

Current Transformer Metering Chamber (CTMC)

Direct coupled to Lucy Heavy Duty Cut Out

Overview

All-insulated polyphase LV metering chamber directly coupled to either the Lucy 200A, 400A or 600A Heavy Duty Cut Outs fitted with cable trough and mounted on a fire retardant plywood back board. Metering chamber module can also be sourced as a retrofit option for assembly to Lucy Heavy Duty Cut Outs already in service.



Shown With Meter Fitted

Features

- Factory configured one piece assembly mounted on 18mm plywood from Forestry Stewardship certified sources
- Accepts up to two polyphase meters with ISO mountings
- Outgoing cabling options:
 - Range taking mechanical leader clamps, two per phase (refer to Product characteristics for capacities)
- Two sealable and lockable sequentially opening doors to segregate CT / busbar side from meter connection side
- Single standard tri-head meter key on outer door plus 2 additional sealing points on each of the other doors
- Bolted busbars between HDCO and CTMC
- Pre-fitted single ratio metering class CL0.5s CTs (200/5, 400/5 or 600/5 according to the fuse rating of the HDCO)
- DIN rail mounted voltage potential fuses
- Industry standard modular test block – MOCOP 5 configuration with Wago rail mounted terminals

Note: The equipment described in this data sheet must be installed by suitably qualified personnel according to applicable Local / National Wiring regulations currently in force.

engineering intelligent solutions

Construction

- Enclosure..... Glass re-inforced polyamide 6
- Internal busbars..... Electro-tin plated copper
- Clear busbar shields..... Polycarbonate
- Modular fuse carriers..... Glass filled polyamide 6
- Busbar connection fixtures..Passivated mild steel
- Rail mounted terminals.....Polyamide 6
- CT mouldings.....Polycarbonate

Door closure competency

- Outer door Standard tri-head lock plus combi-head screws
- Inner chamber access.....Combi-head screws
- Inner and outer doors independently sealable with 2mm wire

CT specification

- Meter class..... CL0.5s
- Rated burden..... 5VA
- CT continuous current rating...1.2 x rated current

Performance data

- Rigid busbar rating (400/600A).....630A nominal
- Flexible busbar rating (200A).....250A nominal
- Supply voltage.....230 / 400V a.c.
- Frequency.....50Hz
- Rated insulation voltage.....690V a.c.
- Enclosure flammability.....UL94 V2 self-extinguishing 30 seconds at 960° C
- Operator protection CT chamber only;
 - Metering Chamber, Installed condition (door closed)..... IP4X
 - HDCO, Installed condition (covers on)...IP3X
 - Operator protection (covers on)..... IPXXB

Backboard (when supplied)

- Insulated board....18mm treated plywood, fire retardant Euro Class C

Mounting brackets..... Stainless steel

Outgoing Terminal Torques

Tyco Leader clamps, 6mm hex drive

- **Size 1** - 25 - 150mm² capacity leader clamp.....12-15Nm
- **Size 2** - 95 - 300mm² capacity leader clamp..... 22-25Nm

Product Characteristics

- Fuse centres 200A/400A..... 83mm
- Fuse centres 600A..... 92mm
- Cable csa 200A Incoming..... 35-95mm²
 - Outgoing (Size 1)..... 25-150mm²
 - Outgoing (Size 2)..... 95-300mm²
- Cable csa 400A Incoming.....70-185mm²
 - Outgoing (Size 1)..... 25-150mm²
 - Outgoing (Size 2)..... 95-300mm²
- Cable csa 600A Incoming..... 95-300mm²
 - Outgoing (Size 1)..... 25-150mm²
 - Outgoing (Size 2)..... 95-300mm²

Standards / Conformity

- IP rating to BSEN 60529
- CE approval for Current Transformers
- Current Transformers conform to IEC 60044-1, BS7626 and IEC 185
- Backboard fire retardant to Euro Class C and BS476 Part 7

