

# CUSTOMER INSTALLATION INSTRUCTIONS

Reliability by Design.

IN0013 (R10) Underground Distribution Box Installation Instructions  
20 Apr 2026



## 1 Purpose






The purpose of this document is to provide guidelines for the installation of the following pre-assembled Underground Distribution Box ('the product') types:







- UBxx05xxxx(400x400) (Drawing No.: HPE-DPA-0175)
- UBxx07xxxx(400x800) (Drawing No.: HPE-DPA-0861)
- UBxx11xxxx(650x800) (Drawing No.: HPE-DPA-0864)
- UBxx10xxxx(800x800) (Drawing No.: HPE-DPA-02019)

In addition to these instructions, installation must comply with any other relevant general or site specific: regulations, standards, and environmental and safety requirements, including safe work practices, as specified in local and/or national work instructions or codes.

## 2 Scope

This instruction is for qualified and competent installers of the product. The product is intended for application in public electricity distribution networks. The product is supplied with a lid rated according to AS3996 or EN124 in line with the maximum load that the product will be subjected to in everyday use.

Types	Loading Group	EN124 Class	Typical Use	EN124 Test Load
	Group 1	A 15	Areas which can only be used by pedestrians and pedal cyclists.	15kN (1.5 tonnes)
	Group 2	B 125	Pedestrian areas and comparable areas, car parks or car parking decks	125kN (12.5 tonnes)
	Group 3	C 250	Installed in the area of curb-side channels of roads which when measured from the curb edge, extends a maximum of 0.5m into the carriageway and a maximum of 0.2m into the pedestrian area.	250kN (25 tonnes)
	Group 4	D 400	Carriageways of roads (including pedestrian street), hard shoulders and parking areas, for all types of vehicles.	400kN (40 tonnes)
	Group 5	E 600	Areas imposing high wheel loads, e.g., docks, aircraft pavements.	600kN (60 tonnes)
	Group 6	F 900	Areas imposing particularly high wheel loads, e.g., aircraft pavements.	900kN (90 tonnes)

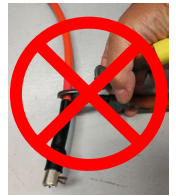
Types	AS3996 Class	Typical Use	Nominal Wheel loading (kg)	Serviceability design load (kN)	Ultimate limit state design (kN)
	A	Areas accessible strictly by pedestrians. Not suited to vehicles. Purpose - residential backyards. Walkways not accessible by vehicles.	330	6.7	10
	B	Private and shared residential property. Suitable for vehicles accessing driveways and footways. Low speed only. Purpose-residential driveways. Unit sites. Parklands. Residential car parks.	2670	53	80
	C	Residential roads and car parks trafficable to vehicles. Purpose-areas with slow moving traffic and minor roads.	5000	100	150
	D	Major roads including freeway and motorway shoulders. Warehouses and loading docks. Purpose-major roads.	8000	160	240
	E	Freeway and motorway carriageways. Suitable for all heavy vehicles. Purpose-freeways and motorways.	13700	267	400
	F	Docks, wharfs and airport service and taxiways. Purpose-heavy and high traffic volumes.	20000	400	600

### 3 References

- EEA Guide to Live LV Electrical Work
- EEA Guide for Livening of Service Connections to Premises

## 4 Important Safety Information

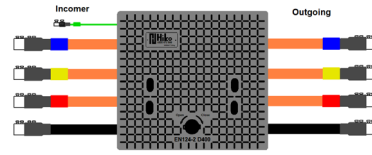
- Wear appropriate personal protective equipment.
- Ensure all electrical components are isolated before making connections. Do not work on an energised system.
- Complete a risk assessment prior to commencing site work.
- Adhere to this work instruction for the instruction, operation maintenance and repairs of this product.
- Unauthorised modification of the safety critical components such as the lid, or structural supporting components, or sealing components is not permitted. If in doubt, contact Hiko for advice.
- Do not use the product if damaged.
- Do not clean products with a high-pressure cleaner.
- The products have an Arc Initiation Protected Zone. To maintain this Safety Zone, holes must not be added to the Pit, Lid or Bell.
- Pre-assembled cable tails are supplied for jointing to network / service cables. These pre-assembled cable tails are water-tight and must not be cut or removed.
- The pre-assembled cable tails must not be extended by pulling the cables through for the insides of the Pit as this will prevent the bell and stand from being safety lifted for maintenance and connection



