



*Israel Electric Corporation Ltd.
Marketing Division
National Network Unit*

Edition:8

Issued date: April 2016

Page No. 1 of 13

NPS – 63/8 Specification for
P.V.C. Underground Power Cable Covers

Specification N°: NPS - 63/8

Underground Power Cable Covers

Replaces specification N°: NPS - 63/7

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Haifa- Israel



Table of contents:

No.	Clause	Page No
1	PURCHASER	
2	NAME OF ITEM&PROJECT	
3	LOCATION OF ITEM&PROJECT	
4	SCOPE OF WORK	
5	TERMINAL POINTS&TERMINAL CONNECTION	
6	CYBER&INFORMATION SECURITY	
7	QUALITY ASSURANCE&QUALITY CONTROL	
8	STANDARDS & CODES	
9	TECHNICAL DOCUMENTS	
10	TECHNICAL REQUIREMENTS	
11	TESTS & INSPECTIONS	
12	PACKAGING &DELIVERY	
13	STORAGE &HANDLING	
14	NAMEPLATE/MARKING	
15	NOTES	
16	SPECIAL REQUIREMENTS	
17	REVISIONS	

Annex A : Summary of data (Questionnaire)

Annex B: Quality Requirements.

Annex C: Statement of manufacturing experience



1. PURCHASER

The Israel Electric Corporation Limited (IECo.)

2. NAME OF ITEM&PROJECT

This specification is applicable for PVC Underground Power Cable Covers

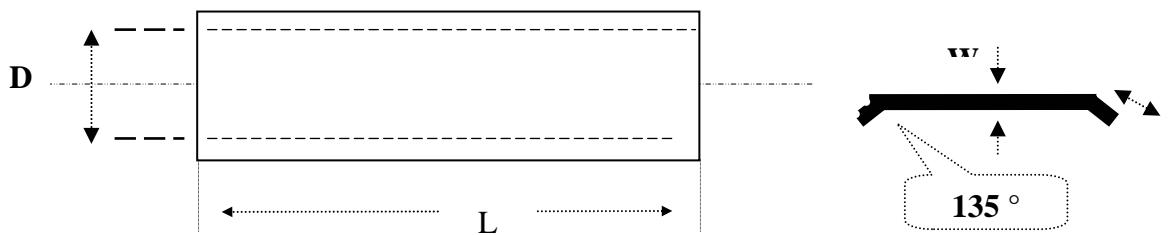


Fig 1: Cover dimensions (Non scaled).

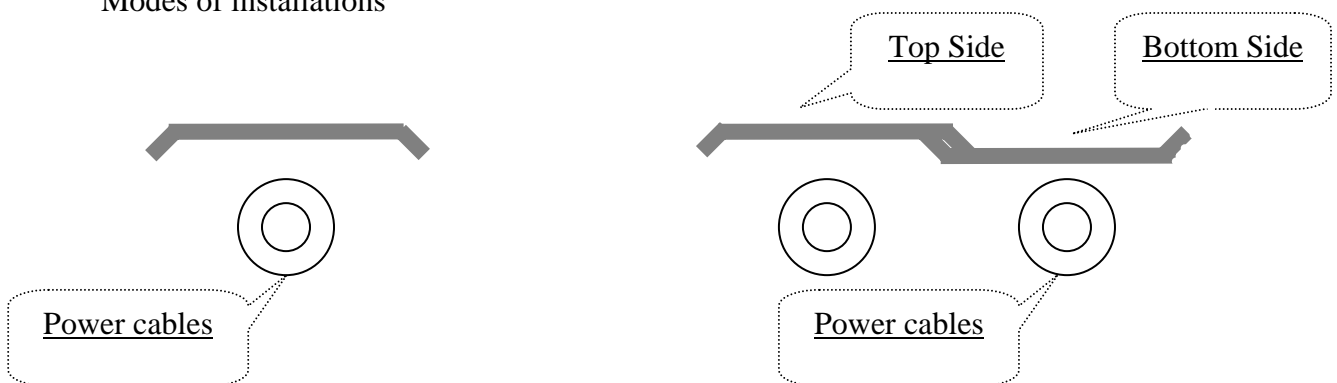
IEC P/N	L (mm)	D (mm)	d (mm)	W (mm)	Color
477653	1000 ± 4	200 ± 2	32 ± 2	2.2 ± 0.2	Shiny Yellow

Table 1: Catalog number and Dimensions

3. LOCATION OF ITEM&PROJECT

The specified cover plates are designed to be used in the underground network.

