



Corrigendum-I

Tender Ref: TPCODL/P&S/1000000103/ 2021-22

With reference to the Tender No- TPCODL/P&S/1000000103/ 2021-22, following corrigendum/ pre bid clarification is hereby issued,

The last date and time of receipt of Bids through ARIBA E-Tender Portal has been extended to 07.10.2021 till 15.00 Hours.

The other terms and condition of the above tender remain unaltered.

Pre Bid queries response against Tender No.: TPCODL/P&S/1000000103/2021-22

Sl no	Reference in tender documents	Description of item	Bidder query	TPCODL Reply
1	Annexure-I Schedule of Items (BOQ)	Supply of 11 KV Porcelain Pin Insulator	Please consider Polymer type instead of Porcelain type. Also confirm class (station or distribution type). Now a days polymer is more reliable compare to Porcelain.	To be complied as per tender specification
2	Annexure-I Schedule of Items (BOQ)	Supply of LT Pin Insulator	do	do
3	Annexure-I Schedule of Items (BOQ)	Concreting of PSC pole by cement concrete of CC 1:4:8 using 40 mm BHG metal (size: 5ftx2ftx2ft=20 Cft =0.570 Cum Padding of PSC pole with cementconcrete of M-15 grade (1:2:4) of size 2ft x 2ft x4inch with all labour & material	(i) Please reconfirm cement concrete ratio 1:4:8 and in padding M15 (1:2:4) (ii) Also for Joist pole please reconfirm the concrete ratio (package 15)	do
4	Performance Bank Guarantee	10% of the total contract value	Requested to 3% of the total contract value	To be complied as per tender T&C
5	Annexure-I Schedule of Items (BOQ)	Couping of existing joist Pole by cement concrete of CC 1:2:4 (size 1MtrX0.5MtrX0.5Mtr) with all labour & material	Please reconfirm cement concrete ratio 1:2:4	do
6	Annexure-I Schedule of Items (BOQ)	Dismantling of existing 11 KV overhead bare conductor and transportation to TPCODL central store	i) Please confirm the distance of TPCODL central store from site ii) Please confirm the involvement of hydra charges during unloading & loading point - TPCODL scope or not. Please consider hydra charges in additional .	TPCODL central store are located at Choudwar and Bhubaneswar. Loading, unloading with all necessary equipment comes under BA scope.
7	Annexure-I Schedule of Items (BOQ)	Dismantling of existing LT overhead bare conductor and transportation to TPCODL central store	i) Please confirm the distance of TPCODL central store from site ii) Please confirm the involvement of hydra charges during unloading & loading point - TPCODL scope or not. Please consider hydra charges in additional.	do
8	Clause No. 3.9 / Type Test	The type tests report of the approved make specified in TPCODL specifications should have been carried out within five years prior to the date of opening of technical bids and test reports are to be submitted along with the bids. If type tests carried out are not within the five years prior to the date of bidding, the bidder will arrange to carry out type tests specified, at his cost. The decision to accept/ reject such bids rests with TPCODL.	Bidder / OEM should Provide the Type test Report for MVCC Conductor & Accessories From CPRI / ERDA /internationally recognized ISO/IEC 17025 certified laboratory accredited to ILAC/IAF	The manufactures for covered conductor and its accessories should have Type Test Certificate from CPRI / ERDA only conducted during last 5 years. The manufactures for other materials should have Type Test Certificate from CPRI / ERDA / NABL accredited laboratories conducted during last 5 years.
9	Technical Specification	The Stranded Conductor shall be longitudinally water tight by means of a water blocking material incorporated during the extrusion process. The use of grease/water swellable tape / water swellable powder etc is not permitted.	Kindly allow Non-conductive water swallable tape /yarn for water tight construction. Water swellable tapes and yarns are also compatible to be used for blocking the water passages in the conductor.	To be complied conforming to EN standard. The filling materials for longitudinal water tightness shall be compatible with the conductor materials or with the materials of the covering.
10	Technical Specification	Technical Specification of Insulated Ties,Insulating Piercing Connector & Mid Span Jointing Kit is not avilabel in Annexure II	We suggest you Kindly add the Technical Specification of Non-Metallic Ties,Insulating Piercing Connector (covered to covered, bare to covered, earthing), Mechanical connector & Mid Span Jointing Kit in Annexure II	Attached
11	5.0. Award Decision Page No.14	The decision to place rate contract / purchase order / LOI solely depends on TPCODL on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that TPCODL may deem relevant.	Kindly clarify whether it is rate contract / purchase order / LOI	This Proposal is for placement of Purchase order
12	4.7 Reverse Auctions Page No.14	TPCODL reserves the right to conduct the reverse auction (instead of public opening of price bids) for the products/ services being asked for in the tender.	Kindly clarify that Reverse Auction will be applicable for this tender or not	TPCODL reserves the right to conduct the reverse auction in the said tender.
13	2.0 Evaluation Criteria Page No.9	TPCODL reserves the right to split the order line item wise and / or quantity wise, among more than one Bidder.	Kindly clarify	Bid shall be evaluated package wise.

Pre Bid queries response against Tender No.: TPCODL/P&S/1000000103/2021-22

Sl no	Reference in tender documents	Description of item	Bidder query	TPCODL Reply
14	Annexure-I Schedule of Items (BOQ)	Quantity of Polymer type insulators found double quantity of Hardware fittings	In the Price schedule format, the quantity of Polymer type insulators found double quantity of Hardware fittings.	Polymer insulator will be used both for tension fitting for covered conductor and conventional H/W fitting for bare conductor. However, actual quantities shall be assessed after due field survey.

