

TYPE APPROVAL CERTIFICATE

This is to certify:
That the Terminal Block

with type designation(s)
SNK series

Issued to
ABB France
CHASSIEU Cedex, France

is found to comply with
DNV GL rules for classification – Ships and offshore units

Application :
For installations inside switchboards/enclosures.

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

This Certificate is valid until **2020-12-31**.

Issued at **Høvik** on **2015-12-16**

DNV GL local station: **Marseille**

Approval Engineer: **Nicolay Horn**

for **DNV GL**

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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.

Certificate No: **TAE00000ST**
File No: **828.30**
Job Id: **262.1-011941-4**

Name and place of manufacturer

ABB Entrelec SP ZOO
Industrial Park UL Grunwaldzka 38
Nowa Wies Leborska, Poland

ABB France
Activité Raccordement, 3 rue Jean Perrin-
CS90009- 69687 Chassieu Cedex, France

Product description

Terminal blocks including accessories.

SNK Series: Screw clamp connection. Rail mounting.

Insulation material: Polyamid 6.6 PA

Type designation	Rated Cross section (mm ²)	Current* (A)	Voltage* (V)	Protection	Function
ZS4	4	32	1000	IP20	Feed-Through
ZS4-PE	4	-	-	IP20	Ground
ZS4-PE-R2	4	-	-	IP20	Ground
ZS4-D1	4	29	800	IP20	Double deck with 1 Feed-Through circuit
ZS4-D2	4	29	800	IP20	Double deck with 2 Feed-Through circuits
ZS4-D2-S	4	25 / 29 ⁽¹⁾	630	IP20	Double deck with 1 disconnect circuit and 1 feed-through circuit
ZS4-D2-S-T2	4	25 / 29 ⁽¹⁾	630	IP20	Double deck with 1 disconnect circuit with test socket screws and 1 feed-through circuit
ZS4-D2-SF1	4	6.3 / 32 ⁽²⁾	800	IP20	Double deck with 1 fuse circuit and 1 feed-through circuit
ZS4-D2-SF1-R1	4	6.3 / 32 ⁽²⁾	800 ⁽³⁾	IP20	Double deck with 1 fuse circuit with blown fuse indicator and 1 feed-through circuit
ZS4-D2-SF1-R3	4	6.3 / 32 ⁽²⁾	800 ⁽⁴⁾	IP20	Double deck with 1 fuse circuit with blown fuse indicator and 1 feed-through circuit
ZS4-T3	4	32	800	IP20	Triple deck with 3 feed-through circuits
ZS4-T3-R1	4	32	800	IP20	Triple deck with 3 feed-through circuits
ZS4-S	4	25	400	IP20	Disconnect with blade
ZS4-S-R1	4	26	400	IP20	Disconnect with blade
ZS4-S-R2	2,5	18	400	IP20	Disconnect with lever
ZS4-S-R3	2,5	18	630	IP20	Disconnect with lever
ZS4-S-T2-R1	4	26	400	IP20	Disconnect with blade and Test Socket
ZS4-S-T2.3-R1	4	26	400	IP20	Disconnect with blade and Test Socket
ZS4-SF	4	6,3	500	IP20	5x20 fuses
ZS4-SF-T2	4	6,3	500	IP20	5x20 fuses with Test Socket Screws
ZS4-SF-R1	4	6,3	500 ⁽³⁾	IP20	5x20 fuses with blown fuse Indicator
ZS4-SF-R2	4	6,3	500 ⁽³⁾	IP20	5x20 fuses with blown fuse Indicator and Test Socket Screws
ZS4-SF-R3	4	6,3	500 ⁽⁴⁾	IP20	5x20 fuses with blown fuse Indicator
ZS4-SF-R4	4	6,3	500 ⁽⁴⁾	IP20	5x20 fuses with blown fuse Indicator and Test Socket Screws
ZS4-R1	2,5	24	800	IP20	Feed-Through
ZS4-R2	4	32	800	IP20	Feed-Through
ZS4-SF1	4	6,3	630	IP20	5x20 & 5x25 fuses
ZS4-SF1-T2	4	6,3	630	IP20	5x20 & 5x25 fuses with Test Socket Screws