Modes of installations





4. SCOPE OF WORK

The specified cover plates are designed to provide an additional preventive for warning about the presence of underground buried cable.

4.1 PROJECT DESCRIPTION N/A

4.2 SCOPE OF SUPPLY

The cover plates will be used in underground installation of power cables.
The cover plates will be manufactured from PVC.

5. TERMINAL POINTS&TERMINAL CONNECTION –NA

6. CYBER&INFORMATION SECURITY –NA

7. QUALITY ASSURANCE&QUALITY CONTROL

7.1 Quality Management System (QMS)

7.1.1 Definition:

7.1.1.1 Certification Body (CB) – An independent external body authorized to confirm that the manufacturer's Management System conforms to the requirements specified in the standard, by issuing a certificate. The Certification Body should be accredited to certify by an Accreditation Body.

7.1.1.2 Accreditation Body (AB) – An independent body, being a member of the International Accreditation Forum Multilateral Arrangement – IAF MLA, having authority to formally approve, by means of document, the competence of a certification body to provide certification services

7.1.2 The manufacturer shall have a Quality Management System (QMS) having a certificate evidencing compliance with the requirements of the valid revision of ISO 9001 or other equivalent standard which specifies requirements for Quality Management System, on the date specified for submission of the proposal.

7.1.3 Approval of conformance with the ISO 9001 requirements, as indicated in clause 1.2 above, shall be in a form of a certificate issued by a Certification Body (CB) which is accredited by an Accreditation Body (AB).

7.1.4 The certificate should bare the logo of the CB and of its Accreditation Body and/or the logo of the IAF.



7.1.5 The certificate shall be valid on the date set for submission of the proposal.

7.1.6 The certificate shall be valid for the scope of activities requested in the request for proposal.

7.2. Quality Requirements

7.2.1 The Quality Requirements are specified in Annex ? of this specification: Q- APP-02 rev. 4 – Quality Requirements.

7.2.2 The Purchaser or his authorized representative shall have the right to inspect and observe the production, inspection and testing of the Work at any facilities where work is performed, including those of Contractor and its subcontractors.

8. STANDARDS & CODES:

Unless otherwise stated, the plates shall be designed, manufactured and tested in accordance with the requirements of the latest published recommendation of the following standards:

1.	DIN 54841-5:2015-09	Plastic warning device for underground cables and pipe lines-Part 5 Cover Plates
2	DIN EN ISO 1183-2:2004-10	Plastics- Methods for determining the density of cellular plastics- Part 2 –Density gradient column method
3	ASTM D 792	Standard Test Methods for Density and specific gravity (Relative Density) of Plastics by Displacements
4	DIN EN ISO 178:2013-09	Plastics –Determination of flexural properties
5	DIN EN ISO 604:2003-12	Plastics –Determination of compressive properties (Modulus of Elasticity by tensile, Compression and Flexural Tests)
6	DIN 51612	Testing of thermal insulating material determination of thermal conductivity
7	DIN 52612	Testing of thermal insulating materials; determination of thermal conductivity
8	ISO 527.1:2012	Determination of tensile properties
9	EN ISO 846	Plastics. Evaluation of the action of microorganisms



9. TECHNICAL DOCUMENTATION

9.1 GENERAL

All the mentioned documents shall be in English or Hebrew.

The I.E.Corp. reserves the right to allow a Bidder to submit part of the required documents at a later date ,as prescribed by I.E.C.

