

CUSTOMER INSTALLATION INSTRUCTIONS

Reliability by Design.

IN0161 (R1) LV Padmount Shallow Frame Installation Instructions
22 Aug 202

1 Purpose

The purpose of this document is to provide guidelines for the installation of the pre-assembled LV Padmount Shallow Frame.

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 LV Frame product.

The supplied LV Padmount Shallow Frame consists of:

- Pre-assembled LV Frame.
- Cables (if requested).

3 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 installation of the LV frame.

4 Technical Information

▣ Dimensions and Weights

Tabulated below are the approximate dimensions and weight of the LV Padmount Shallow Frames. The weights are based on a frame fully populated with disconnects.

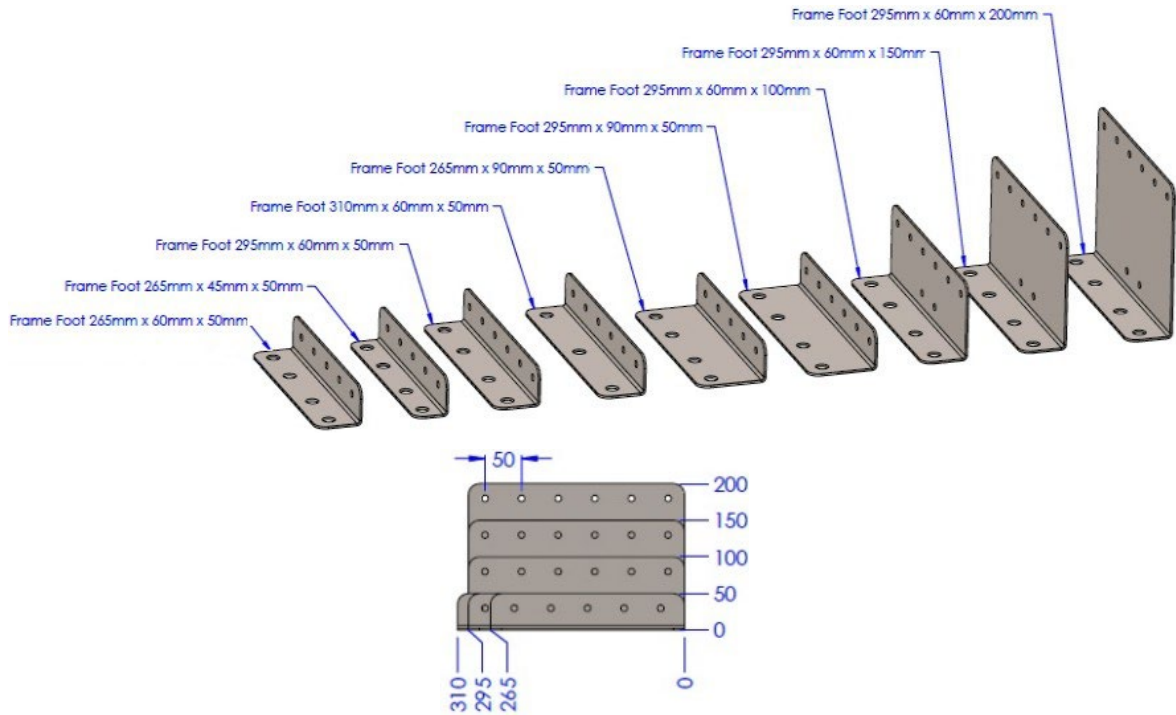
LV Frame		Approx. Frame External Dimensions (mm)			
Size Spec	Approximate Weight	Depth	Height w Feet*	Overall Width w Feet*	Feet Hole Ctrs*
LV700	80kg	235	890-990	830	785
LV800	90kg	235	890-990	930	885
LV900	100kg	235	890-990	1030	985

* Dimensions will vary with feet configuration and feet orientation

▣ Feet Configurations

The LV Padmount Shallow Frame can be fitted with stainless steel feet of varying length and height and can also be orientated inwards or outwards in relation to the LV Frame to better suit the constraints of the Transformer pad and cubicle.