Technical Specification of ALIGNMENT TIES & SUSPENSION CLAMP

4.2 APPLICATION OF NON METALLIC ALIGNMENT TIES AND SUSPENSION CLAMP OF MEDIUM VOLTAGE COVERED CONDUCTOR:

Sl.No	Description	Application
1	Non Metallic Alignment Tie (AT)	<p>For supporting and aligning MVCC at an intermediate pole in a length, with small angle of deviation.</p> <p>The Tie hold the MVCC in its position on top of the pin or post insulator.</p> <p>Insulator Tie consists of an “Insulated Plastic”</p>
2	Suspension Clamp (SC)	<p>For supporting a length of MVCC at an intermediate pole in a length, with small angle of deviation with a hanging insulator.</p> <p>The suspension clamp consists of an “Assembly</p>

4.2.1 Design & Construction of Non Metallic Alignment Ties and Suspension Clamp

A. Non Metallic Alignment Ties

The ties shall be designed suitably to hold the MVCC in its position on top of the insulator. The Tie shall be made of Insulating Plastic materials to ensure tracking resistance and to avoid any insulation damage to covered conductor due to abrasion while mechanical or wind induced vibration. Plastic coated metallic ties are not allowed.

Permanent marking with manufacturer’s name and manufacturing date is mandatory

on the non-metallic alignment ties

B. Suspension Clamps

The Suspension Clamps shall be made of Insulating Plastic to ensure tracking resistance and to avoid any insulation damage to covered conductor due abrasion while mechanical or wind induce vibration. The suspension clamp shall consist of a shear head locking arrangement which can be tightened by hand to avoid tool for installation.

Testing Requirements for an Non Metallic Alignment Tie.

Type tests as per EN 50397-2 shall be conducted from NABL accredited independent Lab of India/the International Laboratory Accreditation corporation, Mutual Recognitions Arrangement (ILAC, MRA) signatory Laboratory like COFRAC.

The following tests are intended to establish design characteristics as per EN 50397 – 2.

Sl. No.	Test	Type Test	Acceptance Test	Routine Test
1	Visual examination	√	√	√
2	Dimensional verification	√	√	√
3	Check for Marking	√	√	√
4	Mechanical tests			
4.1	Failure Load Tests	√	√	√
4.2	Slip Load Tests	√	√	√
4.3	Lift / Side Load Tests	√	√	√
4.4	Thermal Tests under load	√		
5.	Environmental tests			
5.1	Corrosion test	√		
5.2	Climate ageing test	√		

Testing Requirements for Suspension Clamps

Type tests as per EN 50397-2 shall be conducted from NABL accredited independent Lab of India/the International Laboratory Accreditation corporation, Mutual Recognitions Arrangement (ILAC, MRA) signatory Laboratory like COFRAC.

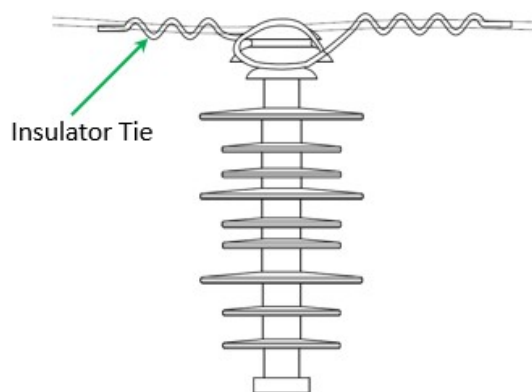
The following tests are intended to establish design characteristics as per EN 50397 – 2.

Sl. No.	Test	Type Test	Acceptance Test	Routine Test
1	Visual examination	√	√	√

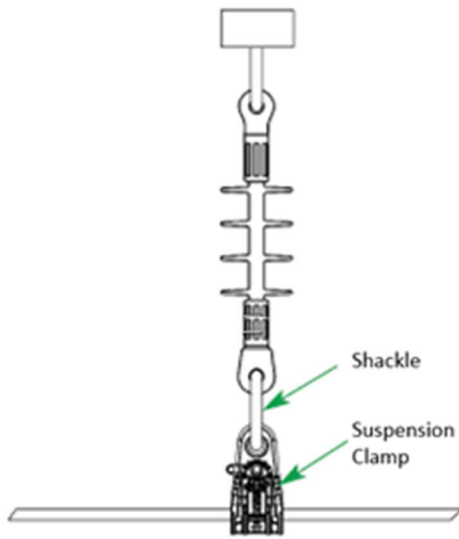
2	Dimensional verification	√	√	√
3	Check for Marking	√	√	√
4	Mechanical tests			
4.1	Failure Load Tests			
4.2	Slip Load Tests	√	√	√
4.3*	Lift / Side Load Tests	√	√	√
4.4	Thermal Tests under load	√		
5.	Environmental tests			
5.1	Corrosion test			
5.2	Climate ageing test	√		

*Lift/Side Load test for suspension clamp is not applicable for hanging type insulator

1. Non Metallic Alignment Tie (AT)



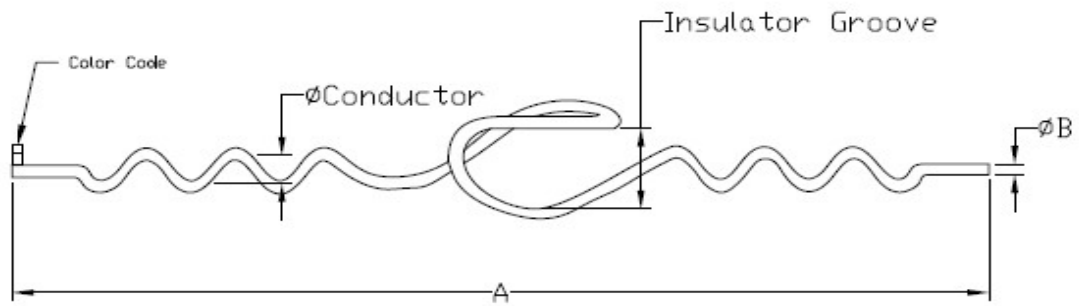
2. Suspension Clamp (SC)



1. GTP for Non Metallic Alignment Tie (AT)

Sl. No.	Description	Requirement	Bidder Offer
1	Name of the Supplier		
2	Length		
3	Weight		
4	Cable Range	Range in line with this specification	
5	Material		
6	Marking		
7	Applicable Standard	EN 50397-2	

