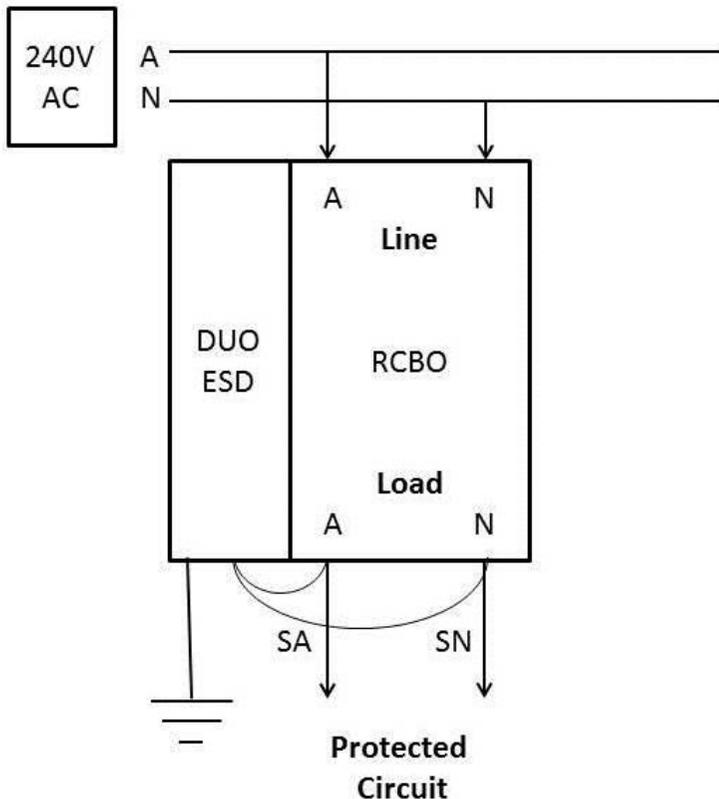


Wiring Diagram for Single Phase 1P+N DUO ESD

THE 1P + N protects against over current, earth leakage in a MEN system and earth faults in a IT or TT type system.



The power wires from the ESD must be wired on the protected side of the RCBO

Red wire from the DUO is to Active

Black wire from the DUO is to Neutral

Green / Yellow wire is to Earth

General Information about the wiring and operation of the DUO :

The 1P + N DUO uses the active and Neutral sensor wires to monitor any voltage detection and current flow to the Earth / sensor wire. The Active and Neutral sensor wires must be located on the load side of the RCBO or circuit breaker so that power is isolated from the sensor wires on the event that there is a fault in the wiring circuit.

The 1P + N DUO is designed to trip before the potential voltage reaches 40 volts AC and/ or the current flow exceeds 10mA. Depending on the fault this may occur at lower voltages and / or current flows.

When the DUO is connected to a NB1L Chint RCBO the DUO will trip the current limiting side of the circuit breaker only.

By depressing the test button on the DUO this will trip the current limiting reset toggle side of the Chint circuit breaker but isolates both Active and Neutral poles.

By depressing the test button on the RCBO it will operate both current limiting reset toggle and residual current limiting reset toggle.

On installation both test buttons should be operated to ensure that the device is operating on the DUO ESD function and also the residual current fault function. Ensure that the Earth sensing wire is connected to the earthing circuit of the appliance(s) or devices to be operated and protected.

The DUO ESD looks upstream and downstream of the RCBO for earth voltage faults otherwise the user would not be correctly protected.

It is possible to wire the DUO so it omits an alarm instead of disconnecting power in the event of the first fault of potential voltage to the earth path in situations where the disconnection of power is life threatening.