9.2 TECHNICAL DOCUMENTS AND SAMPLES TO ACCOMPANY THE PROPOSAL

The Bidder shall submit together with his offer the following documents from the Manufacturer :

9.2.1 Valid ISO 9001 certificate as defined in threshold conditions.

9.2.2 Documents proving experience :

- A reference list that confirms at least 3 (three) years of experience, during the last 5 (five) years, in manufacturing and supplying the offered or similar plates. The list shall contain the total supplied quantities per year and the name of the purchaser.

Similar – the same material, may differ size and inscription

9.2.3 Complete questionnaire (annex A of this specification) , **signed by an authorized officer of the manufacturer.**

9.2.4 The Proposer shall submit to the IECo together with his bid, one sample of the offered Cover plate. The sample shall be delivered by the bidders directly to the sample storehouse of the I/E/Co Supply and Store Devision
The samples delivered by the successful Bidder shall remain in the I.E.Corp. possession.

Samples delivered by Bidders who are not successfully awarded the contract/order and which were not damaged or destroyed during the tests performed by I.E.Corp. will be put at the disposal of the Bidder. Sample not claimed within two months after the award, will be disposed of by the I.E.Corp

9.2.5 Detailed documents

- General outline drawing with dimensions, materials



Israel Electric Corporation Ltd.
Marketing Division
National Network Unit

Edition:8	NPS – 63/8 Specification for P.V.C. Underground Power Cable Covers
Issued date: April 2016	
Page No. 7 of 13	

- Country of Manufacturer
- Part number.
- Description of the marking.
- Description of the packing..
- Storage and transport instruction
- Quality Assurance manual including Quality Procedures.

Note: All the above documents shall be in English or Hebrew.

9.3 TECHNICAL DOCUMENTS AND SAMPLES AFTER NOTIFICATION OF AWARD

After notification of award, and before production of all ordered equipment, the Contractor shall manufacture on cover plate as prototype for Israel Electric Corp. approval.

The printing block and the printed area layout shall be approved by IEC before starting the covers manufacturing procedure

Delivery approval

The Contractor shall submit to the Purchaser the **Routine Test reports** for approval prior to the delivery of the equipment.

The equipment shall be delivered only after approval of the routine test report .

10. TECHNICAL REQUIREMENTS:

10.1 Material of the plate: PVC

10.2 Density : $1.4 \text{ g/cm}^3 \pm 10\%$

10.3 Designed for continuous operation up to 50°C.

10.4 Tensile strength: $>20 \text{ N/mm}^2$

10.5 Increased mechanical strength.

10.6 Pulling resistance : $> 10 \text{ N/mm}^2$

10.7 Elongation at break : $> 30\%$

10.8 Elasticity module

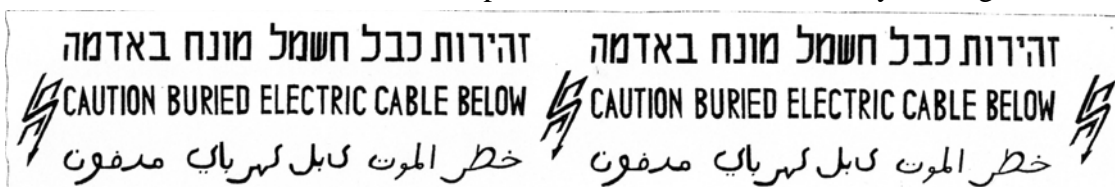
10.9 Chemical resistance against salts & minerals acid: pass

