Cutler-Hammer

Cutler-Hammer® Series G®
Motor Protector Circuit Breaker Time Current Curves
240 – 600 V

Trip Curves TC01211001E

Eaton AB DE-ION®
Circuit Breakers

New Information

Contents

Series G Types JGMPS and JGMPH
(Curve No. TC01204006E) **2**

Series G Types LGMPS and LGMPH
(Curve No. TC01207010E) **3**

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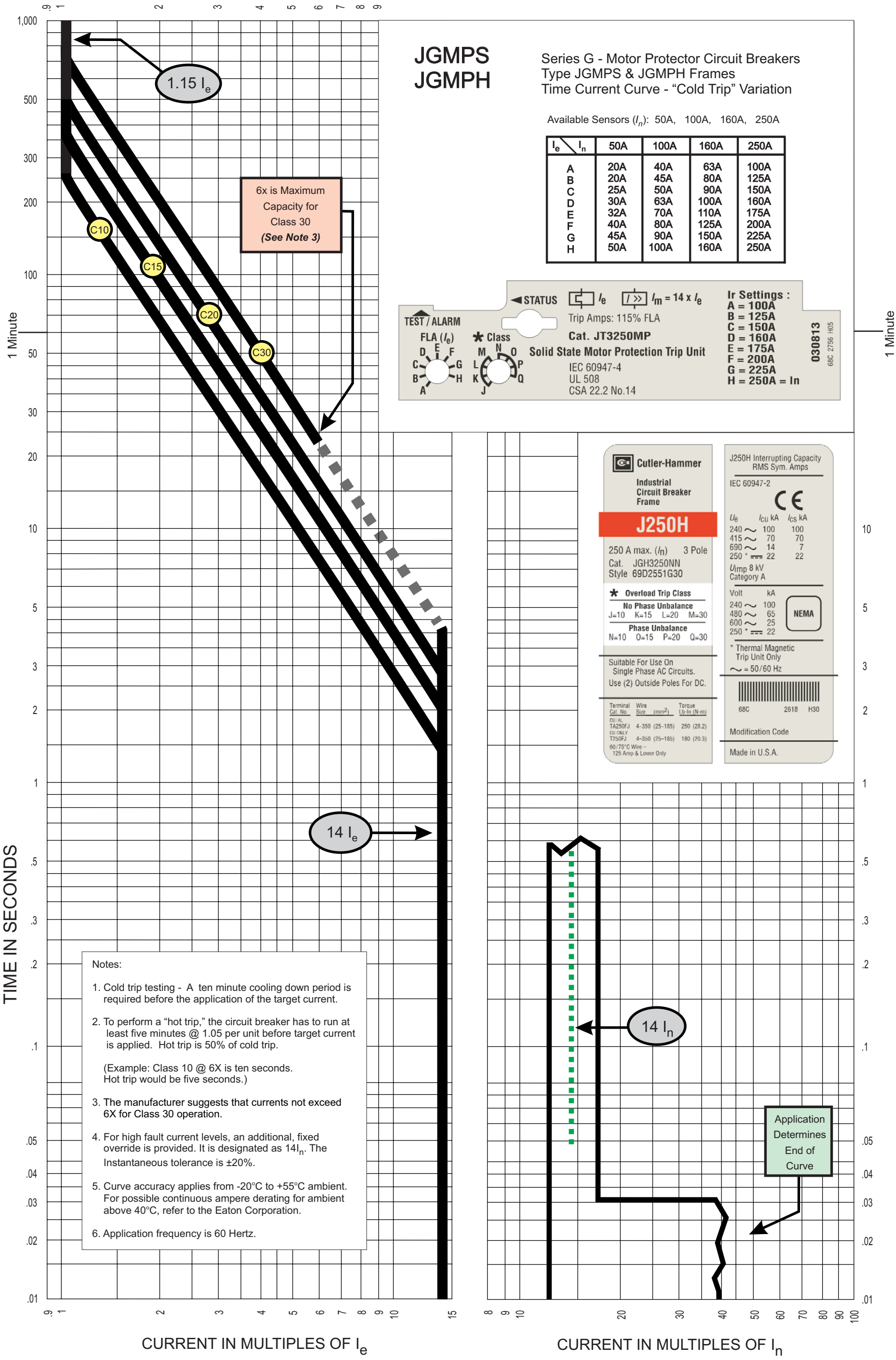
JGMPS
JGMPH

