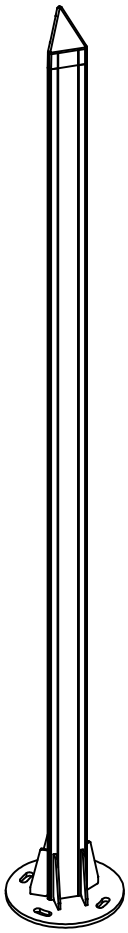
TRIA S
INSTALLATION INSTRUCTIONS



FLOOR

24 VDC		IP67	6063-T66	Ta I 50°C	IK10	

CE UKCA

ALL DIMENSIONS ARE GIVEN ACCORDING TO THE SI SYSTEM OF UNITS (MM, KG, °C), ADDITIONAL DIMENSIONS THAT ARE WRITTEN IN BRACKETS, ARE GIVEN ACCORDING TO THE U.S. MEASUREMENT SYSTEM (IN, LBS, °F)

GENERAL REMARKS ON SAFETY

- READ ALL OF THESE INSTRUCTIONS BEFORE INSTALLATION.
- KEEP ALL OF THE INSTRUCTIONS FOR FUTURE REFERENCE.
- INSTALLATION IS TO BE PERFORMED BY A QUALIFIED CONTRACTOR.
- ALL INSTALLATIONS ARE TO CONFORM TO THE STANDARDS OF THE NATIONAL ELECTRICAL CODE AS WELL AS ALL LOCAL JURISDICTIONAL CODES AND REGULATIONS.
- THE MANUFACTURER ACCEPTS NO RESPONSIBILITY FOR DAMAGE TO PERSONS OR PROPERTY ARISING THROUGH IMPROPER USE OR INSTALLATION.
- FOR WARRANTY CONDITIONS PLEASE CONSULT LOCAL SALES REPRESENTATIVE.

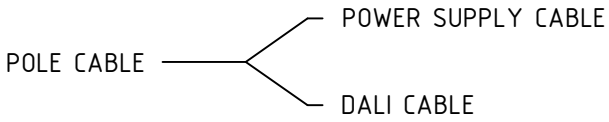
WIRING

WIRE MARKINGS

POLE POWER SUPPLY CABLE MARKING

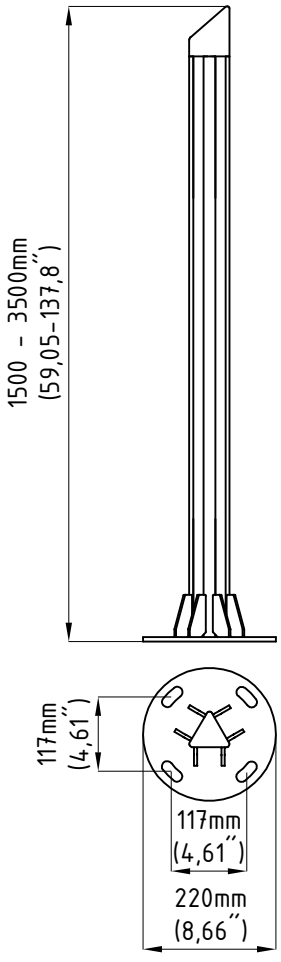
+24 VDC	BLACK	WIRE
-24 VDC	WHITE	WIRE
DALI +	RED	WIRE
DALI -	GREEN	WIRE
NOT USED	ORANGE	WIRE

WIRING SCHEME



NOTE:
THE POLE IS FULLY WIRED. THE POWER SUPPLY IS SUPPLIED SEPARATELY AND MUST BE CONNECTED AND SECURED IN THE DESIGNATED AREA. ALL ELECTRICAL WORK SHOULD BE CARRIED OUT BY A QUALIFIED ELECTRICIAN.
ALL ELECTRICAL RAILWAY SYSTEM ON THE POLE SIDES OPERATE AT 24 VDC AND ARE SLEV TYPE.
POLES ORDERED WITHOUT A JUNCTION BOX ARE DELIVERED WITHOUT A PROTECTIVE FUSE.