1. Non Metallic Alignment Tie (AT)



NOTE:
 STANDARD: EN 50397-2
 CABLE RANGE : SUITABLE COVERED CONDUCTOR
 MARKING : PRODUCT REFERENCE,
 MANUFACTURER LOGO,
 BATCH CODE, MANUFACTURING PERIOD
 General Tolerance : $\pm 5\%$

NAME OF THE CUSTOMER :

A/T . NO :

QUANTITY :

DETAILS OF COVERED CONDUCTOR ACCESSORIES :

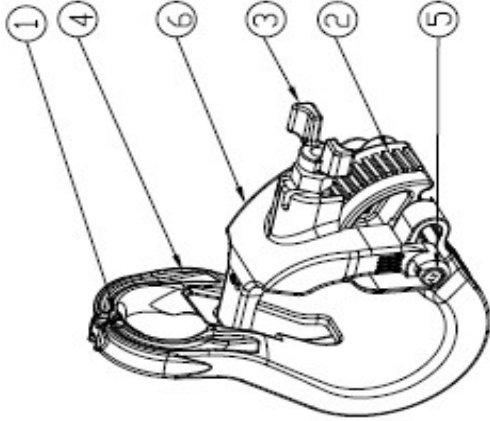
NAME OF THE MANUFACTURE & SYMBOL

DATE			SCALE	DRG. NO.
DRN				
CHD				
APPD			NTS	

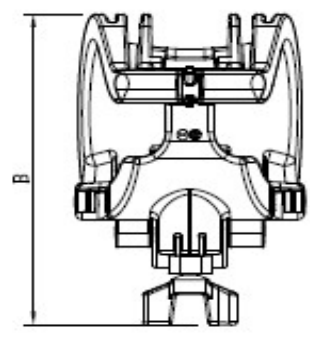
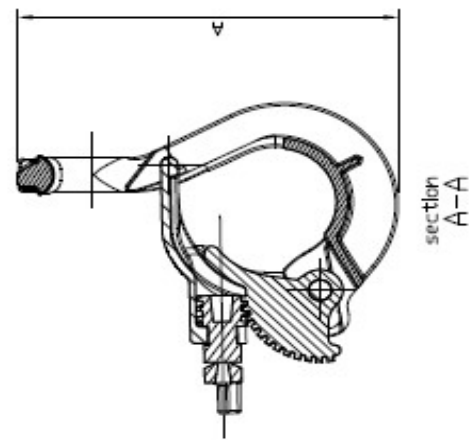
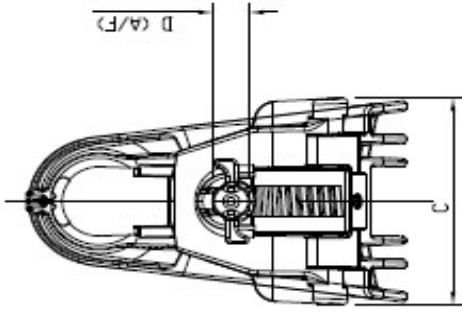
1. GTP for Suspension Clamp

Sl. No.	Description	Requirement	Bidder Offer
1	Name of the Supplier		
2	Cable Range	Range in line with this specification	
3	Material		
4	Minimum Breaking Load - Vertical	Min 5KN	
5	Installation(With/Without disassembly)	Ready- to-use (Without disassembling)	
6	Marking		
7	Dimensions		
8	Weight		
9	Applicable Standard	EN 50397-2	

1. Suspension Clamp (SC)



NOTE:
 STANDARD: EN 50397/2
 CABLE RANGE: SUITABLE COVERED CONDUCTOR
 MARKING: PRODUCT REFERENCE,
 MANUFACTURER LOGO,
 BATCH CODE, MANUFACTURING PERIOD
 General Tolerance: ±5%



NAME OF THE CUSTOMER :
A/T . NO :
QUANTITY :
DETAILS OF COVERED CONDUCTOR ACCESSORIES :

NAME OF THE MANUFACTURE & SYMBOL			
DATE	DRY	CBD	APPD
		SCALE	DWG. NO.
		NTS	

Sl No	Qty	Designation	Material
6	1	Wipe	Polyamide - Black
5	1	Pin	Aluminium Alloy
4	1	Suspension Clamp	Polyamide - Black
3	1	Shear Head	Polyamide - Black
2	1	Lever	Polyamide FV - Black
1	1	Seller	Stainless Steel AISI 304

TECHNICAL SPECIFICATION OF INSULATION PIERCING CONNECTORS & MECHANICAL CONNECTOR

APPLICATION OF INSULATION PIERCING CONNECTORS & MECHANICAL CONNECTOR OF MEDIUM VOLTAGE COVERED CONDUCTOR:

Sl.No	Description	Application
1	Mechanical Connector with Heat shrink sleeve	For main (Bare) to main (MVCC) networking Connection. This connector is to ensure the electrical characteristics with in the required limits, while ensuring necessary insulation protection against tracking and water penetration on MVCC.
2	Insulation Piercing Connector for Networking/ Branching /Looping (IPC – Type 2)	For main (MVCC) to main (MVCC) networking or branching of MVCC to another MVCC Or Branch Cable or Looping for transformer junctions. This connector is to ensure the electrical characteristics with in the required limits, while ensuring necessary insulation protection against tracking and water penetration on MVCC.
3	Insulation Piercing Connector with Aluminum Bail for earthing (IPC – Type 3)	For Temporary Earthing Provision from MVCC Cable for maintenance purpose. This connector is to ensure the electrical characteristics within the required limits, while ensuring necessary insulation protection against tracking and water penetration on MVCC.
4	Insulation Piercing Connector with Live line connector for Transformer connection (IPC – Type 3)	For Transformer connection from MVCC Cable. This connector is to ensure the electrical characteristics within the required limits, while ensuring necessary insulation protection against tracking and water penetration on MVCC. The connector allows connection and disconnection without removing the IPC from MVCC line.

Design & Construction of Insulation Piercing Connectors

A. Insulation Piercing Connectors for MVCC

Insulation Piercing Connectors (IPC) are used for making Tee / Tap-off/ connections to an MVCC.