## 5 Product Technical Information

Hiko Code	Dimensions (L x W x D mm)	Typical Weights (kg)						Cable Tail (size mm <sup>2</sup> )
		Total	Head Frame	AS3996 Class B	EN124 Class B	EN124 Class D	Pit, Cable and Disconnect Assembly	
UBxx05xx	Internal: 400x400x700 External: 500x500x700	125	18	-	29	29	78	150-185
UBxx07xx	AS3996 Internal: 800x400x700 External: 960x500x700 EN124 Internal: 800x400x770 External: 960x500x770	175	20	15	33	45	140	
		193						
		205						
UBxx11xx	Internal: 800x650x700 External: 960x800x700	260	25	20	-	-	215	
UBxx10xx	AS3996 Internal: 800x800x700 External: 960x960x700 EN124 Internal: 800x800x770 External: 960x960x770	315	30	25	135.5	135.5	260	
		425.5						

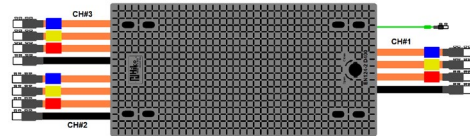
400x400 EN124 Class D Lid



800x400 AS3996 Class B Lid



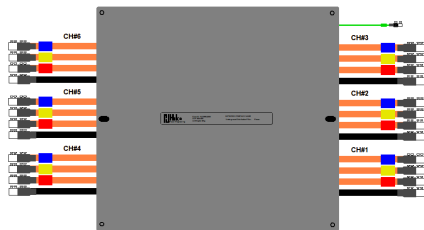
800x400 EN124 Class D Lid



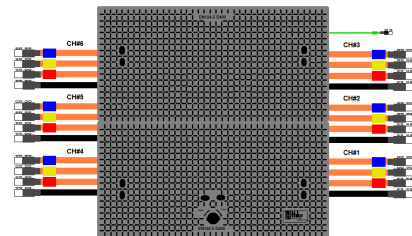
800x650 AS3996 Class B Lid 4 and 5 Ways



800x800 AS 3996 Class B Lid



800x800 EN124 Class D Lid

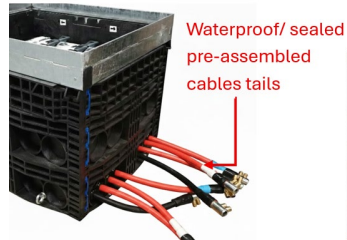
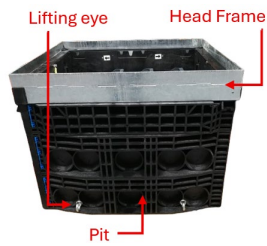


The product consists of an in-ground pit with lid and LV switchgear / fuse gear supplied pre-assembled under an insulated, watertight bell. Single-core flexible cable tails are provided.

**Note:** cable tails must be jointed to network / service cables with water-tight joints (not supplied). Any network / service cable tails that are connected directly to the switchgear must be terminated with water-tight lugs and seals.

UDP components supplied consist of:

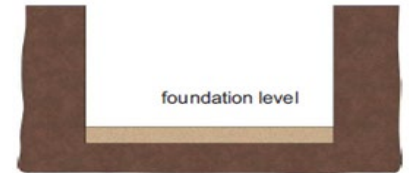
- Pit and lid for in-ground installation.
- Insulated bell complete with lockable/retention bar.
- Waterproof/sealed pre-assembled in-coming and out-going cable tails
- LV switch, Busbars and fuse gear on insulated structures.
- Locking Bars



## 6 Installation

### Installing the connector

1. Prepare the excavation site and complete a risk assessment of the surrounding area.



2. Excavate a hole suitable for the product.

For installations in road carriageways, ensure that there is a minimum of 200 mm clearance on all four external walls of the product: i.e. the hole must be at least 1350 x 980 mm, and ensure the depth of the hole is a minimum of 200 mm deeper\* than the depth of the product.

For installations in footpaths, a minimum of 100 mm.\*

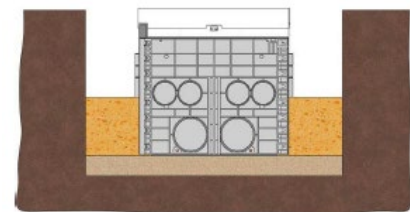
**Note:** final ground level may vary between construction and handover stage.

