

Prepared (also subject responsible if other) BNEWIFCA (EMWMAGB)		No. 1301-SXK 111 5372 Uen		
Approved BNEWIFCA (M. Oscarsson)	Checked	Date 2018-10-25	Rev B	Reference

M8 Grounding Kit, Outdoor

1 Description

Grounding kit for outdoor use, containing a black grounding cable with M8 cable lugs and A2 stainless steel mounting hardware.

Each kit comprises:

- 1 pcs of grounding cable
- 1 pcs of M8x16 mm hexagon head bolt (ISO 4017)
- 1 pcs of M8 nut
- 1 pcs of M8 washer 8.4x16x1.6
- 1 pcs of M8x10 mm hex socket cap screw (ISO 4762)
- 1 pcs of M8 internal tooth lock washer

2 Grounding Cable Design

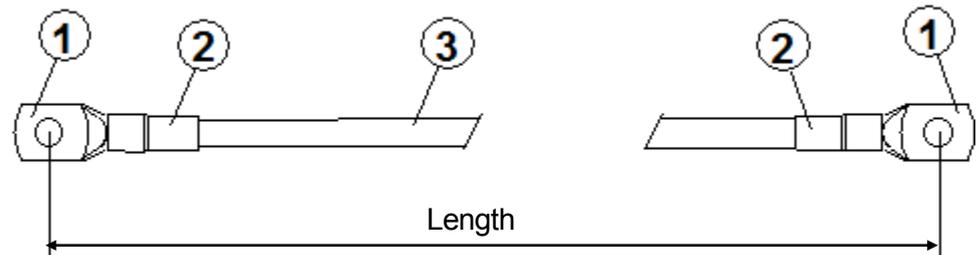


Figure 1.

2.1 Parts List

Pos	Qty	Description	Ericsson ref. P/N	Comment
1	2	Cable Lug, M8	SNG 802 27	See § 2.3
2	2	Glue heat shrink sleeve	N/A	Flammability min UL 94 V-2. Note that the sleeve must not interfere with the cable lug seating plane when assembled.
3	2 m	Cable, 16 mm ²	TFK 100 507/00	See § 2.2
4*	1	Product identity marking	N/A	See § 6
5*	1	M8 x 16 mm screw	3/SBA 188 080/0160	See § 2.4. Note that material shall be A2.
6*	1	M8 nut	SBM 146 080/78	See § 2.4. Note that material shall be A2.
7*	1	M8 washer 8.4x16x1.6	SCA 103 080	See § 2.4. Note that material shall be A2.
8*	1	M8 x 10 mm screw	78/SBA 166 080/0100	See § 2.4. Note that material shall be A2 and that the thread shall be waxed.
9*	1	M8 lock washer	SXA 124 4048/1	See § 2.4.

(*) Not present in the drawing.

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2.2 Cable requirements

2.2.1 Design

Conductor: Stranded copper wires according to IEC 60228, class 5
 Insulation: PVC, lead free
 Black, for outdoor use (UV resistance, non water absorbing)
 Fire resistance; VW-1 and IEC 60332-1
 Marking; manufacturer name, conductor size, "VW-1"
 See 1301-TFK 1005 rev N for additional requirements.

2.2.2 Limiting Values

Quantity	Condition	Value	Unit
Insulation strength		500 min	V DC
Bending radius		65 max	mm
Conductor resistance		1.2 max	Ohm/km

2.3 Cable lug requirements

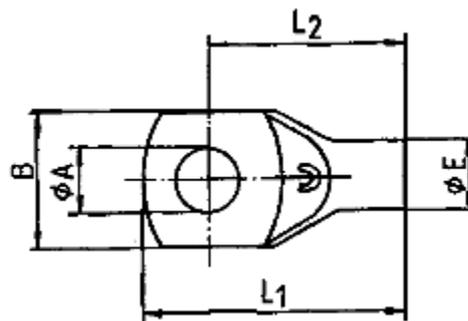


Figure 2

Dimensions: $\text{ØA} = 8.5 \text{ mm}$
 ØE shall fit the conductor (see requirements in 105 82-105)
 $B = 13 \text{ mm}$

Material: Tin plated copper

See 1301-SNG 802 for tolerances and additional requirements

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2.4 Screw, washer and nut requirements

Applicable for all part if not otherwise stated:
Material shall be A2 stainless steel

Screw #1:

Screw trade name: ISO 4017 M6S M 8X16
See 1301-SBA 188 for additional requirements.