Insulation Piercing Connectors are designed to make a connection between the uncut main conductor and a branch cable conductor without having to strip either cable to expose the conductor. Instead, the tightening action of the IPC will first pierce the Insulation, then make good electrical contact between the main and branch conductor while simultaneously insulating and sealing the connection.

B. Insulation Piercing Connectors-Construction

The connector bodies shall be made entirely of mechanical and weather resistant plastic insulation material made of weather & UV resistant reinforced polymer and no metallic part outside the housing is acceptable except for the tightening bolt or nuts.

Any metallic part that is exposed must be free from potential during or after connector installation.

Screws or nuts assigned for fitting with IPC (Insulating Piercing connector), must be fitted with torque limiting shear heads to prevent over tightening or under tightening.

While the min & max torque values are to be specified by Manufacturer, these should not exceed 27 N mtr for IPC for main conductor < 95 sq mm, and 42 Nmtr for main conductor >95, but < 240 sq mm.

The contact teeth or blade of the connector is made of tinned copper with equivalent Cross Section with respect to %IACS to suit the max branch cable size declared. The shear bolt/nut shall be suitable for tightening with a hexagonal socket of 13 mm or 17mm.

The IPCs shall be water proof and the water tightness shall be ensured by appropriate elastomeric materials and not by grease, gel or paste alone. Grease can be applied to protect the contact blade alone and shall not be visible on the outer surface of the connector. Connector should not be dipped in grease.

Each IPC should be provided with a cap to seal the cut end of the Branch cable. It should be of a design that once the connector is installed, it shall not be possible to remove the cap without dismantling the connector.

All the metallic parts of the connector should be corrosion resistant and there should not be any appreciable change in contact resistance & temperature after overloads & load cycling and should conform to the long duration tests specified in this standard.

Testing Requirements for Insulation Piercing Connectors

Type tests as per EN 50397-2 shall be conducted from NABL accredited independent Lab of India/the International Laboratory Accreditation corporation, Mutual Recognitions Arrangement (ILAC, MRA) signatory Laboratory like COFRAC.

The following tests are intended to establish design characteristics as per EN 50397 – 2.

Sl. No.	Test	Type test	Acceptance Test	Routine test
1	Visual examination	√	√	√
2	Dimensional verification	√	√	√
3	Mechanical tests	√	√	√
4	Water Tightness test	√		
5	Climatic Ageing Test	√		
6	Corrosion Test	√		
7	Electrical Ageing Test	√		
8	Check for permanent marking	√	√	

Mechanical Connector with Heat Shrink Sleeve

Mechanical Connectors are used for bare conductor to covered conductor connection. The body as well as the shear head screws of the mechanical connector should be made of aluminum alloy. It should have a centered bore with tapered edges and a moisture block barrier in the center of the tube. Heat shrink sleeve shall be rated for up to 11/33 KV.

Testing Requirements for Mechanical Connector

Type tests as per EN 61238-1 shall be conducted from NABL accredited independent Lab of India/the International Laboratory Accreditation corporation, Mutual Recognitions Arrangement (ILAC, MRA) signatory Laboratory like COFRAC.

The following tests are intended to establish design characteristics as per EN 61238-1.

Sl.No.	Test	Type Test	Acceptance Test	Routine Test
1	Visual examination	√	√	√
2	Dimensional verification	√	√	√
3	Check for permanent Marking	√	√	√
4	Mechanical Test	√	√	√

5	Water Tightness test	√	√	
6	Climatic Ageing Test	√		
7	Corrosion Test	√		
8	Electrical Ageing Test	√		

Live Line Connector (For Transformer Location)

Live line connector is used to make the electrical connection under voltage between a bare main conductor and a sheathed branch conductor. It is generally set up remotely by means of an insulating stick with a hook.

The body of the connector along with screws and bolts should be made of aluminium alloy.

The live line connector should include a standardized gripping ring made of aluminium alloy to insert the hook pole thus allowing the connector to be fitted and clamped on the main conductor by its loosening and removal mechanism. To ensure the proper holding of the connector to the main conductor/ bail a flap shall be provided at the interface of the connector

Testing Requirements for Live Line Connector

Type tests as per EN 50397-2 & ANSI C119.4 shall be conducted from NABL accredited independent Lab of India/the International Laboratory Accreditation corporation, Mutual Recognitions Arrangement (ILAC, MRA) signatory Laboratory like COFRAC.

The following tests are intended to establish design characteristics as per EN 50397-2 ANSI C119.4.

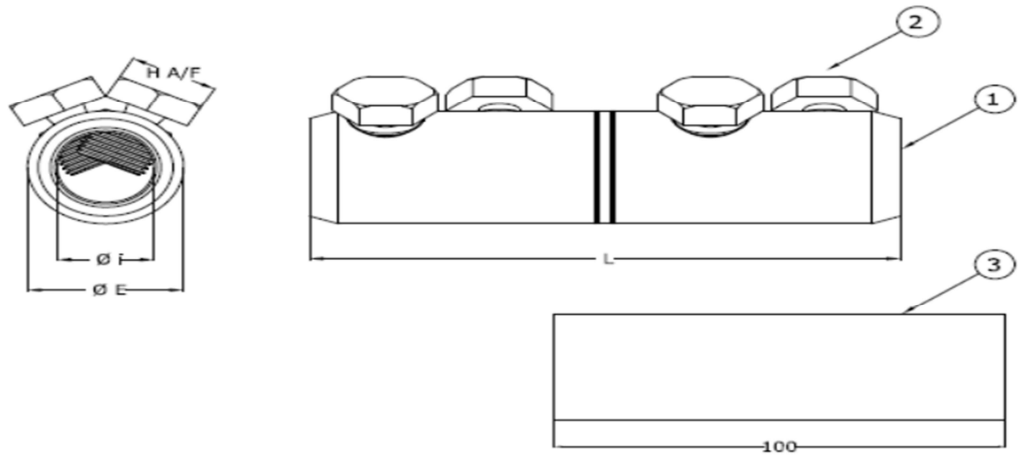
S.No.	Test	Type Test	Acceptance Test	Routine Test
1	Visual examination	√	√	√
2	Dimensional verification	√	√	√
3	Check for Marking	√	√	√
4	Mechanical Test	√	√	√
6	Climatic Ageing Test	√		
7	Corrosion Test	√		
8	Electrical Ageing test*	√		