For more information, contact Hiko Power Engineering.

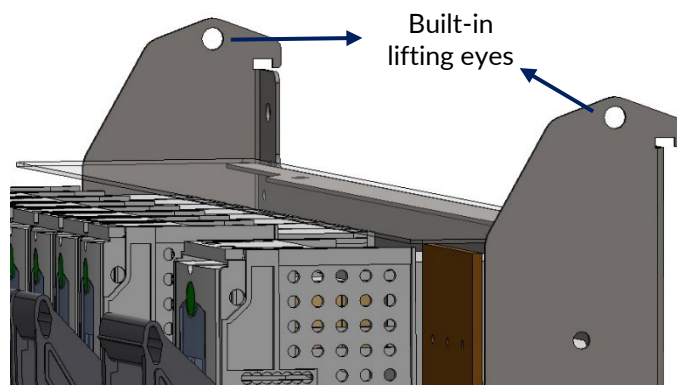


5 Handling Information

Upon unboxing, inspect the product for damage prior to installation. The LV frame includes lifting eyes and handles for ease of handling and transport. Note that the LV frame may be unstable when unbolted from the pallet.

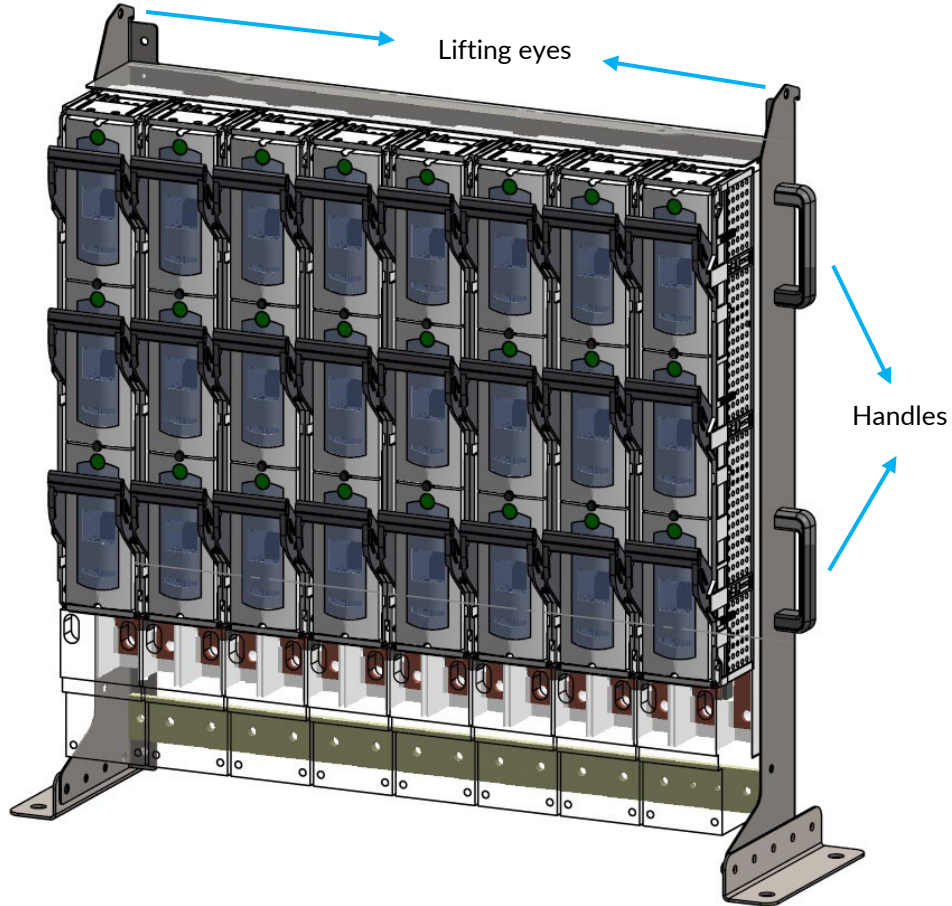
▣ Lifting Eyes

A built-in lifting eye is located on top of each leg, intended to be used in conjunction with a suitably rated dee-shackle. The use of a spreader bar to safely lift the LV frame for transport is required.



