

Product Datasheet



Universal Tank Mount Frame

100kVA to 750kVA - designed to be installed safely in less than 30 minutes

DS0141 R2 UTMF Datasheet 06/2024

Hiko's low voltage universal tank mount frame (UTMF) builds on its extensive range of low voltage switchgear frames for transformers designed to be installed safely in less than 30 minutes.

The UTMF fits typical transformers including 100 to 750 kVA Etel Minipad, 200 to 500 kVA Hitachi / ABB Mini as well as the 300 and 500 kVA Tyree cubicle transformers.

Key to installing the UTMF and its universal fit is the two-rail system devised by the Hiko engineering team. These stainless steel rails are simply bolted to the mounting bosses on the transformer and the UTMF is then lifted onto the rails where the open clamps on the frame make positioning easy. The UTMF is then secured in place with a long nut driver tightening the spring-loaded clamp bolts.

Because of the tank mounting, there is no need to drill the concrete pad. This speeds up installation, but it can be bolted to the concrete if required. The earth bar is on the right-hand side close to the neutral bushing and earth stud, making it easier to connect the earth. This frees up access to the

neutral bar for testing and results in a quicker install.

The UTMF incorporates advanced safety features which are embedded in Hiko designs to improve handling and access for installers and operators such as handles and lifting eyes for ease of manoeuvrability. Safe operating performance and long-term reliability are assured by our design methodology which includes mechanical, electrical, and thermal modelling and testing before a design is released to production and is in line with the requirements of AS/NZS 61439.1 and AS/ NZS 61439.5.

The UTMF is available for PEN networks and options for separate Earth / Neutral connections and can be preinstalled with internal CTs and a Gridkey LV monitoring device. The new design also provides clearer access to the drain tap for changing the oil as and when maintenance is required.

For frames and single supply over 500kVA circuit breaker options are available for added protection and are specified by each network.

Transformers

Make	Model	kVA
Etel	Minipad	100 - 750
Hitachi / ABB	Mini Sub	200 - 750
Tyree	Cubicle Type	300 - 500

Materials

Component	Material
Frames	Stainless Steel 304
Fixings	Stainless Steel 304
Protective Covers	Polycarbonate (transparent)
Busbar heat-shrink	Polyolefin

Configurations

Rating (kVA)	Busbar Size (mm)	N/E Bar Size (mm)	Bushing Cable Cross Section (mm²)	Incoming Isolator (A)
100 - 300	30 x 10	30 x 10	185	630
500	50 x 10	30 x 10**	2 x 150	1000
750*	80 x 10	50 x 10**	2 x 240	1250

^{*} Frame without circuit breakers

Dimensions

		Max. No. of Fuse Switch Disconnects	
Frame Width (mm)	Service panel width (mm)	With service panel	Without service panel
800	100	6	8
900	200	7	9

Options

Fits DIN-style switchgear Street lighting and Ripple Relay control MDI's / metering / LV monitoring CTs fitted to the disconnects Other switchgear or control gear Auxiliary supplies Direct bus connection with covers PEN and separate Earth Neutral connections Customisation of the design to suit network requirements

Other literature available on request

Reports, drawings, technical data sheets, installation instructions, O&M guidelines

^{**} Can be provided same size as busbars