

AcuLok TMO

Transformer Mounted Distribution Cabinets



engineering intelligent solutions

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Transformer Mounted Low Voltage Distribution Cabinets featuring AcuLok Fuse Handle technology

AcuLok TMO is a ground breaking development in transformer mounted LV distribution cabinets from Lucy Switchgear Ltd, the UK's leading independent manufacturer of electrical distribution equipment.

Designed to meet the increasingly demanding needs of the Utilities and private commercial operators in a global arena, the new AcuLok TMO product family redefines previously accepted safety and versatility norms and elevates them to even higher levels.

Outdoor or alternatively indoor installation as part of a unit substation is the prime vocation of these compact units. Main disconnectors rated at either 1000A or 2000A control the 630A fuse ways or other outgoing devices. The high equipment specification includes current transformers for load monitoring, a programmable digital meter, integral 660A Veam Powerlock generator sockets and an rcd protected auxiliary socket.

The AcuLok TMO cabinets are the first in a range of Lucy distribution products that will incorporate the unique AcuLok fuse handle system.



Safety Enhancements

- Deep skirt shrouding around fuse handle for fuse handle alignment and arc containment
- Fully shrouded fuse ways and phases
- Independent manual load break, load make transformer disconnectors
- Consistent fuse handle clamping pressure*
- Recessed test points in transformer disconnectors and fuse handles
- Simple visual confirmation of correct fuse handle engagement
- RCD protected 13A socket outlet for auxiliary supply
- Shielded generator synchronisation terminals

Key Attributes

- Multi-position attachment points for mechanical cable connectors on fuse stalks
- Individual load-bearing cable cleat per fuse way

- Easily removable fuse stalks for connector attachment
- Complete 3 phase fuse ways are easily removable to allow panel reconfiguration
- Live current measurement per fuse handle facility

Options

- 4, 5 or 6 outgoing fuse ways (7 and 8 available to special order)
- 800A or 1600A busbar ratings
- ACBs up to 2500A directly connected to transformer flange
- Ganged fuse ways with metering facilities for large LV customers
- 3 phase disconnector handle
- 4 core cable kit

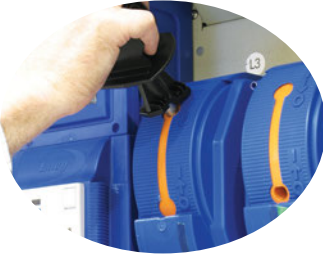
* Mechanism patent applied for



Standby generator cables fitted to the Veam Powerlock sockets. The earth socket is mounted at the bottom of cabinet.



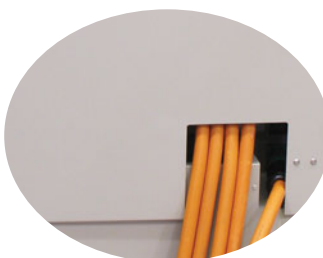
Transformer disconnectors padlocked off with the link bars in place.



Retractable disconnecter handle used to switch the unit.



Fully shrouded AcuLok handle easily extracted from the fuse way.



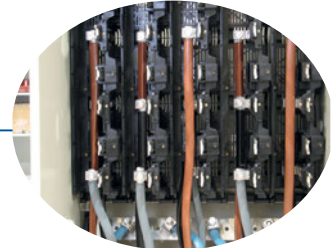
Aperture in lower edge of door allows five generator cables to exit the cabinet with the door padlocked shut.



For further information about the AcuLok range visit www.lucyelectric.com



The instrument panel consolidates the digital multi meter, auxiliary fuses and generator synchronisation sockets in one compact panel.



Widely spaced phase terminations.