FIXTURE DIMENSIONS

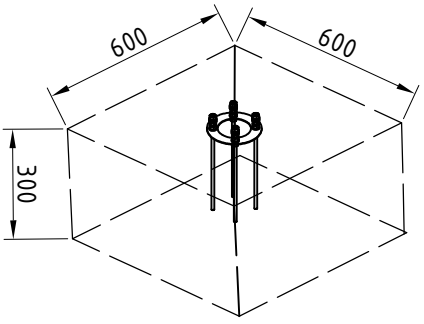


INSTALLATION GUIDE

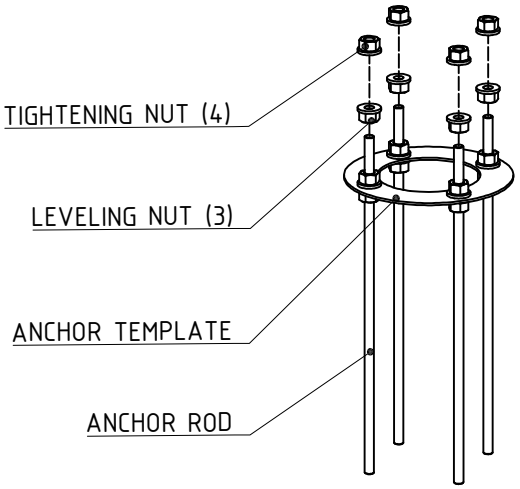
IN-GROUND CONCRETE MOUNT

1. PREPARE LOCATION FOR POLE PLACEMENT AND POUR CONCRETE AROUND ANCHOR PLATE ASSEMBLY AS PER PICTURE BELLOW. ENSURE THAT THE CABLE CONDUIT (MAXIMUM ϕ30 MM) IS PROPERLY PLACED IN THE CONCRETE.
2. ONCE CONCRETE IS CURED POSITION THE POLE ON THE ANCHORS. ENSURE ONE SET OF WASHER AND NUTS ARE PLACED UNDER THE POLE BASE TO ALLOW FINE LEVELING AS PER DETAIL "A".
3. USE THE LEVELING NUTS TO FINE LEVEL THE POLE.
4. AFTER LEVELING THE POLE, USE THE NEXT SET OF NUTS AND WASHERS SECURELY TO FIX THE POLE IN PLACE. (USE A TIGHTENING TORQUE OF 90NM FOR SECURING THE M12 NUTS.)
5. AFTER SECURING THE POLE ON THE ANCHOR BOLTS AND VERIFYING LEVEL, FILL THE VOID BETWEEN THE BASE AND THE CONCRETE FOUNDATION WITH GROUT. (ENSURE COMPLIANCE WITH ALL APPLICABLE LOCAL STANDARD AND GUIDELINES FOR CONCRETE BASE TYPE.)
6. CONNECT THE FEED CABLE TO THE POLE CABLE. (CONNECTION TO BE PREFORMED BY QUALIFIED ELECTRICIAN).

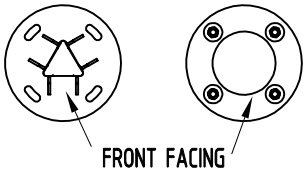
NOTE:
MAKE THE CONCRETE BASE A MINIMUM OF 600x600x300MM, OR ENSURE COMPLIANCE WITH ALL APPLICABLE LOCAL STANDARDS AND GUIDELINES.

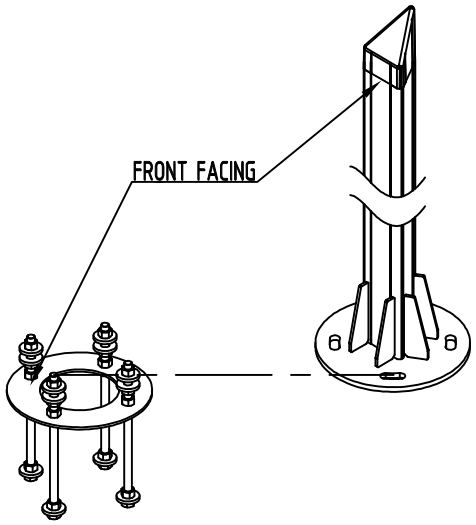


DETAIL "A"



