

7. INSTALLATION REQUIREMENTS FOR METERS AND CONTROL EQUIPMENT

7.1. General

Customer's ancillary equipment such as surge diverters, voltmeters, phase failure relays etc. shall be connected on the load side of the revenue metering equipment. Customer owned current transformers for energy management are permitted on the line side of revenue metering equipment at multiple tenancy installations.

To facilitate the requirements of the *Electrical Safety Act 2002 and Electrical Safety Regulation 2002* for performing electrical work, and the *Electricity Act 1994 and Electricity Regulation 2006*, supply to the revenue metering equipment for each *customer* is to be capable of being individually isolated. (Refer to Clauses 7.2, 7.3 and 7.15).

7.2. Isolation for Single and Multiple Installations with *Direct Connected Metering*

Direct connected metering shall be installed on the line side of the individual installation's main switches.

7.2.1 *Single Installations*

A metering isolation link per phase shall be connected to the line side of the metering. This arrangement maintains supply to electronic meters. (Refer to Clause 7.15 and Drawing ECMM 7.1).

Exception:

Where overload protection for the *consumer's mains*, in accordance with AS/NZS 3000 (Wiring Rules), cannot be achieved by the positioning of the installation's main switches on the load side of the metering the follow shall apply:

A metering isolation D curve circuit breaker connected on the line side of the metering, and sized for overload protection of the *consumer's mains*, shall be installed on the front of the meter panel. The circuit breaker shall be enclosed in a sealable non-metallic enclosure with a clear cover to allow the *customer* to determine if the circuit breaker is in the open or closed position without removing the cover.

Note: Enclosures that are lockable only are not acceptable.

If the marking on the circuit breaker is not legible when the cover is in place, the open and closed positions are to be identified by additional marking on the enclosure.

A permanent indelible label shall be fixed on or adjacent to the circuit breaker enclosure stating the following:

C Curve
option now
removed

D curve circuit breaker

Contact an electrical contractor if this circuit breaker is in the tripped (O) position.

Metering isolation only.

Note: A metering isolation circuit breaker is used in place of a metering isolation link.

QLD Electricity Connection and Metering Manual



Need 10kA breaker AND links for each meter - this is similar to Victoria

7.2.2 Multiple Installations

Where a circuit breaker main switch is installed for overload protection of the *consumer's mains* in accordance with AS/NZS 3000 (Wiring Rules), it shall be connected on the line side of the metering. Metering isolation links are required for individual *customers*. (Refer to Clause 7.15).

7.2.3 Existing Installations

When minor work is being carried out at an existing installation (including a like for like meter change, *AF receiver* change or connection of additional circuits) it will not be necessary to alter the wiring of the meter to before the main switch. (Refer to the notes below).

This change need only be made where there is a major alteration to the metering or switchboard (for example where the switchboard is replaced, when replacing single phase meters with a polyphase meter or connection of additional phase/s). This will include the addition of an isolation link (Refer to Clause 7.2.1).

All meters at the one meter location must follow the same sequence (i.e. be either all "before" or all "after" the main switch/s or any lockable isolator).

Exceptions:

1. Where *direct connected* electronic meters are installed to facilitate a *customer* requested supply change, additional supplies (e.g. controlled supplies) or installation of an *IES* on an existing single *customer* installation they shall be connected on the line side of the individual installation's switchgear and provision for isolation is required in accordance with Clause 7.2.1.

In Ergon Energy's Distribution area allowance is also to be made for the metering equipment to be mounted on a hinged panel in accordance with clause 7.6.1

2. On existing multi-tenancy installations where the individual tenancy main switch is connected on the line side of the meters, a new electronic meter shall be connected on the line side of the individual tenancy main switch. A means of isolation in accordance with Clause 7.2.1 must be provided to allow isolation of the electronic meter without interrupting supply to other *customers*.
3. On existing single phase multi-tenancy installations utilising plug-in meters, the need to fit isolation link/s is not required in situations where a replacement plug-in meter is to be used. These include a single phase tenancy with an Inverter Energy System (IES) or a tenancy with Time of Use metering (TOU)

Note: For a multi-phase tenancy with plug-in meters, provision for the installation of a Poly-Phase meter shall be made where an Inverter Energy System (IES) is installed. This will include the addition of isolation links (refer to Clause 7.2.1)