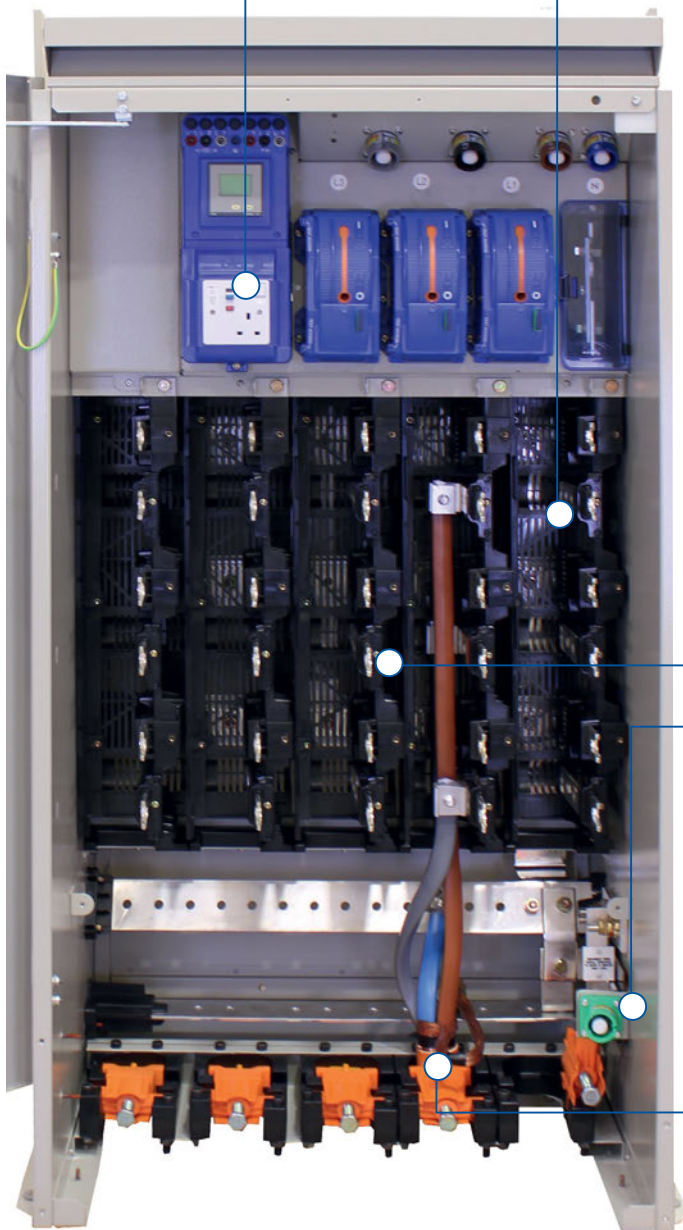
Transparent fuse way shield padlocked in place.



Removal of the apron plate gives full frontal access for cabling.



Cleats are load bearing and provide a solid anchor point during cable connection.



The AcuLok Fuse Handle*

Meticulously engineered for reliability and optimum operator safety

Single movement automatic fuse clamping operation

Rogowski coil loop test access points

The preset mechanism applies consistent clamping pressure through a system of rotary cams and Belleville washers thereby eliminating the variances in thumb screw tightness sometimes introduced by operators. Additionally, the position of the orange handle gives an infallible indication of the clamping status; flush is fully clamped whereas at right angles is ready for insertion or withdrawal.

Fuse integrity points

Innovative features bring improved operator safety levels. Two key attributes provide the main advantages; deep skirt shrouding which protects the operator from the dangers of arc flash during fuse handle manipulation and a clamping operation that is accomplished automatically in one movement.



Tube for Rogowski coil

* Patent applied for

AcuLok TMO

Technical specifications

Mounts on distribution transformers with 'F' type flange according to ENA technical specification 35-1

1000A / 2000A rated independent manual load make / load break disconnectors

4, 5 or 6 outgoing fuse ways

630A rated fuse handles accept BS 88 J type fuses with 92mm centres

1 x 4 core 300mm² Waveform cable per way (bunched 185mm² or 740mm² for ACB's)

Outgoing connections by compression lugs or range taking mechanical shear-off connectors 95-300mm² capacity

660A Veam Powerlock standby generator sockets including earth

Multi-function digital meter with 30 minute lag setting and option for comms

Metering CL0.5 rated current transformer per phase, ratio 2000/5A or 1000/5A

20VA CT burden

60% rated neutral

Suitable for 3C or 4C networks

IP2XB rating with the door open

Operating temperature range -25 to +40°C

CONFORMITY TO STANDARDS

ENA approved to 37-2 Issue 4, BS EN 60947-1

Switching performance to relevant sections of BSEN 60439-1, IEC 60947-3, BSEN 50300

IP rating to BSEN 60529