Distribution Overhead Construction Standard Section 5 Pole Mounted Substations

Record Number: R0002730474

Version Number: 4.0

Date: April 2026

Authorisations

Action	Name and title	Date
Prepared by	Tetiana Knyzhka	30/03/2026
Reviewed by	Aftab Hussain	31/03/2026
Authorised by	Branden Papalia	02/04/2026
Review cycle	5 Years	

Responsibilities

This document is the responsibility of the Asset Management Systems and Standards Team, Tasmanian Networks Pty Ltd, ABN 24 167 357 299 (hereafter referred to as "TasNetworks").

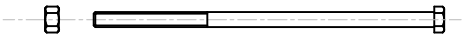
Please contact the Asset Management Systems and Standards Team with any queries related to this standard.

Record of revisions

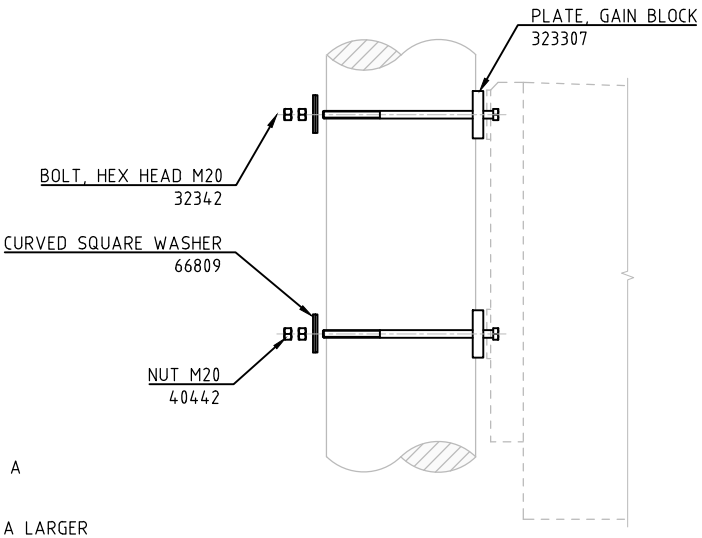
Version	Description	Date
4.0	Major update: Section fully revised to reflect current construction requirements.	02/04/2026

D-OHC-E100-SD-001	POLE SUBSTATION CONSTRUCTIONS. ASSEMBLIES EXPLANATION
D-OHC-E100-SD-002	POLE SUBSTATION CONSTRUCTIONS. GENERAL NOTES & CODES
D-OHC-E101-SD-001	POLE SUBSTATION CONSTRUCTIONS. SUB-ASSEMBLIES. TRANSFORMERS MOUNTING OPTIONS
D-OHC-E101-SD-002	POLE SUBSTATION CONSTRUCTIONS. SUB-ASSEMBLIES. HV LEADS
D-OHC-D101-SD-003	POLE SUBSTATION CONSTRUCTIONS. SUB-ASSEMBLIES. TRANSPOSITION BRACKET 1-PHASE
D-OHC-D101-SD-004	POLE SUBSTATION CONSTRUCTIONS. SUB-ASSEMBLIES. TRANSPOSITION BRACKET 3-PHASE
D-OHC-E101-SD-005	POLE SUBSTATION CONSTRUCTIONS. SUB-ASSEMBLIES. LV LEADS AND BUSHING CONNECTIONS. 1-PHASE TRANSFORMERS
D-OHC-E101-SD-006	POLE SUBSTATION CONSTRUCTIONS. SUB-ASSEMBLIES. LV LEADS AND BUSHING CONNECTIONS. 25-315 kVA 3-PHASE TRANSFORMERS
D-OHC-E101-SD-007	POLE SUBSTATION CONSTRUCTIONS. SUB-ASSEMBLIES. LV LEADS AND BUSHING CONNECTIONS. 500 kVA 3-PHASE TRANSFORMERS
D-OHC-E102-SD-001	POLE SUBSTATION CONSTRUCTIONS. SINGLE WOOD POLE SUBSTATION. INTEGRATED HV FUSING. 1-PHASE 11kV OR 22 kV
D-OHC-D102-SD-002	POLE SUBSTATION CONSTRUCTIONS. SINGLE WOOD POLE SUBSTATION. BILL OF MATERIALS. 1-PHASE 11kV OR 22kV
D-OHC-D103-SD-001	POLE SUBSTATION CONSTRUCTIONS. SINGLE WOOD POLE SUBSTATION. INTEGRATED HV FUSING. 3-PHASE 25 – 100kVA 11kV OR 22 kV
D-OHC-D103-SD-002	POLE SUBSTATION CONSTRUCTIONS. SINGLE TITAN POLE SUBSTATION. INTEGRATED HV FUSING. 3-PHASE 200 – 500kVA 11kV OR 22 kV
D-OHC-D103-SD-003	POLE SUBSTATION CONSTRUCTIONS. SINGLE POLE SUBSTATION. BILL OF MATERIALS. 3-PHASE 11kV
D-OHC-D103-SD-004	POLE SUBSTATION CONSTRUCTIONS. SINGLE POLE SUBSTATION. BILL OF MATERIALS. 3-PHASE 22kV
D-OHC-D104-SD-001	POLE SUBSTATION CONSTRUCTIONS. SINGLE WOOD POLE SUBSTATION. REMOTE HV FUSING. 1-PHASE 11kV OR 22 kV
D-OHC-D104-SD-002	POLE SUBSTATION CONSTRUCTIONS. SINGLE WOOD POLE SUBSTATION. REMOTE HV FUSING. 3-PHASE 25 – 100kVA 11kV OR 22 kV
D-OHC-D104-SD-003	POLE SUBSTATION CONSTRUCTIONS. SINGLE TITAN POLE SUBSTATION. REMOTE HV FUSING. 3-PHASE 200 – 500kVA 11kV OR 22 kV

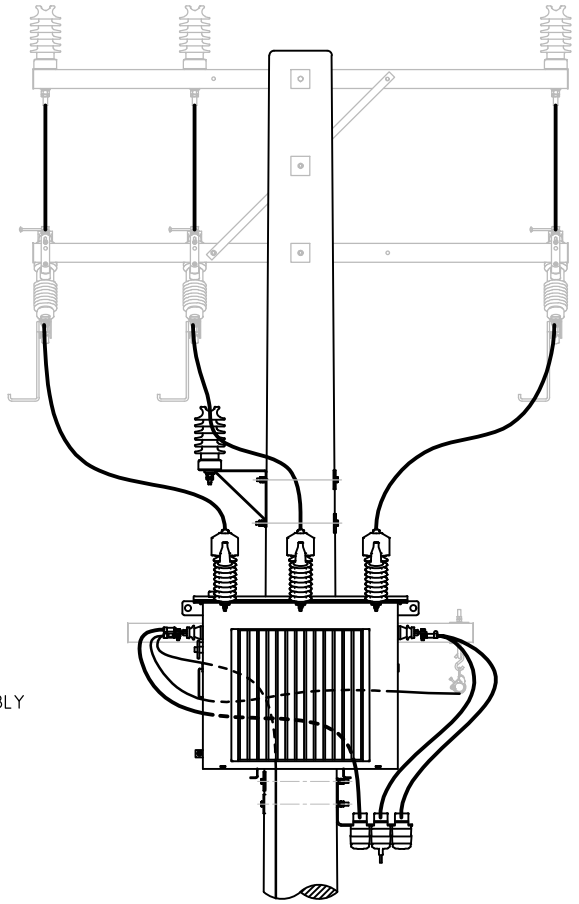
D-OHC-D105-SD-001	POLE SUBSTATION CONSTRUCTIONS. SINGLE POLE SUBSTATION. SWER ISOLATING TRANSFORMER 12.7 kV
D-OHC-D105-SD-002	POLE SUBSTATION CONSTRUCTIONS. SINGLE POLE SUBSTATION. SWER DISTRIBUTION TRANSFORMER 12.7 kV
D-OHC-D105-SD-003	POLE SUBSTATION CONSTRUCTIONS. SINGLE POLE SUBSTATION. SWER DISTRIBUTION TRANSFORMER BILL OF MATERIALS 12.7 kV
D-OHC-D106-SD-001	POLE SUBSTATION CONSTRUCTIONS. SINGLE POLE SUBSTATION. U/G HV SUPPLIED. 11kV OR 22 kV
D-OHC-D107-SD-001	POLE SUBSTATION CONSTRUCTIONS. SINGLE POLE SUBSTATION. LV BRIDGING ARRANGEMENTS. 1-PHASE & 2-PHASE LV ABC
D-OHC-D107-SD-002	POLE SUBSTATION CONSTRUCTIONS. SINGLE POLE SUBSTATION. LV BRIDGING ARRANGEMENTS. 1-PHASE & 2-PHASE LV BARE
D-OHC-D107-SD-003	POLE SUBSTATION CONSTRUCTIONS. SINGLE POLE SUBSTATION. LV BRIDGING ARRANGEMENTS. 3-PHASE LV ABC
D-OHC-D107-SD-004	POLE SUBSTATION CONSTRUCTIONS. SINGLE POLE SUBSTATION. LV BRIDGING ARRANGEMENTS. 3-PHASE LV BARE
D-OHC-D108-SD-001	POLE SUBSTATION CONSTRUCTIONS. SINGLE POLE SUBSTATION. FUSE TABLES
	LIST OF BOMs



BOLT M20
32342



TRANSFORMER MOUNTING
ASSEMBLY 100-500kVA
710232



22/TX/3/500 ASSEMBLY
710253

NOTES:

1. A MATERIAL IS TYPICALLY BOLTS, NUTS, WASHERS ETC. THAT IS PART OF A SUB-ASSEMBLY OR ASSEMBLY. IT'S DEFINED SEPARATELY TO SIMPLIFY DESIGN AND CONSTRUCTION.
2. A SUB-ASSEMBLY IS A SMALLER, SELF-CONTAINED UNIT THAT IS PART OF A LARGER ASSEMBLY. IT'S DEFINED SEPARATELY TO SIMPLIFY DESIGN AND CONSTRUCTION.
3. AN ASSEMBLY IS THE MAJOR STRUCTURE THAT IS MADE UP OF MULTIPLE PARTS OR SUB-ASSEMBLIES AND MATERIAL. IT REPRESENTS THE COMPLETE UNIT THAT IS INSTALLED IN THE FIELD.
4. MATERIAL NUMBERS TYPICALLY START WITH 1XXXXX, 2XXXXX, 3XXXXX, 4XXXXX, 5XXXXX, 8XXXXX, OR 0XXXXX (LEADING ZERO IS OFTEN NOT SHOWN).
5. SUB-ASSEMBLY DESCRIPTIONS BEGIN WITH "OH/" AND ARE ASSOCIATED WITH 710XXX NUMBERS.
6. ASSEMBLY DESCRIPTIONS BEGIN WITH "11", "12.7", "22", AND ALSO USE 710XXX NUMBERS.

SUB-ASSEMBLY

MATERIAL

MATERIALS	DESCRIPTION	TYPE	710232 OH/TX/MOUNTING/100-500
32342	BOLT, HEX HEAD M20x450mm C/W WASHER & NUT	EA	2
323307	PLATE, GAIN BLOCK, 125mm CROSS ARM	EA	2

MATERIALS	DESCRIPTION	TYPE	710253 22/TX/3/500
710232	OH/TX/MOUNTING/100-500kVA (OH/TX/MOUNTING/100-500)	EA	1
710082	OH, 11KV-22KV, INSULATOR, A-BRACKET (OH/HV/INSUL/A-BKT/POLE)	EA	1
710590	OH, 22KV, INSULATORS, INTER TO STEEL XARM (OH/22/INSUL/I/ST)	EA	1
710234	OH, TRANSFORMER HV LEAD (OH/TX/HVLEAD)	EA	3
710237	OH, TRANSFORMER LV LEAD, WIRE, BLDNG 150mm^2 x 37/2.25 XLPE BLACK	EA	2
32215	BOLT, HEX HEAD M12x65mm GAL. C/W NUT	EA	4
40440	NUT, HEX M12 THREAD GALVANISED STEEL	EA	1
426205	T/FORMER, 22kV/433-250V 500kVA x 3P MEPS	EA	1

ASSEMBLY, SHOWN ON THE DRAWING

EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E100-SD-001

BM REV C

ALTERATIONS
ORIGINAL ISSUE

REFERENCE
NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOYZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS ASSEMBLIES EXPLANATION

SCALE: NTS

A4

D - OHC - E100 - SD - 001

REVISION: C

DWG STATUS STANDARD

POLE SUBSTATIONS CONSTRUCTION CODES

FOR SUB-ASSEMBLIES:

OH	/	TX	/	MOUNTING	/	25-63	/	2C
DENOTER		TRANSFORMER		TX PART OF INTEREST		SIZE OF TX OR CABLE		ADDITIONAL

TX - TRANSFORMER

MOUNTING - TX MOUNTING
HV LEAD - HV LEAD INTO TX
LV LEAD - LV LEAD OUT OF TX
TBRACKET - TRANSPOSITION BRACKET

25-63 - 25-63kVA TX
100-500 - 100-500kVA TX
95 - 95mm CABLE
150 - 150mm CABLE
1 - SINGLE PHASE
3 - THREE PHASE

2C - 2 CORE CABLE
4C - 4 CORE CABLE

FOR ASSEMBLIES:

11	/	TX	/	3	/	100	/	ISO
VOLTAGE		TRANSFORMER		PHASES		SIZE (kVA)		ADDITIONAL

11 - 11kV
22 - 22kV
12.7 - SWER

TX - TRANSFORMER
TXF - INTEGRATED HV FUSE
TXRF - HV FUSE

1 - SINGLE PHASE + NEUTRAL
3 - THREE PHASES + NEUTRAL

25, 50, 63, 100, 200, 315, 500

ISO - SWER ISOLATION TRANSFORMER
1CCT - SINGLE CIRCUIT
2CCT-TWO CIRCUITS

GENERAL NOTES FOR POLE SUBSTATION CONSTRUCTIONS:

1. NEUTRAL BUSHING TO HAVE LOCK NUT AND BOLT TO BE LONG ENOUGH SO THE LOCKING NUT CAN BE FULLY TIGHTENED ON TO THE BOLT WITH 1 CLEAR THREAD SHOWING.
2. WHEN THE SUBSTATION IS AT THE END OF A HV SPUR LINE, THE TRANSFORMER SHOULD BE MOUNTED ON THE SIDE OF THE POLE OPPOSITE THE HV SPUR LINE - SINGLE CUSTOMER TRANSFORMERS ON PRIVATE PROPERTY EXCEPTED WHERE HV FUSES ARE REMOTELY LOCATED. INSTALL "T" NUMBER AT THE TRANSFORMER POLE AND ADD A "C" NUMBER FOR THE FUSES ON THE TEE OFF POLE.
3. TRANSFORMERS SHALL NOT BE INSTALLED ON STOBIE POLES.
4. TO ACHIEVE SEPARATION BETWEEN BARE LV CONDUCTORS AND TRANSFORMER TANK, 1-PHASE OPEN WIRE LV SYSTEMS CAN USE A LVIS FRP CROSSARM S.I.323215. 2-PHASE AND 3-PHASE OPEN WIRE WILL REQUIRE A LVISL FRP CROSSARM S.I.323217.
5. WHERE THERE IS A CONFLICT WITH A STAY OR ADDITIONAL HEIGHT IS REQUIRED LVABC CAN BE MOUNTED ON A CROSSARM AS SHOWN IN THIS SECTION.
6. TRANSFORMERS CAN BE INSTALLED ON EXISTING WOOD POLES PROVIDING THE POLE DEPTH AND FOUNDATION MEETS THE STANDARDS FOR THE INSTALLATION. REFER TO POLE SECTION OF THIS STANDARD AND DISTRIBUTION OVERHEAD DESIGN STANDARD FOR POLE DETAILS.
7. WHERE NEW 3-PHASE TRANSFORMERS ARE INSTALLED WITHIN AN EXISTING NETWORK THE SIZE AND CORRECT HV PHASING NEEDS TO BE CONSIDERED. GENERALLY, THE SIZE NEEDS TO BE SAME OR LARGER THAN ADJACENT TRANSFORMERS TO ALLOW LOAD TRANSFERS IN THE LV NETWORK WHEN REQUIRED. THE HV CONNECTIONS ACROSS "A, B AND C" NEED TO BE THE SAME AS ADJACENT TRANSFORMERS TO ALLOW THE LV CIRCUITS TO PHASE OUT AT LV OPEN POINTS.
8. TO ACHIEVE THE CORRECT HV PHASING / CONNECTIONS DESIGNERS NEED TO CONSIDER THE FOLLOWING:
   - TRACE OUT THE CONNECTIONS OF THE ADJACENT TRANSFORMERS.
   - NOMINATE THE SIDE OF POLE TO INSTALL IT ON.
   - SPECIFY CONNECTIONS AT A TEE OFF POLE.
   - TRANSPOSE LEADS BETWEEN THE HV FUSES AND OVERHEAD MAINS OR TRANSFORMER IF NOT TOO COMPLEX.
   - USE A TRANSPOSITION BRACKET TO REPLACE THE INSULATOR BRACKET.
9. IF A LARGE TRANSFORMER IS INSTALLED ON A TEE OFF CLOSE TO AN EXISTING LV NETWORK, IT SHALL BE CONNECTED VIA AN LV EXTENSION BACK TO THE MAIN LV NETWORK AND PHASED OUT TO PROVIDE FLEXIBILITY TO THE NETWORK. AS ABOVE THE TRANSFORMER NEEDS TO MATCH THE SIZES OF THE ADJACENT TRANSFORMERS WITH THE SAME HV CONNECTIONS.
10. TRANSFORMER INSTALLATIONS SHALL NOT HAVE LV OPEN POINTS OR CIRCUITS ATTACHED TO THE POLE FROM AN ADJACENT TRANSFORMER. THE LV OPEN POINT SHALL BE ON AN ADJACENT POLE UNLESS PRIOR APPROVAL IS OBTAINED FROM ENGINEERING.
11. THE MINIMUM CLEARANCE FROM THE HV CABLE CRUTCH TO GROUND LEVEL SHALL BE 5.5m, UNLESS OTHERWISE SPECIFIED BY THE DESIGNER.
12. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS | ORIGINAL ISSUE

REFERENCE: NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOVZHKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS GENERAL NOTES & CODES

SCALE: NTS

A4

D - OHC - E100 - SD - 002

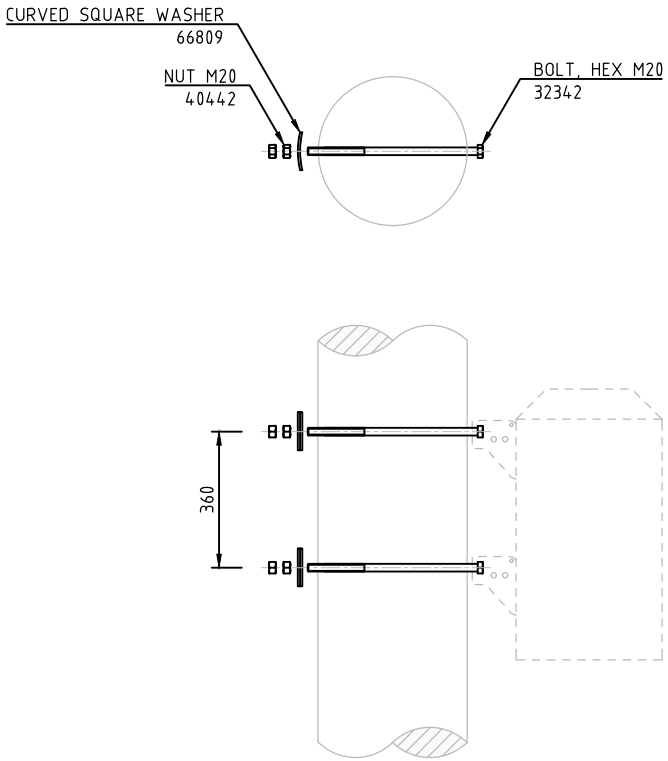
REVISION: C

EMF/PDF CREATION DATE 01/04/2026

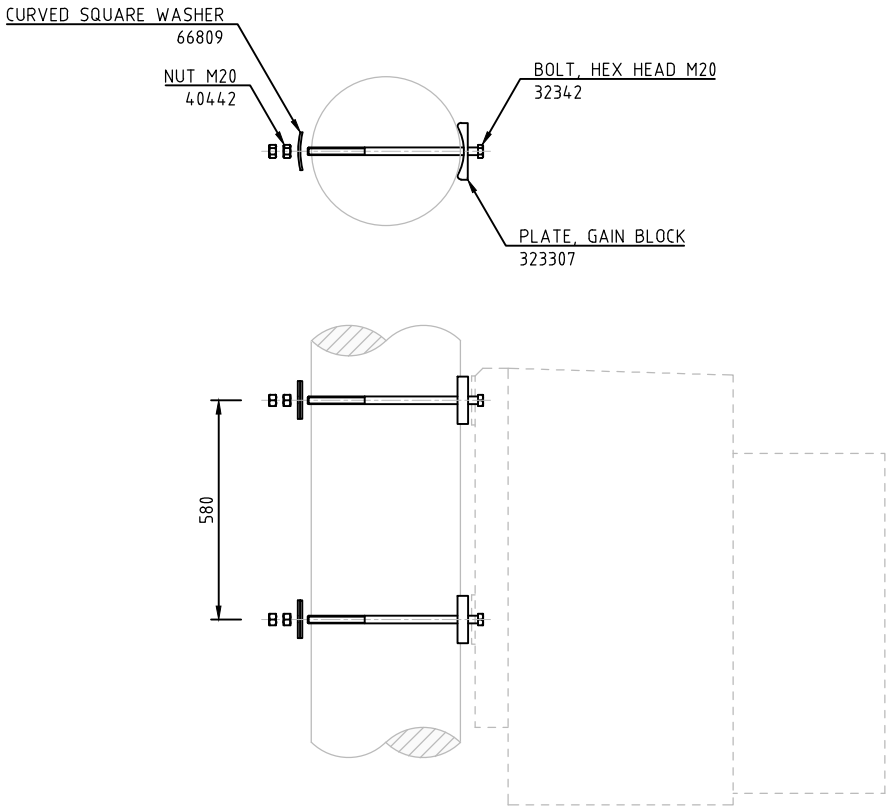
BM DWG NO D-OHC-E100-SD-002

BM REV C

DWG STATUS STANDARD



TRANSFORMER MOUNTING ASSEMBLY 25-63kVA
710231



TRANSFORMER MOUNTING ASSEMBLY 100-500kVA
710232

MATERIALS	DESCRIPTION		710231	710232
		TYPE	OH/TX/MOUNTING/25-63	OH/TX/MOUNTING/100-500
32342	BOLT, HEX HEAD M20x450mm C/W NUT	EA	2	2
323307	PLATE, GAIN BLOCK, 125mm CROSS ARM	EA		2
66809	WASHER, CURVED SQUARE M20 100mm	EA	2	2
40442	NUT, HEX M20 THREAD GALVANISED STEEL	EA	2	2