Handles

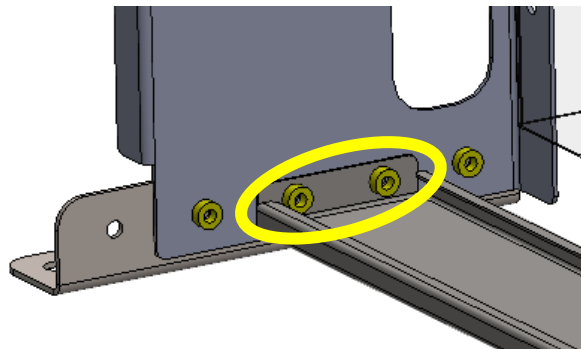
The LV Padmount Shallow LV Frame is fitted with two carrying handles on each side of the frame for easier manual handling to the Transformer.



6 LV Frame Installation

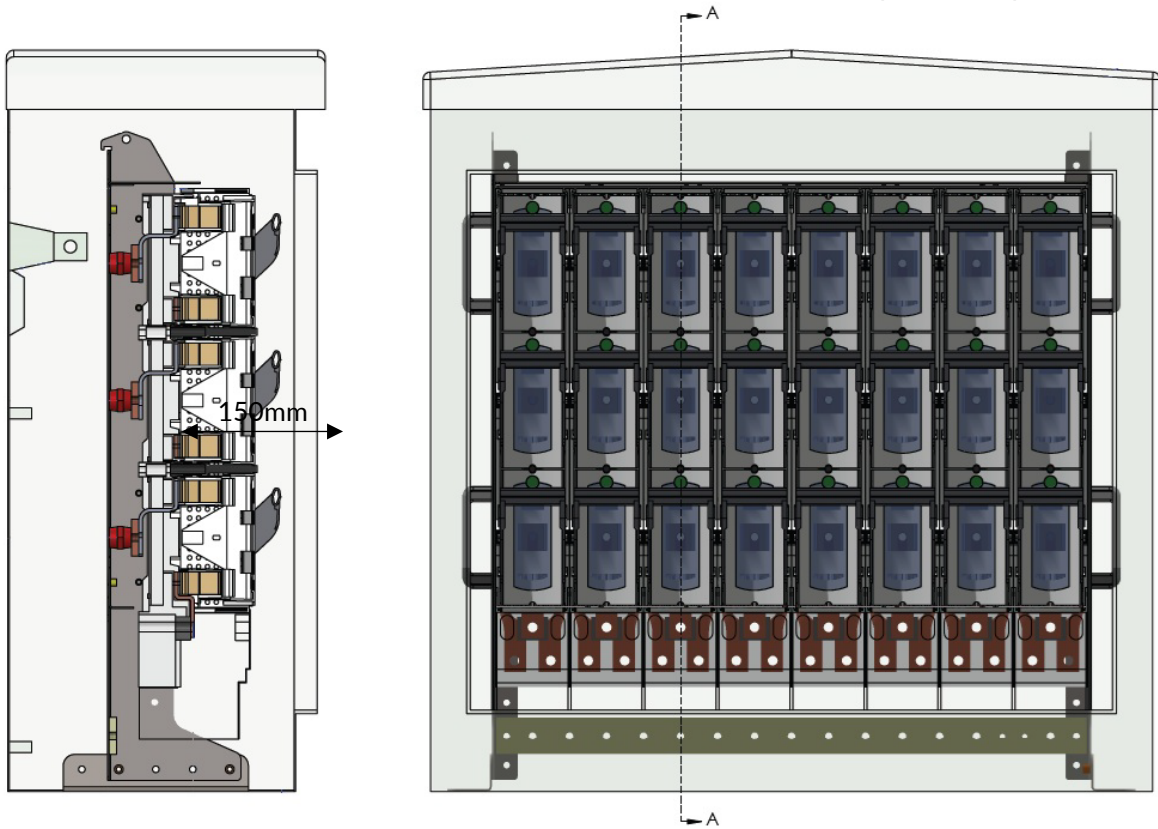
1. Depending on the Transformer configuration, an LV800 or LV900 Padmount Shallow Frame may be fitted with a temporary stiffening bar, used to secure the structure of the frame during shipping.

