Ritherdon CT Chamber
TECHNICAL DATA SHEET

The Ritherdon CT Chamber

Ritherdon CT Chambers are designed to measure alternating current in electrical units, the CT chamber is available in ratings from ***200A 400A and 600A***. CT Chamber can be installed to meter the Distribution Network Operator's (DNO) supply and Building Network Operator's supply (BNO).
The Ritherdon CT Chamber is designed and tested according to the specifications of **UK Power Networks**. CT Chamber is an insulated enclosure made to mount the electricity meter. The enclosure is supplied in two parts: an empty enclosure and a backplate to simplify installation. The backplate is easily secured inside the enclosure after it has been mounted onto the cut-out and fixed to the wall. The individual covers protect the electrician allowing work to be carried out in the CT Chamber on one phase without having to isolate the complete unit.

The CT Chamber is available in following standard size:

Table 1 - Product Range table showing dimensions and weight of the product:

Product	Height(mm)	Width(mm)	Depth(mm)	Weight(kg)
CT Chamber	745	535	300	33

Key Features and Benefits:

- Lugging tool not required
- UMT300 (4364-145) cable clamps with double headed shear bolt.
- Switch off and safely work on a single phase
- CTs quickly and securely clip onto terminal rail.
- Cable entry bottom and cable exit top
- Pre-Wiring is included for connection to CTs and Meter
- Safe and easy to operate testing unit
- Approved & Specified by UKPN and their Preferred Supplier
- Can be installed by a qualified electrician.
- Rating up to 200A,400A and 600A.

Figure 1 – Ritherdon CT Chamber

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Current Transformers

Moulded case current transformers are designed with protective housing, which provides insulation and safeguards against external environmental factors, suitable for primary currents from 200A to 600A with built in terminal covers.
CTs conform with the following standards:

- BS 7626
- BSEN 60044-1
- IEC 60044-1
- BSEN 61869-2
- IEC 61892-2.
- IEC185

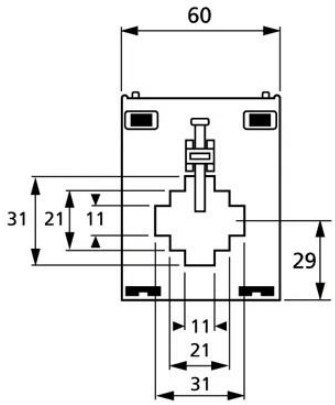

*Figure 2 – Ritherdon CT **163D** dimensions.*

Key Features and Benefits:

- The CTs are designed to operate between ambient temperatures of -5°C to +50°C.
- CT is designed to safely handle systems with a rated voltage of 0.72Kv for single phase and 3kv for three phase system, without risk of damage or inaccurate measurements.
- The CT transforms various primary current to 1A or 5A secondary using 40x10mm, 30x10mm busbars and 28mm diameter cables.

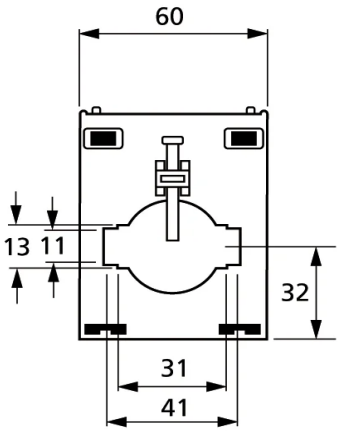

*Figure 3 – Ritherdon CT **164D** dimensions.*

Table 2 - Product Range table showing dimensions, rating, and measuring ratio of the product:

CT 164D	CT 163D	Rating (A)	Measuring CT Ratio	CT Entry	CT Exit	Busbar (mm)	Internal (Ø mm)
-----	CTC-200	200A	200:5 ratio, class 0.5s, 5VA	P1	P2	20x20 30x10	24mm
CTC-400	-----	400A	400:5 ratio, class 0.5s, 5VA	P1	P2	40x10 30x10	28
CTC-600	-----	600A	600:5 ratio, class 0.5s, 5VA	P1	P2	40x10 30x10	28

Testing

Ritherdon CT chamber range has been tested in accordance with the following standards:

- **IEC 60439-1** this is an international standard which applies to low-voltage switchgear and control gear assemblies; Type-tested assemblies (TTA) and partially type-tested assemblies (PTTA). The voltage of these assemblies does not exceed 1000 V a.c. at a frequency not exceeding 1000 Hz.
- **IEC 60439-5** specifies requirements for Cable distribution cabinets (CDCs), Low-Voltage switchgear assemblies particularly for power distribution in public networks.
- **ENATS 37-2: 2005** it defines technical requirements for public electricity network distribution assemblies. For operational voltages up to 230V single phase system, three phase system 460V and split single-phase system.
- **EN62262** standard specifies a coding system, the IK code, which indicates the level of protection provided by an enclosure with electrical components against external mechanical impacts.