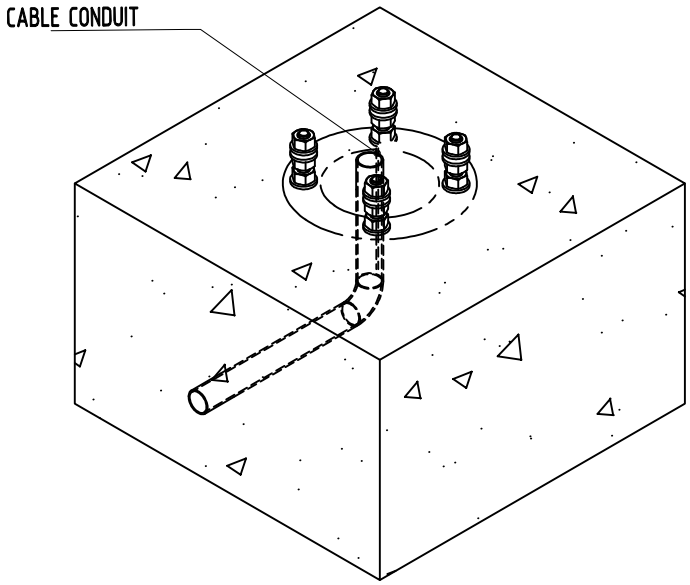
ANCHOR SET ORIENTATION

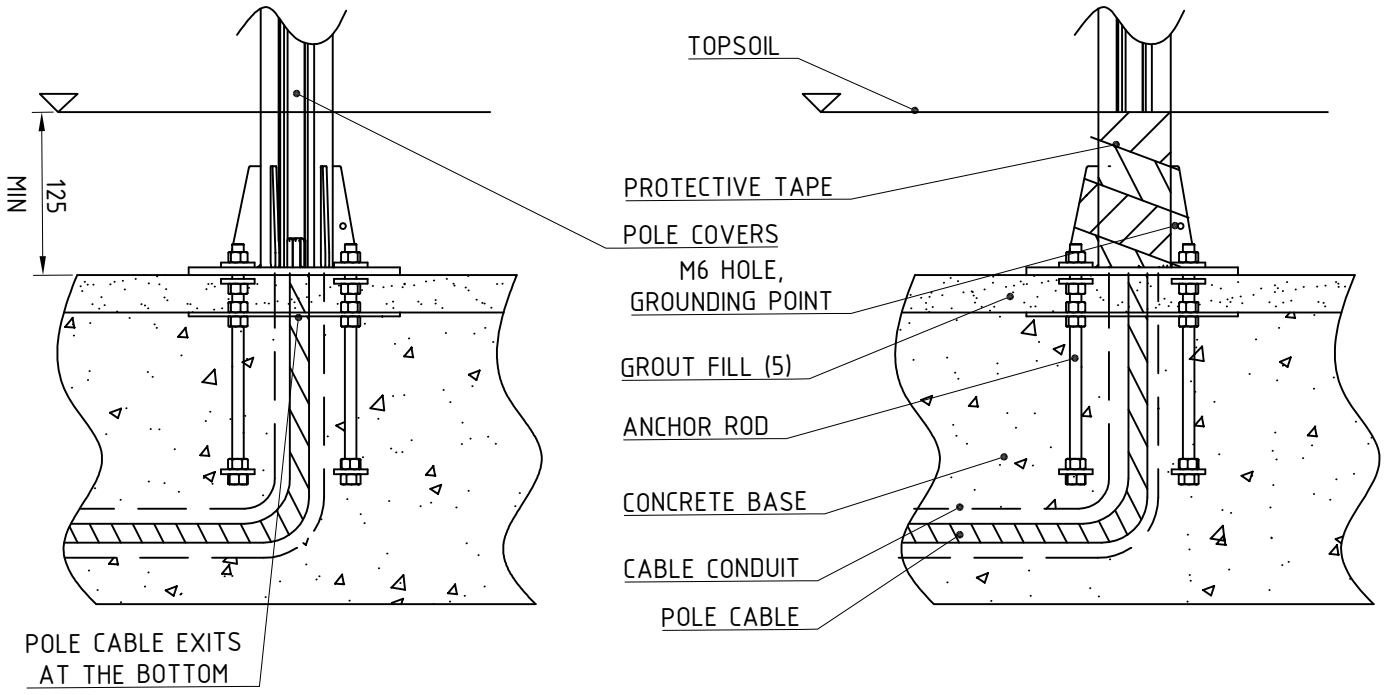




NOTE:
POLE COVERS WILL BE SUPPLIED IN FULL LENGTH AND MUST BE CUT BY A QUALIFIED CONTRACTOR AFTER INSTALLATION OF THE QUICK-CONNECT ADAPTER.
IF THE POLE IS PARTIALLY BURIED BELOW THE TOPSOIL, THE COVERS SHALL BE CUT TO SUIT THE BURIED SECTION, IT IS ADVISED TO USE BITUMEN PROTECTIVE TAPE (BITUMEN TAPE IS NOT SUPPLIED BY THE MANUFACTURER).
THIS ALLOWS FOR A 125mm HEIGHT ALLOCATION FOR PAVING OR OTHER SURFACING.
THE CABLE CONDUIT SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 40mm ABOVE THE ANCHOR PLATE TO ALLOW FOR LEVELING AND GROUT VARIATION.
THE CONDUIT SHALL BE CUT TO MATCH THE FINAL GROUT HEIGHT PRIOR TO POLE PLACEMENT.

IN THE CONCRETE MOUNTING OPTION, THE POLE CABLE WILL EXIT AT THE BOTTOM OF THE POLE TO FACILITATE EASY ROUTING THROUGH THE CABLE CONDUIT.

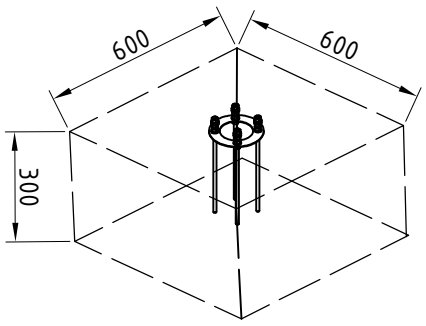




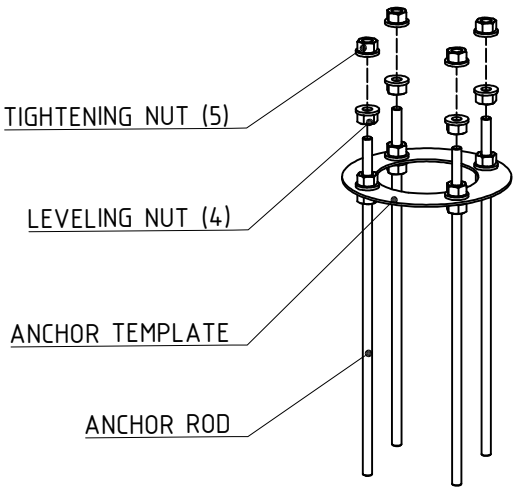
UTILITY-VAULT MOUNTING

1. PREPARE LOCATION FOR POLE PLACEMENT AND POUR CONCRETE AROUND ANCHOR PLATE ASSEMBLY AS PER PICTURE BELLOW. ENSURE THAT THE CABLE CONDUIT (MAXIMUM ϕ30 MM) IS PROPERLY PLACED IN THE CONCRETE OR IN THE UTILITY-VAULT..