*Electrical ageing test shall be as per ANSI C119.4

1. GTP for MECHANICAL CONNECTOR – BARE TO COVERED CONNECTION

Sl. No.	Description	Requirement	Bidder Offer
1	Name of supplier		
2	Type of connection required	Bare conductor to Covered conductor	
3	Are torque limiting shear heads provided to tightening bolts		
4	Range of cable sizes accommodated for Main & Branch	Range to in line with this specification	
5	Tightening Torque		
6	Torque for establishing connection between main and Tap (Nm)	70% of min torque specified	
7	Is heat shrink sleeve provided with the connector		
8	Marking and embossing on the connector		
9	Applicable Standard	EN 50397-2	

Mechanical Connector for Bare to Covered connection



5	400-600	3
4	240-400	3
3	120-240	2
2	70-150	2
1	25-95	1
Sl.No.	Cable range Al/Cu (mm ²)	No Of Bolts on Each Side

3	1	HEAT SHRINK SLEEVE	UV RESISTANT POLYMER
2	X	SHEAR OFF BOLT	ALUMINIUM ALLOY
1	1	BODY	ALUMINIUM ALLOY
PART	QTY	DESCRIPTION	MATERIAL

Note :
 STANDARD: EN 50397-2
 CABLE RANGE: SUITABLE COVERED CONDUCTOR
 MARKING: PRODUCT REFERENCE,
 MANUFACTURERE LOGO,
 BATCH CODE, MANUFACTURING PERIOD
 GENERAL TOLERANCE: ±5%

NAME OF THE CUSTOMER :
A/T . NO :
QUANTITY :
DETAILS OF COVERED CONDUCTOR ACCESSORIES :

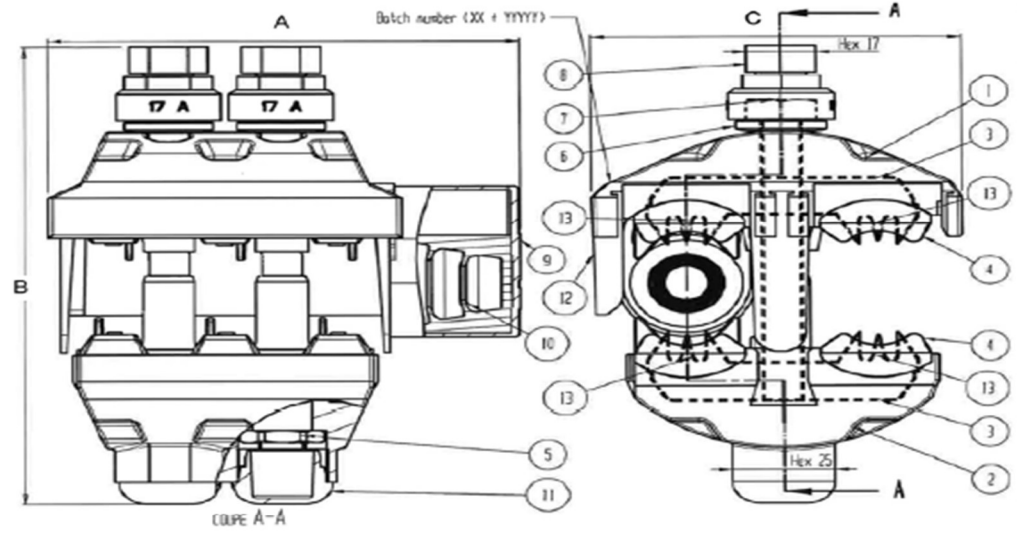
NAME OF THE MANUFACTURE & SYMBOL

DATE	01/06/2018	SCALE NTS	DRG. NO.
DRN			
CHD			
APPD			

2. GTP for INSULATION PIERCING CONNECTOR – COVERED TO COVERED CONNECTION

Sl. No.	Description	Requirement	Bidder Offer
1	Name of supplier		
2	Type of connection required	Covered conductor to Covered conductor	
3	Are torque limiting shear heads provided to tightening bolts		
4	Range of cable sizes accommodated for Main & Branch	Range to in line with this specification	
5	Tightening Torque		
6	Torque for establishing connection between main and Tap (Nm)	70% of min torque specified	
7	Marking and embossing on the connector		
8	Applicable Standard	EN 50397-2	

Insulation Piercing Connector for Networking / Branching / Looping



13		Blend	Silicone Based
12	1	Marking	Color - White
11	2	Screw Protection	Polyethylene - pink
10	1	Cap seal	Thermoplastic Rubber - Green
9	1	EndCap	Polymide GF - Black
8	2	Shear head	Polycarbonate GF - Black
7	2	Screw	Galvanized steel
6	2	Washer	Galvanized steel
5	2	Nut	Galvanized steel
4	2	Seal	Thermoplastic Rubber - Black
3	6	Electrical contact blade	Tinned copper alloy
2	1	1/2 body, nut side	Polymide GF - Black
1	1	1/2 body, screw side	Polymide GF - Black
PART	QTY	DESCRIPTION	MATERIAL

NOTE:
 STANDARD: EN 50397-2
 CABLE RANGE : SUITABLE COVERED CONDUCTOR
 MARKING : PRODUCT REFERENCE,
 MANUFACTURER LOGO,
 BATCH CODE, MANUFACTURING PERIOD
 General Tolerance : ±5%