Dimensions

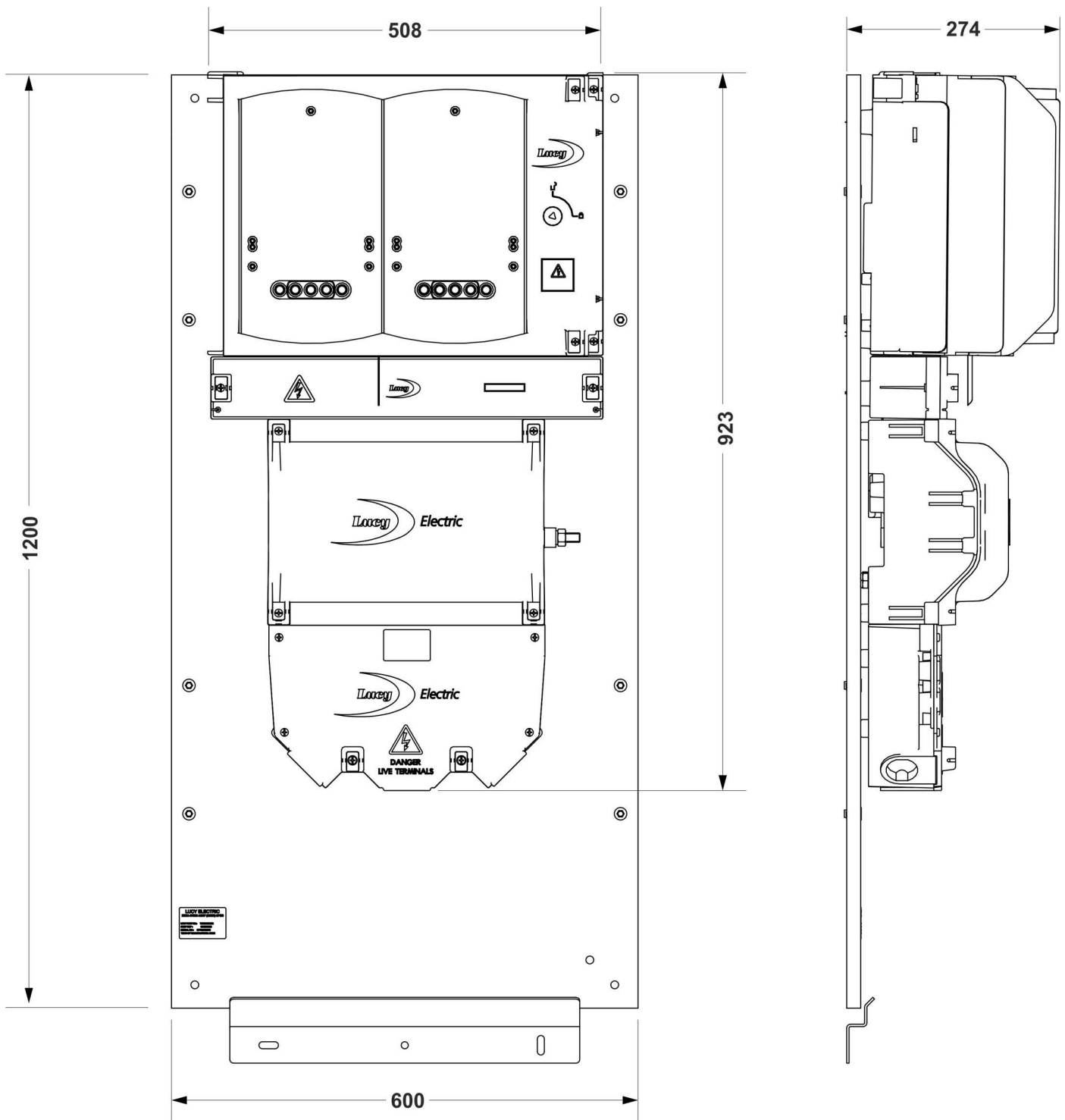
Complete CTMC, HDCO and trough assembly, board mounted

- Board height..... 1200mm
- Board width..... 600mm
- Board thickness..... 18mm
- Unit height (600A).....1100mm
- Unit width (600A)..... 508mm
- Unit depth (600A)..... 256mm
- Recommended height AGL for cable entry into trough when fitted to backboard.....300mm
- Fixing points..... 4
- Weight (without fuses)..... 55kgs