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS

ORIGINAL ISSUE

REFERENCE

NEW DRAWING

TasNetworks

DRAWN	MEGAVAR PTY LTD
DRAFTING CHECK	MEGAVAR PTY LTD
DESIGNED BY	T.JOVZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE
POLE SUBSTATION
SUB-ASSEMBLIES
TRANSFORMERS MOUNTING OPTIONS

SCALE: NTS

A4

D - OHC - E101 - SD - 001

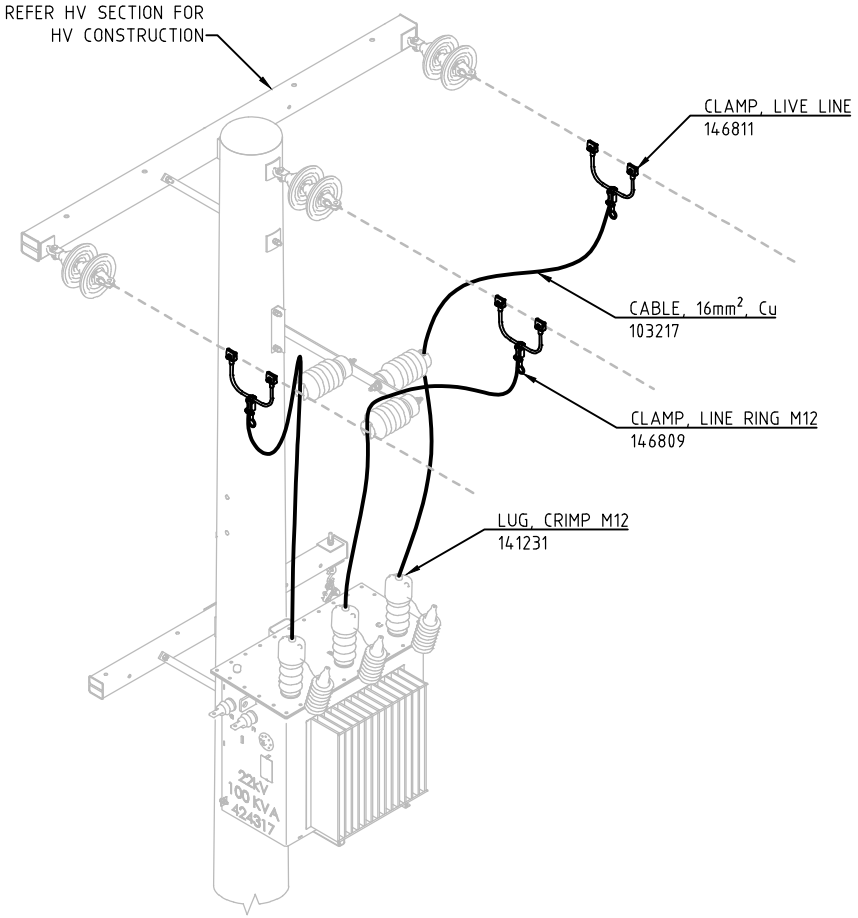
REVISION: C

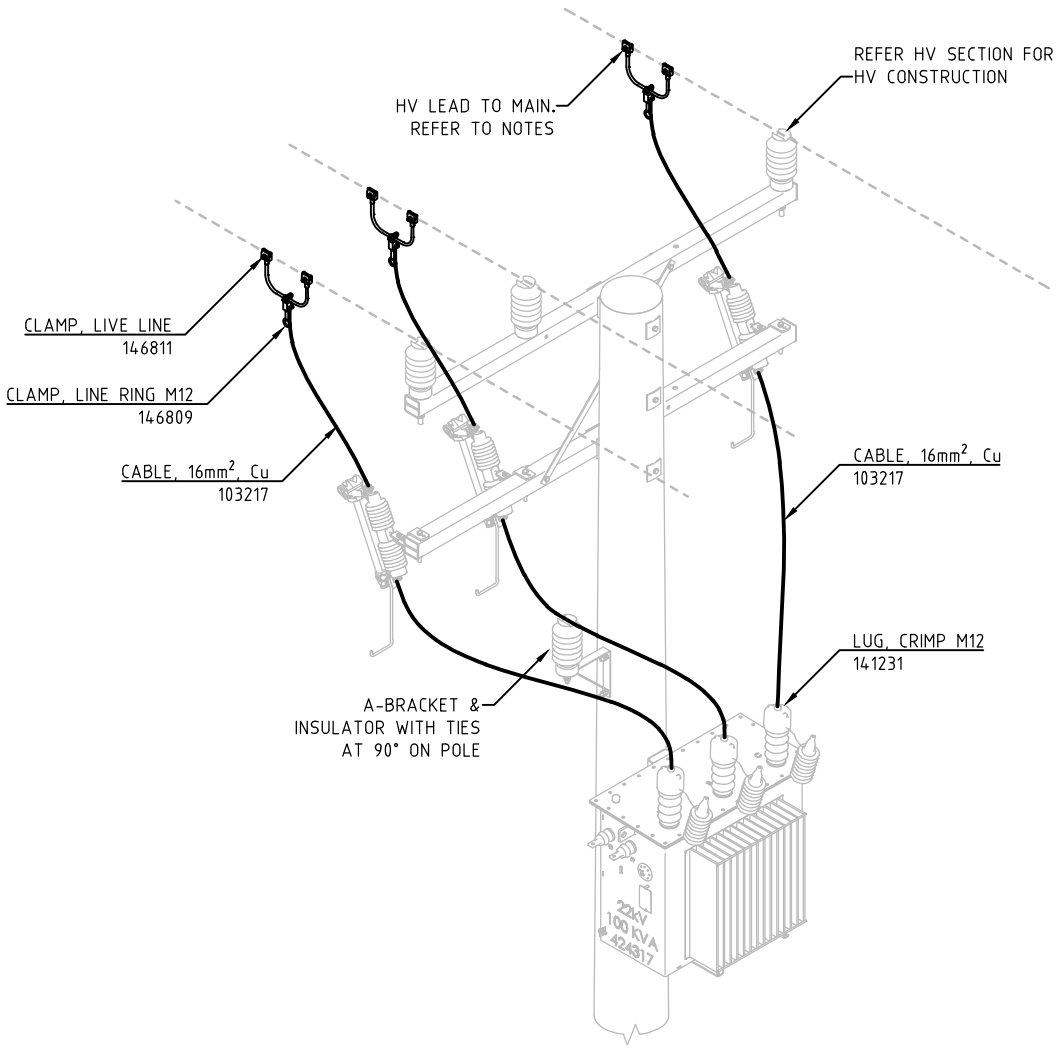
EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E101-SD-001

BM REV C

DWG STATUS STANDARD





MATERIALS			710234
	DESCRIPTION	TYPE	OH/TX/HVLEAD
103217	CABLE, 1CORE x 16mm² x 7/1.70 x 0.6/1 V75	M	4
141231	LUG, CRIMP TERMINAL M12 x 16mm² COPPER	EA	1
146811	CLAMP, LIVE LINE 2 BOLT STIRRUP	EA	1
146809	CLAMP, LIVE LINE RING FITTING M12 - B24T	EA	1

NOTES:

1. PREFERRED CONNECTIONS TO MAINS ARE LIVE LINE CLAMPS & DEE'S FOR INCREASED SAFE APPROACH DISTANCE. REFER TO CONDUCTORS, CABLES, CONNECTORS SECTION FOR FURTHER DETAILS.
2. JOINTING COMPOUND TO BE USED ON ALL ALUMINIUM JOINTS.
3. ALL TRANSFORMERS UP TO 500kVA SHALL USE 16mm²/0.6/1kV INSULATED COPPER CONDUCTOR.
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS: ORIGINAL ISSUE

REFERENCE

NEW DRAWING: SUPERSEDES
D-OHC-F018-SD-001

TasNetworks

DRAWN	MEGAVAR PTY LTD
DRAFTING CHECK	MEGAVAR PTY LTD
DESIGNED BY	T.JOVZHKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SUB-ASSEMBLIES
HV LEADS

SCALE: NTS

A4

D - OHC - E101 - SD - 002

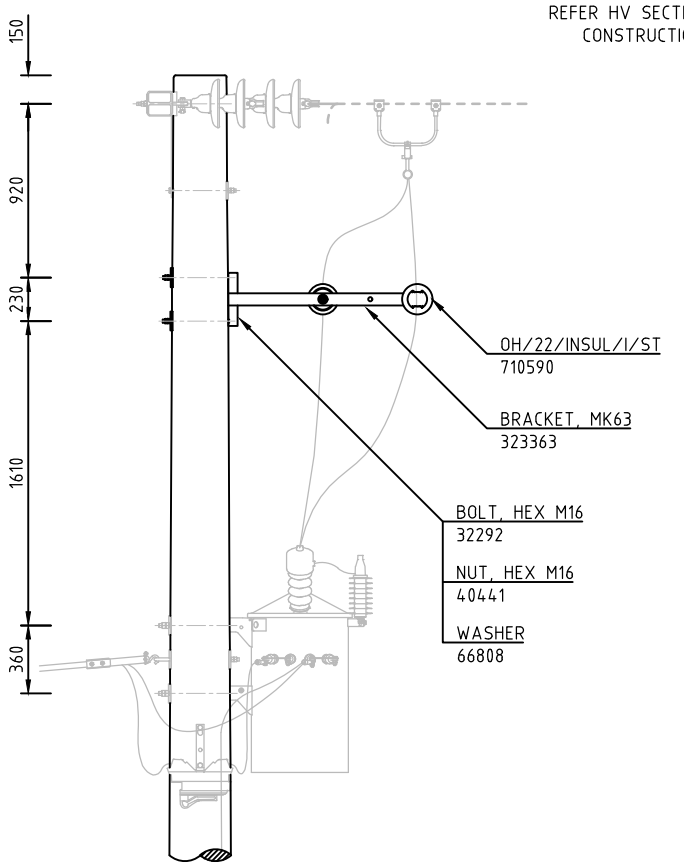
REVISION: B

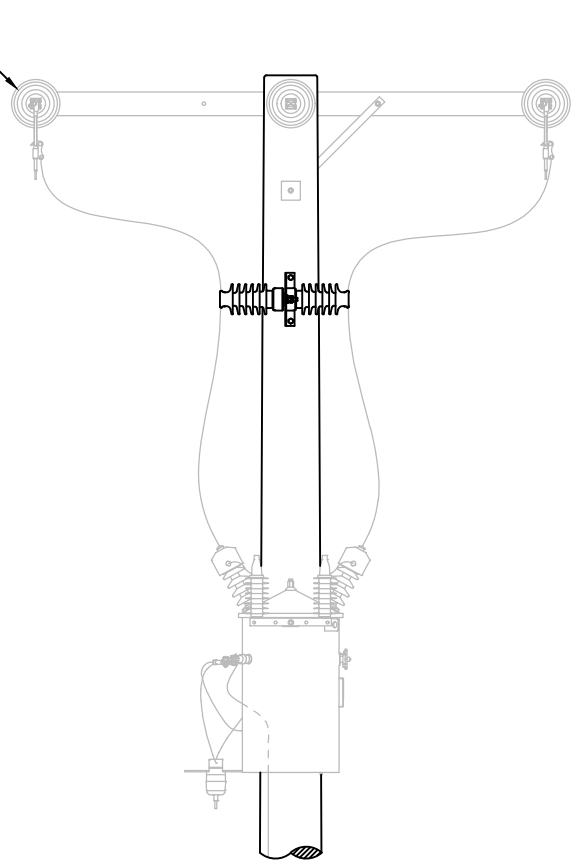
EMF/PDF CREATION DATE 16/03/2026

BM DWG NO D-OHC-E101-SD-002

BM REV B

DWG STATUS STANDARD





USE RELEVANT TRANSFORMER ASSEMBLIES AND ADD THESE COMPONENTS FOR REMOTE FUSED TRANSFORMERS.		
MATERIALS	DESCRIPTION	710776
		OH/TX/TBRACKET/1
710590	OH, 22kV, INSULATORS, INTER TO STEEL XARM, (OH/22/INSUL/I/ST)	2
323363	BRACKET, ANGLE TRANSPOSITION MK63 GAL.	1
32292	BOLT, HEX HEAD M16 x 450mm GAL. C/W NUT	2
66808	WASHER, CURVED SQUARE M16 100mm	2
40441	NUT, HEX M16 THREAD GALVANISED STEEL	2

NOTES:

1. ENSURE THAT LOCK NUTS ARE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.
2. REFER D-OHC-E100-SD-002 FOR GENERAL NOTES.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS

ORIGINAL ISSUE

REFERENCE

NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOYZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SUB-ASSEMBLIES
TRANSPOSITION BRACKET
1-PHASE

SCALE: NTS

A4

D - OHC - E101 - SD - 003

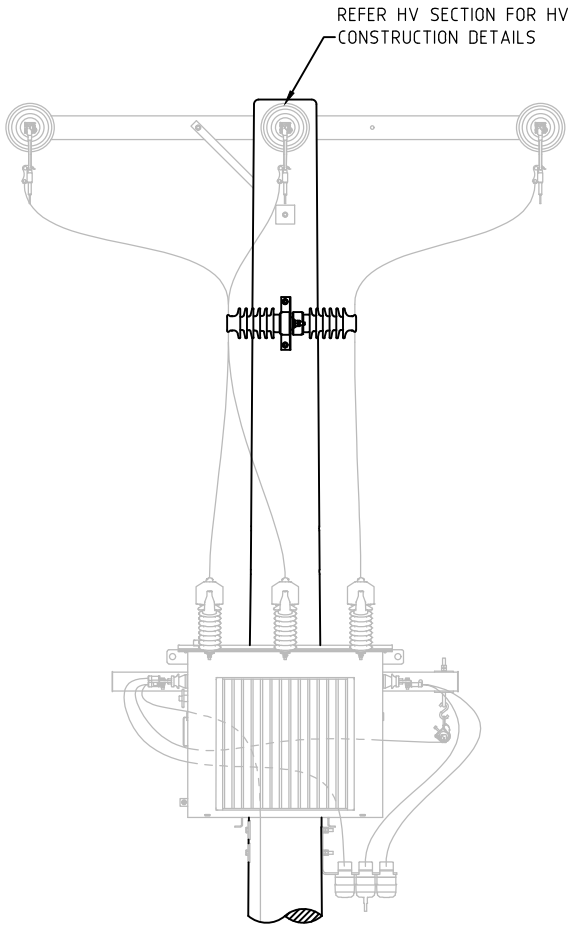
REVISION: C

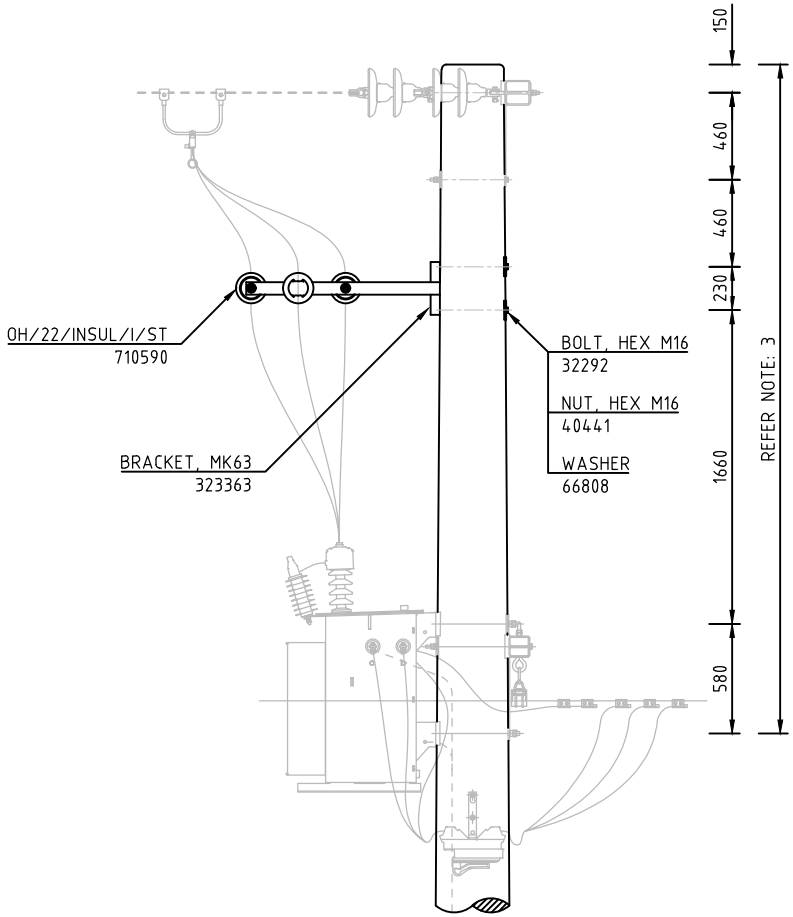
EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E101-SD-003

BM REV C

DWG STATUS STANDARD





USE RELEVANT TRANSFORMER ASSEMBLIES AND ADD THESE COMPONENTS FOR REMOTE FUSED TRANSFORMERS.		
MATERIALS	DESCRIPTION	710777
		OH/TX/TBRACKET/3
710590	OH, 22kV, INSULATORS, INTER TO STEEL XARM, (OH/22/INSUL/I/ST)	3
323363	BRACKET, ANGLE TRANSPOSITION MK63 GAL.	1
32292	BOLT, HEX HEAD M16 x 450mm GAL. C/W NUT	2
66808	WASHER, CURVED SQUARE M16 100mm	2
40441	NUT, HEX M16 THREAD GALVANISED STEEL	2

NOTES:

1. ENSURE THAT LOCK NUTS ARE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.
2. REFER D-OHC-E100-SD-002 FOR GENERAL NOTES.
3. DIMENSIONS BASED ON STANDARD TITAN POLE (12.5m EQUIPMENT POLE) HOLE SPACINGS.
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS

ORIGINAL ISSUE

REFERENCE

NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOYZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SUB-ASSEMBLIES
TRANSPOSITION BRACKET
3-PHASE

SCALE: NTS

A4

D - OHC - E101 - SD - 004

REVISION: C

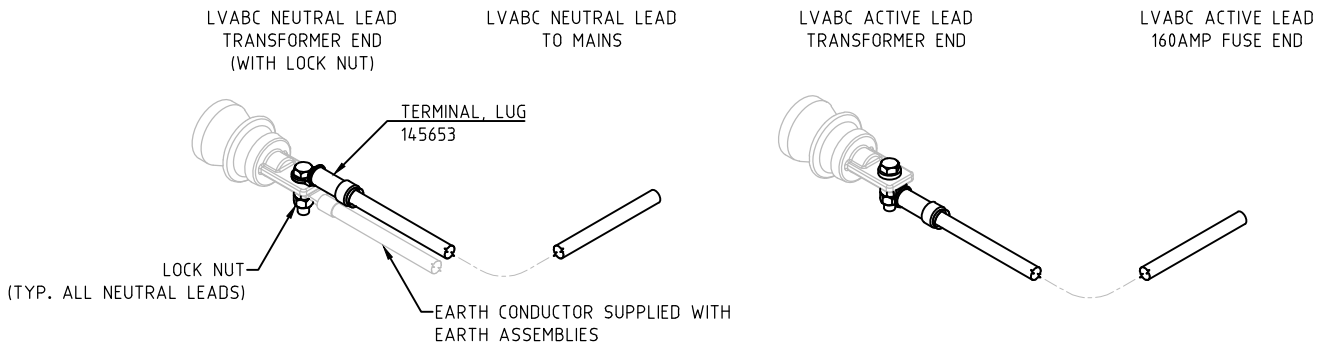
EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E101-SD-004

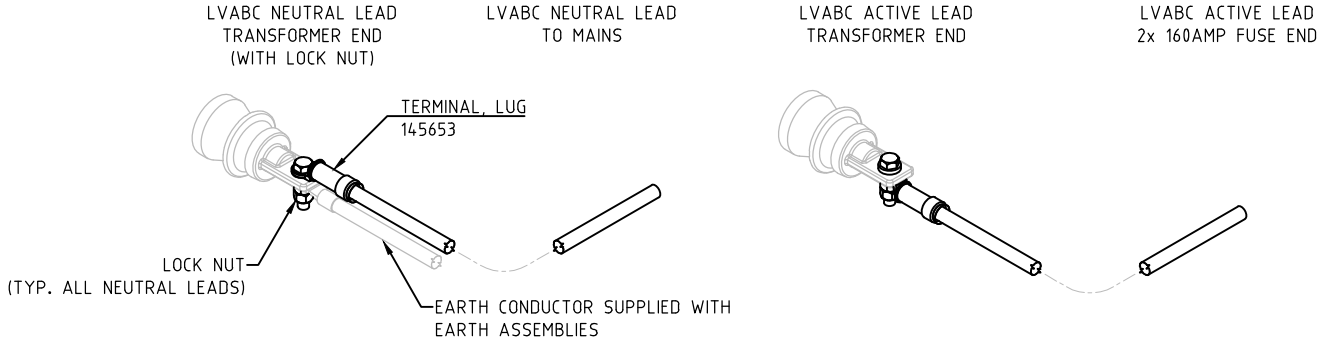
BM REV C

DWG STATUS STANDARD

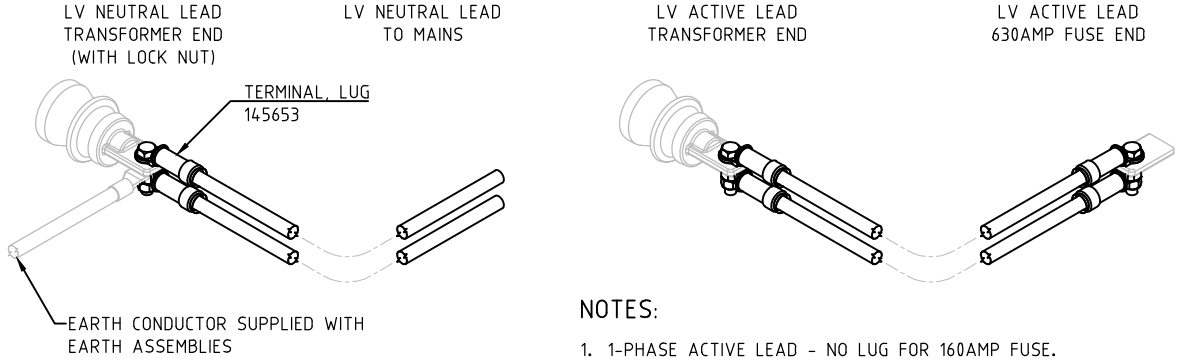
1-PHASE TRANSFORMER LV LEADS USING 160AMP FUSE BASE FOR 1-PHASE CONFIGURATION			
TRANSFORMER	NEUTRAL (mm^2)	ACTIVE (mm^2)	BUSHING BOLT SIZE M12
25kVA 1-PH	1x 95 LVABC	1x 95 LVABC	50



1-PHASE TRANSFORMER LV LEADS USING 2x 160AMP FUSE BASES FOR 2-PHASE CONFIGURATION			
TRANSFORMER	NEUTRAL (mm^2)	ACTIVE (mm^2)	BUSHING BOLT SIZE M12
25kVA 1-PH	1x 95 LVABC	2x 95 LVABC	50
50kVA 1-PH	2x 95 LVABC	2x 95 LVABC	50
SPLIT PHASE TRANSFORMERS TO HAVE SINGLE LEAD TO EACH FUSE BASE			



50kVA 1-PHASE TRANSFORMER LV LEADS USING 630AMP FUSE BASE FOR 1-PHASE CONFIGURATION			
TRANSFORMER	NEUTRAL (mm^2)	ACTIVE (mm^2)	BUSHING BOLT SIZE M12
50kVA 1-PH	2x 95 LVABC	2x 95 LVABC	50



MATERIALS	DESCRIPTION		710235
		TYPE	OH/TX/LVLEAD/95/2C
145653	TERMINAL, LUG COMPRESSION M13 x 95mm^2	EA	2
103003	CABLE, 2CORE x 95mm^2 x 19/2.63 x 0.6/1 XLPE	M	3

NOTES:

1. 1-PHASE ACTIVE LEAD - NO LUG FOR 160AMP FUSE.
2. 50kVA 1-PHASE REQUIRES DOUBLE LV LEADS.
3. NEUTRAL BUSHING TO HAVE LOCK NUT AND BOLT BE LONG ENOUGH SO THE NUT CAN BE FULLY TIGHTENED ON THE BOLT.

