



HRVATSKI REGISTAR BRODOVA

CROATIAN REGISTER OF SHIPPING

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SCHNEIDER ELECTRIC d.o.o.

Poljička cesta 26
21000 SPLIT
HRVATSKA

U: Splitu, dne: 2017-10-23
At: date:

Naš znak: 2237/TSE/DD/031311
Our ref.:

Vaš znak: dopis od 2017, rujan
Your ref.:

PREDMET: Potvrda o tipnom odobrenju

Poštovani,

Zahvaljujemo se na Vašem zahtjevu te Vam dostavljamo original i dvije kopije Potvrde o tipnom odobrenju:

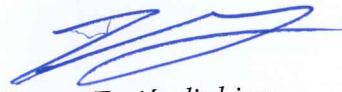
1. QF-PTO-01 03-001609/031311.

S poštovanjem,

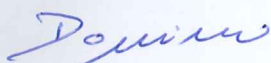
Odgovorni ekspert:



Voditelj odjela za strojarstvo,
elektrouređaje i automatizaciju:


Kruno Ferić, dipl.ing

Darko Dominović, dipl.ing.



Prilog: 3 x Potvrda
Na znanje: HRB, odjel KN
-prilog: 1 x Potvrda
Na znanje: HRB, odjel KI
-prilog: 1 x Potvrda

**POTVRDA O TIPNOM ODOBRENJU**
TYPE APPROVAL CERTIFICATE

Br /No

03-001609/031311

Potvrđuje se da je ovaj proizvod, u skladu s Pravilima za klasifikaciju brodova, Dio 1. - Opći propisi, Odjeljak 3. - Tipno odobrenje proizvoda, odobren za ugradnju na brodove i postrojenja pod nadzorom Hrvatskog registra brodova.
This is to certify that this product, on the basis of the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products, is approved for use on board ships and installations under supervision of the Croatian Register of Shipping.

TIP I OPIS PROIZVODA:

TYPE AND DESCRIPTION OF PRODUCT:

MINIJATURNI PREKIDAČ
MINIATURE CIRCUIT BREAKER**Tip**
Type**Acti 9****Modeli**
Models**iC60N; iC60H; iC60L****PROIZVOĐAČ:**
MANUFACTURER:**SCHNEIDER ELECTRIC INDUSTRIES SAS**31 Rue Pierre Mendes France – Eybens
38050 Grenoble Cedex 9
FRANCUSKA - FRANCE**PROIZVOD UDOVOLJAVA SLIJEDEĆIM PRAVILIMA/PROPISIMA:**
THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:**Hrvatski registar brodova: PRAVILA ZA KLASIFIKACIJU BRODOVA, ELEKTRIČNA OPREMA, DIO 12****Croatian Register of Shipping: RULES FOR THE CLASSIFICATION OF SHIPS, ELECTRICAL EQUIPMENT, PART 12****DETALJI O PROIZVODU I UVJETIMA CERTIFIKACIJE DANI SU NA POLEBINI.**
FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.**ODOBRENJE VRIJEDI DO:**
APPROVAL IS VALID UNTIL:

2021-10-17

Mjesto i datum:
Place and date:

Split, 2017-10-23

M.P.
(Seal)

Marinko Popović, dipl.ing.

NAPOMENA: Ova potvrda nije valjana ako se proizvod ili način njegove proizvodnje promijenio u odnosu na tipno ispitani proizvod. Proizvođač treba obavijestiti Hrvatski registar brodova o bilo kojoj izmjeni na proizvodu kako bi ishodio valjanu potvrdu.
NOTE: This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.

PODROBNJI OPIS PROIZVODA:
DETAILED PRODUCT DESCRIPTION:

Electrical ratings according to IEC / EN 60947-2- ref. temp. 50°C

iC60N Series - electrical ratings

Number of poles: 1P, 1P+N, 2P, 3P, 4P	Utilization Category: A
Rated frequency: 50/60 Hz.	Suitability for insulation: suitable
Rated operational voltage (Ue): 133V/240V, 415V, 440V	Circuit breaker for use in IT system: Yes
Overvoltage category: IV	Tripping curve : B, C, D
Rated impulse withstand voltage: Uimp: 6kV	Degree of protection: IP 20

1 Pole / 1 Pole + Neutral

Ue (V)	In (A)	Icu (kA)	Ics (kA)	Icm (kA)
100 - 133	0,5 - 4	50	50	105
	6 - 63	20	15	40
220 - 240	0,5 - 4	50	50	105
	6 - 63	10	7,5	17

2 Poles / 3 Poles / 4 Poles

Ue (V)	In (A)	Icu (kA)	Ics (kA)	Icm (kA)
100 - 133	0,5 - 4	50	50	105
	6 - 63	20	15	40
220 - 240	0,5 - 4	50	50	105
	6 - 63	20	15	40
380 - 415	0,5 - 4	50	50	105
	6 - 63	10	7,5	17
440	0,5 - 4	25	25	52,5
	6 - 63	6	4,5	9

iC60N Series Double terminal - electrical ratings

Number of poles: 1P, 1P+N, 2P, 3P, 3P+NG, 3P+ND, 4P	Utilization Category: A
Rated frequency: 50/60 Hz.	Suitability for insulation: suitable
Rated operational voltage (Ue): 133V/240V, 415V, 440V	Circuit breaker for use in IT system: Yes
Overvoltage category: IV	Tripping curve : B, C, D
Rated impulse withstand voltage: Uimp: 6kV	Degree of protection: IP 20