10.10 Self extinguish within 60 sec max : pass

10.11 Thermal conductivity coefficient : $> 0.3 \text{ W/(K m)}$

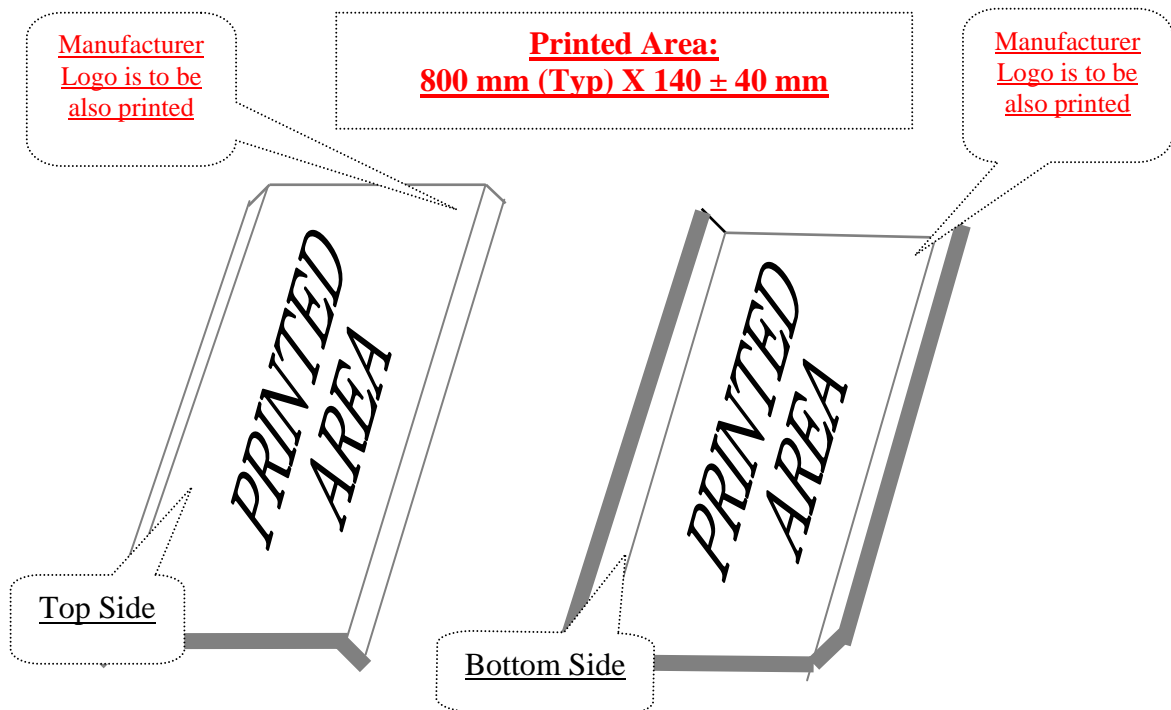
10.12 Color: bright yellow (equivalent to RAL 1016, 1018, 1021, 1023)

10.13 Printed data: The covers shall be printed with durable and clearly and legible





Edition:8	NPS – 63/8 Specification for P.V.C. Underground Power Cable Covers
Issued date: April 2016	
Page No. 8 of 13	



- The printout shall be equally fitted (centered) on both sides of the cover and will include the manufacturer's name or logo.
- Covers with unfinished printed sentences or defected printout will be rejected.
- Printed out data general appearance (Letter's size correlation) shall be respected.
- A digital layout of the printed data is available by e- mail.

11. TESTS&INSPECTION

Routine Test Report

Duly certified routine tests are obligatory. Such tests shall be performed at the Manufacturer's laboratory.

Each supplied equipment shall be tested in accordance with the standards in clause 8.

Routine Test Report



Edition:8	NPS – 63/8 Specification for P.V.C. Underground Power Cable Covers
Issued date: April 2016	
Page No. 9 of 13	

- A Routine Test Report shall be prepared by the Contractor for each equipment
- The routine test report shall state according to which standard and clause the test was performed.
- The Routine Test Report shall contain the serial no. of the equipment, the results of the tests, the required values and the values obtained during the test.

12 PACKAGING & DELIVERY

The packing of the cover plates shall be designed to protect the equipment against ingress of moisture and mechanical damage during shipment and for indoor/outdoor storage

Each batch of 25 pieces of cover will be separately wrapped and each 200 covers (2 rows of 100 covers each) are to be separately tied .
A pile up of maximum 1200 covers, uniformly wrapped, shall be supplied on a wooden shipping stand .