2. ONCE THE CONCRETE IS CURED POSITION THE UTILITY-VAULT ON THE CONCRETE BLOCK. THE HOLE ON THE UTILITY-VAULT SHOULD BE CONCENTRIC WITH THE ANCHOR SET. ONCE THE UTILITY-VAULT IS IN DESIRED POSITION, USE SUITABLE SCREWS TO FIX THE UTILITY-VAULT WITH THE CONCRETE BLOCK. (SCREWS NOT SUPPLIED BY THE MANUFACTURER)
3. ONCE THE UTILITY-VAULT IS SECURED, POSITION THE POLE ON THE ANCHORS. ENSURE ONE SET OF WASHER AND NUTS ARE PLACED UNDER THE POLE BASE TO ALLOW FINE LEVELING AS PER DETAIL "A".
4. USE THE LEVELING NUTS TO FINE LEVEL THE POLE.
5. AFTER LEVELING THE POLE, USE THE NEXT SET OF NUTS AND WASHERS SECURELY TO FIX THE POLE IN PLACE. (USE A TIGHTENING TORQUE OF 90NM FOR SECURING THE M12 NUTS.)
6. AFTER SECURING THE POLE ON THE ANCHOR BOLTS AND VERIFYING LEVEL, FILL THE VOID BETWEEN THE BASE AND THE CONCRETE FOUNDATION WITH GROUT. (ENSURE COMPLIANCE WITH ALL APPLICABLE LOCAL STANDARD AND GUIDELINES FOR CONCRETE BASE TYPE.)
7. CONNECT THE FEED CABLE TO THE POLE CABLE. (CONNECTION TO BE PREFORMED BY QUALIFIED ELECTRICIAN).
8. ONCE THE FEED CABLE IS CONNECTED AND ALL OTHER WORK IN THE UTILITY VAULT COMPLETE, INSTALL THE COVER BOX TO CLOSE THE VAULT.

