

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Circuit Breaker

with type designation(s)
C60N, C60H & C60L

Issued to

Schneider Electric Industries SAS
Eybens Isere, France

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

Miniature Circuit Breakers

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

Rated voltage (V) 240 / 415 / 440

Rated current (A) 1 - 63

Issued at **Høvik** on **2017-06-20**

This Certificate is valid until **2022-06-19**.

DNV GL local station: **Marseille**

for **DNV GL**

Approval Engineer: **Nicolay Horn**

.....
Andreas Kristoffersen
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.



Name and place of manufacturers

Schneider Electric / Merlin Gerin,
Ales, France

Product description

Product type	Number of poles	Rated Voltage (V)	Courbes (*)	Maximum operating current (A)	Breaking-Capacity	
					Icu/Ics (kA)	U (V)
C60N	1	240 / 415	B, C, D	0,5 - 40A	10/7,5 kA	240V
			B, C	50 - 63A	10/7,5 kA	240V
			B, C, D	0,5 - 40A	3/2,25 kA	415V
	2, 3, 4	240 / 415 / 440	B, C	50 - 63A	3/2,25 kA	415V
			B, C, D	0,5 - 40A	20/15 kA	240V
			B,C	50 - 63A	20/15 kA	240V
			B, C, D	0,5 - 40A	10/7,5 kA	415V
			B,C	50 - 63A	10/7,5 kA	415V
C60H	1	240 / 415	B, C, D	0,5 - 40A	15/7,5 kA	240V
			B, C, D	0,5 - 40A	4/2 kA	415V
	2, 3, 4	240 / 415 / 440	B, C, D	0,5 - 40A	30/15 kA	240V
			B, C, D	0,5 - 40A	15/7,5 kA	415V
C60L	1	240 / 415	B, C, D	0,5 - 40A	10/5 kA	440V
			B, C	0,5 - 25A	25/12,5 kA	240V
			B, C	0,5 - 25A	6/3 kA	415V
	2, 3, 4	240 / 415 / 440				
			B, C	0,5 - 25A	50/25 kA	240V
					25/12,5 kA	415V
					20/10 kA	440V
(*) courbes	B = Ii = 4In	C = Ii = 8,5In	D = Ii = 12In			

Product type	Number of poles	Rated Voltage (V)	Courbes (*)	Maximum operating current (A)	Breaking-Capacity	
					Icu/Ics (kA)	U (V)
C60H	1	60	C	1 to 63A	24	60
	2	125	C	1 to 63A	25	125
	3	125	C	1 to 63A	40	125
	4	250	C	1 to 63A	50	250
C60L	1	60	C	1 to 63A	25	60
	2	125	C	1 to 63A	30	125
	3	125	C	1 to 63A	50	125
	4	250	C	1 to 63A	60	250
(*) courbes		C = Ii = 8,5In				

All tests results are given according to IEC60947-2.

Application/Limitation

Shall be installed and tested according to DNV GL's Rules for Classification of Ships, offshore units and high Speed and light craft.

The manufacturer's instructions to be observed.

Suitable for use in an IT system with a capacity of 1.2 times the maximum trip current at 440 V AC (IEC 60947-2, Annex H).

Type Approval documentation

Tests carried out

Type tests according to IEC 60947-2:(2006+A1:2009), Climatic and Vibration tests in accordance with IEC 60068-1 and 2.

Marking of product

Schneider Electric – Multi 9 C60 N, H, L – Voltage – Current.

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 are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Survey to be performed at 2 and 3.5 year and at renewal.



Job Id: **262.1-007050-4**
Certificate No: **TAE00001ZC**

END OF CERTIFICATE