ALTERATIONS

ORIGINAL ISSUE

REFERENCE

NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOYZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SUB-ASSEMBLIES
LV LEADS AND BUSHING CONNECTIONS
1-PHASE TRANSFORMERS

SCALE: NTS

A4

D - OHC - E101 - SD - 005

REVISION: C

EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E101-SD-005

BM REV C

DWG STATUS STANDARD

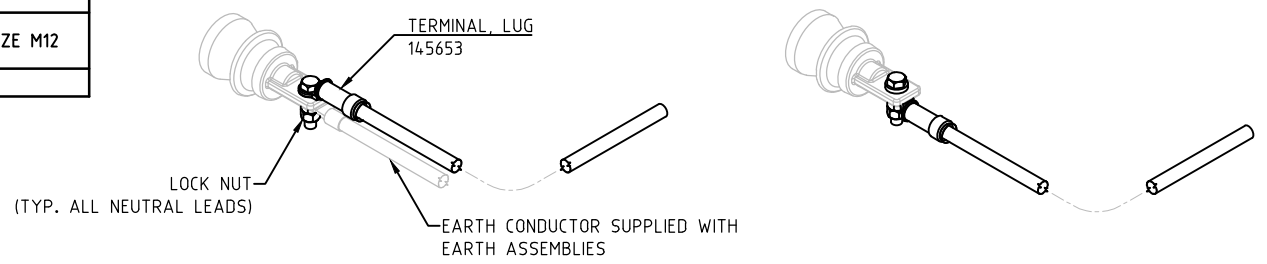
3-PHASE TRANSFORMER LV LEADS USING 160AMP FUSE BASE			
TRANSFORMER	NEUTRAL (mm^2)	ACTIVE (mm^2)	BUSHING BOLT SIZE M12
25-63kVA 3-PH	1x 95 LVABC	1x 95 LVABC	50

LVABC NEUTRAL LEAD TRANSFORMER END (WITH LOCK NUT)

LVABC NEUTRAL LEAD TO MAINS

LVABC ACTIVE LEAD TRANSFORMER END

LVABC ACTIVE LEAD 160AMP FUSE END



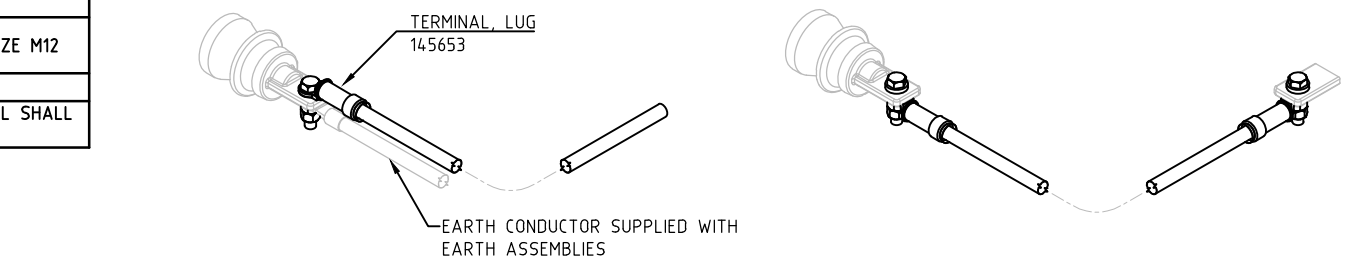
3-PHASE TRANSFORMER LV LEADS USING 630AMP FUSE BASE			
TRANSFORMER	NEUTRAL (mm^2)	ACTIVE (mm^2)	BUSHING BOLT SIZE M12
100kVA	1x 95 LVABC	1x 95 LVABC	50
WHERE TRANSFORMERS SUPPLY AN UNDERGROUND CABLE THE NEUTRAL COPPER TAIL SHALL CONNECT DIRECT TO THE NEUTRAL BUSHING			

LVABC NEUTRAL LEAD TRANSFORMER END (WITH LOCK NUT)

LVABC NEUTRAL LEAD TO MAINS

LVABC ACTIVE LEAD TRANSFORMER END

LVABC ACTIVE LEAD 630AMP FUSE END



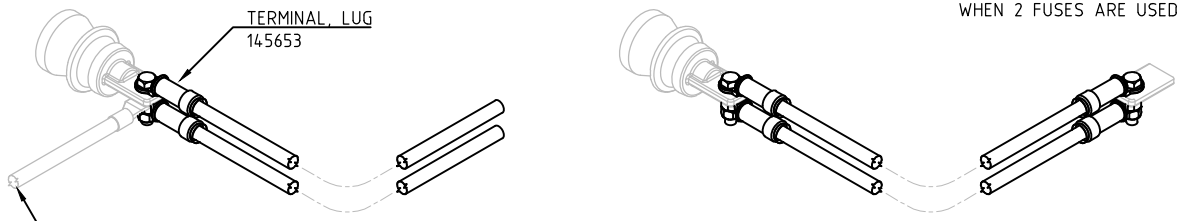
3-PHASE TRANSFORMER LV LEADS USING 630AMP FUSE BASE			
TRANSFORMER	NEUTRAL (mm^2)	ACTIVE (mm^2)	BUSHING BOLT SIZE M12
200 & 315kVA	2x 95 LVABC	2x 95 LVABC	50
WHERE TRANSFORMERS SUPPLY AN UNDERGROUND CABLE THE NEUTRAL COPPER TAIL SHALL CONNECT DIRECT TO THE NEUTRAL BUSHING			

LV NEUTRAL LEAD TRANSFORMER END (WITH LOCK NUT)

LV NEUTRAL LEAD TO MAINS

LV ACTIVE LEAD TRANSFORMER END

LV ACTIVE LEAD 630AMP FUSE END SINGLE CONNECTION ONLY WHEN 2 FUSES ARE USED



MATERIALS	DESCRIPTION		710236
		TYPE	OH/TX/LVLEAD/95/4C
145653	TERMINAL, LUG COMPRESSION M13 x $95mm^2$	EA	4
103001	CABLE, 4CORE x $95mm^2$ x 19/2.63 x 0.6/1 XLPE	M	3

NOTES:

1. 25, 63 & 100kVA 3-PHASE ONLY REQUIRE SINGLE LEADS.
2. 200 & 315kVA LEADS TO SHALL BE 2x 95 LVABC MIN.
3. NEUTRAL BUSHING TO HAVE LOCK NUT AND BOLT BE LONG ENOUGH SO THE NUT CAN BE FULLY TIGHTENED ON THE BOLT.

ALTERATIONS

ORIGINAL ISSUE

REFERENCE

NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JANYZHKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SUB-ASSEMBLIES
LV LEADS AND BUSHING CONNECTIONS
25-315kVA 3-PHASE TRANSFORMERS

SCALE: NTS

A4

D - OHC - E101 - SD - 006

REVISION: B

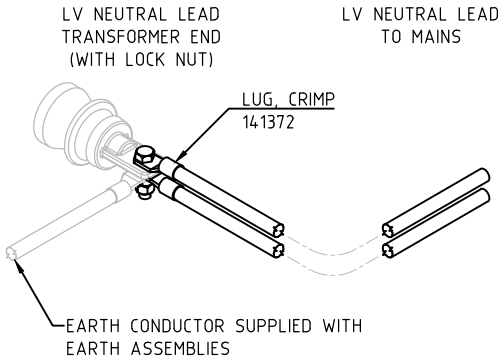
EMF/PDF CREATION DATE 01/04/2026

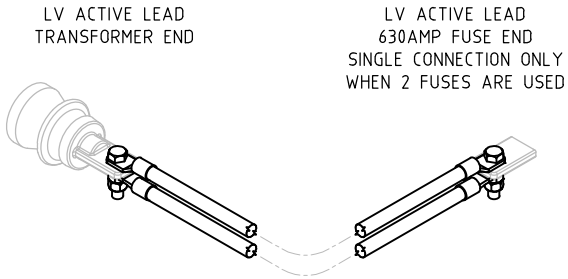
BM DWG NO D-OHC-E101-SD-006

BM REV B

DWG STATUS STANDARD

3-PHASE TRANSFORMER LV LEADS USING 630AMP FUSE BASE			
TRANSFORMER	NEUTRAL (mm^2)	ACTIVE (mm^2)	BUSHING BOLT SIZE M12
500kVA	2x 150Cu	2x 150Cu	65
WHERE TRANSFORMERS SUPPLY AN UNDERGROUND CABLE THE NEUTRAL COPPER TAIL SHALL CONNECT DIRECT TO THE NEUTRAL BUSHING			





MATERIALS	DESCRIPTION		710237
		TYPE	OH/TX/LVLEAD/150
141372	LUG, CRIMP TERMINAL M12 x 150mm^2 COPPER	EA	7
94195	WIRE, BLDNG 150mm^2 x 37/2.25 XLPE BLACK	M	4

NOTES:

1. 500kVA LEADS SHALL BE 2x COPPER 150mm^2 MIN.
2. NEUTRAL BUSHING TO HAVE LOCK NUT AND BOLT BE LONG ENOUGH SO THE NUT CAN BE FULLY TIGHTENED ON THE BOLT.

ALTERATIONS

ORIGINAL ISSUE

REFERENCE

NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOVZIHKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SUB-ASSEMBLIES
LV LEADS AND BUSHING CONNECTIONS
500 kVA 3-PHASE TRANSFORMERS

SCALE: NTS

A4

D - OHC - E101 - SD - 007

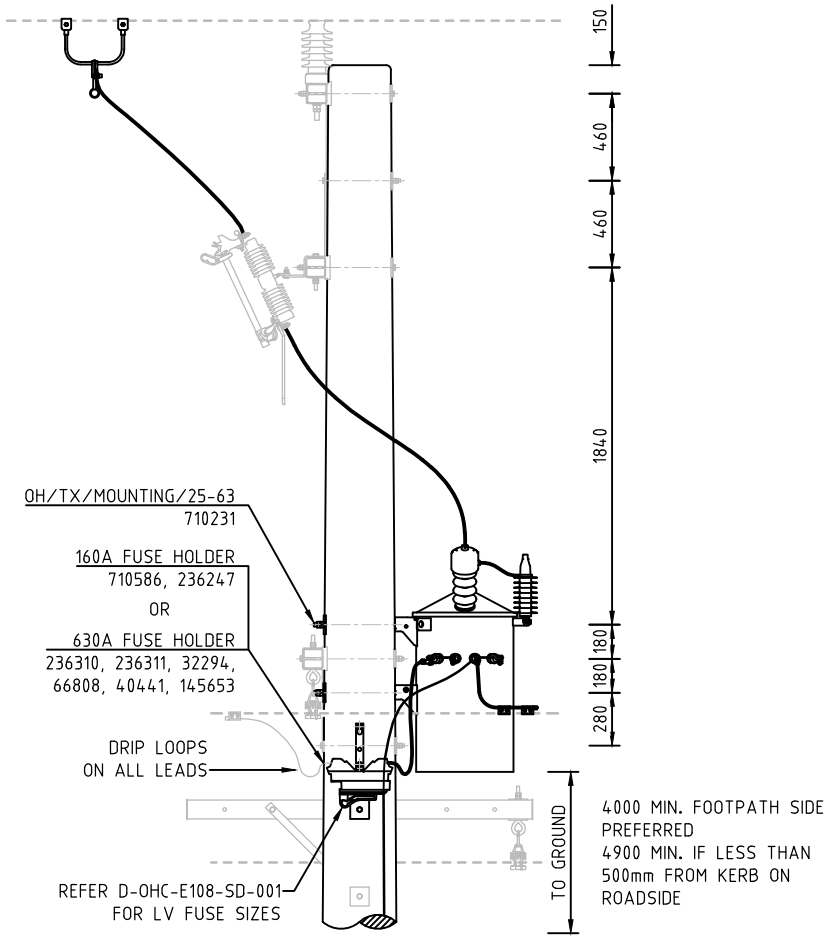
REVISION: B

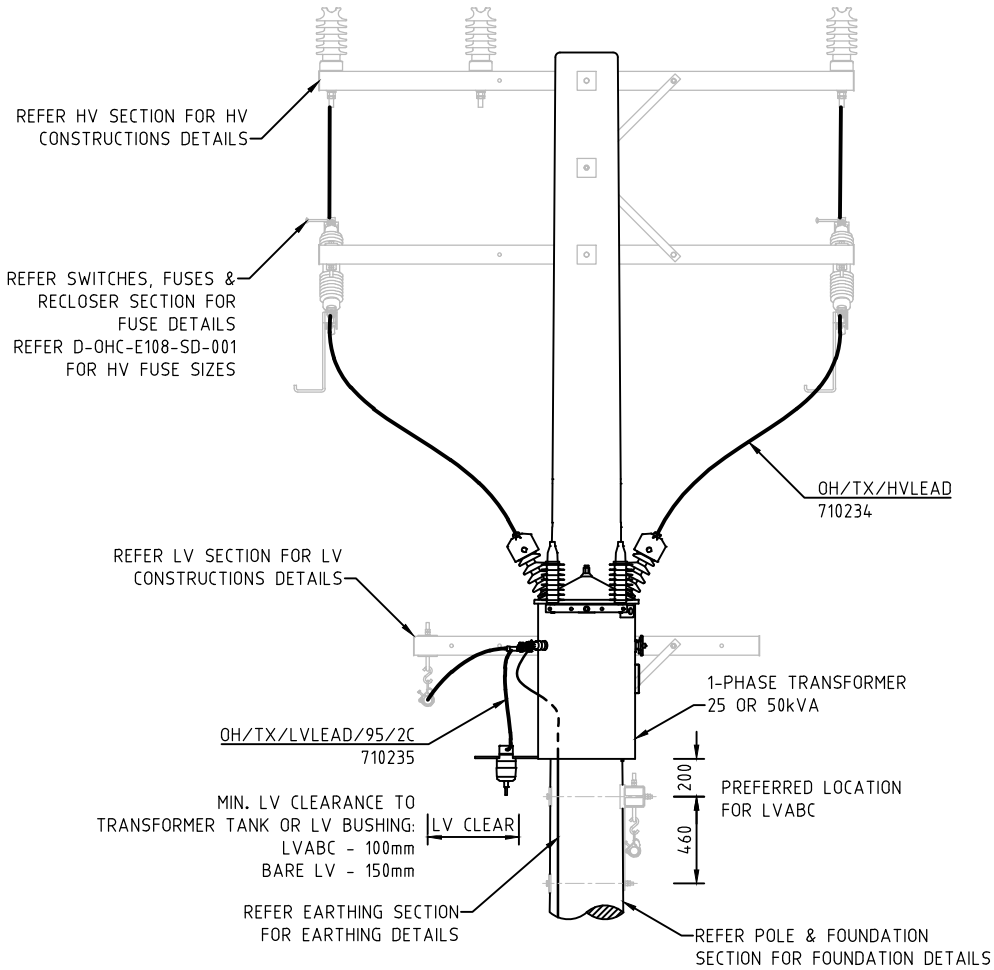
EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E101-SD-007

BM REV B

DWG STATUS STANDARD





NOTES:

1. REFER D-OHC-E100-SD-002 FOR GENERAL NOTES
2. ENSURE THAT LOCK NUTS ARE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.
3. REFER D-OHC-E102-SD-002 FOR BILL OF MATERIALS.
4. LV FUSING POSITIONED TO SUIT INSTALLATION.
5. SINGLE LV STRAIN OR INTERMEDIATE CROSSARM CAN BE FITTED IN POSITIONS AS SHOWN INCLUDING TOP OR BOTTOM TRANSFORMER BOLTS OR AS SPECIFIED BY DESIGN.
6. LV CROSSARM SHALL NOT BE INSTALLED ABOVE TOP TRANSFORMER BOLT.
7. REFER TO D-OHC-E101-SD-001 FOR TRANSFORMER HANGING DETAILS.
8. TRANSFORMER FOR SINGLE SUPPLY LOADS SHALL HAVE LV FUSE RATED TO SUIT MAXIMUM DEMAND. LV FUSE WILL BE THE SERVICE PROTECTION DEVICE (SPD). TRANSFORMER FUSES IN SERIES WITH AN SPD SHALL NOT BE USED.
9. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS	REFERENCE
ORIGINAL ISSUE	NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOWZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE WOOD POLE SUBSTATION
INTEGRATED HV FUSING
1-PHASE 11kV OR 22kV

SCALE: NTS

A4

D - OHC - E102 - SD - 001

REVISION: C

MATERIALS	BILL OF MATERIALS FOR 11kV TRANSFORMERS DESCRIPTION	TYPE	SINGLE CIRCUIT TRANSFORMERS 710238 11/TX/1/25/1CCT	 710239 11/TX/1/50/1CCT	TWO CIRCUIT TRANSFORMERS 710676 11/TX/1/25/2CCT	 710678 11/TX/1/50/2CCT
710231	OH, TRANSFORMER MOUNTING, 25-63kVA (OH/TX/MOUNTING/25-63)	EA	1	1	1	1
710234	OH, TRANSFORMER HV LEAD (OH/TX/HVLEAD)	EA	2	2	2	2
710235	OH, TRANSFORMER LV LEAD, 95mm, 2 CORE (OH/TX/LVLEAD/95/2C)	EA	1	2	1	2
236247	SWITCH, ISOLATING POLE FUSE 6-95mm^2 SZ-00	EA			1	1
236310	FUSE HOLDER, LV, NGK, 630A 1-Ph	EA		1		
236311	BRACKET, 630A NGK FUSE HOLDER	EA		1		
32292	BOLT, HEX HEAD M16 x 450mm GAL. C/W NUT	EA		2		
420914	T/FORMER, 11kV/500-250V 25kVA x 1P MEPS	EA	1		1	
421111	T/FORMER, 11kV/500-250V 50kVA x 1P MEPS	EA		1		1
145653	LUG, COMPRESSION INSULATED M13 95mm^2	EA		2		
66808	WASHER, CURVED SQUARE M16 100mm	EA		2		
40441	NUT, HEX M16 THREAD GALVANISED STEEL	EA		2		
710586	OH, 160A FUSE, WOOD POLE MOUNTED (OH/SERV/FUSE/POLE/160)	EA	1		1	1

MATERIALS	BILL OF MATERIALS FOR 22kV TRANSFORMERS DESCRIPTION	TYPE	SINGLE CIRCUIT TRANSFORMERS 710240 22/TX/1/25/1CCT	 710241 22/TX/1/50/1CCT	TWO CIRCUIT TRANSFORMERS 710767 22/TX/1/25/2CCT	 710769 22/TX/1/50/2CCT
710231	OH, TRANSFORMER MOUNTING, 25-63kVA (OH/TX/MOUNTING/25-63)	EA	1	1	1	1
710234	OH, TRANSFORMER HV LEAD (OH/TX/HVLEAD)	EA	2	2	2	2
710235	OH, TRANSFORMER LV LEAD, 95mm, 2 CORE (OH/TX/LVLEAD/95/2C)	EA	1	2	1	2
236247	SWITCH, ISOLATING POLE FUSE 6-95mm^2 SZ-00	EA			1	1
236310	FUSE HOLDER, LV, NGK, 630A 1-Ph	EA		1		
236311	BRACKET, 630A NGK FUSE HOLDER	EA		1		
32292	BOLT, HEX HEAD M16 x 450mm GAL. C/W NUT	EA		2		
423513	T/FORMER, 22kV/500-250V 25kVA x 1P MEPS	EA	1		1	
423605	T/FORMER, 22kV/500-250V 50kVA x 1P MEPS	EA		1		1
145653	LUG, COMPRESSION INSULATED M13 95mm^2	EA		2		
66808	WASHER, CURVED SQUARE M16 100mm	EA		2		
40441	NUT, HEX M16 THREAD GALVANISED STEEL	EA		2		
710586	OH, 160A FUSE, WOOD POLE MOUNTED (OH/SERV/FUSE/POLE/160)	EA	1		1	1

NOTES:

1. ADD HV FUSE ASSEMBLY (710271 TO 710276) FOR INTEGRATED HV FUSING TRANSFORMER INSTALLATIONS.
2. ADD TRANSPOSITION BRACKET SUB-ASSEMBLY (710776) FOR REMOTE FUSING INSTALLATIONS.

EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E102-SD-002

BM REV B

ALTERATIONS	REFERENCE
ORIGINAL ISSUE	NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOYZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE WOOD POLE SUBSTATION
BILL OF MATERIALS
1-PHASE 11kV OR 22kV

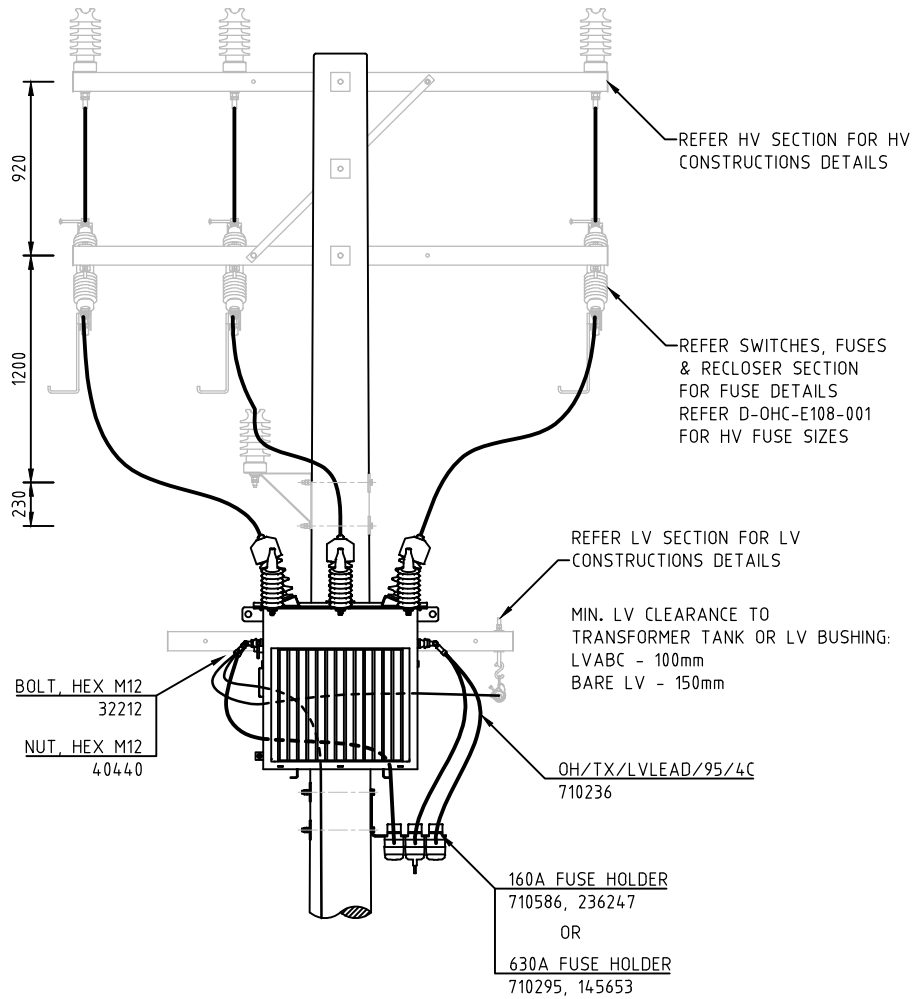
SCALE: NTS

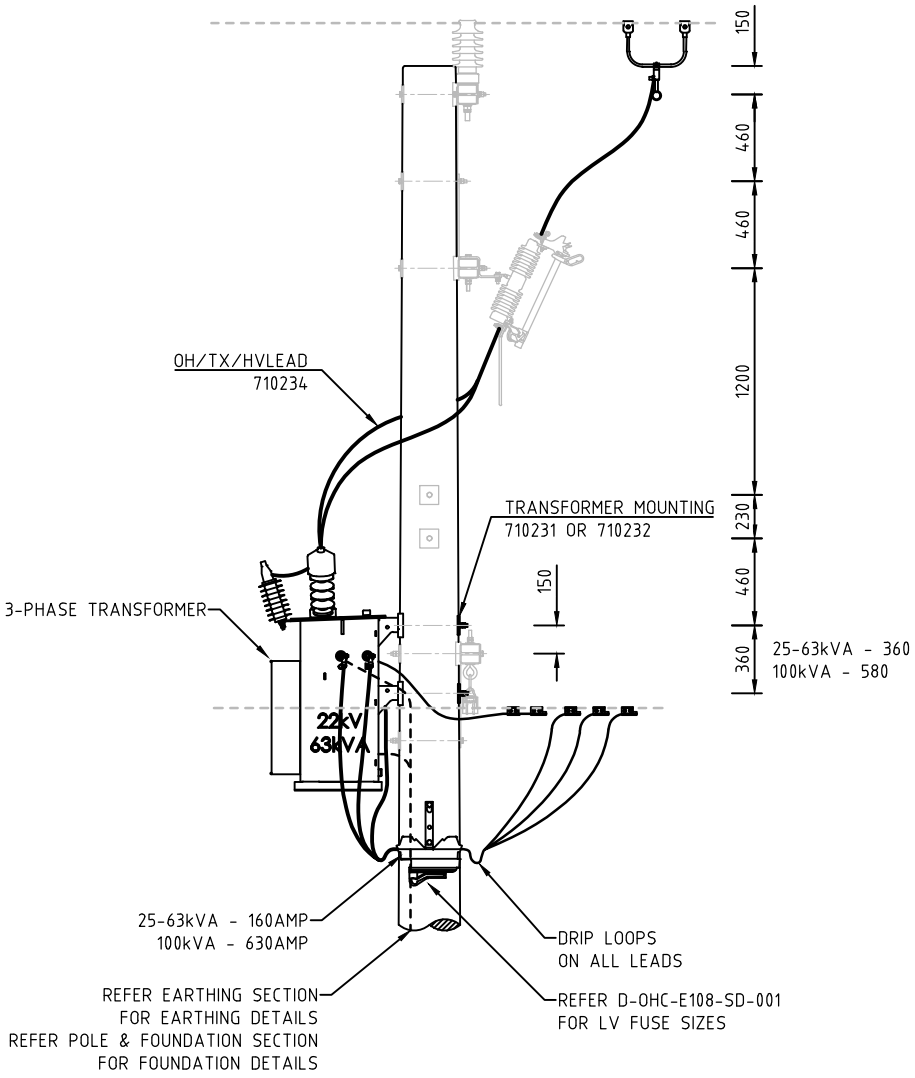
A4

D - OHC - E102 - SD - 002

REVISION: B

DWG STATUS STANDARD





NOTES:

1. REFER D-OHC-E103-SD-003 OR D-OHC-E103-SD-004 FOR BILL OF MATERIALS.
2. ENSURE THAT LOCK NUTS ARE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.
3. REFER D-OHC-E100-SD-002 FOR GENERAL NOTES.
4. LV FUSING POSITIONED TO SUIT INSTALLATION.
5. SINGLE LV STRAIN OR INTERMEDIATE CROSSARM CAN BE FITTED IN POSITIONS AS SHOWN OR AS SPECIFIED BY DESIGN.
6. LV CROSSARM SHALL NOT BE INSTALLED ABOVE TOP TRANSFORMER BOLT.
7. REFER TO D-OHC-E101-SD-001 FOR TRANSFORMER HANGING DETAILS.
8. TRANSFORMER FOR SINGLE SUPPLY LOADS SHALL HAVE LV FUSE RATED TO SUIT MAXIMUM DEMAND. LV FUSE WILL BE THE SERVICE PROTECTION DEVICE (SPD). TRANSFORMER FUSES IN SERIES WITH AN SPD SHALL NOT BE USED.
9. IF USING HV RISERS FOR DELTA SPACING REFER TO HV SECTION FOR DETAILS.
10. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS	REFERENCE
ORIGINAL ISSUE	NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOWZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE WOOD POLE SUBSTATION
INTEGRATED HV FUSING
3-PHASE 25 - 100kVA 11kV OR 22kV

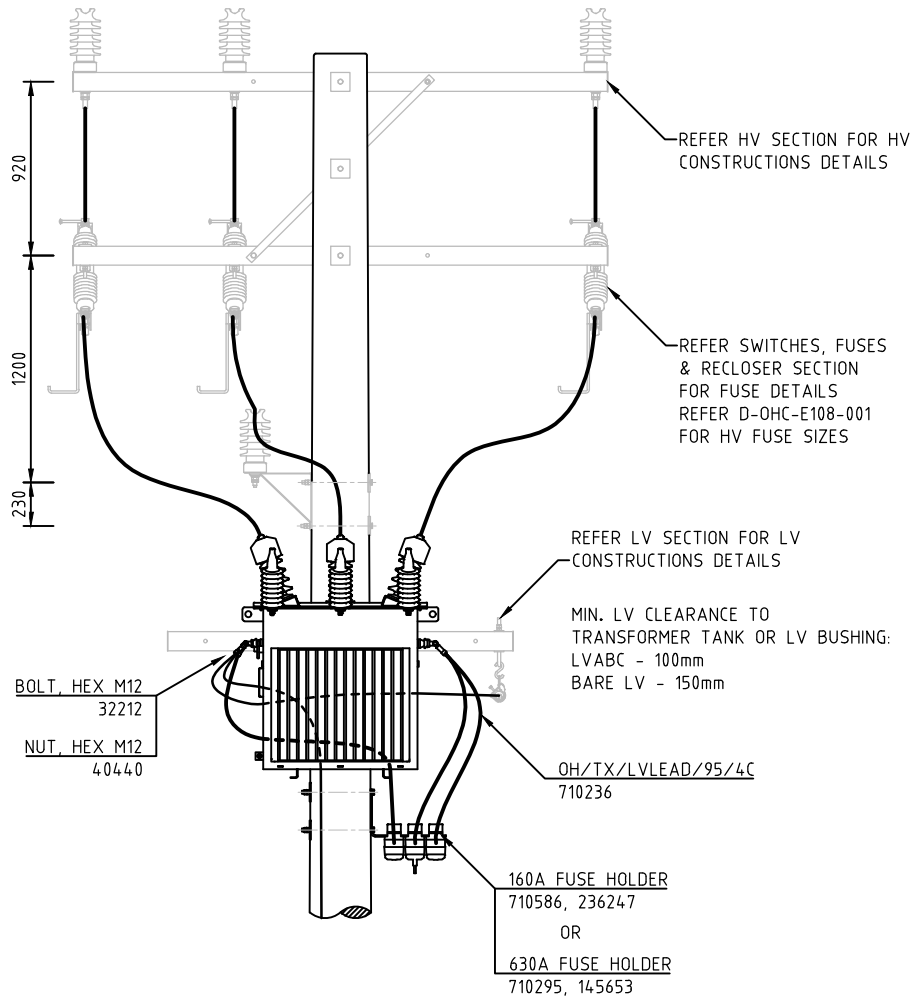
SCALE: NTS
A4
REVISION: B

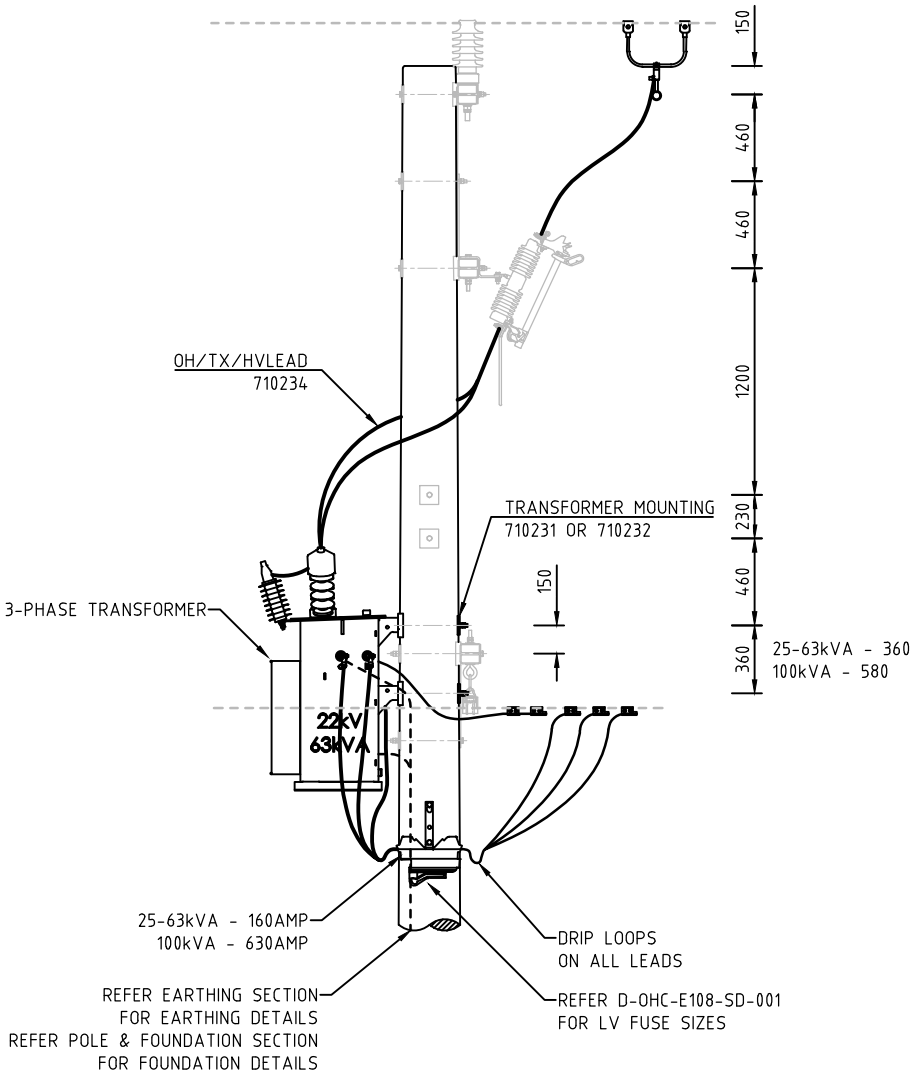
D - OHC - E103 - SD - 001

EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E103-SD-001 BM REV B

DWG STATUS STANDARD





NOTES:

1. REFER D-OHC-E103-SD-003 OR D-OHC-E103-SD-004 FOR BILL OF MATERIALS.
2. ENSURE THAT LOCK NUTS ARE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.
3. REFER D-OHC-E100-SD-002 FOR GENERAL NOTES.
4. LV FUSING POSITIONED TO SUIT INSTALLATION.
5. SINGLE LV STRAIN OR INTERMEDIATE CROSSARM CAN BE FITTED IN POSITIONS AS SHOWN OR AS SPECIFIED BY DESIGN.
6. LV CROSSARM SHALL NOT BE INSTALLED ABOVE TOP TRANSFORMER BOLT.
7. REFER TO D-OHC-E101-SD-001 FOR TRANSFORMER HANGING DETAILS.
8. TRANSFORMER FOR SINGLE SUPPLY LOADS SHALL HAVE LV FUSE RATED TO SUIT MAXIMUM DEMAND. LV FUSE WILL BE THE SERVICE PROTECTION DEVICE (SPD). TRANSFORMER FUSES IN SERIES WITH AN SPD SHALL NOT BE USED.
9. IF USING HV RISERS FOR DELTA SPACING REFER TO HV SECTION FOR DETAILS.
10. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS	REFERENCE
ORIGINAL ISSUE	NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOWZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE WOOD POLE SUBSTATION
INTEGRATED HV FUSING
3-PHASE 25 - 100kVA 11kV OR 22kV

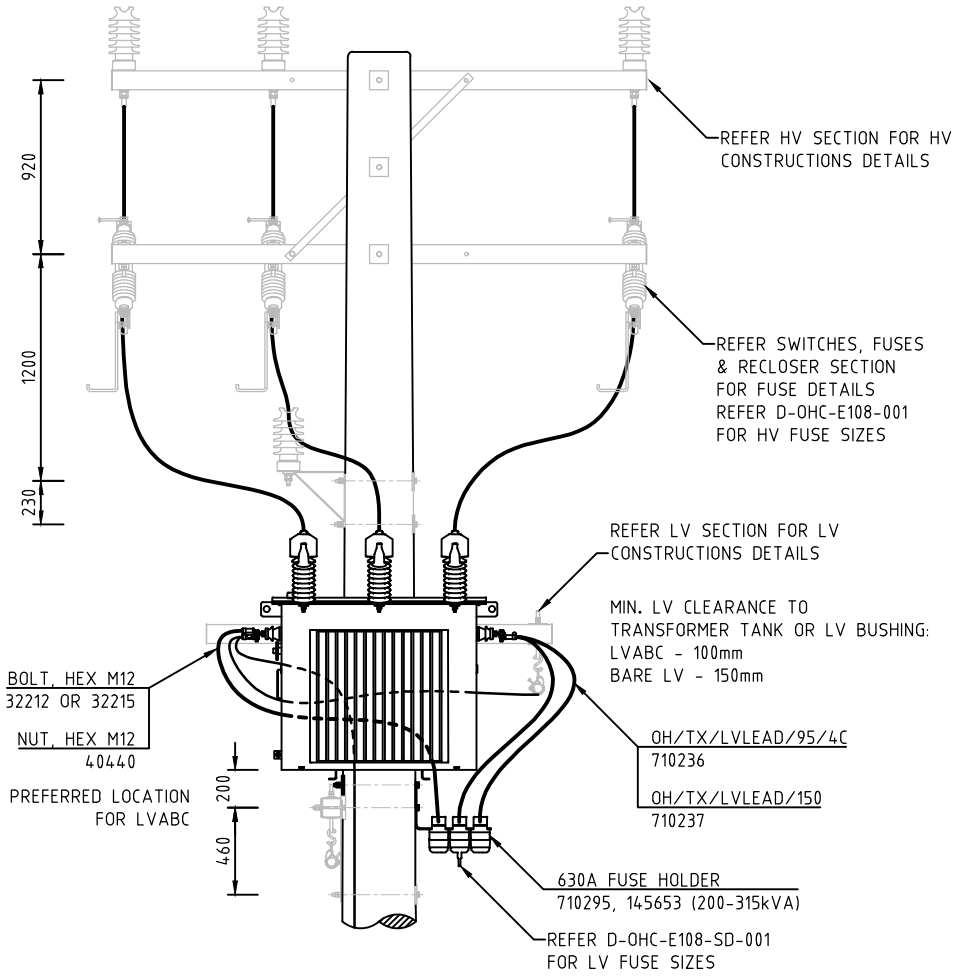
SCALE: NTS
A4
REVISION: B

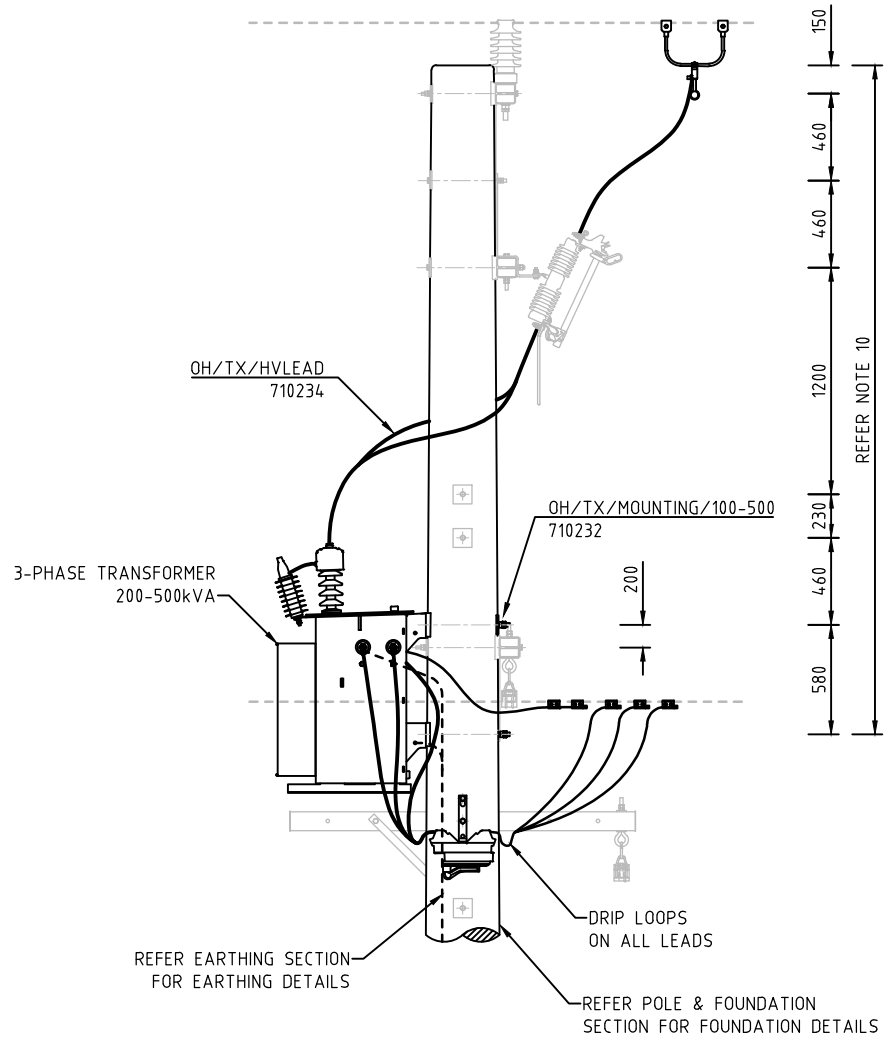
D - OHC - E103 - SD - 001

EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E103-SD-001 BM REV B

DWG STATUS STANDARD





NOTES:

1. REFER D-OHC-E103-SD-003 OR D-OHC-E103-SD-004 FOR BILL OF MATERIALS.
2. ENSURE THAT LOCK NUTS ARE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.
3. REFER D-OHC-E100-SD-002 FOR GENERAL NOTES.
4. LV FUSING POSITIONED TO SUIT INSTALLATION.
5. SINGLE LV STRAIN OR INTERMEDIATE CROSSARM CAN BE FITTED IN POSITIONS AS SHOWN OR AS SPECIFIED BY DESIGN.
6. LV CROSSARM SHALL NOT BE INSTALLED ABOVE TOP TRANSFORMER BOLT.
7. REFER TO D-OHC-E101-SD-001 FOR TRANSFORMER HANGING DETAILS.
8. TRANSFORMER FOR SINGLE SUPPLY LOADS SHALL HAVE LV FUSE RATED TO SUIT MAXIMUM DEMAND. LV FUSE WILL BE THE SERVICE PROTECTION DEVICE (SPD). TRANSFORMER FUSES IN SERIES WITH AN SPD SHALL NOT BE USED.
9. IF USING HV RISERS FOR DELTA SPACING REFER TO HV SECTION FOR DETAILS.
10. DIMENSIONS BASED ON STANDARD TITAN POLE (12.5m EQUIPMENT POLE) HOLE SPACINGS.
11. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS	REFERENCE
ORIGINAL ISSUE	NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOWZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE TITAN POLE SUBSTATION
INTEGRATED HV FUSING
3-PHASE 200 - 500kVA 11kV OR 22kV