NOTE:
MAKE THE CONCRETE BASE A MINIMUM OF 600x600x300MM, OR ENSURE COMPLIANCE WITH ALL APPLICABLE LOCAL STANDARDS AND GUIDELINES.

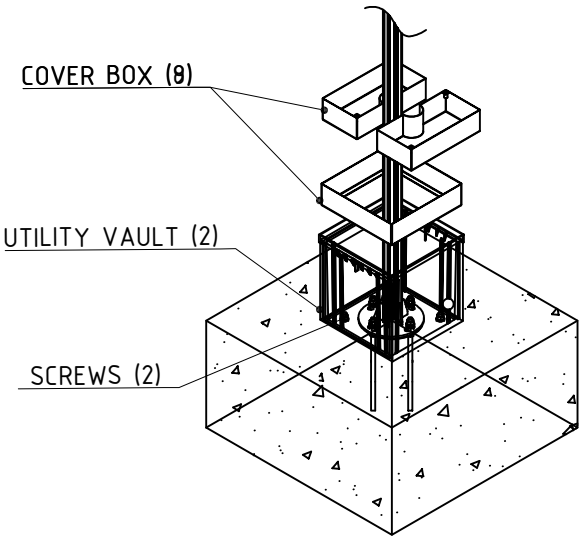


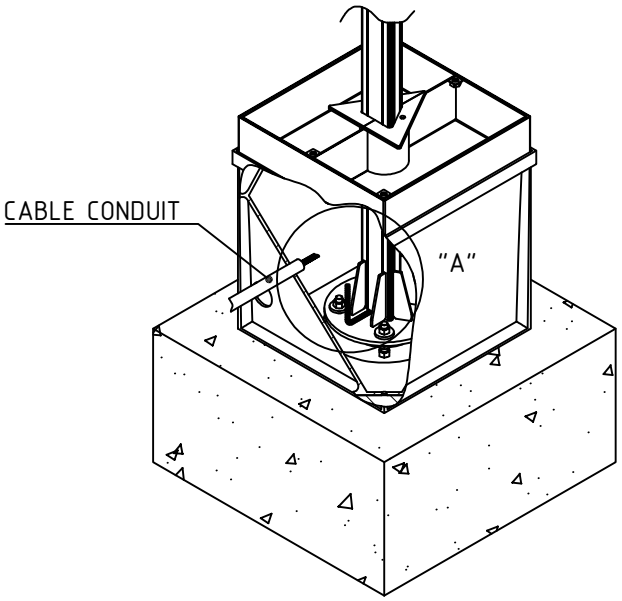
DETAIL "A"