Washer #1:

Washer trade name: BRB 8.4X16X1.6
See 1301-SCA 103 for additional requirements

Nut:

Nut trade name: ISO 4032 M6M M 10 and ISO 4032 M6M M 8
See 1301-SBM 146 for additional requirements

Screw #2:

Screw trade name: ISO 4762 MC6S M 8X10
See 1301-SBA 166 for additional requirements.
The screw shall be waxed, see document 105 86-MTV 110 0002/1

Washer #2:

Washer trade name: No trade name, Ericsson unique design
See 13043-SXA 124 4048/1 for additional requirements

Note:

Screw #2 shall be pre-assembled into one of the cable lugs and be kept in place by washer #2 (insert the screw into the cable lug and press the washer over the threads until just almost fully seated against the cable lug back end. It shall be possible to easily rotate the screw also with the locking washer in place).



Figure 3

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2.5 Cable assembly requirements

Design, manufacturing and testing of the crimp joints shall be performed in accordance with Ericsson requirement specification 105 82-105 Uen.

3 Environmental Resistance

Quantity	Condition	Value	Unit
Operating temp. range		-20 to +70	°C
Storage temp. range		-40 to +85	°C
Vibration	IEC 60068-2-6		
Shock	IEC 60068-2-27		
Moisture	At 95% RH, 21 days, IEC 60068-2-3		

4 Banned and Restricted Substances

All included parts shall be RoHS compliant.

All included parts shall be free from Ericsson banned and restricted substances according to document 2/000 21-FAU 104 04 Uen.

5 Product Quality

General:

The product shall meet applicable requirements in Quality specification 105 63-2031 Uen.

Pull-off load requirement:

See document 105 82-105, table 1 stating:
2400 N for 16 mm² cable

Reliability:

The product shall be designed for a service life time of min 20 years.

Design:

Once an out turn sample is approved, neither the design nor the included material may be changed without approval from Ericsson design responsible.

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6 Product identity marking

The product identity marking shall be printed on the cable jacket.

Note that it's the grounding kit product identity SXK 111 5372/1 RXX that shall be used.

7 Product/Transport packaging and marking

- Each grounding kit shall be put in a low charging plastic bag, slightly bigger than the coil.
The cable shall be formed to a coil with diameter 170 ± 10 mm
Seal the plastic bag by welding.
Sealing shall be done so that the cable coil gets a tight fit in the bag.
- The not pre-assembled piece parts shall be packed into a small plastic bag to be put in the bigger grounding kit bag as described above.
- Each package shall be marked acc. to § 3 in 102 01-1003 Uen.
See § 5.1.3 in 102 01-107 for recommended label

8 References

1301-SNG 802	Product specification, Cable lug
1301-SBA 188	Product specification, Screw #1
1301-SCA 103	Product specification, Washer #1
1301-SBA 166	Product specification, Screw #2
105 86-MTV 110 0002/1	Surface treatment, Screw #2
13043-SXA 124 4048/1	Product specification, Washer #2
IEC 60068-2-3	Test methods, moisture
IEC 60068-2-6	Test methods, vibration
IEC 60068-2-27	Test methods, shock
105 63-2031	General quality requirements on components
2/000 21-FAU 104 04	Ericsson banned and restricted substances
105 82-105	Crimping requirements
102 01-1003	Marking of Product, Outer and Transport-packaging
102 01-107	Markings for Products and Packages

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9 Note

In case of deviation on the purchased product and this document, ERICSSON responsible must be informed before the deviations take place.

10 Product List

Product number	Figure	Nom. Cable conductor cross section	Length
SXK 111 5372/1	1	16 mm ²	2 m

11 Document Revision Information

Revision	Description
A	First revision
B	§ 2.1 & 2.4; requirement added: - Screw pos 8 (Screw #2) shall be waxed.