The Ritherdon CT chamber has passed all these tests, and the reports are available on request from Ritherdon.

Space Requirements for Installation:

The diagram below shows the space requirements for the installation of our CT Panel.

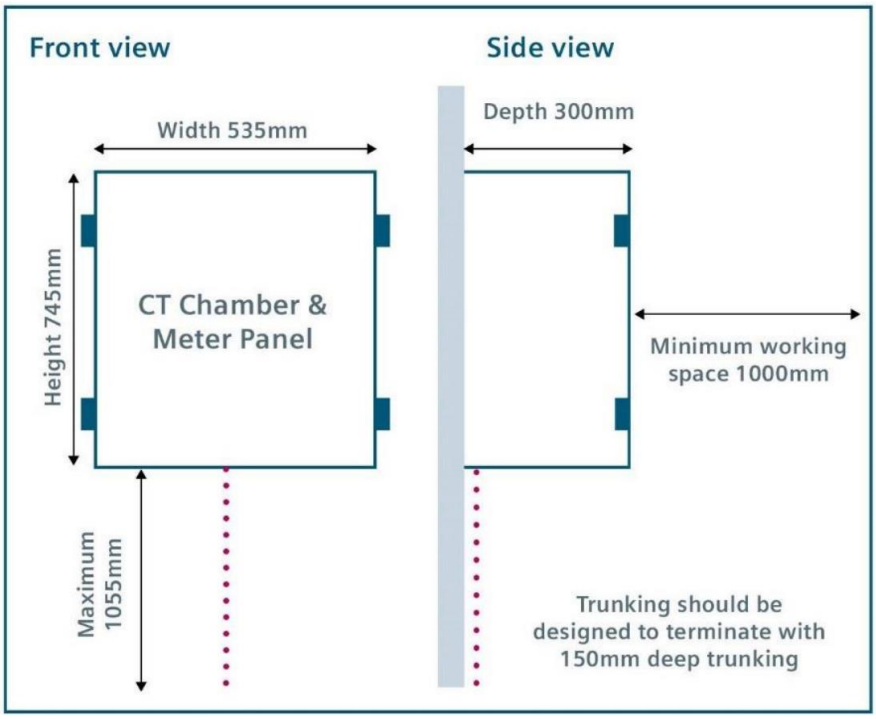

Figure 4 – Space requirements for installation

Gland Plate Cut Out Detail.

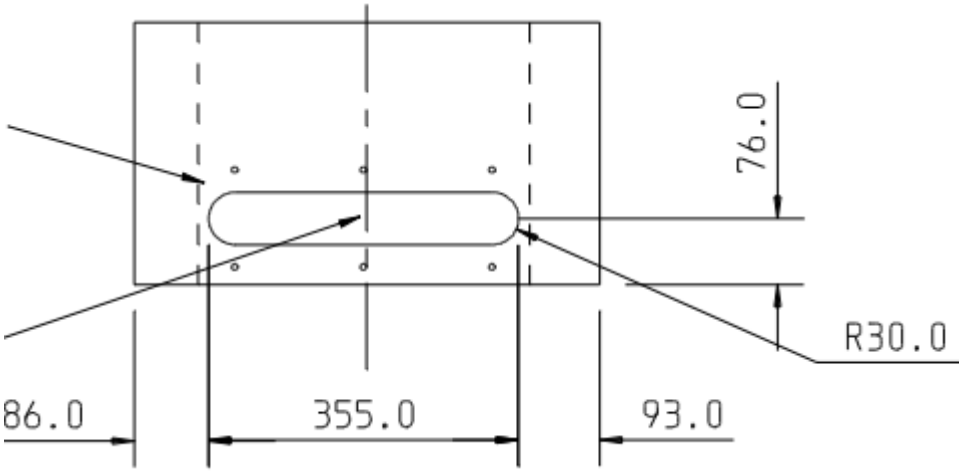

Figure 5 – Space requirements for installation

Please ensure that there is adequate space and suitable tails are provided by the site electrician.

Please contact our technical team if you require a more detailed report of the testing or if you have any other questions and would like to discuss any aspect of this data sheet.