SCALE: NTS
A4
REVISION: C

D - OHC - E103 - SD - 002

EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E103-SD-002 BM REV C

DWG STATUS STANDARD

MATERIALS	DESCRIPTION	TYPE	SINGLE CIRCUIT TRANSFORMERS					
			710242	710243	710244	710245	710246	710247
			11/TX/3/25/1CCT	11/TX/3/63/1CCT	11/TX/3/100/1CCT	11/TX/3/200/1CCT	11/TX/3/315/1CCT	11/TX/3/500/1CCT
710232	OH, TRANSFORMER MOUNTING, 100-500kVA (OH/TX/MOUNTING/100-500)	EA			1	1	1	1
710231	OH, TRANSFORMER MOUNTING, 25-63kVA (OH/TX/MOUNTING/25-63)	EA	1	1				
710234	OH, TRANSFORMER HV LEAD (OH/TX/HVLEAD)	EA	3	3	3	3	3	3
710236	OH, TRANSFORMER LV LEAD, 95mm, 4 CORE (OH/TX/LVLEAD/95/4C)	EA	1	1	1	2	2	
710237	OH, TRANSFORMER LV LEAD, WIRE, BLDNG 150mm^2 x 37/2.25 XLPE BLACK	EA						2
236247	SWITCH, ISOLATING POLE FUSE 6-95mm^2 SZ-00	EA	2	2				
710295	OH, 630A FUSES, WOOD POLE MOUNTED (OH/SERV/FUSE/POLE/630)	EA			1	1	1	1
145653	TERMINAL, LUG COMPRESSION M13 x 95mm^2	EA			3	6	6	
32212	BOLT, HEX HEAD M12 x 50mm GAL. C/W NUT	EA	4	4	4	4	4	
32215	BOLT, HEX HEAD M12 x 65mm GAL. C/W NUT	EA						4
40440	NUT, HEX M12 THREAD GALVANISED STEEL	EA	1	1	1	1	1	1
421414	T/FORMER, 11kV/500-250V 25kVA x 3P MEPS	EA	1					
421609	T/FORMER, 11kV/500-250V 63kVA x 3P MEPS	EA		1				
421710	T/FORMER, 11kV/433-250V 100kVA x 3P MEPS	EA			1			
421810	T/FORMER, 11kV/433-250V 200kVA x 3P MEPS	EA				1		
421906	T/FORMER, 11kV/433-250V 315kVA x 3P MEPS	EA					1	
425003	T/FORMER, 11kV/433-250V 500kVA x 3P MEPS	EA						1
710586	OH, 160A FUSE, WOOD POLE MOUNTED (OH/SERV/FUSE/POLE/160)	EA	1	1				

MATERIALS	DESCRIPTION	TYPE	TWO CIRCUIT TRANSFORMERS		
			710770	710771	710772
			11/TX/3/200/2CCT	11/TX/3/315/2CCT	11/TX/3/500/2CCT
710232	OH, TRANSFORMER MOUNTING, 100-500kVA (OH/TX/MOUNTING/100-500)	EA	1	1	1
710234	OH, TRANSFORMER HV LEAD (OH/TX/HVLEAD)	EA	3	3	3
710236	OH, TRANSFORMER LV LEAD, 95mm, 4 CORE (OH/TX/LVLEAD/95/4C)	EA	2	2	
710237	OH, TRANSFORMER LV LEAD, WIRE, BLDNG 150mm^2 x 37/2.25 XLPE BLACK	EA			2
710295	OH, 630A FUSES, WOOD POLE MOUNTED (OH/SERV/FUSE/POLE/630)	EA	2	2	2
145653	TERMINAL, LUG COMPRESSION M13 x 95mm^2	EA	6	6	
32212	BOLT, HEX HEAD M12 x 50mm GAL. C/W NUT	EA	4	4	
32215	BOLT, HEX HEAD M12 x 65mm GAL. C/W NUT	EA			4
40440	NUT, HEX M12 THREAD GALVANISED STEEL	EA	1	1	1
421810	T/FORMER, 11kV/433-250V 200kVA x 3P MEPS	EA	1		
421906	T/FORMER, 11kV/433-250V 315kVA x 3P MEPS	EA		1	
425003	T/FORMER, 11kV/433-250V 500kVA x 3P MEPS	EA			1

NOTES:

1. ADD HV FUSE ASSEMBLY (710271 TO 710276) FOR INTEGRATED HV FUSING TRANSFORMER INSTALLATIONS.
2. ADD TRANSPOSITION BRACKET SUB-ASSEMBLY (710777) FOR REMOTE FUSING INSTALLATIONS.

ALTERATIONS

ORIGINAL ISSUE

REFERENCE

NEW DRAWING: SUPERSEDES
D-OHC-F002-SD-002 TO
D-OHC-F012-SD-002

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOWYZHKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE POLE SUBSTATION
BILL OF MATERIALS
3-PHASE 11kV

SCALE: NTS

A4

D - OHC - E103 - SD - 003

REVISION: A

EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E103-SD-003

BM REV A

DWG STATUS STANDARD

MATERIALS	DESCRIPTION	TYPE	SINGLE CIRCUIT TRANSFORMERS					
			710248	710249	710250	710251	710252	710253
			22/TX/3/25/1CCT	22/TX/3/63/1CCT	22/TX/3/100/1CCT	22/TX/3/200/1CCT	22/TX/3/315/1CCT	22/TX/3/500/1CCT
710232	OH, TRANSFORMER MOUNTING, 100-500kVA (OH/TX/MOUNTING/100-500)	EA			1	1	1	1
710231	OH, TRANSFORMER MOUNTING, 25-63kVA (OH/TX/MOUNTING/25-63)	EA	1	1				
710234	OH, TRANSFORMER HV LEAD (OH/TX/HVLEAD)	EA	3	3	3	3	3	3
710236	OH, TRANSFORMER LV LEAD, 95mm, 4 CORE (OH/TX/LVLEAD/95/4C)	EA	1	1	1	2	2	
710237	OH, TRANSFORMER LV LEAD, WIRE, BLDNG 150mm^2 x 37/2.25 XLPE BLACK	EA						2
236247	SWITCH, ISOLATING POLE FUSE 6-95mm^2 SZ-00	EA	2	2				
710295	OH, 630A FUSES, WOOD POLE MOUNTED (OH/SERV/FUSE/POLE/630)	EA			1	1	1	1
145653	TERMINAL, LUG COMPRESSION M13 x 95mm^2	EA			3	6	6	
32212	BOLT, HEX HEAD M12 x 50mm GAL. C/W NUT	EA	4	4	4	4	4	
32215	BOLT, HEX HEAD M12 x 65mm GAL. C/W NUT	EA						4
40440	NUT, HEX M12 THREAD GALVANISED STEEL	EA	1	1	1	1	1	1
424013	T/FORMER, 22kV/500-250V 25kVA x 3P MEPS	EA	1					
424202	T/FORMER, 22kV/500-250V 63kVA x 3P MEPS	EA		1				
424317	T/FORMER, 22kV/433-250V 100kVA x 3P MEPS	EA			1			
424411	T/FORMER, 22kV/433-250V 200kVA x 3P MEPS	EA				1		
424509	T/FORMER, 22kV/433-250V 315kVA x 3P MEPS	EA					1	
426205	T/FORMER, 22kV/433-250V 500kVA x 3P MEPS	EA						1
710586	OH, 160A FUSE, WOOD POLE MOUNTED (OH/SERV/FUSE/POLE/160)	EA	1	1				

MATERIALS	DESCRIPTION	TYPE	TWO CIRCUIT TRANSFORMERS		
			710773	710774	710775
			22/TX/3/200/2CCT	22/TX/3/315/2CCT	22/TX/3/500/2CCT
710232	OH, TRANSFORMER MOUNTING, 100-500kVA (OH/TX/MOUNTING/100-500)	EA	1	1	1
710234	OH, TRANSFORMER HV LEAD (OH/TX/HVLEAD)	EA	3	3	3
710236	OH, TRANSFORMER LV LEAD, 95mm, 4 CORE (OH/TX/LVLEAD/95/4C)	EA	2	2	
710237	OH, TRANSFORMER LV LEAD, WIRE, BLDNG 150mm^2 x 37/2.25 XLPE BLACK	EA			2
710295	OH, 630A FUSES, WOOD POLE MOUNTED (OH/SERV/FUSE/POLE/630)	EA	2	2	2
145653	TERMINAL, LUG COMPRESSION M13 x 95mm^2	EA	6	6	
32212	BOLT, HEX HEAD M12 x 50mm GAL. C/W NUT	EA	4	4	
32215	BOLT, HEX HEAD M12 x 65mm GAL. C/W NUT	EA			4
40440	NUT, HEX M12 THREAD GALVANISED STEEL	EA	1	1	1
424411	T/FORMER, 22kV/433-250V 200kVA x 3P MEPS	EA	1		
424509	T/FORMER, 22kV/433-250V 315kVA x 3P MEPS	EA		1	
426205	T/FORMER, 22kV/433-250V 500kVA x 3P MEPS	EA			1

NOTES:

1. ADD HV FUSE ASSEMBLY (710271 TO 710276) FOR INTEGRATED HV FUSING TRANSFORMER INSTALLATIONS.
2. ADD TRANSPOSITION BRACKET SUB-ASSEMBLY (710777) FOR REMOTE FUSING INSTALLATIONS.

ALTERATIONS

ORIGINAL ISSUE

REFERENCE

NEW DRAWING: SUPERSEDES
D-OHC-F002-SD-002 TO
D-OHC-F012-SD-002

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOIYZHKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TasNetworks

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE POLE SUBSTATION
BILL OF MATERIALS
3-PHASE 22kV

SCALE: NTS

A4

D - OHC - E103 - SD - 004

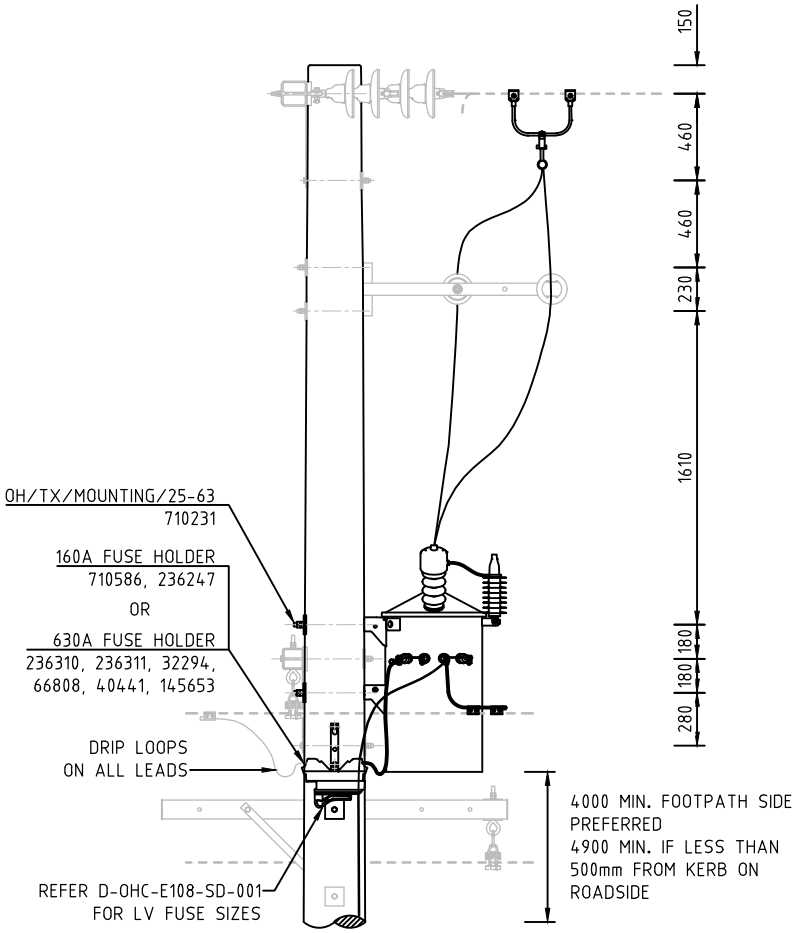
REVISION: B

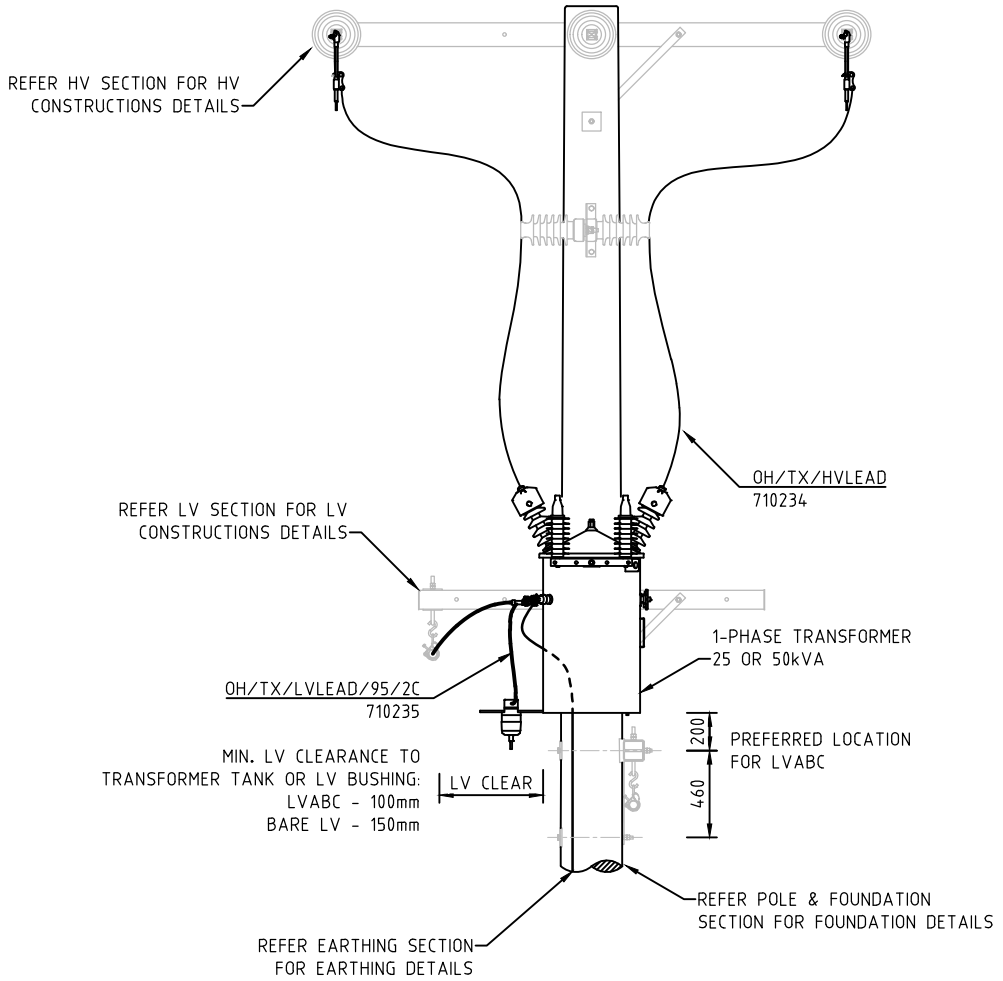
EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E103-SD-004

BM REV B

DWG STATUS STANDARD





NOTES:

1. ENSURE THAT LOCK NUTS ARE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.
2. REFER D-OHC-E100-SD-002 FOR GENERAL NOTES.
3. REFER D-OHC-E102-SD-002 FOR BILL OF MATERIALS.
4. LV FUSING POSITIONED TO SUIT INSTALLATION.
5. REFER TO D-OHC-E101-SD-001 FOR TRANSFORMER HANGING DETAILS.
6. TRANSFORMER FOR SINGLE SUPPLY LOADS SHALL HAVE LV FUSE RATED TO SUIT MAXIMUM DEMAND. LV FUSE WILL BE SERVICE FUSE (SPD).
7. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS	REFERENCE
ORIGINAL ISSUE	NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOWYZHKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE WOOD POLE SUBSTATION
REMOTE HV FUSING
1-PHASE 11kV OR 22kV

SCALE: NTS

A4

D - OHC - E104 - SD - 001

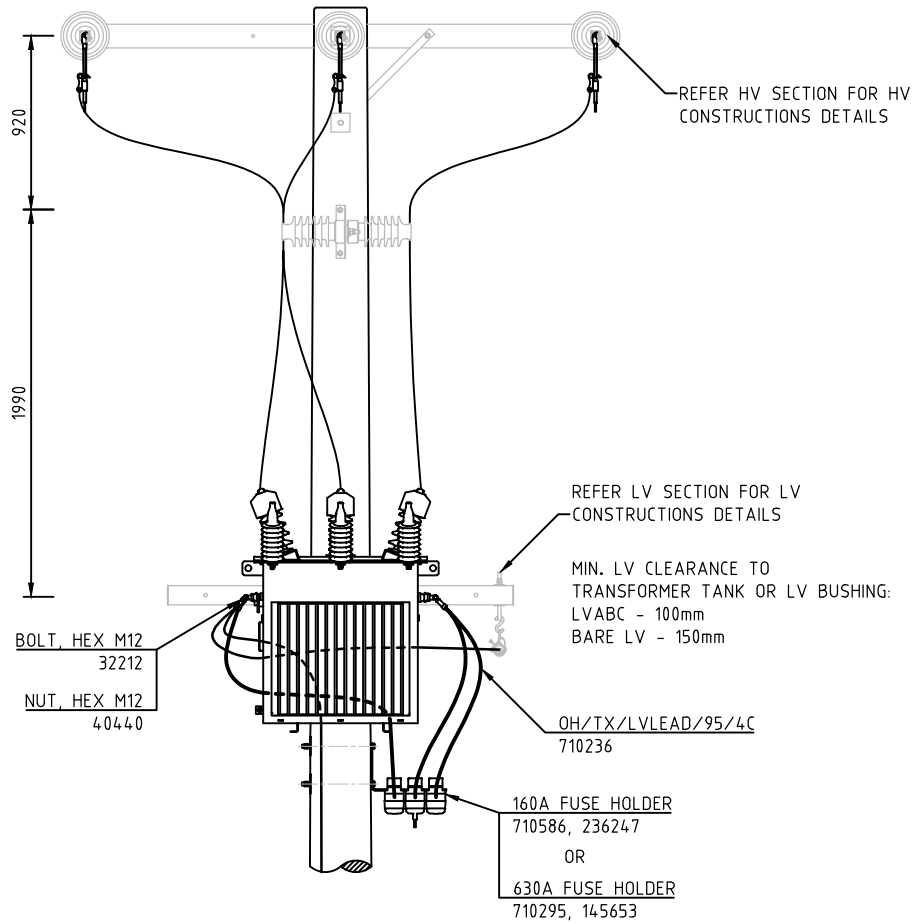
REVISION: A

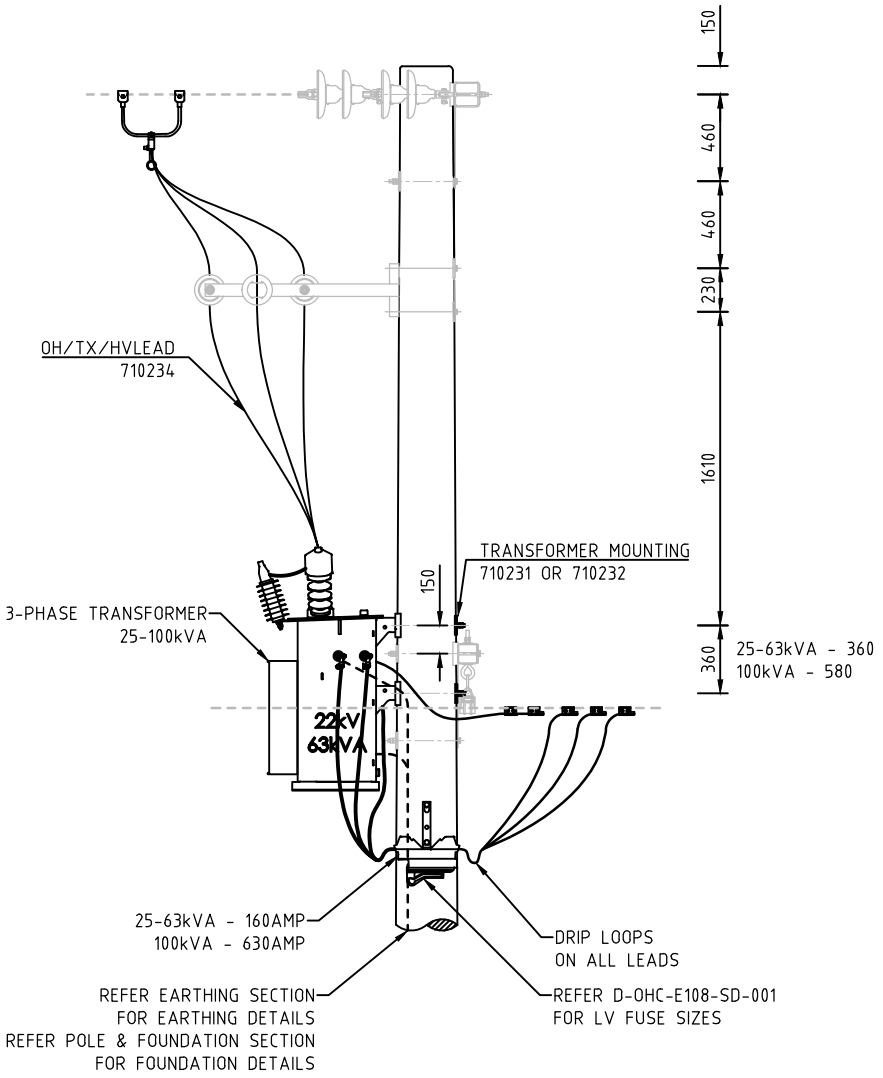
EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E104-SD-001

BM REV A

DWG STATUS STANDARD





NOTES:

1. REFER D-OHC-E103-SD-003 OR D-OHC-E103-SD-004 FOR BILL OF MATERIALS.
2. ENSURE THAT LOCK NUTS ARE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.
3. REFER D-OHC-E100-SD-002 FOR GENERAL NOTES.
4. LV FUSING POSITIONED TO SUIT INSTALLATION.
5. SINGLE LVIS OR LVISL CROSSARM CAN BE FITTED IN POSITIONS AS SHOWN OR AS SPECIFIED BY DESIGN.
6. LV CROSSARM SHALL NOT BE INSTALLED ABOVE TOP TRANSFORMER BOLT.
7. REFER TO D-OHC-E101-SD-001 FOR TRANSFORMER HANGING DETAILS.
8. TRANSFORMER FOR SINGLE SUPPLY LOADS SHALL HAVE LV FUSE RATED TO SUIT MAXIMUM DEMAND. LV FUSE WILL BE THE SERVICE PROTECTION DEVICE (SPD). TRANSFORMER FUSES IN SERIES WITH AN SPD SHALL NOT BE USED.
9. IF USING HV RISERS FOR DELTA SPACING REFER TO HV SECTION FOR DETAILS.
10. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS	REFERENCE
ORIGINAL ISSUE	NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOYZHKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE WOOD POLE SUBSTATION
REMOTE HV FUSING
3-PHASE 25 - 100kVA 11kV OR 22kV

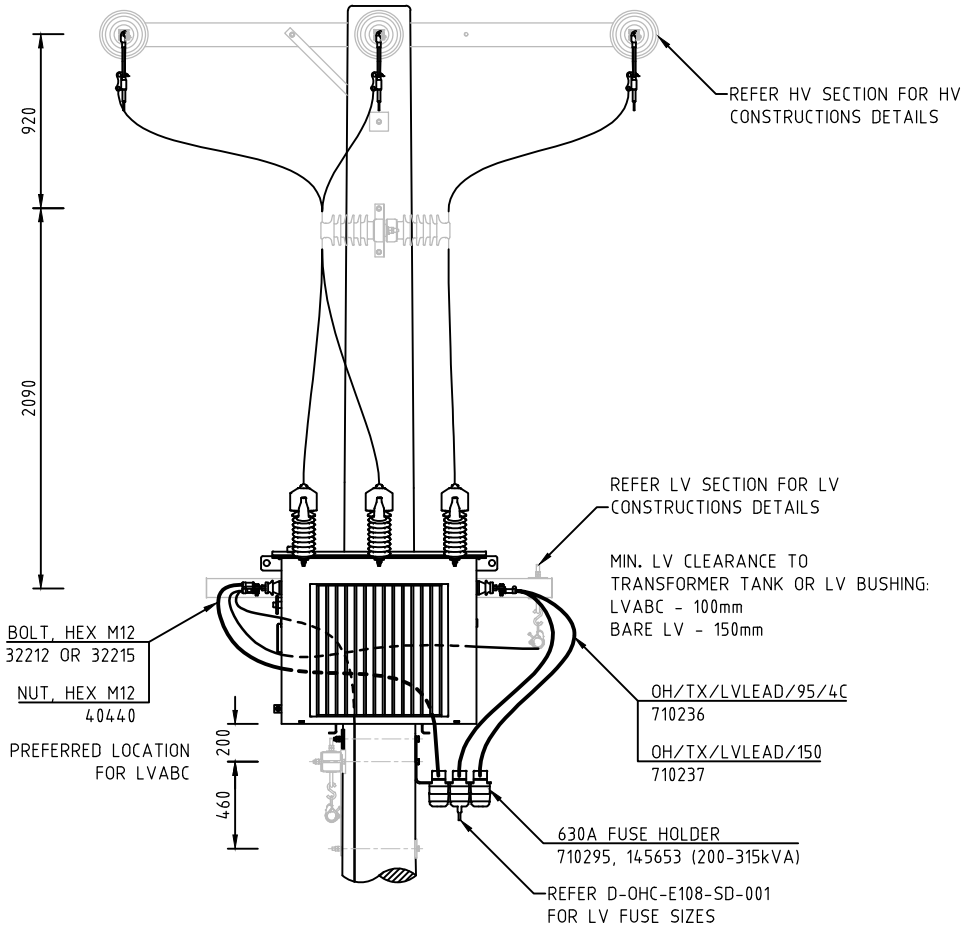
SCALE: NTS
A4
REVISION: A

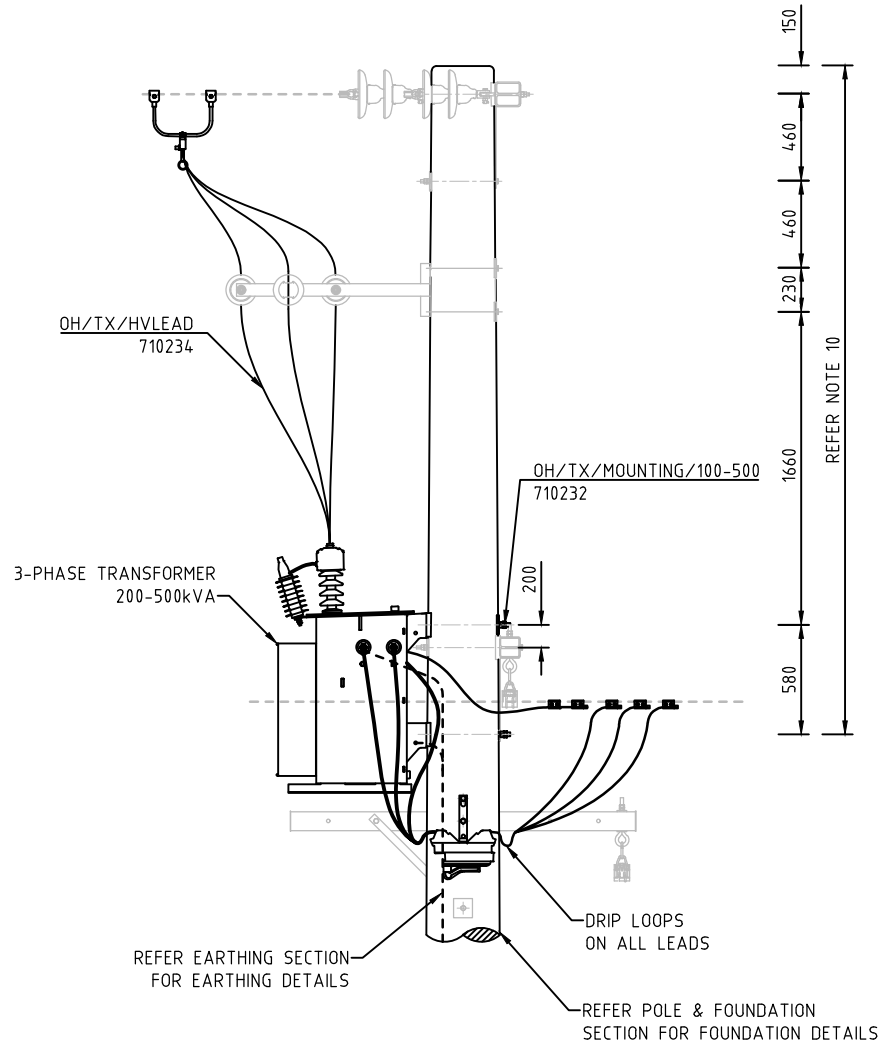
D - OHC - E104 - SD - 002

EMF/PDF CREATION DATE 30/03/2026

BM DWG NO D-OHC-E104-SD-002 BM REV A

DWG STATUS STANDARD





NOTES:

1. REFER D-OHC-E103-SD-003 OR D-OHC-E103-SD-004 FOR BILL OF MATERIALS.
2. ENSURE THAT LOCK NUTS ARE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.
3. REFER D-OHC-E100-SD-002 FOR GENERAL NOTES.
4. LV FUSING POSITIONED TO SUIT INSTALLATION.
5. SINGLE LVIS OR LVISL CROSSARM CAN BE FITTED IN POSITIONS AS SHOWN OR AS SPECIFIED BY DESIGN.
6. LV CROSSARM SHALL NOT BE INSTALLED ABOVE TOP TRANSFORMER BOLT.
7. REFER TO D-OHC-E101-SD-001 FOR TRANSFORMER HANGING DETAILS.
8. TRANSFORMER FOR SINGLE SUPPLY LOADS SHALL HAVE LV FUSE RATED TO SUIT MAXIMUM DEMAND. LV FUSE WILL BE THE SERVICE PROTECTION DEVICE (SPD). TRANSFORMER FUSES IN SERIES WITH AN SPD SHALL NOT BE USED.
9. IF USING HV RISERS FOR DELTA SPACING REFER TO HV SECTION FOR DETAILS.
10. DIMENSIONS BASED ON STANDARD TITAN POLE (12.5m EQUIPMENT POLE) HOLE SPACINGS.
11. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS	REFERENCE
ORIGINAL ISSUE	NEW DRAWING

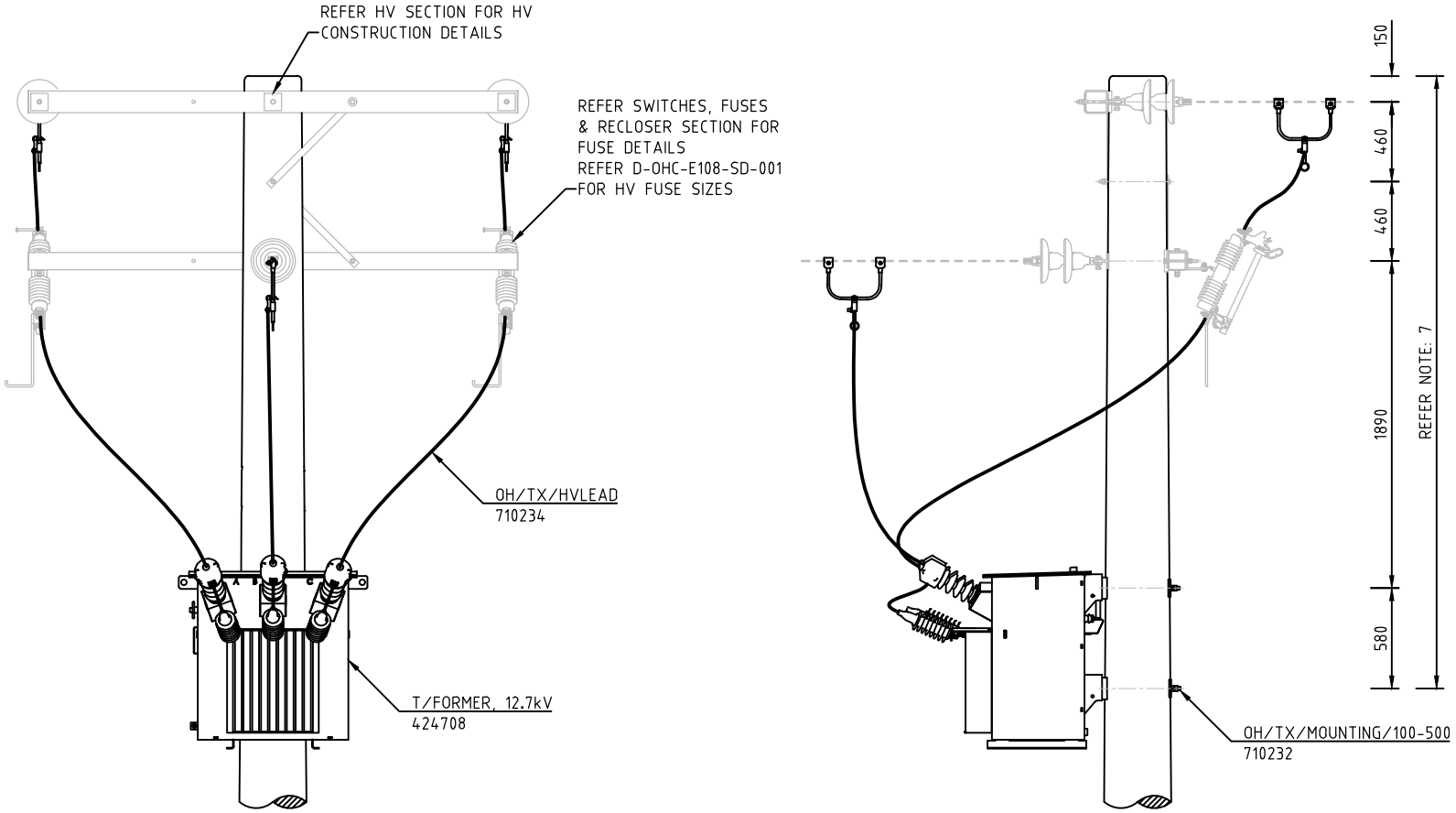
TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOWYZHKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE TITAN POLE SUBSTATION
REMOTE HV FUSING
3-PHASE 200 - 500kVA 11kV OR 22kV

SCALE: NTS
A4
REVISION: A

D - OHC - E104 - SD - 003



MATERIALS	DESCRIPTION		710256
		TYPE	12.7/TX/1/100/ISO
710232	OH/TX/MOUNTING/100-500kVA (OH/TX/MOUNTING/100-500)	EA	1
710234	OH, TRANSFORMER HV LEAD (OH/TX/HVLEAD)	EA	3
424708	T/FORMER, 12.7kV/500-250V 100kVA x1P MEPS	EA	1

NOTES:

1. ENSURE THAT LOCK NUTS ARE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.
2. REFER D-OHC-E100-SD-002 FOR GENERAL NOTES.
3. REFER SWITCHES, FUSES, RECLOSER SECTION FOR FUSE CONSTRUCTION DETAILS.
4. NO NEW LV SUPPLIES CONNECTED EXCEPT FOR SUPPLYING AN ADJACENT SWER RECLOSER. EXISTING CONNECTIONS ACCEPTABLE, HOWEVER WHEN MAJOR ALTERATIONS TO THE INSTALLATION OCCUR THEN CONSIDER REMOVING LV AND CHANGE SUPPLY ARRANGEMENTS TO A DISTRIBUTION TRANSFORMER. (THE LV CAPACITY IS ONLY 10KVA.)
5. CONSUMER UNDERGROUND MAINS ARE NOT PERMITTED ON POLE.
6. REFER TO D-OHC-E101-SD-001 FOR TRANSFORMER HANGING DETAILS.
7. DIMENSIONS BASED ON STANDARD TITAN POLE (12.5m EQUIPMENT POLE) HOLE SPACINGS.
8. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS

ORIGINAL ISSUE

REFERENCE

NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JANYZHKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE POLE SUBSTATION
SWER ISOLATING TRANSFORMER
12.7kV

SCALE: NTS

A4

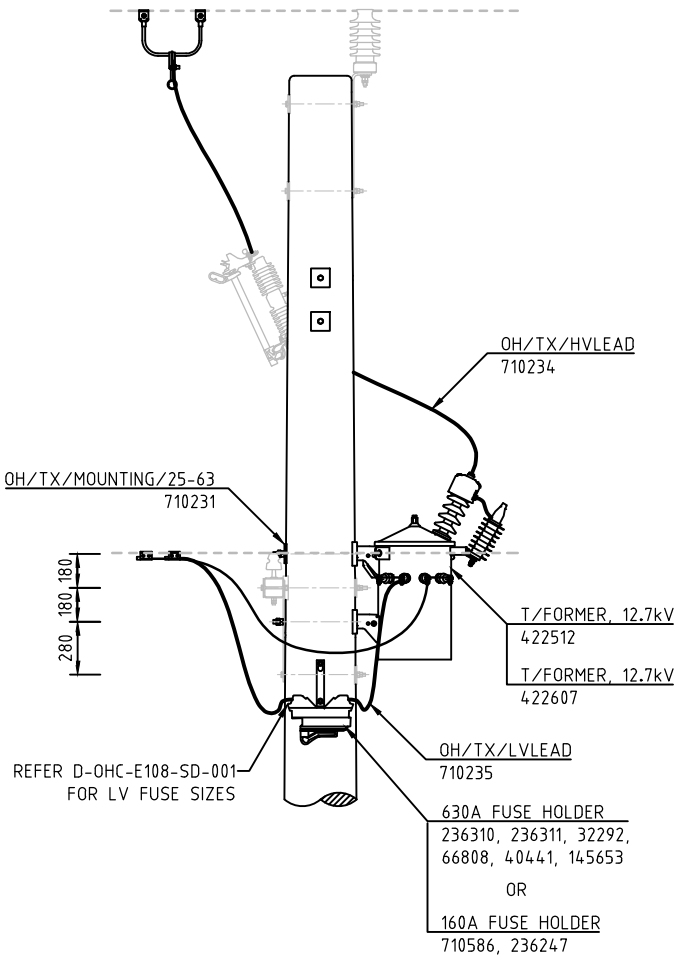
D - OHC - E105 - SD - 001

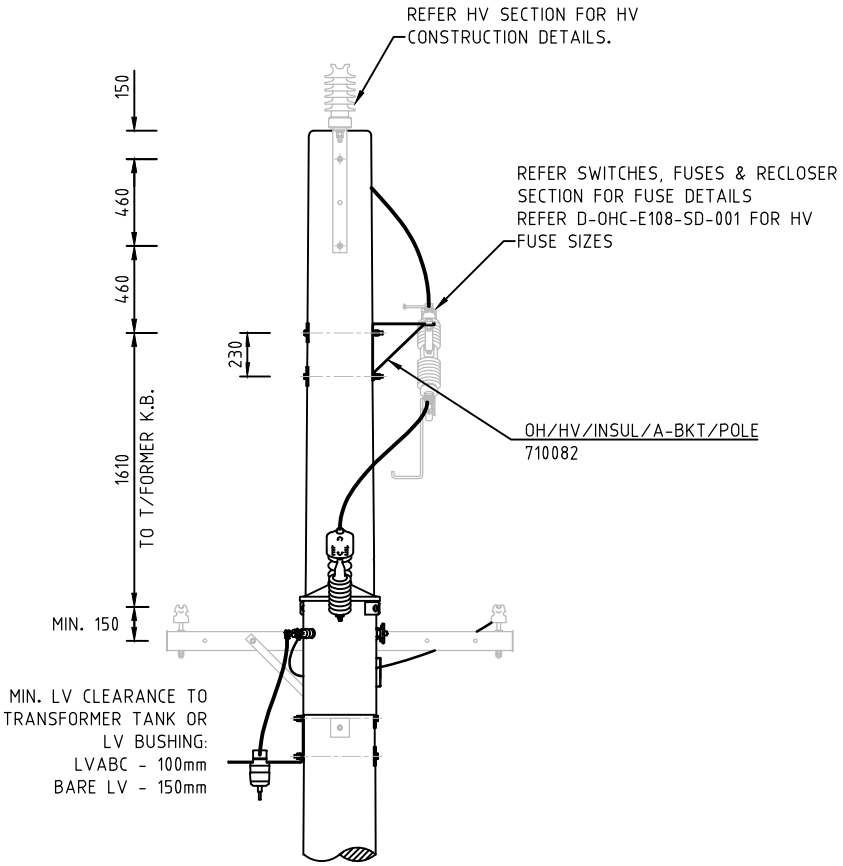
REVISION: C

EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E105-SD-001 BM REV C

DWG STATUS STANDARD





NOTES:

1. ENSURE THAT LOCK NUTS ARE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.
2. REFER D-OHC-E100-SD-002 FOR GENERAL NOTES.
3. REFER D-OHC-E105-SD-003 FOR BILL OF MATERIALS.
4. LV FUSING POSITIONED TO SUIT INSTALLATION.
5. CONSUMER UNDERGROUND MAINS ARE NOT PERMITTED ON POLE.
6. REFER TO D-OHC-E101-SD-001 FOR TRANSFORMER HANGING DETAILS.
7. TRANSFORMER FOR SINGLE SUPPLY LOADS SHALL HAVE LV FUSE RATED TO SUIT MAXIMUM DEMAND. LV FUSE WILL BE SERVICE FUSE (SPD)
8. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS	
ORIGINAL ISSUE	

REFERENCE
NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JUYZHKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE POLE SUBSTATION
SWER DISTRIBUTION TRANSFORMER
12.7kV

SCALE: NTS

A4

D - OHC - E105 - SD - 002

REVISION: C

EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E105-SD-002

BM REV C

DWG STATUS STANDARD

NOTES:

1. ADD A HV FUSE SUB-ASSEMBLY (710257 OR 710258 OR 710259) FOR INTEGRATED HV FUSING TRANSFORMER INSTALLATIONS.
2. ADD A HV POST INSULATOR SUB-ASSEMBLY (710590) FOR REMOTE HV FUSING TRANSFORMER INSTALLATIONS.