NAME OF THE CUSTOMER : _____
 A/T . NO : _____
 QUANTITY : _____
 DETAILS OF COVERED CONDUCTOR ACCESSORIES : _____

NAME OF THE MANUFACTURE & SYMBOL

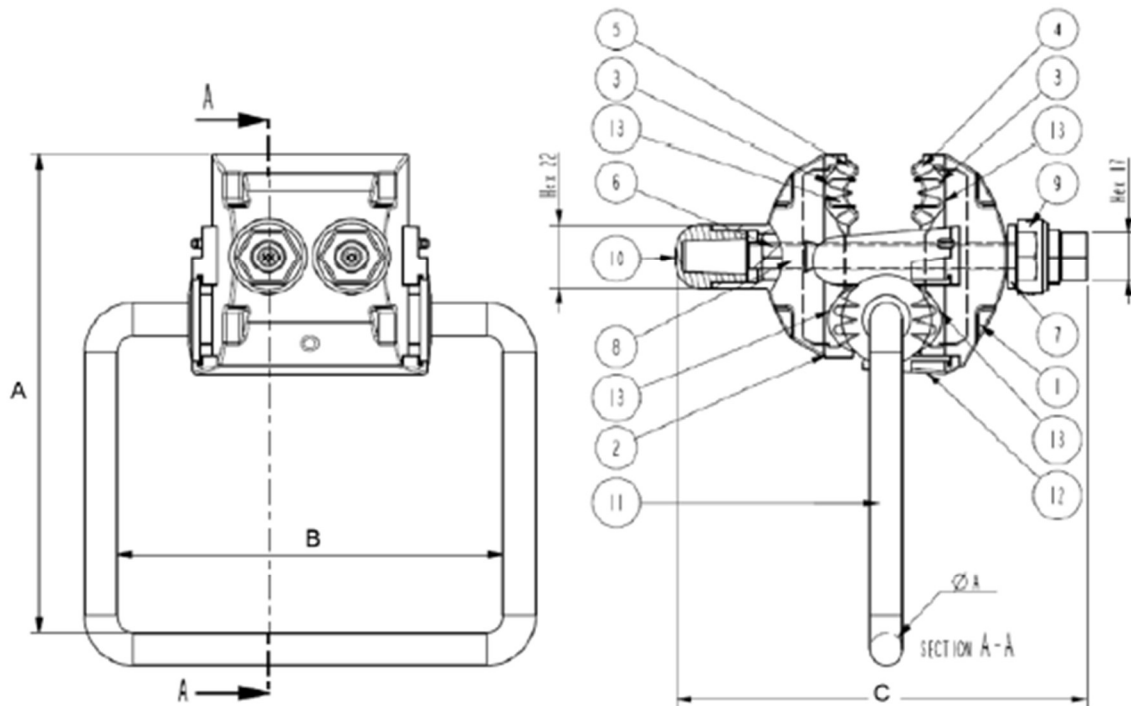
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CHD	
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SCALE	DRG. NO.
NTS	

3. GTP for INSULATION PIERCING CONNECTOR – EARTHING

Sl. No.	Description	Requirement	Bidder Offer
1	Name of supplier		
2	Type of connection required	Maintanance Earthing	
3	Are torque limiting shear heads provided to tightening bolts		
4	Is Overmoulded Aluminum Bail provided for earthing		
5	Range of cable sizes accommodated for Main & Branch	Range to in line with this specification	
6	Tightening Torque		
7	Torque for establishing connection between main and Tap (Nm)	70% of min torque specified	
8	Marking and embossing on the connector		
9	Applicable Standard	EN 50397-2	

Insulation Piercing Connector with Aluminum Bail



13		Lubricant	Silicone Based
12	1	Marking	Color - White
11	1	Bail (See Table)	See Table
10	2	Screw Protection	Polyethylene - Pint
9	2	Shear head	Polycarbonate GF - Black
8	2	Screw	Galvanized steel
7	2	Washer	Galvanized steel
6	2	Nut	Galvanized steel
5	1	Seal : nut side	Thermoplastic Rubber - Black
4	1	Seal : screw side	Thermoplastic Rubber - Black
3	6	Electrical contact blade	Tinned copper alloy
2	1	1/2 body, nut side	Polymide GF - Black
1	1	1/2 body, screw side	Polymide GF - Black
PART	QTY	DESCRIPTION	MATERIAL

NOTE:
 STANDARD: EN 50397-2
 CABLE RANGE : SUITABLE COVERED CONDUCTOR
 MARKING :PRODUCT REFERENCE,
 MANUFACTURER LOGO,
 BATCH CODE, MANUFACTURING PERIOD
 General Tolerance : ±5%

NAME OF THE CUSTOMER :

A/T . NO :

QUANTITY :

DETAILS OF COVERED CONDUCTOR ACCESSORIES :

NAME OF THE MANUFACTURE & SYMBOL

DATE

DRN

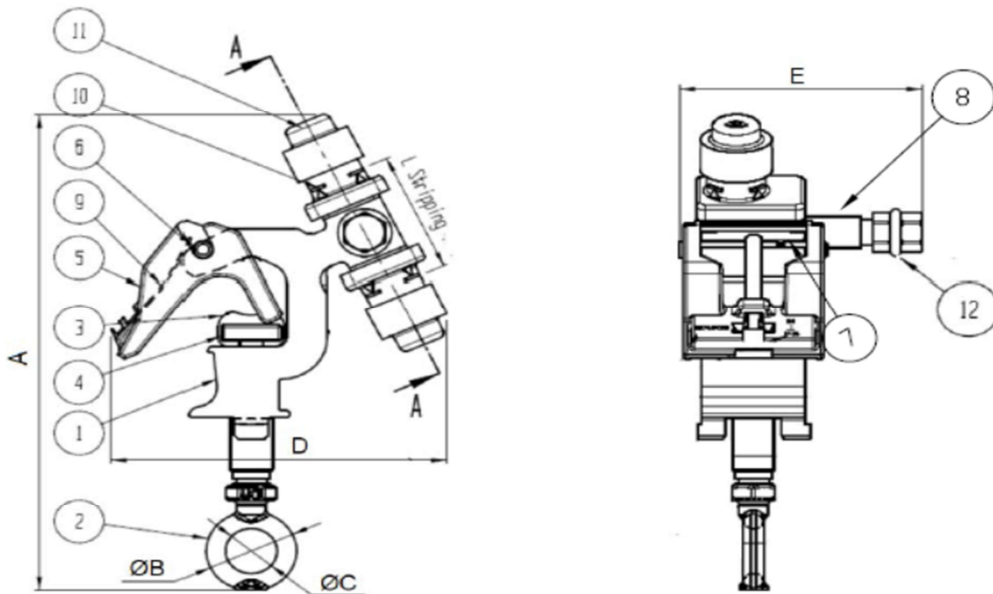
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APPD

SCALE DRG. NO.