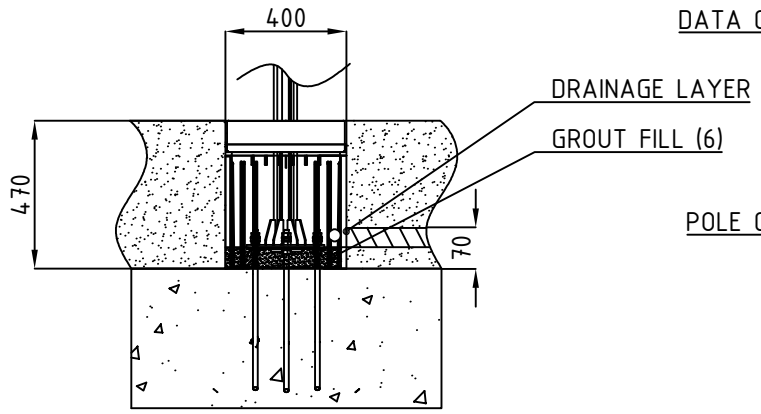


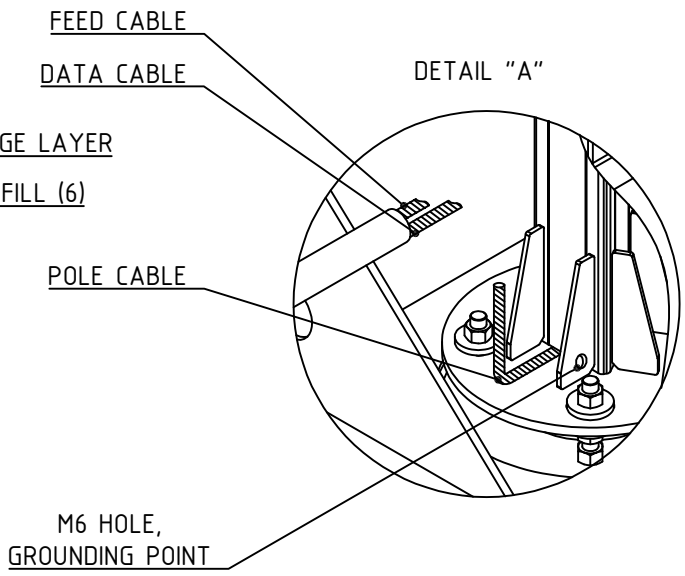
NOTE:
POLE COVERS WILL BE SUPPLIED IN FULL LENGTH AND MUST BE CUT BY THE QUALIFIED CONTRACTOR AFTER QUICK-CONNECT ADAPTER INSTALLATION. ENSURE THE DRAINAGE HOLE IS LOCATED ABOVE GROUT LEVEL.
THE UTILITY VAULT IS SUPPLIED WITH PRE-CUT HOLES FOR PROPER POSITIONING. ALL CONDUIT PLACEMENT HOLES SHALL BE FIELD-CUT BY THE CONTRACTOR. THE COVER BOX SHALL BE 100MM IN DEPTH AND MAY BE FILLED WITH THE REQUIRED INFILL.

THE POLE COMES WITH A 5-POLE CABLE. IF Y CONNECTORS ARE ORDERED, PLEASE REFER TO THE INSTALLATION INSTRUCTION DOCUMENT FOR THE CONNECTOR. IF THE SPLICE IS PERFORMED WITHOUT THE CONNECTOR, ENSURE THAT AN IP67 RATING IS ACHIEVED. (POWER SUPPLIES SUPPLIED BY FILIX ARE IP67 RATED.) ALL CONNECTIONS SHOULD BE DONE ACCORDING TO THE WIRING SECTION OF THIS DOCUMENT.