Ue (V)	In (A)	Icu (kA)	Ics (kA)	Icm (kA)
100 - 133	0,5 - 4	70	70	154
	6 - 63	30	15	63
220 - 240	0,5 - 4	70	70	154
	6 - 63	15	7,5	30

Ue (V)	In (A)	Icu (kA)	Ics (kA)	Icm (kA)
220 - 240	0,5 - 4	70	70	154
	6 - 63	30	15	63
380 - 415	0,5 - 4	70	70	154
	6 - 63	15	7,5	30
440	0,5 - 4	50	50	105
	6 - 63	10	5	17

iC60H Series - electrical ratings

Number of poles: 1P, 1P+N, 2P, 3P, 4P	Utilization Category: A
Rated frequency: 50/60 Hz.	Suitability for insulation: suitable
Rated operational voltage (Ue): 133V/240V, 415V, 440V	Circuit breaker for use in IT system: Yes
Overvoltage category: IV	Tripping curve : B, C, D
Rated impulse withstand voltage: Uimp: 6kV	Degree of protection: IP 20

1 Pole / 1 Pole + Neutral

Ue (V)	In (A)	Icu (kA)	Ics (kA)	Icm (kA)
100 - 133	0,5 - 4	70	70	154
	6 - 63	30	15	63
220 - 240	0,5 - 4	70	70	154
	6 - 63	15	7,5	30

2 Poles / 3 Poles / 4 Poles

Ue (V)	In (A)	Icu (kA)	Ics (kA)	Icm (kA)
220 - 240	0,5 - 4	70	70	154
	6 - 63	30	15	63
380 - 415	0,5 - 4	70	70	154
	6 - 63	15	7,5	30
440	0,5 - 4	50	50	105
	6 - 63	10	5	17

iC60H Series Double terminal - electrical ratings

Number of poles: 1P, 1P+N, 2P, 3P, 4P	Utilization Category: A
Rated frequency: 50/60 Hz.	Suitability for insulation: suitable
Rated operational voltage (Ue): 133V/240V, 415V, 440V	Circuit breaker for use in IT system: Yes
Overvoltage category: IV	Tripping curve : B, C, K, Z
Rated impulse withstand voltage: Uimp: 6kV	Degree of protection: IP 20

Ue (V)	In (A)	Icu (kA)	Ics (kA)	Icm (kA)
100 - 133	0,5 - 4	70	70	154
	6 - 63	30	15	63
220 - 240	0,5 - 4	70	70	154
	6 - 63	15	7,5	30

Ue (V)	In (A)	Icu (kA)	Ics (kA)	Icm (kA)
220 - 240	0,5 - 4	70	70	154
	6 - 63	30	15	63
380 - 415	0,5 - 4	70	70	154
	6 - 63	15	7,5	30
440	0,5 - 4	50	50	105
	6 - 63	10	5	17

iC60L Series - electrical ratings

Number of poles: 1P, 1P+N, 2P, 3P, 4P	Utilization Category: A
Rated frequency: 50/60 Hz.	Suitability for insulation: suitable
Rated operational voltage (Ue): 133V/240V, 415V, 440V	Circuit breaker for use in IT system: Yes
Overvoltage category: IV	Tripping curve : B, C, K, Z
Rated impulse withstand voltage: Uimp: 6kV	Degree of protection: IP 20

1 Pole

Ue (V)	In (A)	Icu (kA)	Ics (kA)	Icm (kA)
100 - 133	0,5 - 4	100	100	220
	6 - 25	50	50	105
	32 - 40	36	18	75,6
	50 - 63	30	15	63
220 - 240	0,5 - 4	100	100	220
	6 - 25	25	12,5	52,5
	32 - 40	20	10	40
	50 - 63	15	7,5	30

2 Poles / 3 Poles / 4 Poles

Ue (V)	In (A)	Icu (kA)	Ics (kA)	Icm (kA)
100 - 133	0,5 - 4	100	100	220
	6 - 25	50	50	105
	32 - 40	36	18	75,6
	50 - 63	30	15	63
220 - 240	0,5 - 4	100	100	220
	6 - 25	50	25	105
	32 - 40	36	18	75,6
	50 - 63	30	15	63
380 - 415	0,5 - 4	100	100	220
	6 - 25	25	12,5	52,5
	32 - 40	20	10	40
	50 - 63	15	7,5	30
440	0,5 - 4	70	70	154
	6 - 25	20	10	40
	32 - 40	15	7,5	30
	50 - 63	10	5	17

PODRUČJE PRIMJENE / POSEBNI GRANIČNI UVJETI:
*APPLICATION / LIMITATIONS:***Za unutarnju montažu.***For indoor installation.***DOKUMENTACIJA ZA TIPNO ODOBRENJE:**
*TYPE APPROVAL DOCUMENTATION:***KATALOG/ CATALOG Acti 9****CB test Certificates:**

DE1-46675; DE1-46675/M2, DE1-50595

L2E Laboratory test reports:201210125_002 (05/03/2013), 201210125-004 (11/03/2013), 201210125-005 (20/02/2013), 201210125,
201210125-008**VDE test reports:**5010831-4402-0001-2-118536-iC60N; 5010831-4402-0001-3-118536- iC60H; 5010831-4402-0001-4-
118536iC60L; 5010831-4402-0012-170099-1; 5010831-4402-0012-170099-2**OZNAČAVANJE PROIZVODA:**
*MARKING OF PRODUCT:***Kako je navedeno u opisu proizvoda.***As is indicate in product description.***UVJETI ZA CERTIFIKACIJU:**
*CONDITIONS FOR CERTIFICATION:***Ne / Not**