

Technical Datasheet

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. An intermediate coupler kit is required for the 200A version to enable connection to the CT chamber.



Meters Shown Not Supplied

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)
 - Compression cable lugs on to pre fitted M16 studs
- 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 CL 0.5 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.

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..... CL0.5
- 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.....240 / 415V 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;
 - Installed condition, door closed..... IP4X
 - Doors open, all shrouds in place..... IP2X
 - Operator protection HDCO (covers on)... IP3X

Outgoing Terminal Torques

(Tyco Leader clamps)

- 6mm hex drive..... 22-25Nm

Product Characteristics

- Fuse centres 200A/400A..... 83mm
- Fuse centres 600A..... 92mm
- Cable csa 200A (incoming)..... 35-95mm²
(outgoing)..... 95-300mm²
- Cable csa 400A (incoming).....70-185mm²
(outgoing)..... 95-300mm²
- Cable csa 600A (incoming)..... 95-300mm²
(outgoing)..... 95-300mm²

Backboard (when supplied)

- Insulated board....18mm treated plywood, fire retardant Euro Class C
- Mounting brackets..... Stainless steel

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

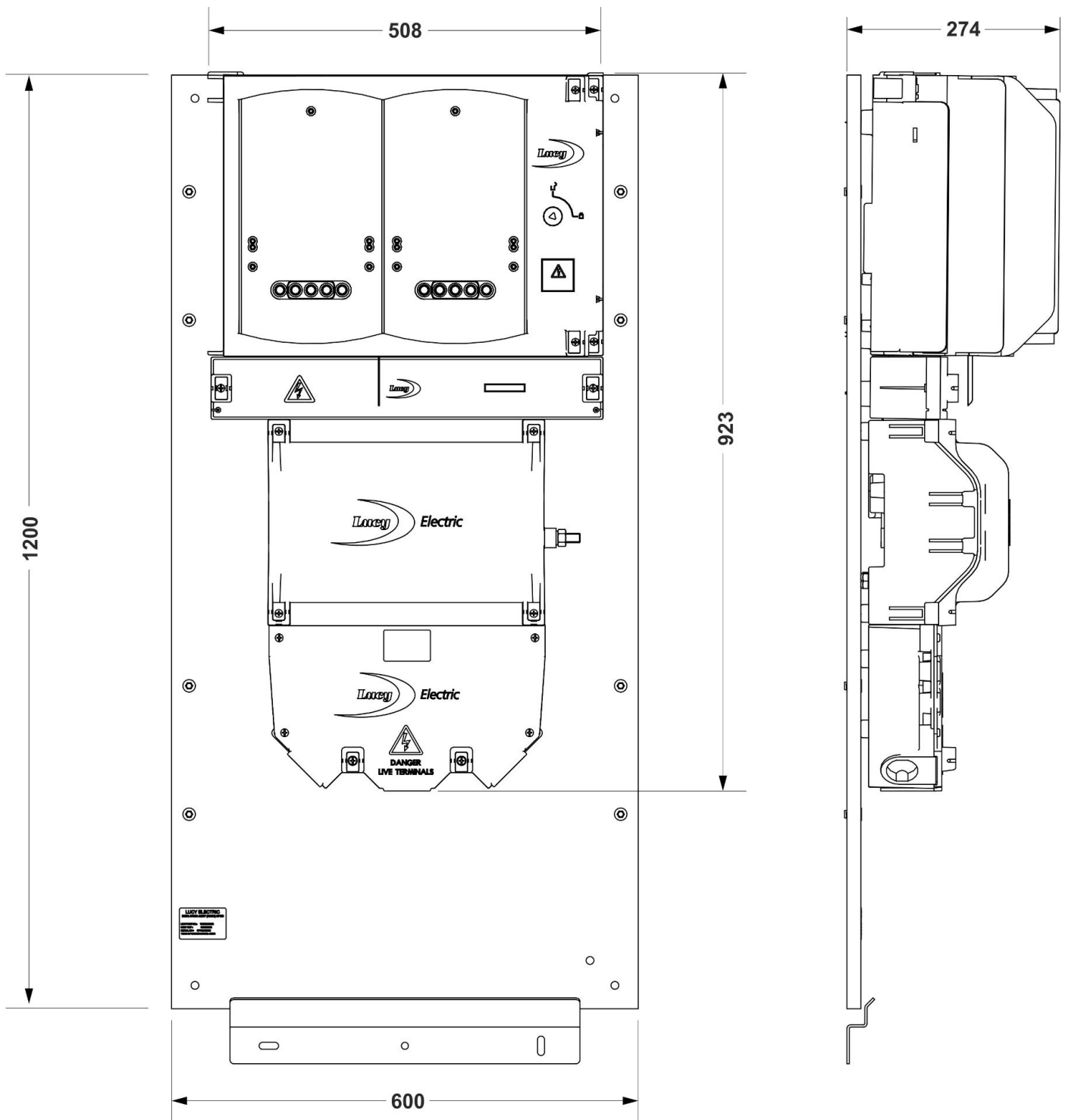
Complete CTMC, HDCO and trough assembly, board mounted