To remove the stiffening bar, undo the two M8 bolts on both sides of the bar as below.



2. Install the cables to the bushings.

3. Install the frame inside the cubicle, centred across the concrete pad (example below).

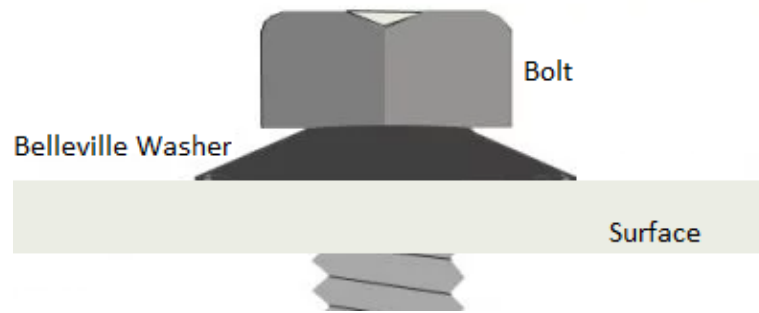


4. Secure the LV Frame to the concrete pad with anchor bolts, ensuring they are not located too close to the edge of the concrete pad.
5. Install the bushing cables to the incomer and fit feeder cables.

7 LV Disconnect Installation

1. There is a torque requirement for:
 - a. The disconnect bolts going into the busbars.
 - b. The outgoing terminal bolts of the disconnect with cable fitted. If no cable is fitted onto the outgoing terminal bolt, only finger tight is required.

Note: Ensure the Belleville washers are re-installed the right way around (see illustration below).



2. Depending on the size of the disconnect and/or bolt, use the table below:

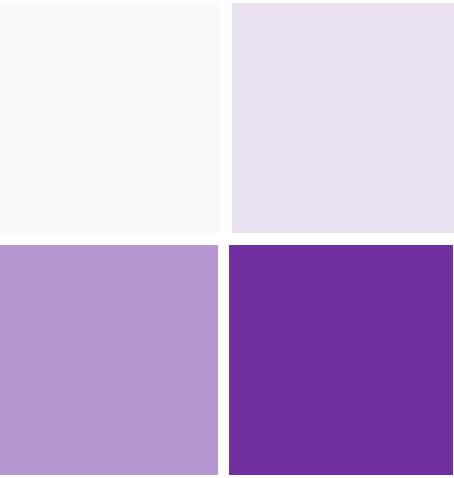
**Torque Requirement for Disconnect Bolts
on the Busbar**

DIN Size	Bolts Size	Torque (Nm)
DIN 2, 3	M12	40
DIN 00	M8	12

**Torque Requirement for Outgoing Terminal Bolts of the
Disconnect with Cable Fitted**

DIN Size	Bolts Size	Torque (Nm)
DIN 2, 3	M12	40
DIN 00	M8	12

3. Any spare way cover installed in place of a disconnect must be fastened to the busbars with a nylon bolt M12x30mm.



0800 473 999

Christchurch Office - 85a Falsgrave St, Phillipstown

Auckland Office - Unit B5, 269A Mount Smart Rd

www.hikopower.co.nz

