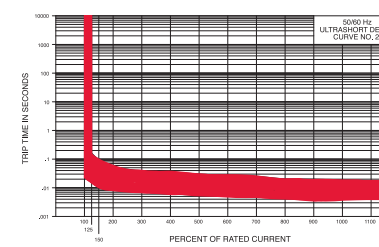
Long - DC 16



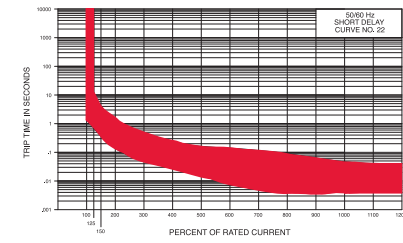
Instantaneous - AC 20



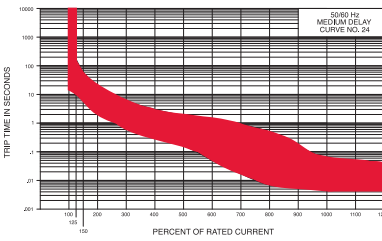
Ultrashort - AC 21



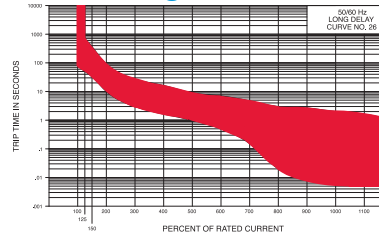
Short - AC 22



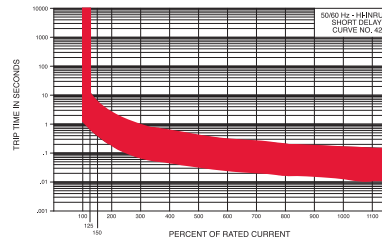
Medium - AC 24



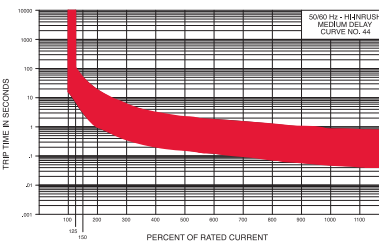
Long - AC 26



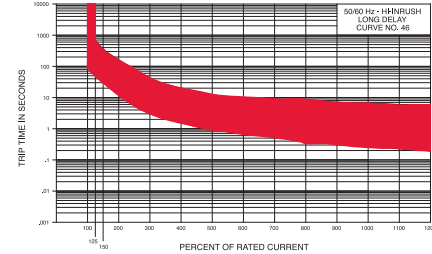
Short - High Inrush AC 42



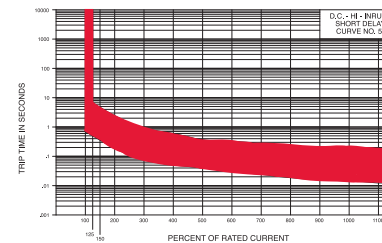
Medium - High Inrush AC 44



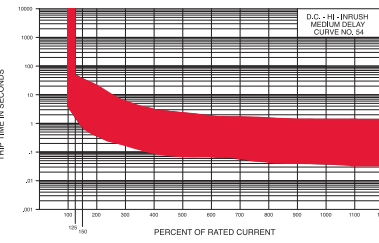
Long - High Inrush AC 46



Short - High Inrush DC 52



Medium - High Inrush DC 54



Long - High Inrush DC 56