MATERIALS	DESCRIPTION	TYPE	SINGLE CIRCUIT TRANSFORMERS		TWO CIRCUIT TRANSFORMERS	
			710254	710255	710778	710779
			12.7/TX/1/25/1CCT	12.7/TX/1/50/1CCT	12.7/TX/1/25/2CCT	12.7/TX/1/50/2CCT
710231	OH, TRANSFORMER MOUNTING, 25-63kVA (OH/TX/MOUNTING/25-63)	EA	1	1	1	1
710234	OH, TRANSFORMER HV LEAD (OH/TX/HVLEAD)	EA	1	1	1	1
710235	OH, TRANSFORMER LV LEAD, 95mm, 2 CORE (OH/TX/LVLEAD/95/2C)	EA	1	2	1	2
236247	SWITCH, ISOLATING POLE FUSE 6-95mm^2 SZ-00	EA			1	1
236310	FUSE HOLDER, LV, NGK, 630A 1-Ph	EA		1		
236311	BRACKET, 630A NGK FUSE HOLDER	EA		1		
32292	BOLT, HEX HEAD M16 x 450mm GAL. C/W NUT	EA		2		
422512	T/FORMER, 12.7kV/500-250V 25kVA x 1P MEPS	EA	1		1	
422607	T/FORMER, 12.7kV/500-250V 50kVA x 1P MEPS	EA		1		1
710082	OH, 11kV-22kV, INSULATOR, A-BRACKET (OH/HV/INSUL/A-BKT/POLE)	EA	1	1	1	1
145653	LUG, COMPRESSION INSULATED M13 95mm^2	EA		2		
66808	WASHER, CURVED SQUARE M16 100mm	EA		2		
40441	NUT, HEX M16 THREAD GALVANISED STEEL	EA		2		
710586	OH, 160A FUSE, WOOD POLE MOUNTED (OH/SERV/FUSE/POLE/160)	EA	1		1	1

ALTERATIONS

ORIGINAL ISSUE

REFERENCE

NEW DRAWING

TasNetworks

DRAWN	MEGAVAR PTY LTD
DRAFTING CHECK	MEGAVAR PTY LTD
DESIGNED BY	T.JOYZHKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE

POLE SUBSTATION CONSTRUCTIONS
SINGLE POLE SUBSTATION
SWER DISTRIBUTION TRANSFORMER
BILL OF MATERIALS 12.7kV

SCALE: NTS

A4

D - OHC - E105 - SD - 003

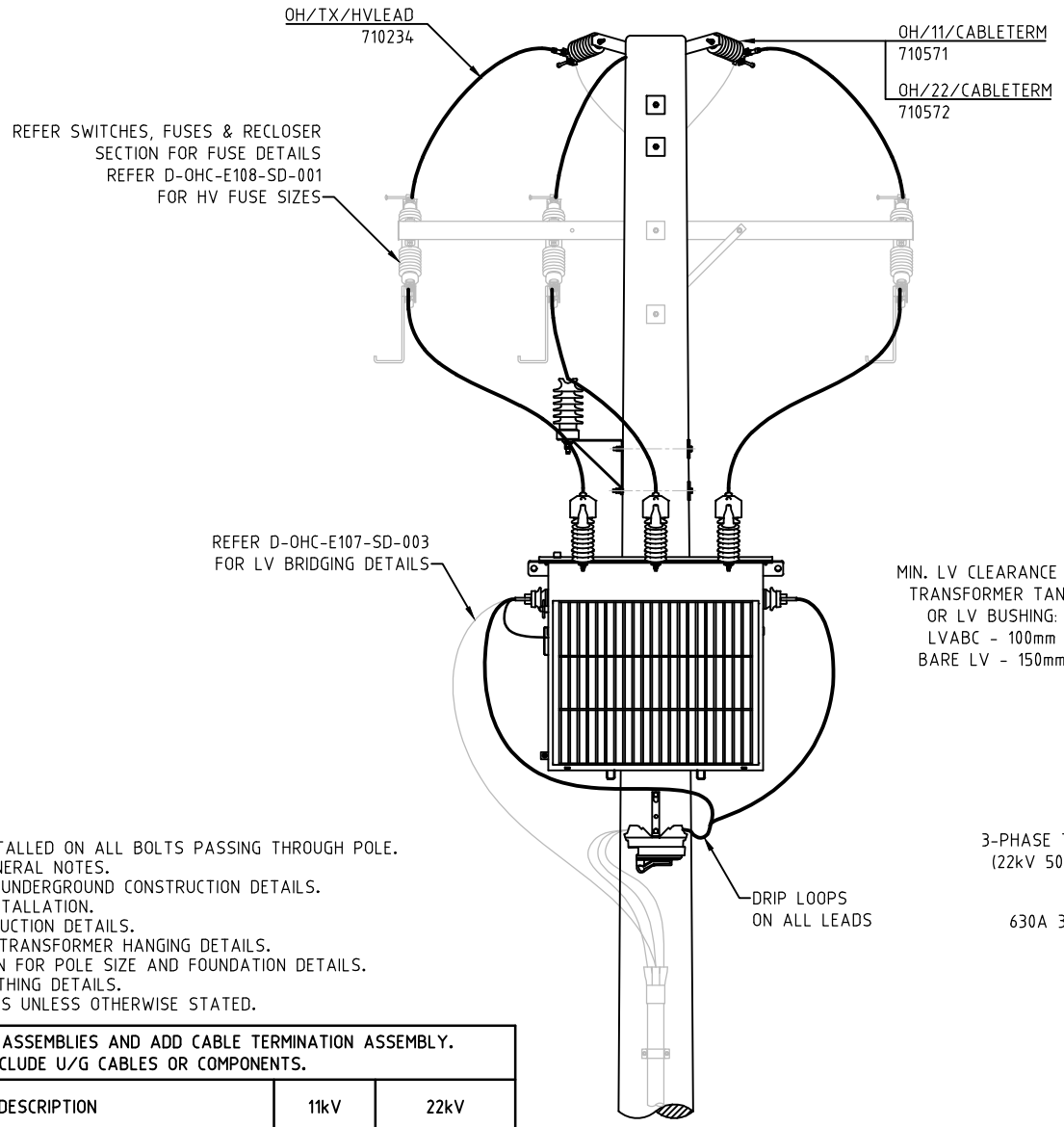
REVISION: A

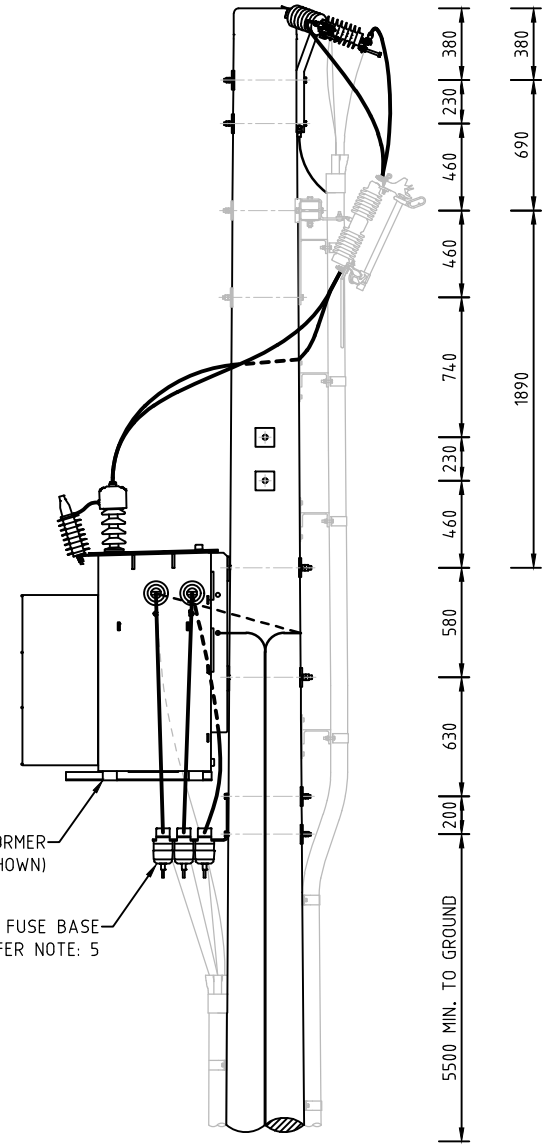
EMF/PDF CREATION DATE 30/03/2026

BM DWG NO D-OHC-E105-SD-003

BM REV A

DWG STATUS STANDARD





NOTES:

1. ENSURE THAT LOCK NUTS ARE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.
2. REFER D-OHC-E100-SD-002 FOR GENERAL NOTES.
3. REFER UNDERGROUND SECTION FOR UNDERGROUND CONSTRUCTION DETAILS.
4. LV FUSING POSITIONED TO SUIT INSTALLATION.
5. REFER LV SECTION FOR LV CONSTRUCTION DETAILS.
6. REFER TO D-OHC-E101-SD-001 FOR TRANSFORMER HANGING DETAILS.
7. REFER POLE & FOUNDATION SECTION FOR POLE SIZE AND FOUNDATION DETAILS.
8. REFER EARTHING SECTION FOR EARTHING DETAILS.
9. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

USE RELEVANT TRANSFORMER ASSEMBLIES AND ADD CABLE TERMINATION ASSEMBLY.
DOES NOT INCLUDE U/G CABLES OR COMPONENTS.

MATERIALS	DESCRIPTION	11kV	22kV
710571	OH, 11kV CABLE TERMINATION (OH/11/CABLETERM)	1	
710572	OH, 22kV CABLE TERMINATION (OH/22/CABLETERM)		1

EMF/PDF CREATION DATE 16/03/2026

BM DWG NO D-OHC-E106-SD-001

BM REV B

ALTERATIONS

ORIGINAL ISSUE

REFERENCE

NEW DRAWING

TasNetworks

DRAWN	MEGAVAR PTY LTD
DRAFTING CHECK	MEGAVAR PTY LTD
DESIGNED BY	T.JOYZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE POLE SUBSTATION
U/G HV SUPPLIED
11kV OR 22kV

SCALE: NTS

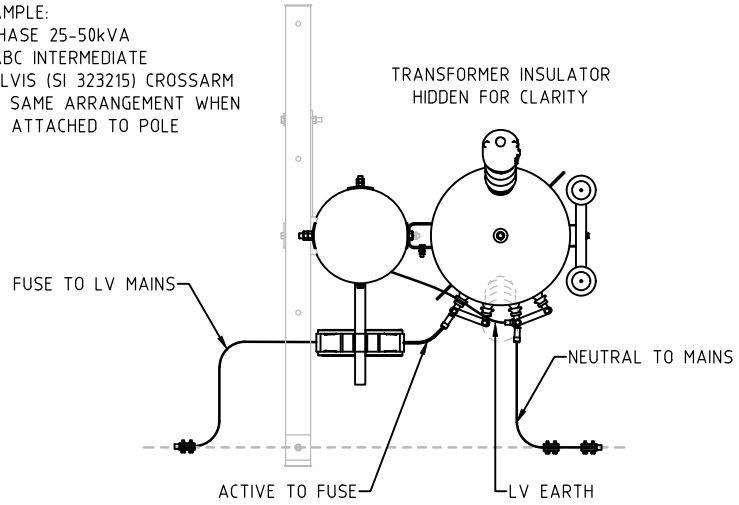
A4

D - OHC - E106 - SD - 001

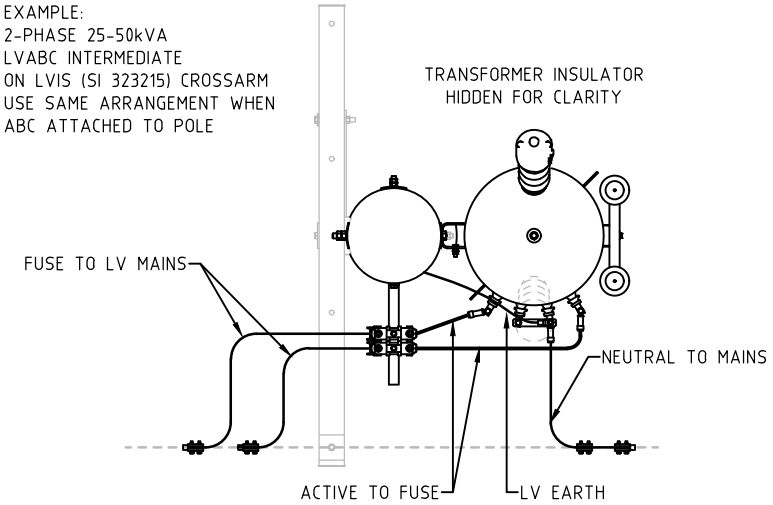
REVISION: B

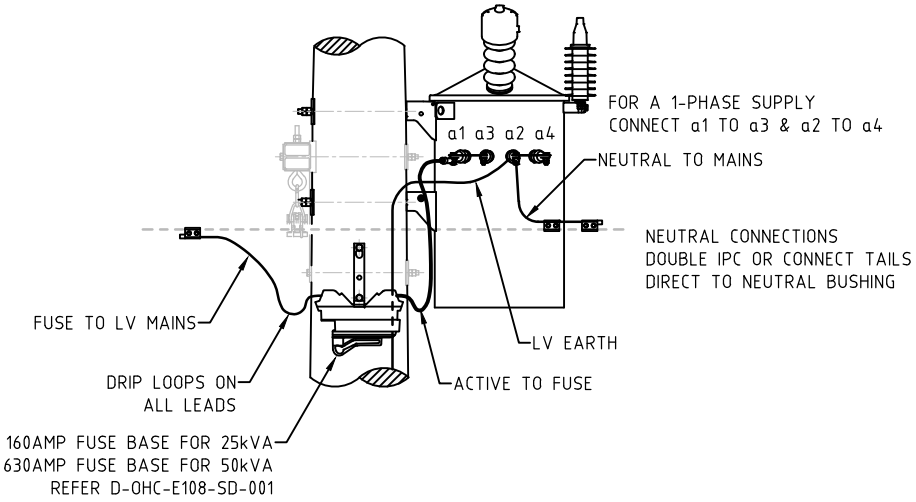
DWG STATUS STANDARD

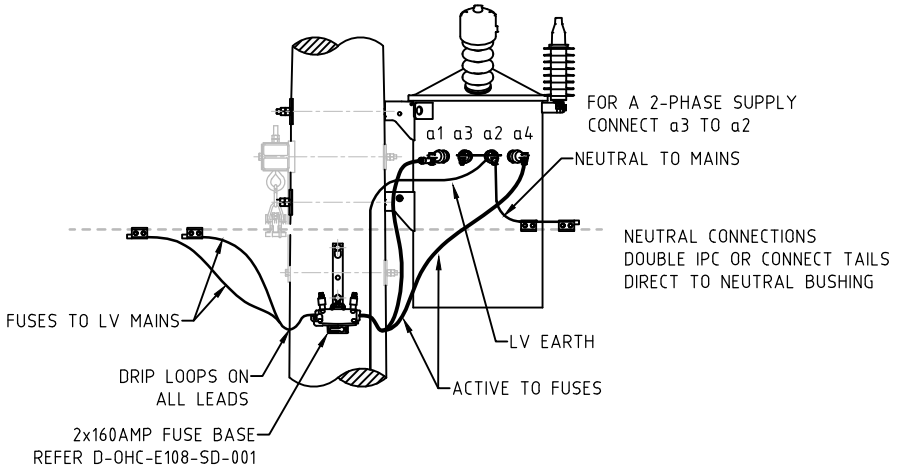
EXAMPLE:
1-PHASE 25-50kVA
LVABC INTERMEDIATE
ON LVIS (SI 323215) CROSSARM
USE SAME ARRANGEMENT WHEN
ABC ATTACHED TO POLE



EXAMPLE:
2-PHASE 25-50kVA
LVABC INTERMEDIATE
ON LVIS (SI 323215) CROSSARM
USE SAME ARRANGEMENT WHEN
ABC ATTACHED TO POLE







NOTES:

1. REFER PART 2 FOR OLD INSTALLATIONS USING BARE TYPE FUSE LINKS AND COPPER LEADS.
2. LV FUSING POSITIONED TO SUIT INSTALLATION.
3. TRANSFORMER FOR SINGLE SUPPLY LOADS SHALL HAVE LV FUSE RATED TO SUIT MAXIMUM DEMAND. LV FUSE WILL BE SERVICE FUSE (SPD).
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS	REFERENCE
ORIGINAL ISSUE	NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOWYZHKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE POLE SUBSTATION
LV BRIDGING ARRANGEMENTS
1-PHASE & 2-PHASE LV ABC

SCALE: NTS
A4
REVISION: C

D - OHC - E107 - SD - 001

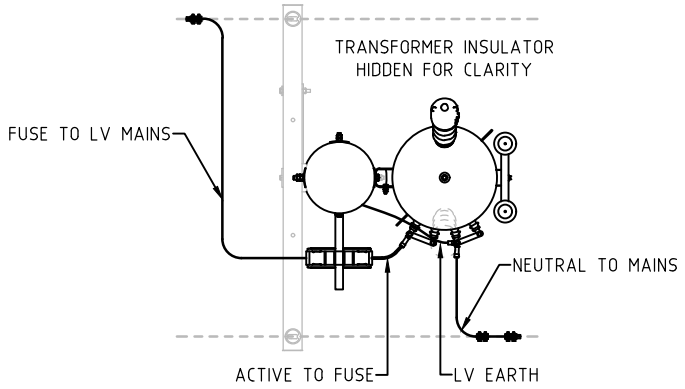
EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E107-SD-001

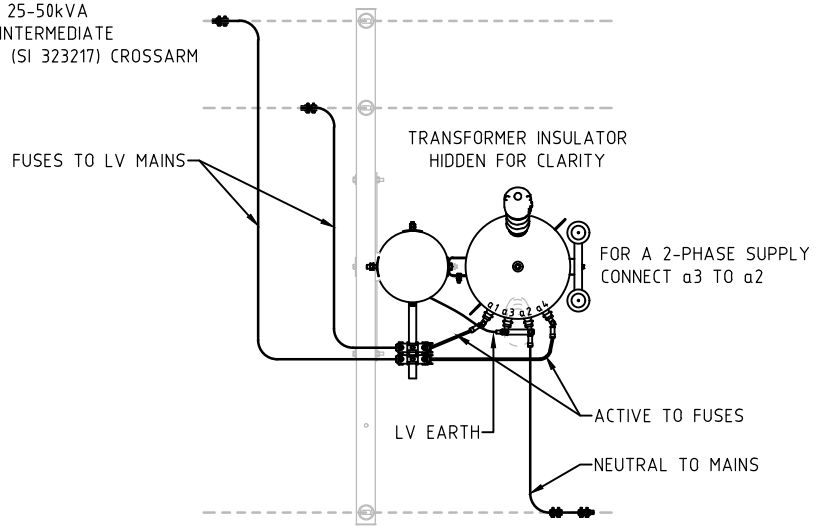
BM REV C

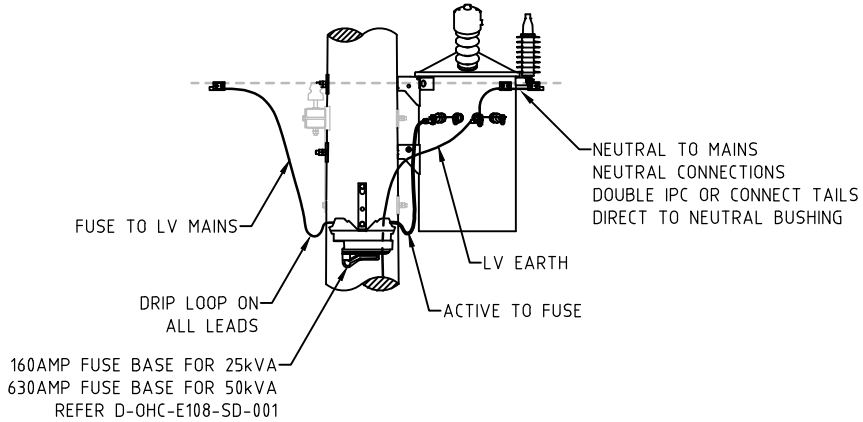
DWG STATUS STANDARD

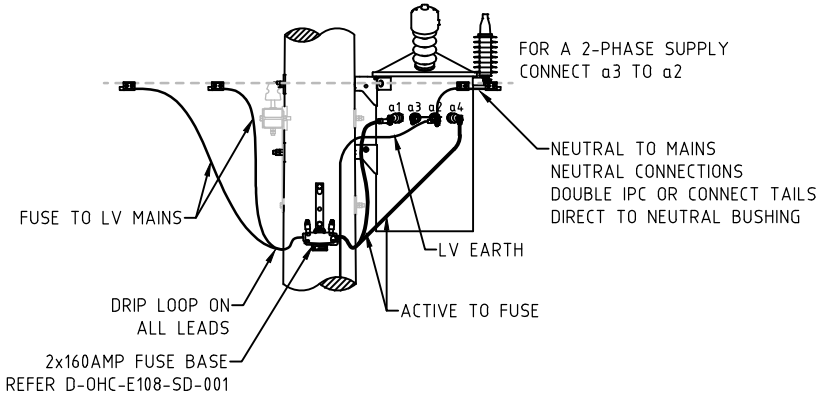
EXAMPLE:
1-PHASE 25-50kVA
LVBARE INTERMEDIATE
ON LVIS (SI 323215) CROSSARM



EXAMPLE:
2-PHASE 25-50kVA
LVBARE INTERMEDIATE
ON LVISL (SI 323217) CROSSARM







NOTES:

1. REFER PART 2 FOR OLD INSTALLATIONS USING BARE TYPE FUSE LINKS AND COPPER LEADS.
2. LV FUSING POSITIONED TO SUIT INSTALLATION.
3. TRANSFORMER FOR SINGLE SUPPLY LOADS SHALL HAVE LV FUSE RATED TO SUIT MAXIMUM DEMAND. LV FUSE WILL BE SERVICE FUSE (SPD).
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS
ORIGINAL ISSUE

REFERENCE
NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOYZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE
POLE SUBSTATION CONSTRUCTIONS
SINGLE POLE SUBSTATION
LV BRIDGING ARRANGEMENTS
1-PHASE & 2-PHASE LV BARE

SCALE: NTS
A4
REVISION: C

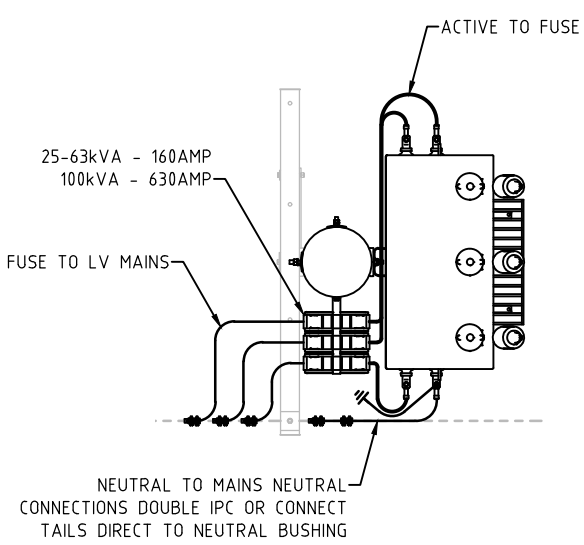
D - OHC - E107 - SD - 002

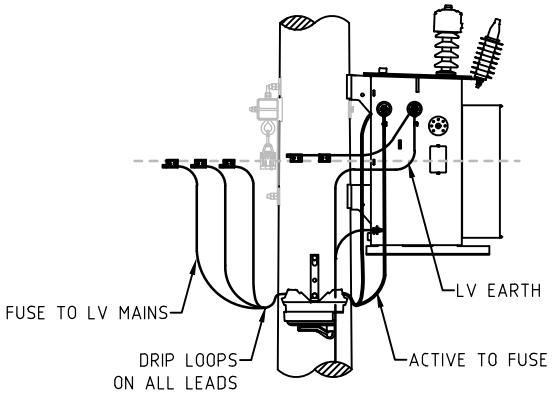
EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E107-SD-002