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ZS4-SF1-R1	4	6,3	630 ⁽³⁾	IP20	5x20 & 5x25 fuses with blown fuse Indicator
ZS4-SF1-R2	4	6,3	630 ⁽³⁾	IP20	5x20 & 5x25 fuses with blown fuse and Test Socket Screws
ZS4-SF1-R3	4	6,3	630 ⁽⁴⁾	IP20	5x20 & 5x25 fuses with blown fuse and Indicator
ZS4-SF1-R4	4	6,3	630 ⁽⁴⁾	IP20	5x20 & 5x25 fuses with blown fuse I and Test Socket Screws
ZS6	6	41	1000	IP20	Feed-Through
ZS6-3S	4	32	800	IP20	Feed-through with 3 connections
ZS6-4S	4	32	800	IP20	Feed-through with 4 connections
ZS6-S-4S-T2	4	27	500	IP20	Disconnect with blade with 4 connections and with test socket screws
ZS6-S	4	25	500	IP20	Disconnect with blade
ZS6-PE	6	-	-	IP20	Ground
ZS6-3S-PE	4	-	-	IP20	Ground
ZS6-4S-PE	4	-	-	IP20	Ground
ZS6-D1	6	40	800	IP20	Double deck + 1 Feed-Through circuit
ZS6-D2	6	40	800	IP20	Double deck + 2 Feed-Through circuits
ZS6-D1-PE	6	-	-	IP20	Double deck with 1 ground circuit
ZS6-D2-PE	6	41	800	IP20	Double deck with 1 feed-through circuit and 1 ground circuit
ZS10	10	57	1000	IP20	Feed-Through
ZS10-S	4	25	630	IP20	Disconnect with blade
ZS10-SF	10	10	630	IP20	For 6.3x32 fuses
ZS10-SF-R1	10	10	630 ⁽³⁾	IP20	For 6.3x32 fuses - with blown fuse
ZS10-SF-R3	10	10	630 ⁽⁴⁾	IP20	For 6.3x32 fuses - with blown fuse
ZS10-S-R2	4	25	630	IP20	Disconnect with lever
ZS10-ST	10	50	630	IP20	Test disconnect with sliding link
ZS10-ST-1	10	50	630	IP20	Test disconnect with sliding link for Potential Transformer circuits
ZS10-ST-T4	10	50	630	IP20	Test disconnect with sliding link for Current Transformer circuits
ZS10-R1	10	57	630	IP20	Feed-through
ZS10-PE	10	-	-	IP20	Ground
ZS10-PE-R1	10	-	-	IP20	Ground
ZS16	16	76	1000	IP20	Feed-Through
ZS16-PE	16	-	-	IP20	Ground
ZS25	16	76	1000	IP20	Feed-Through
ZS25-PE	16	-	-	IP20	Ground
ZS35	35	125	1000	IP20	Feed-Through
ZS35-PE	35	-	-	IP20	Ground
ZS50	50	150	1000	IP20	Feed-Through
ZS50-PE	50	-	-	IP20	Ground
ZS70	70	192	1000	IP10	Feed-Through
ZS70-PE	70	-	-	IP10	Ground
ZS95	95	232	1000	IP10	Feed-Through
ZS95-PE	95	-	-	IP10	Ground

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- (1) : Disconnect circuit / feed-through circuit
(2) : Fuse circuit / feed-through circuit
(3) : Operating voltage limited to 110 V due to fuse indicator circuit, rated for 24 - 110 V
(4) : Operating voltage limited to 250 V due to fuse indicator circuit, rated for 115 - 250 V

Type Approval documentation

Technical info: Spread sheet, Part of CD "ABB France DNV Certification"
SNK Series Terminal Blocks, Parts of catalogue.

Test reports: LCIE 97800-594321A, B, E & I, dated 2011-04-30, ABB test reports 20070864-M1, 20071023-M1, 20071025-M1, 20071146-M1 to 20071150-M1, 20080167-M1 & 20080167-M1, 20080205-M1, 20080252-M1 to 20080255-M1, 20080526-M1 all dated 2010-10-27, 20080774-M1, dated 2010-10-04, 20080915-M1, 20090178-M1 to 20090181-M1 all dated 2010-10-27, 20090259 dated 2010-11-15, 20090260-M1 2010-10-27 and 20100605-M1 dated 2010-11-15. All test reports part of CD "ABB France DNV Certification" ABB Test reports nos. 20130419 dated 2013-10-15 & 20130597 dated 2014-02-06. LCIE test certificates nos. FR 615322B dated 2011-09-23, FR 617238 & 617237 dated 2011-12-02, FR 634633 dated 2013-03-01, FR 640069 dated 2013-04-11, FR 641215 dated 2013-07-25, FR 648815 dated 2013-10-28 & FR 631719A dated 2013-05-02 TUV test certificate no, HU-00113B-A1. Intertek Semco test certificate no. SE-70280 dated. 2012-09-18. ABB environmental test reports nos. 20110412-M & 20110413-M dated 2013-01-28, 20120701 dated 2013-02-21, 20130030 dated 2013-02-15, 20130151 & 20130157 dated 2013-04-30, 20130158 dated 2013-07-04, 20130196 dated 2013-09-19, 20130199 dated 2013-10-08, 20130270 dated 2013-07-25 and 20130419 dated 2013-10-15

Tests carried out

Type tests in accordance with IEC 60947-7-1, IEC 60947-7-2 & IEC 60947-7-3, Heat/cold test, Damp heat & Vibration test.

Marking of product

ABB - Type designation according to IEC 60947-7-1, IEC 60947-7-2 & IEC 60947-7-3, standard imprinted on the product.

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 assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and 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.

Assessment to be performed at least every second year.

END OF CERTIFICATE