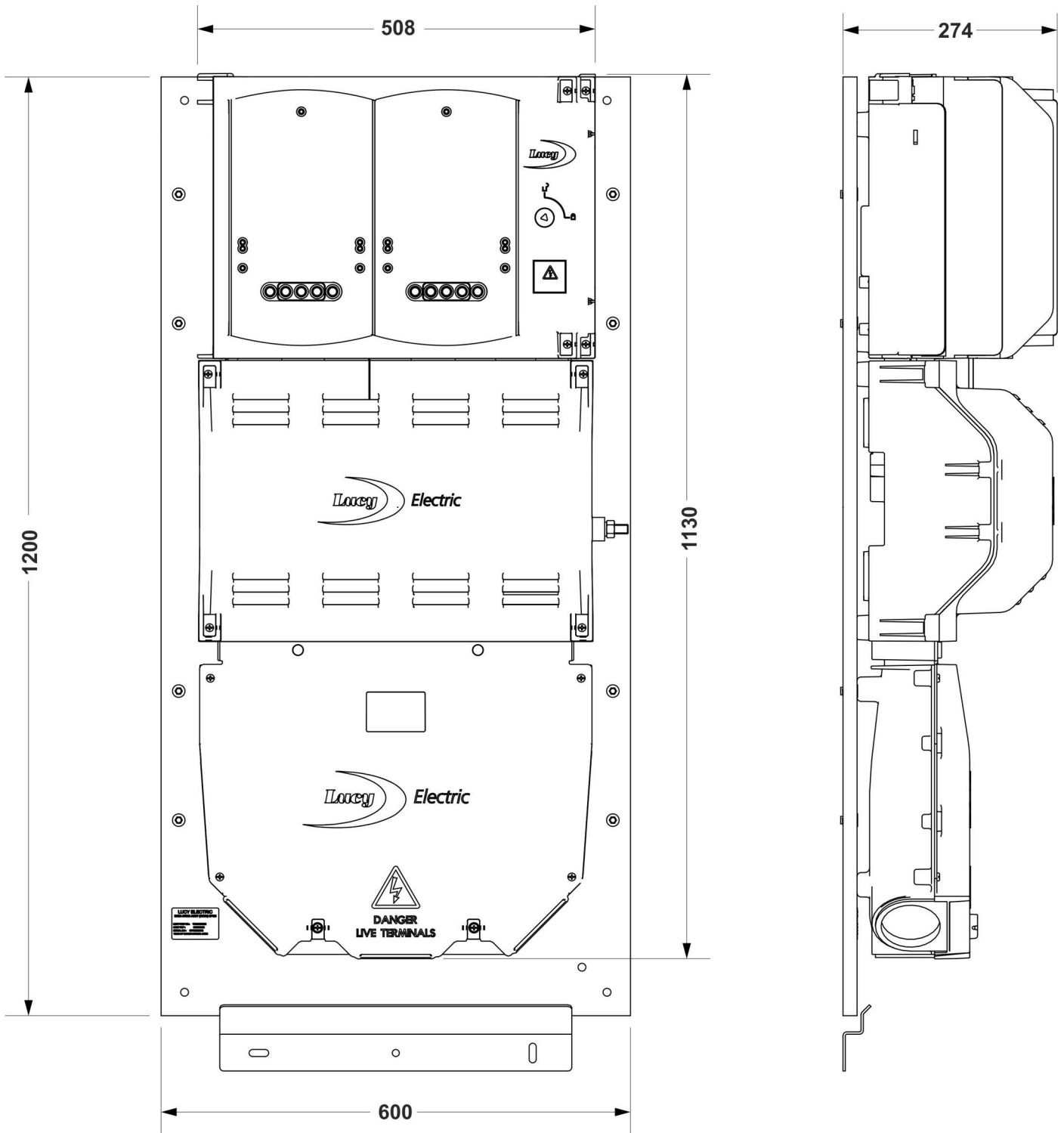
General arrangement diagrams

(dims in mm)

- 200 A HDCO with trough



- 600 A HDCO with trough



Note: 400A HDCO is the same size as 600A unit and can be fitted with either the 600A or the smaller 400A trough (not shown).

Disclaimer: Lucy Electric has a policy of continuous research and development thus accordingly reserves the right to change the design and specifications of its products without prior notice or liability.

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