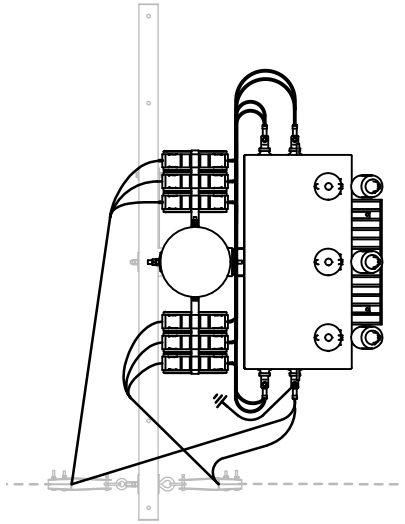
BM REV C

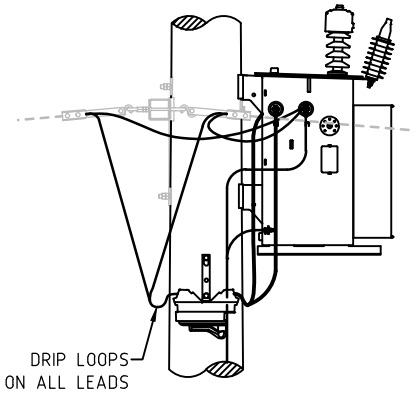
EXAMPLE:
3-PHASE 25-100kVA LVABC INTERMEDIATE
ON LVIS (SI 323215) CROSSARM
USE SAME ARRANGEMENT WHEN
ABC ATTACHED TO POLE



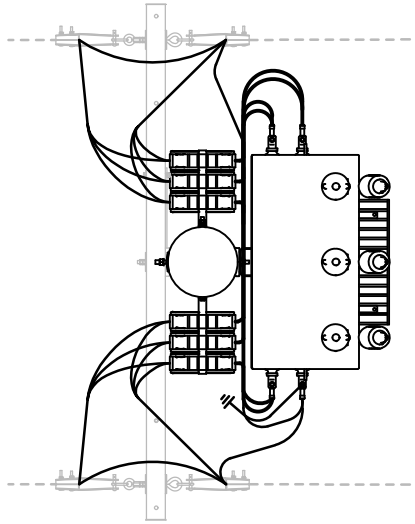


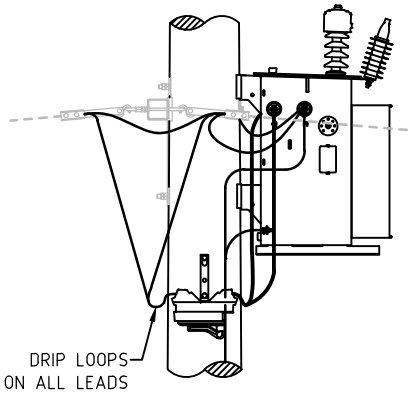
EXAMPLE:
3-PHASE 200-315kVA LVABC STRAIN
ON LVISL (SI 323217) CROSSARM
USE SAME ARRANGEMENT WHEN
ABC ATTACHED TO POLE



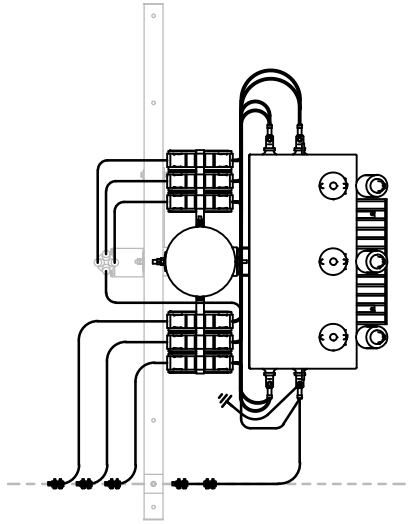


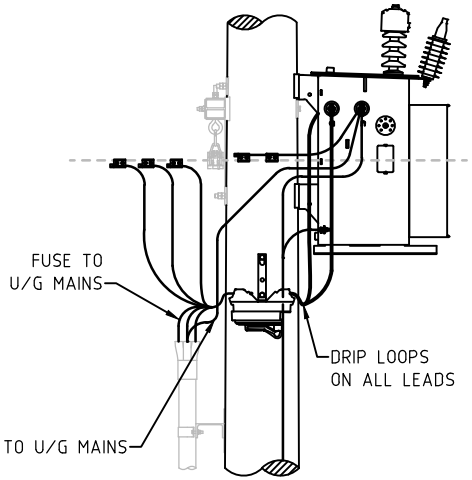
EXAMPLE:
3-PHASE 315-500kVA LVABC STRAIN
ON LVISL (SI 323217) CROSSARM
WITH PARALLEL ABC
TO GET LOAD AWAY FROM 500kVA





EXAMPLE:
3-PHASE 315-500kVA LVABC INTERMEDIATE
ON LVISL (SI 323217) CROSSARM
UNDERGROUND AND OVERHEAD ARRANGEMENT





NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS	REFERENCE
ORIGINAL ISSUE	NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOYZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE POLE SUBSTATION
LV BRIDGING ARRANGEMENTS
3-PHASE LV ABC

SCALE: NTS

A4

D - OHC - E107 - SD - 003

REVISION: C

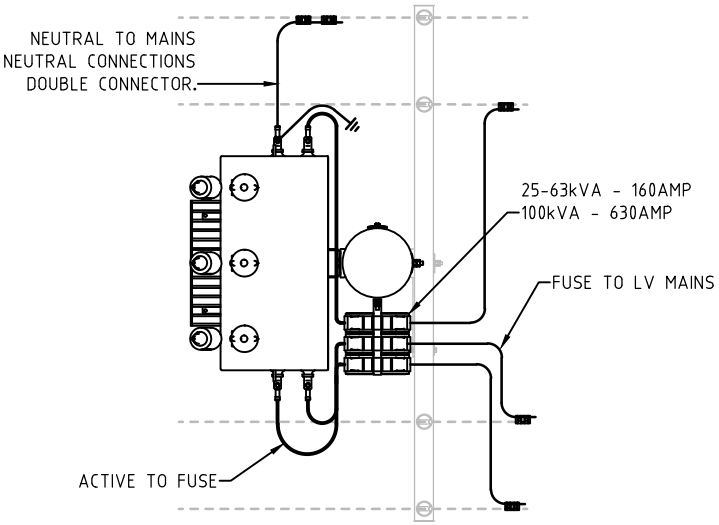
EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E107-SD-003

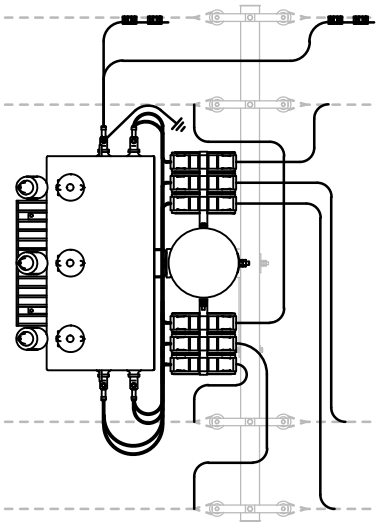
BM REV C

DWG STATUS STANDARD

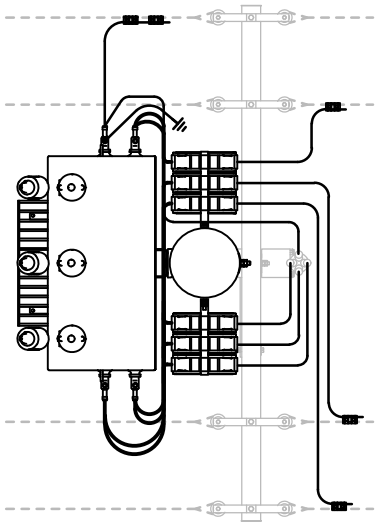
EXAMPLE:
3-PHASE 25-100kVA LVBARE INTERMEDIATE
ON LVISL (SI 323217) CROSSARM

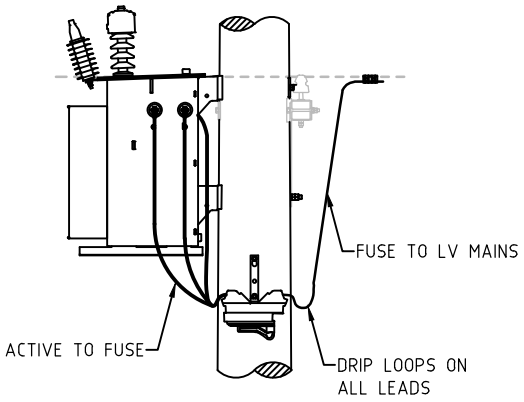


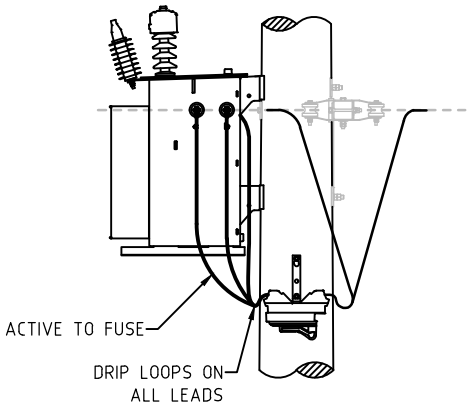
EXAMPLE:
3-PHASE 200-500kVA LVBARE STRAIN
ON LVISL (SI 323217) CROSSARM
315-500kVA WITH MIN. 7/4.50 AAC OR 19/.083 Cu
TO GET LOAD AWAY FROM 500kVA

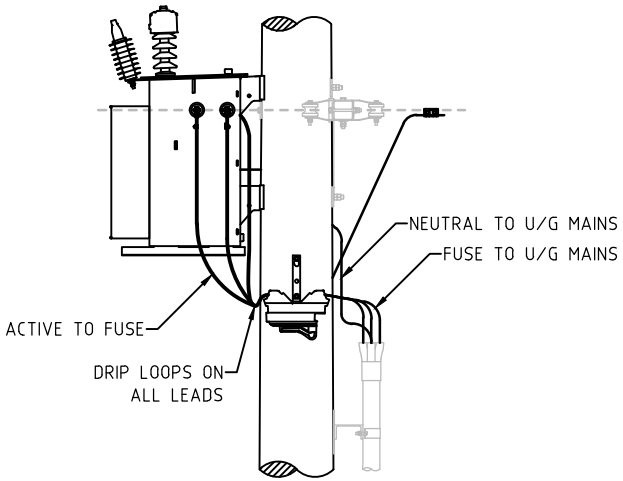


EXAMPLE:
3-PHASE 315-500kVA LVBARE STRAIN
ON LVISL (SI 323217) CROSSARM
UNDERGROUND AND OVERHEAD ARRANGEMENT









NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

ALTERATIONS	REFERENCE
ORIGINAL ISSUE	NEW DRAWING

TasNetworks

DRAWN	AMSS
DRAFTING CHECK	AMSS
DESIGNED BY	T.JOVZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE POLE SUBSTATION
LV BRIDGING ARRANGEMENTS
3-PHASE LV BARE

SCALE: NTS

A4

D - OHC - E107 - SD - 004

REVISION: C

EMF/PDF CREATION DATE 01/04/2026

BM DWG NO D-OHC-E107-SD-004

BM REV C

DWG STATUS STANDARD

22kV TRANSFORMER FUSE SIZES							
TRANSFORMER kVA	HV FUSE RATING (AMPS)				LV FUSE RATING (AMPS)		FUSE BASE
	HRC	FAULT TAMER	EDO	BORIC ACID	1x250V	2x250V	
10 1-PH	N/A	5	6/20	6	63	63	160A
15 1-PH	N/A	5	6/20	6	100	63	160A
25 1-PH	N/A	5	6/20	6	160	100	160A
50 1-PH	N/A	5	6/20	6	315	160	*630A
* FOR 50kVA CONFIGURED TO 1-PH ONLY A SINGLE 630AMP FUSE BASE TO BE USED OR 2x 160AMP FUSE BASES WHEN SPLIT PHASED							

11kV TRANSFORMER FUSE SIZES							
TRANSFORMER kVA	HV FUSE RATING (AMPS)				LV FUSE RATING (AMPS)		FUSE BASE
	HRC	FAULT TAMER	EDO	BORIC ACID	1x250V	2x250V	
10 1-PH	N/A	5	6/20	6	63	63	160A
15 1-PH	N/A	5	6/20	6	100	63	160A
25 1-PH	N/A	5	6/20	6	160	100	160A
50 1-PH	N/A	10	16	15	315	160	*630A
* FOR 50kVA CONFIGURED TO 1-PH ONLY A SINGLE 630AMP FUSE BASE TO BE USED OR 2x 160AMP FUSE BASES WHEN SPLIT PHASED							

22kV TRANSFORMER FUSE SIZES							
TRANSFORMER kVA	HV FUSE RATING (AMPS)				LV FUSE RATING (AMPS)		FUSE BASE
	HRC	FAULT TAMER	EDO	BORIC ACID	1xSET	2xSETS	
10 3-PH	N/A	5	6/20	6	40	N/A	160A
15 3-PH	N/A	5	6/20	6	40	N/A	160A
25 3-PH	N/A	5	6/20	6	63	N/A	160A
50 3-PH	5	5	6/20	6	100	N/A	160A
63 3-PH	5	5	6/20	6	125	N/A	160A
100 3-PH	10	5	6/20	6	200	N/A	630A
200 3-PH	16	15	16	15	315	200	630A
300 3-PH	20	20	25	25	450	315	630A
315 3-PH	20	20	25	25	450	315	630A
500 3-PH	40	N/A	25	25	630	450	**630A
** FOR 500kVA USED FOR A SINGLE CUSTOMER WHERE A LARGER FUSE SIZE IS REQUIRED REFER TO ENGINEERING.							

11kV TRANSFORMER FUSE SIZES							
TRANSFORMER kVA	HV FUSE RATING (AMPS)				LV FUSE RATING (AMPS)		FUSE BASE
	HRC	FAULT TAMER	EDO	BORIC ACID	1xSET	2xSETS	
10 3-PH	N/A	5	6/20	6	40	N/A	160A
15 3-PH	N/A	5	6/20	6	40	N/A	160A
25 3-PH	N/A	5	6/20	6	63	N/A	160A
50 3-PH	10	5	6/20	6	100	N/A	160A
63 3-PH	10	5	6/20	6	125	N/A	160A
100 3-PH	16	15	16	15	200	N/A	630A
200 3-PH	31.5	20	25	25	315	200	630A
300 3-PH	40	N/A	50	50	450	315	630A
315 3-PH	40	N/A	50	50	450	315	630A
500 3-PH	50	N/A	50	50	630	450	**630A
** FOR 500kVA USED FOR A SINGLE CUSTOMER WHERE A LARGER FUSE SIZE IS REQUIRED REFER TO ENGINEERING.							

12.7kV TRANSFORMER FUSE SIZES (SWER)							
TRANSFORMER kVA	HV FUSE RATING (AMPS)				LV FUSE RATING (AMPS)		FUSE BASE
	HRC	FAULT TAMER	EDO	BORIC ACID	1xSET	2xSETS	
10 1-PH	N/A	5	6/20	6	63	63	160A
15 1-PH	N/A	5	6/20	6	100	63	160A
25 1-PH	N/A	5	6/20	6	160	100	160A
50 1-PH	N/A	10	16	15	315	160	*630A
* FOR 50kVA CONFIGURED TO 1-PH ONLY A SINGLE 630AMP FUSE BASE TO BE USED OR 2x 160AMP FUSE BASES WHEN SPLIT PHASED							

6.6kV TRANSFORMER FUSE SIZES							
TRANSFORMER kVA	HV FUSE RATING (AMPS)				LV FUSE RATING (AMPS)		FUSE BASE
	HRC	FAULT TAMER	EDO	BORIC ACID	1x250V	2x250V	
100 3-PH	N/A	20	25	25	200	N/A	160A

22/12.7kV ISOLATING TRANSFORMER FUSE SIZES (SWER)							
TRANSFORMER kVA	HV FUSE RATING (AMPS)				LV FUSE RATING (AMPS)		FUSE BASE
	HRC	FAULT TAMER	EDO	BORIC ACID	1xSET	2xSETS	
25	N/A	5	6/20	6	REFER TO ENGINEERING		160A
50	N/A	5	6/20	6			160A
100	N/A	15	16	15	63	40	160A

NOTES:

1. DATA EXTRACTED FROM DISTRIBUTION SWITCHGEAR OPERATIONS MANUAL VERSION 10.0.

EMF/PDF CREATION DATE 05/12/2025

BM DWG NO D-OHC-E108-SD-001

BM REV A

ALTERATIONS

ORIGINAL ISSUE

REFERENCE

NEW DRAWING

TasNetworks

DRAWN	MEGAVAR PTY LTD
DRAFTING CHECK	MEGAVAR PTY LTD
DESIGNED BY	T.JOVZIKA
CHECKED BY	A.HUSSAIN
APPROVED BY	B.PAPALIA
DATE APPROVED	02-04-2026

TITLE: POLE SUBSTATION CONSTRUCTIONS
SINGLE POLE SUBSTATION
FUSE TABLES

SCALE: NTS

A4

D - OHC - E108 - SD - 001

REVISION: A

DWG STATUS STANDARD

BOM No. in SAP	APL	Material BOM Description	Drawing
710231	OH/TX/MOUNTING/25-63	OH, TRANSFORMER MOUNTING, 25-63KVA	D-OHC-E101-SD-001
710232	OH/TX/MOUNTING/100-500	OH, TRANSFORMER MOUNTING, 100-500KVA	D-OHC-E101-SD-001
710234	OH/TX/HVLEAD	OH, TRANSFORMER HV LEAD	D-OHC-E101-SD-002
710235	OH/TX/LVLEAD/95/2C	OH, TRANSFORMER LV LEAD, 95MM, 2 CORE	D-OHC-E101-SD-005
710236	OH/TX/LVLEAD/95/4C	OH, TRANSFORMER LV LEAD, 95MM, 4 CORE	D-OHC-E101-SD-006
710237	OH/TX/LVLEAD/150	OH, TRANSFORMER LV LEAD, 150MM, 4 CORE	D-OHC-E101-SD-007
710238	11/TX/1/25/1CCT	11KV, TRANSFORMER, 25KVA, 1PH, 1CCT	D-OHC-E102-SD-002
710239	11/TX/1/50/1CCT	11KV, TRANSFORMER, 50KVA, 1PH, 1CCT	D-OHC-E102-SD-002
710240	22/TX/1/25/1CCT	22KV, TRANSFORMER, 25KVA, 1PH, 1CCT	D-OHC-E102-SD-002
710241	22/TX/1/50/1CCT	22KV, TRANSFORMER, 50KVA, 1PH, 1CCT	D-OHC-E102-SD-002
710242	11/TX/3/25/1CCT	11KV, TRANSFORMER, 25KVA, 3PH, 1CCT	D-OHC-E103-SD-003
710243	11/TX/3/63/1CCT	11KV, TRANSFORMER, 63KVA, 3PH, 1CCT	D-OHC-E103-SD-003
710244	11/TX/3/100/1CCT	11KV, TRANSFORMER, 100KVA, 3PH, 1CCT	D-OHC-E103-SD-003
710245	11/TX/3/200/1CCT	11KV, TRANSFORMER, 200KVA, 3PH, 1CCT	D-OHC-E103-SD-003
710246	11/TX/3/315/1CCT	11KV, TRANSFORMER, 315KVA, 3PH, 1CCT	D-OHC-E103-SD-003
710247	11/TX/3/500/1CCT	11KV, TRANSFORMER, 500KVA, 3PH, 1CCT	D-OHC-E103-SD-003
710248	22/TX/3/25/1CCT	22KV, TRANSFORMER, 25KVA, 3PH, 1CCT	D-OHC-E103-SD-004
710249	22/TX/3/63/1CCT	22KV, TRANSFORMER, 63KVA, 3PH, 1CCT	D-OHC-E103-SD-004
710250	22/TX/3/100/1CCT	22KV, TRANSFORMER, 100KVA, 3PH, 1CCT	D-OHC-E103-SD-004
710251	22/TX/3/200/1CCT	22KV, TRANSFORMER, 200KVA, 3PH, 1CCT	D-OHC-E103-SD-004
710252	22/TX/3/315/1CCT	22KV, TRANSFORMER, 315KVA, 3PH, 1CCT	D-OHC-E103-SD-004
710253	22/TX/3/500/1CCT	22KV, TRANSFORMER, 500KVA, 3PH, 1CCT	D-OHC-E103-SD-004
710254	12.7/TX/1/25/1CCT	12.7KV, TRANSFORMER, 25KVA, 1CCT	D-OHC-E105-SD-003
710255	12.7/TX/1/50/1CCT	12.7KV, TRANSFORMER, 50KVA, 1CCT	D-OHC-E105-SD-003
710256	12.7/TX/1/100/ISO	12.7KV, ISO TRANSFORMER, 100KVA	D-OHC-E105-SD-001
710676	11/TX/1/25/2CCT	11KV, TRANSFORMER, 25KVA, 1PH, 2CCT	D-OHC-E102-SD-002
710678	11/TX/1/50/2CCT	11KV, TRANSFORMER, 50KVA, 1PH, 2CCT	D-OHC-E102-SD-002
710767	22/TX/1/25/2CCT	22KV, TRANSFORMER, 25KVA, 1PH, 2CCT	D-OHC-E102-SD-002
710769	22/TX/1/50/2CCT	22KV, TRANSFORMER, 50KVA, 1PH, 2CCT	D-OHC-E102-SD-002

710770	11/TX/3/200/2CCT	11KV, TRANSFORMER, 200KVA, 3PH, 2CCT	D-OHC-E103-SD-003
710771	11/TX/3/315/2CCT	11KV, TRANSFORMER, 315KVA, 3PH, 2CCT	D-OHC-E103-SD-003
710772	11/TX/3/500/2CCT	11KV, TRANSFORMER, 500KVA, 3PH, 2CCT	D-OHC-E103-SD-003
710773	22/TX/3/200/2CCT	22KV, TRANSFORMER, 200KVA, 3PH, 2CCT	D-OHC-E103-SD-004
710774	22/TX/3/315/2CCT	22KV, TRANSFORMER, 315KVA, 3PH, 2CCT	D-OHC-E103-SD-004
710775	22/TX/3/500/2CCT	22KV, TRANSFORMER, 500KVA, 3PH, 2CCT	D-OHC-E103-SD-004
710776	OH/TX/TBRACKET/1	OH, TRANSPOSITION BRACKET, 1PH	D-OHC-E101-SD-003
710777	OH/TX/TBRACKET/3	OH, TRANSPOSITION BRACKET, 3PH	D-OHC-E101-SD-004
710778	12.7/TX/1/25/2CCT	12.7KV, TRANSFORMER, 25KVA, 2CCT	D-OHC-E105-SD-003
710779	12.7/TX/1/50/2CCT	12.7KV, TRANSFORMER, 50KVA, 2CCT	D-OHC-E105-SD-003