The gross weight of each package should not exceed 1250 kg

Note: Different arrangement should be agreed with IEC.

13. STORAGE & HANDLING –N/A

14. NAMEPLATE/MARKING

The outer side of the shipping stand should be marked with the following information:

- 14.1. Israel Electric Corp. catalog part number.
- 14.2. Israel Electric Corp. order number.
- 14.3. Manufacturer's name.
- 14.4. Place of items production.
14. 5. Manufacturer's catalog part number, production date, batch number

15. NOTES –N/A

16. SPECIAL REQUIREMENTS N/A

17. REVISIONS N/A

Annex A: Summary of data- QUESTIONNAIRE



*Israel Electric Corporation Ltd.
Marketing Division
National Network Unit*

Edition:8	NPS – 63/8 Specification for P.V.C. Underground Power Cable Covers
Issued date: April 2016	
Page No. 10 of 13	

Tender No.: _____ Proposer name: _____

#	Technical Parameters	Requested	Offered
1	P/N and Manufacturer's P/N	Identification	
2	Material	PVC	(Y/N)
3	Density	1.4 g/cm ³ ± 10%	
4	Designed for continuous operation temperature	up to 50°C	
5	Tensile Strength	>20 N/mm ²	
6	Pulling resistance	> 10 N/mm ²	
7	Elongation at break	> 30%	
8	Elasticity module	2.7 N/mm ² ± 10%	
9	Chemical resistance against organic salts & mineral acids	Pass	(Y/N)
10	Self-extinguish (Within 60 sec max)	Pass	(Y/N)
11			(Y/N)
12	Thermal conductivity coefficient	> 0.3 W/(K m)	
13	Cover's Color	Bright Yellow	RAL N°:
14	Packaging and delivery	As defined in paragraph 7	(Y/N)

Summary of data- QUESTIONNAIRE



*Israel Electric Corporation Ltd.
Marketing Division
National Network Unit*

Edition:8	NPS – 63/8 Specification for P.V.C. Underground Power Cable Covers
Issued date: April 2016	
Page No. 11 of 13	

IEC P/N		L (mm)	D (mm)	d (mm)	W (mm)	Color	Printed Data
477653	Required	1000 ± 4	200 ± 2	32 ± 2	2.2 ± 0.2	Bright Yellow	According To section 1.5
	Offered					As RAL N°:	(Y/N)

This Questionnaire shall be signed by an authorized officer of the manufacturer

Proposer's address:					
Manufacturer address:					
Proposer's Fax. No.:				Tel. No. :	
Date :		Signature:			



*Israel Electric Corporation Ltd.
Marketing Division
National Network Unit*

Edition:8

Issued date: April 2016

Page No. 12 of 13

NPS – 63/8 Specification for
P.V.C. Underground Power Cable Covers

Annex: B

Quality Requirements



Annex: C- Statement of manufacturing experience

I, _____ (enter name), hereby state the following:

I _____ (enter name) , am authorized to sign this statement on behalf of _____
("The Manufacturer")

1. I hold the position of _____ (enter job title and description, i.e. partner, production manager, sales manager, etc.) at the Manufacturer.
2. I have been in this position since _____ (enter date).
3. I am providing this statement with regards to I.E.C's tender number _____ ("the Tender").
4. The facts/details given in this statement have been checked and verified by me.
5. _____ (the Manufacturer) has experience in production of the proposed or similar equipment, for at least 3 years in the last 5 years, prior to tender submission.

Similar means: Plates manufactured from the same material and in the same technology with different dimensions and inscriptions

7. I hereby undertake to provide, upon IEC's request and at its sole discretion, any other documents (reference list, quantity, dates of supply, letter of recommendations etc.) or other Information requested for this Tender for purposes of proving said experience.

Signature

Date