3. Confirm finished ground levels to ensure correct pit depth.
4. Fill the hole to the depth of the product, using compacted hard fill or concrete under the base of the product.

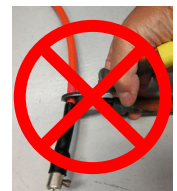
If required, unlock and lift off the lid pieces and head-frame.

**Note:** the Product will function satisfactorily up to 5 degrees off the horizontal. Any further height changes up to 50 mm can be made by adjusting the headframe (step 11).

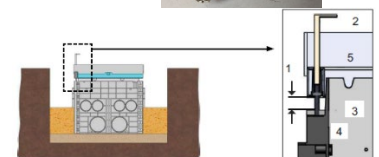
5. If the base is not pre-fitted, fix the base to the bottom pit walls using the fixings provided.
6. Use a suitable lifting method and lower the product centrally into the hole.
7. Fill the hole around the product up to the levels of the cable entries with compacted hard fill in stages according to standards as required by the location.



8. Connect the flexible cable tails to network / service cables using suitable in-line joints.
9. Pre-assembled cable tails are supplied for jointing to network / service cables. These pre-assembled cable tails are water-tight and must not be cut or removed.



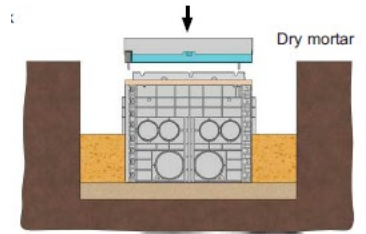
10. If height/level adjustment is needed, adjust the head frame (1) to the ground level using the height compensation screws (2) turn the bolts to ensure the headframe is level with the ground (3). Make sure that all four bolts are contacting the metal supports on the Pit elements (4).



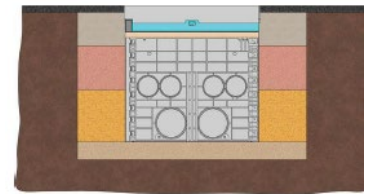
**Note:** Maximum adjustment is 50 mm at any corner.

11. Once the height adjustment has been completed, lift off the head frame and place it beside the hole.
12. Completely fill in the resulting cavity with dry mortar with compressive strength  $\geq 35$  MPa, or concrete with compressive strength  $\geq 30$  MPa. The product may only be placed under load once the mortar or concrete used has reached the hardness specified by the supplier.

**Note:** PU or other foam must not be used.



13. Immediately after filling with mortar, replace the head frame. The threaded rods will press through the still soft dry mortar until they are standing on the metal supports.
14. Ensure the lid is in place and secured.
15. Fill the final stage of the hole around the Product with compacted hard fill according to standards, or other surface finish as required by the location.



## 7 Inspection and maintenance

1. **SAFETY WARNING:** Always wear the correct PPE when opening the lid for inspection, operation or maintenance.

Remove the lid by unscrewing and removing all bolts.

**Note:** if the lid is secured using security bolts, use the correct security tool.

2. Lift / remove the lid using a safe lifting technique.
3. Using a safe technique, check the for the presence of water in the pit. Do not raise the insulated watertight bell if water is present above the bottom of the bell.
4. If water is present above the bottom of the bell, pump it out using a safe technique. Do not lower any conductive tubing or other components into the pit.

If water is not present above the bottom of the bell, remove the locking bars and lift the bell out of the pit using the lifting points indicated.

**Note:** a number of different methods are used to latch the bell, according to customer requirements, including security padlocks.

5. **Follow all operating procedures applicable to the inspection, operation and maintenance of LV network switchgear / fusegear. Always use insulated tools inside the pit.**

Perform inspection, operation or maintenance work as required.

**Note:** LV network operations must be performed only by persons holding the appropriate competency rating for the type of work.

6. Replace the insulated watertight bell carefully back into position and install the bell locking bars in the positions indicated by the arrows. The locking bar must be secured by an M8 Bolt, 8mm Locking Pin, or 8mm Padlock
7. Replace the lid, securing bolts, and lid hole caps.
8. Ensure lid and pit are secure before leaving the site.