Series G - Motor Protector Circuit Breakers
Type JGMPS & JGMPH Frames
Time Current Curve - "Cold Trip" Variation

Available Sensors (I_n): 50A, 100A, 160A, 250A

I_e \ I_n	50A	100A	160A	250A
A	20A	40A	63A	100A
B	20A	45A	80A	125A
C	25A	50A	90A	150A
D	30A	63A	100A	160A
E	32A	70A	110A	175A
F	40A	80A	125A	200A
G	45A	90A	150A	225A
H	50A	100A	160A	250A



Notes:

1. Cold trip testing - A ten minute cooling down period is required before the application of the target current.
2. To perform a "hot trip," the circuit breaker has to run at least five minutes @ 1.05 per unit before target current is applied. Hot trip is 50% of cold trip.

   (Example: Class 10 @ 6X is ten seconds. Hot trip would be five seconds.)
3. The manufacturer suggests that currents not exceed 6X for Class 30 operation.
4. For high fault current levels, an additional, fixed override is provided. It is designated as $14I_n$. The Instantaneous tolerance is ±20%.
5. Curve accuracy applies from -20°C to +55°C ambient. For possible continuous ampere derating for ambient above 40°C, refer to the Eaton Corporation.
6. Application frequency is 60 Hertz.

Curve Number: TC01204006E
June 2008

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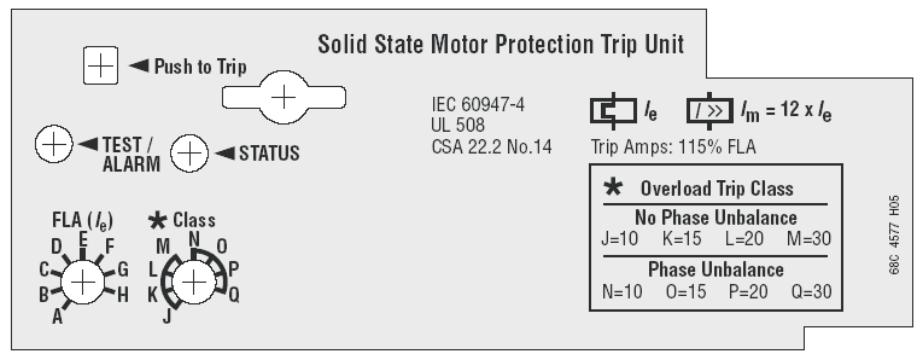
LGMPS
LGMPH

Series G - Motor Protector Circuit Breakers
Type LGMPS & LGMPH Frames
Time Current Curve - "Cold Trip" Variation



Available Sensors (I_n): 250A, 400A, 600A, 630A

I_e \ I_n	250A	400A	600A	630A
A	100A	160A	250A	250A
B	125A	200A	300A	300A
C	150A	225A	315A	315A
D	160A	250A	350A	350A
E	175A	300A	400A	400A
F	200A	315A	450A	500A
G	225A	350A	500A	600A
H	250A	400A	600A	630A

1.15 I_e

6x is Maximum Capacity for Class 30 *(See Note 3)*

C10 C15 C20 C30

12 I_e

12 I_n

Application Determines End of Curve

Notes:

1. Cold trip testing - A ten minute cooling down period is required before the application of the target current.
2. To perform a "hot trip," the circuit breaker has to run at least five minutes @ 1.05 per unit before target current is applied. Hot trip is 50% of cold trip.

   (Example: Class 10 @ 6X is ten seconds. Hot trip would be five seconds.)
3. The manufacturer suggests that currents not exceed 6X for Class 30 operation.
4. For high fault current levels, an additional, fixed override is provided. It is designated as $12I_n$. The Instantaneous tolerance is ±20%.
5. Curve accuracy applies from -20°C to +55°C ambient. For possible continuous ampere derating for ambient above 40°C, refer to the Eaton Corporation.
6. Application frequency is 60 Hertz.

TIME IN SECONDS — 1 Minute

CURRENT IN MULTIPLES OF I_e

CURRENT IN MULTIPLES OF I_n

Curve Number: TC01207010E
June 2008

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