DNV·GL

Certificate No: **E-14279**

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Circuit Breaker

with type designation(s) J250C, JGC, J250E, JGE, J250H, JGH, J250S & JGS

Issued to

Eaton Electrical

Moon Township, United States

is found to comply with

Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

Application:

Shall be installed and tested according to Det Norske Veritas' Rules for Ships and Mobile Offshore Units. The manufacturer's instruction to be observed.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Rated Voltage (V) 690 V AC Rated Current (A) 80 - 250 Frequency (Hz) 50 - 60

This Certificate Is valid until 2019-06-30.

Issued at Høvik on 2015-09-29

DNV GL local station: New York

Approval Engineer: Nicolay Horn



for DNV GL

Digitally Signed By: Laumann, Marit Location: DNV GL Høvik, Norway Signing Date: 2015-11-13

Marit Laumann Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Job Id: **262.1-017170-1**

Certificate No: E-14279

Name and place of manufacturer

Cutler-Hammer Industries, Park Industrial Itabo KM18, Arecibo Plant, Carretera Sanchez, Haina

Product description

Technical info:

Product:	Moulded case circuit breakers
Types:	J250E, J250H and J250S
Number of poles:	3 and 4
Rated current (A):	80, 90, 100, 110, 125, 150, 160, 175, 200 and 225 and 250
Rated operational voltage:	690 V AC and 250 V AC.
Rated insulation voltage:	690
Rated impulse withstand voltage Uimp:	8 kV
Rated frequency Hz:	50 - 60
Utilization category:	A
Max ambient temperature:	50 °C

Short circuit data:

	J250E	J250H	J250S	J250C
	JGE	JGH	JGS	JGC
Ra	ated Short-circu	it Service Brea	king cap. Ics (k/	4)
240V AC	65	100	85	200
415V AC	25	53	45	100
690V AC	6	7	6	12
Rat	ted Ultimate sh	ort- circuit Brea	king cap. Icu (k	(A)
240V AC	65	100	85	200
415V AC	25	70	45	100
690V AC	12	14	12	16
R	lated Short Circ	uit Breaking Ca	pacity (Ics=Icu)
250V DC	10	22	22	42

Application/Limitation

Suitable for use in an IT system with a capacity of 1.2 times the maximum trip current at 415 V AC.

Type Approval documentation

Technical: "Specification of the Certified Product, Annex to KEMA- KEUR

CERTIFICATE no. 2084525.05 issued 2005-09-06.

Test reports:

CQC test Report no: C009-CB2011CQC-033247, issued 2011-06-17

KEMA test reports no.: 98.2808-QUA/COM issued 2003-08-27.

CLARK test report no.: EL8006 dated February 2006.
UL test report no.: MC8387 dated 2004-06-06.
Alion EMC test report no.: 03_0903_1 dated 2003-07-29.
LF Research test report no.: 2006-152 dated December 2006.

Tests carried out

Type tests according to IEC 60947-2 including EMC, vibration test and damp heat test.

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Job Id: 262.1-017170-1

Certificate No: E-14279

Marking of product

EATON/Cutler Hammer - J250E/H/S/C or JGE/JGH/JGS/JGC - Circuit-Breaker - Type data

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the survey to be dealt with:

- · Ensure that type approved documentation is available.
- Ensure that materials used comply with type approved documents and/or referenced material specifications.
- Review design, materials, performance and production process with respect to possible changes, in order to ensure compliance with the type approved documentation and/or referenced material specifications.
- Ensure traceability between manufacturer's product marking and the DNV Type Approval Certificate.

Assessment to be carried out at least every second year.

END OF CERTIFICATE

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