- Board height..... 1200mm
- Board width..... 700mm
- 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

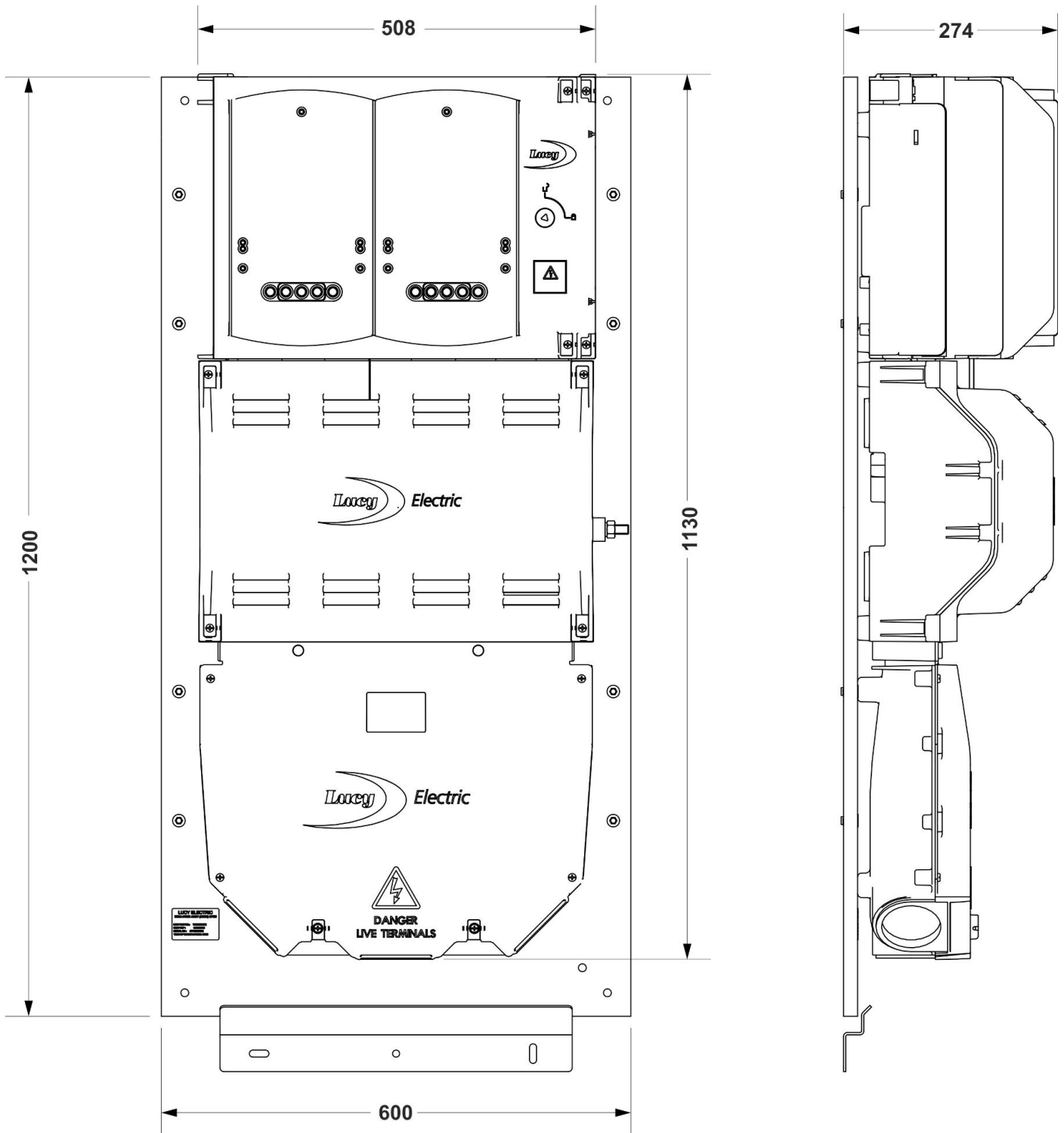
General arrangement diagrams

(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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