NTS

Live Line Connector



Prt	Qty	Description	Material
12	1	O'ring seal (Option F)	Thermoplastic rubber - Black
11	2	Indicator	Thermoplastic rubber - Black
10	2	Seal	Thermoplastic rubber - Black
9	1	Leaf spring	Inox
8	1	Top screw	Aluminium alloy
7	1	Top jaw	Aluminium alloy
6	1	Pin	Aluminium alloy
5	1	Composite plastic flap	Polyamide GF - Black
4	2	Clip	ABS - Black
3	1	Main Jaw	Aluminium alloy
2	1	Main screw	Aluminium alloy
1	1	Body	Aluminium alloy

NOTE:
 STANDARD: EN 50397-2
 CABLE RANGE : SUITABLE COVERED CONDUCTOR
 MARKING :PRODUCT REFERENCE
 MANUFACTURING LOGO
 BATCH CODE, MANUFACTURING PERIOD
 General Tolerance : ±5%

NAME OF THE CUSTOMER :

A/T . NO :

QUANTITY :

DETAILS OF COVERED CONDUCTOR ACCESSORIES :

NAME OF THE MANUFACTURE & SYMBOL

DATE 01/06/2018

DRN SSM

CHD VVA

APPD JVJ

SCALE DRG. NO.
 NTS

TECHNICAL SPECIFICATION OF MEDIUM VOLTAGE COVERED CONDUCTOR:

APPLICATION OF MID SPAN JOINTS OF MEDIUM VOLTAGE COVERED CONDUCTOR:

Sl.No	Description	Application
1	Midspan Joints for AAAC Covered Conductor (MJ)	Mid-span tension joints for jointing AAAC MVCC over a span
2	Midspan Joints for ACSR Covered Conductor (MJ)	Mid-span tension joints for jointing ACSR MVCC over a span

4.4.1 Design & Construction of Mid Span Joints

A. Mid Span Jointing Sleeves for AAAC Covered Conductor

The sleeves should be Pre-Insulated type. Sleeve should be made of Aluminum, insulated with an Anti-UV black thermoplastic tube hermetically sealed two ends with 2 flexible rings. Strip length, Hexagonal crimping die reference and size to be marked on the outer surface of plastic sleeve.

B. Mid Span Insulated Jointing Sleeves for ACSR Covered Conductor

The sleeves consist of an aluminum tube with torques limited shear head bolts, and pressure pads. A heat shrinkable sleeve rated for up to 11/33 KV shall be provided over the joint

Testing Requirements for Mid Span Joints

Type tests as per EN 50397-2 shall be conducted from NABL accredited independent Lab of India/the International Laboratory Accreditation corporation, Mutual Recognitions Arrangement (ILAC, MRA) signatory Laboratory like COFRAC.

The following tests are intended to establish design characteristics as per EN 50397 – 2.

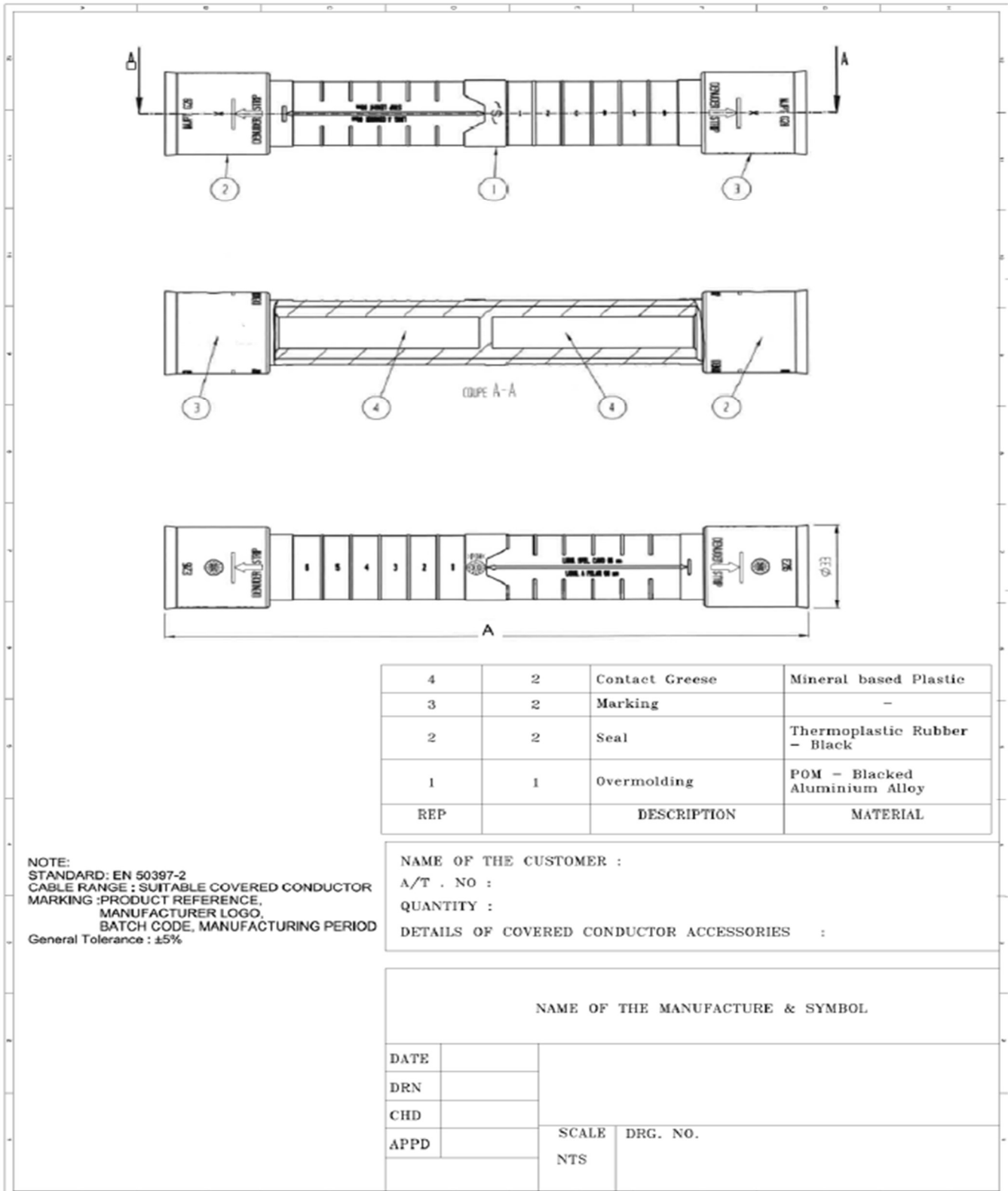
S.No.	Test	Type Test	Acceptance Test	Routine Test
1	Visual examination	√	√	√
2	Dimensional verification	√	√	√
3	Check for Marking	√	√	√
4	Mechanical Test	√	√	√
5	Water Tightness test	√		
6	Climatic Ageing Test	√		
7	Corrosion Test*	√		