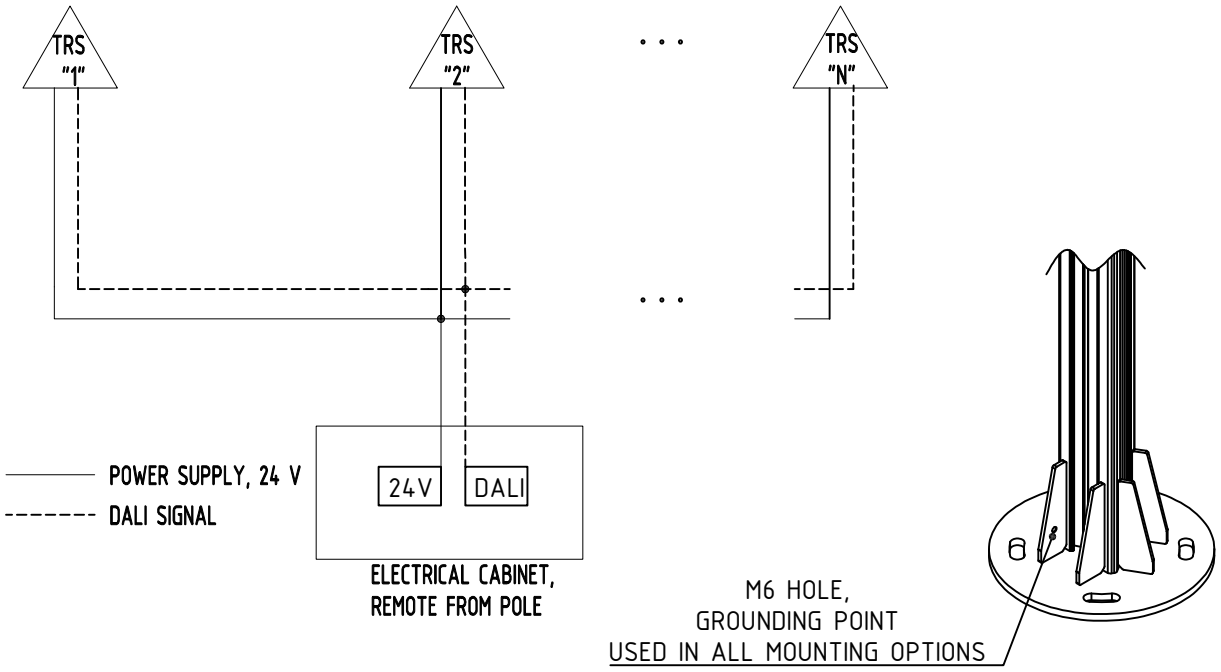




CONCRETE MOUNT WIRING SCHEME

NOTE:
THE POLE CABLE EXITS AT THE BOTTOM AND CONSISTS OF FOUR (4) WIRES.
ELECTRICAL CONNECTION CAN BE PERFORMED USING; APPROVED CONNECTORS (OPTIONAL ACCESSORIES), OR DIRECT SPLICING. (WHEN SPLICING IS USED, THE CONNECTION MUST ACHIEVE A MINIMUM PROTECTION RATING OF IP67.) (FOR CONNECTORS SUPPLIED BY FILIX, REFER TO THE INSTALLATION INSTRUCTIONS PROVIDED BY FILIX)
IT IS RECOMMENDED THAT ALL CONNECTIONS BE MADE; INSIDE A SUITABLE ELECTRICAL CABINET, OR WITHIN AN EASILY ACCESSIBLE AND PROTECTED ENCLOSURE.
A SINGLE POWER SUPPLY MAY BE USED TO SUPPLY MULTIPLE POLES.
THE WATTAGE PER POLE (W/POLE) AND THE DISTANCE BETWEEN THE POWER SUPPLY AND EACH POLE MUST BE PROPERLY SPECIFIED TO AVOID VOLTAGE DROP

FOR POLE CABLE ROUTING DETAILS, REFER TO THE INSTALLATION GUIDE, IN-GROUND CONCRETE BASE.



UTILITY VAULT MOUNT WIRING SCHEME

NOTE:
THE POLE CABLE EXITS AT THE SIDE AND CONSISTS OF FOUR (4) WIRES.
ELECTRICAL CONNECTION CAN BE PERFORMED USING; APPROVED CONNECTORS (OPTIONAL ACCESSORIES), OR DIRECT SPLICING. (WHEN SPLICING IS USED, THE CONNECTION MUST ACHIEVE A MINIMUM PROTECTION RATING OF IP67.) (FOR CONNECTORS SUPPLIED BY FILIX, REFER TO THE INSTALLATION INSTRUCTIONS PROVIDED BY FILIX)
IT IS RECOMMENDED TO PERFORM ELECTRICAL CONNECTIONS INSIDE THE UTILITY VAULT.
UTILITY VAULTS MAY BE USED AS A DAISY-CHAIN DISTRIBUTION SYSTEM TO MINIMIZE OVERALL CABLE ROUTING AND REDUCE INSTALLATION COMPLEXITY.
ALTERNATIVELY, CONNECTIONS MAY BE MADE OUTSIDE THE VAULTS, WITH EACH UTILITY VAULT BEING POWERED INDIVIDUALLY (STAR CONFIGURATION).

FOR POLE CABLE ROUTING DETAILS, REFER TO THE INSTALLATION GUIDE, UTILITY-VAULT MOUNT.