*Corrosion test is not applicable for pre insulated type joints.

1. GTP for MIDPSAN JOINTS

Sl. No.	Description	Requirement	Bidder Offer
1	Name of Supplier.		
2	IS manufacturer of Accessories an ISO 9001-2000 Company?		
3	Type No & Size Range	Range to in line with this specification	
4	Is any metallic part carrying potential in operation exposed after installation		
5	Installation		
6	Applicable Standard	EN 50397-2	

1. Midspan Joints (TJ) for AAAC Covered Conductor



4	2	Contact Grease	Mineral based Plastic
3	2	Marking	-
2	2	Seal	Thermoplastic Rubber - Black
1	1	Overmolding	POM - Blacked Aluminium Alloy
REP		DESCRIPTION	MATERIAL

NOTE:
 STANDARD: EN 50397-2
 CABLE RANGE : SUITABLE COVERED CONDUCTOR
 MARKING : PRODUCT REFERENCE,
 MANUFACTURER LOGO,
 BATCH CODE, MANUFACTURING PERIOD
 General Tolerance : $\pm 5\%$

NAME OF THE CUSTOMER :

A/T . NO :

QUANTITY :

DETAILS OF COVERED CONDUCTOR ACCESSORIES :

NAME OF THE MANUFACTURE & SYMBOL

DATE

DRN

CHD

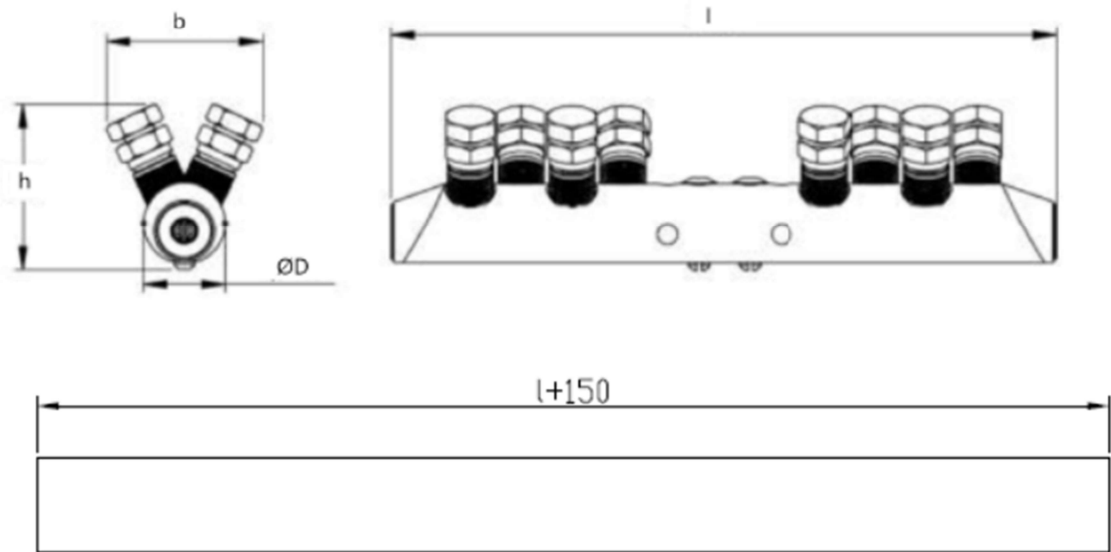
APPD

SCALE

NTS

DRG. NO.

1. Midspan Joints (TJ) for ACSR Covered Conductor



4	1	Heat Shrink Sleeve	UV Resistant Polymer
3	2	Pressure Pads	Steel
2	MIn. 8	Shear Off Bolt	Aluminium Alloy
1	1	Body	Aluminium Alloy
REP	QUANTITY	DESCRIPTION	MATERIAL

Note 1
 STANDARD: EN 50397-2
 CABLE RANGE: SUITABLE COVERED CONDUCTOR
 MARKING: PRODUCT REFERENCE,
 MANUFACTURERE LOGO,
 BATCH CODE, MANUFACTURING PERIOD
 GENERAL TOLERANCE: ±5%

NAME OF THE CUSTOMER :

A/T - NO :

QUANTITY :

DETAILS OF COVERED CONDUCTOR ACCESSORIES :

NAME OF THE MANUFACTURE & SYMBOL

DATE	01/06/2018		SCALE	DRG. NO.
DRN				
CED				
APPD			NTS	