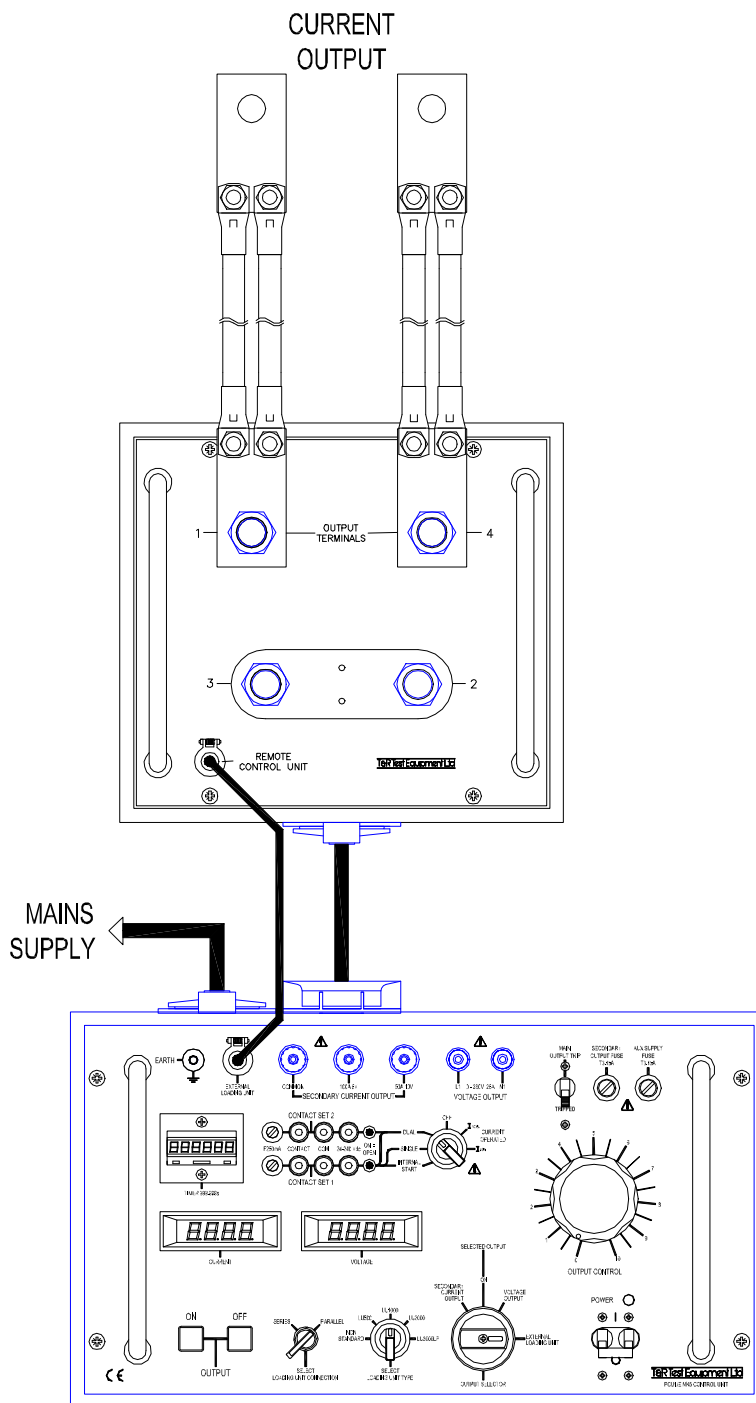


Figure 3a Overall Connection Scheme

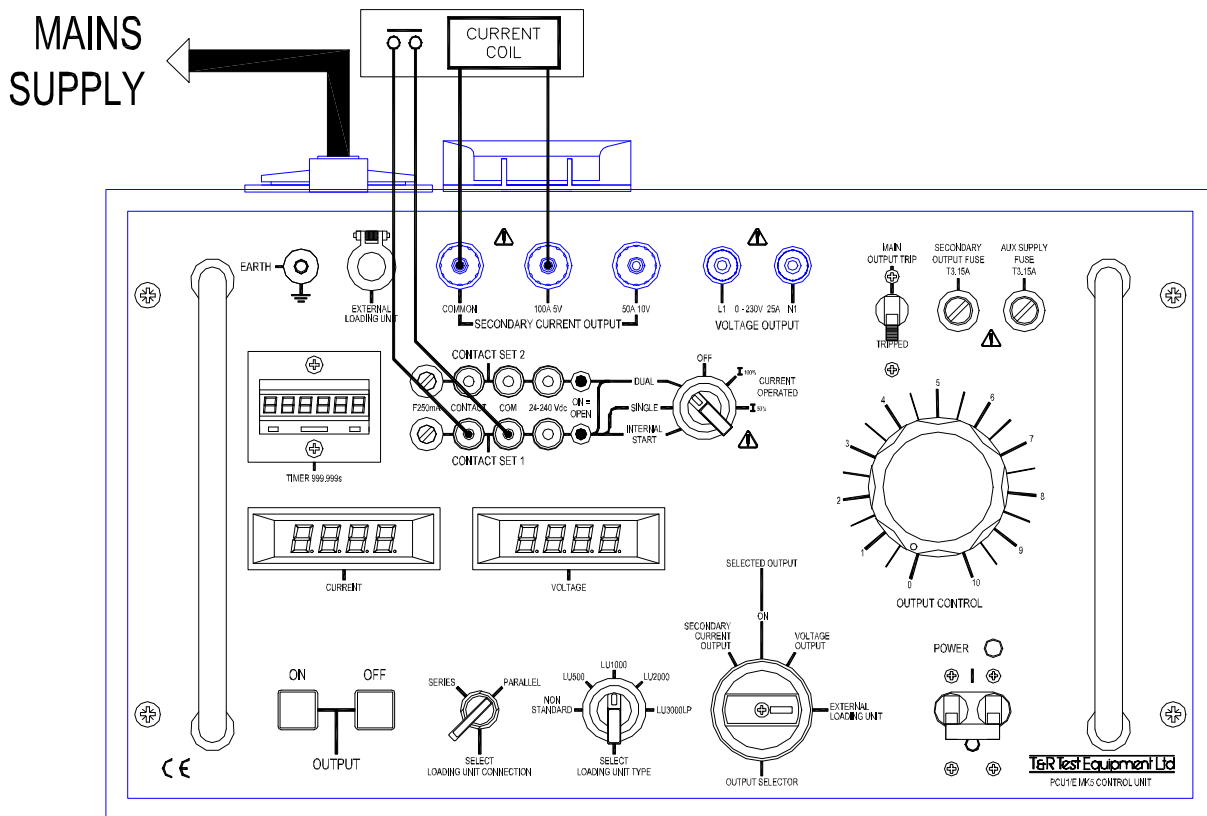


Any of the connection schemes shown in the following sections may either be connected with or without the loading unit, depending on the current required. Currents up to 100A are available directly from the secondary injection terminals on the PCU1/E.

IMPORTANT NOTE:

Should the supply ground/earth be of doubtful integrity it is advisable to connect a separate ground lead to the earth terminal on the PCU1/E which in turn should be connected to a good local earth/ground of low impedance.

Figure 3b Over Current and Over Voltage Relays



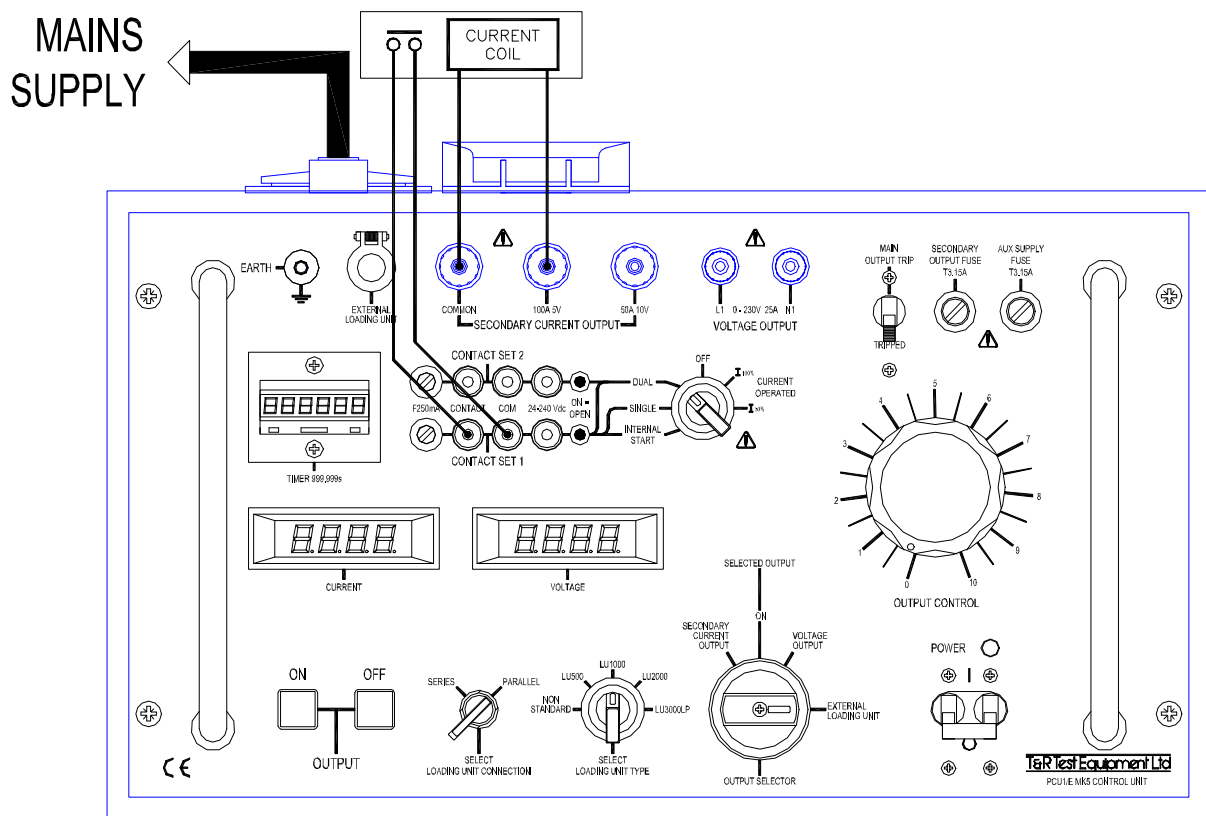
CONNECTIONS

1. Timer mode switch setting to **INTERNAL START**
2. Relay contacts to **C1**
3. Relay coil to the desired output

TEST PROCEDURES

1. Switch on the main supply switch
2. Select timer mode switch to the **OFF** position
3. Ensure that the output regulator is in the zero position
4. Select the desired ammeter range
5. Check that connections are made as above
6. Press output ON push-button and adjust output regulator until the desired output level is indicated
7. Press output OFF push-button
8. Select **INTERNAL START** position on the timer mode switch and ensure timer is reading zero
9. Press output ON push-button
10. Relay will trip after a set time, which will be displayed on the timer, and the output will be switched off automatically

Figure 3e Timing of auto-reset/reclosing devices



CONNECTIONS

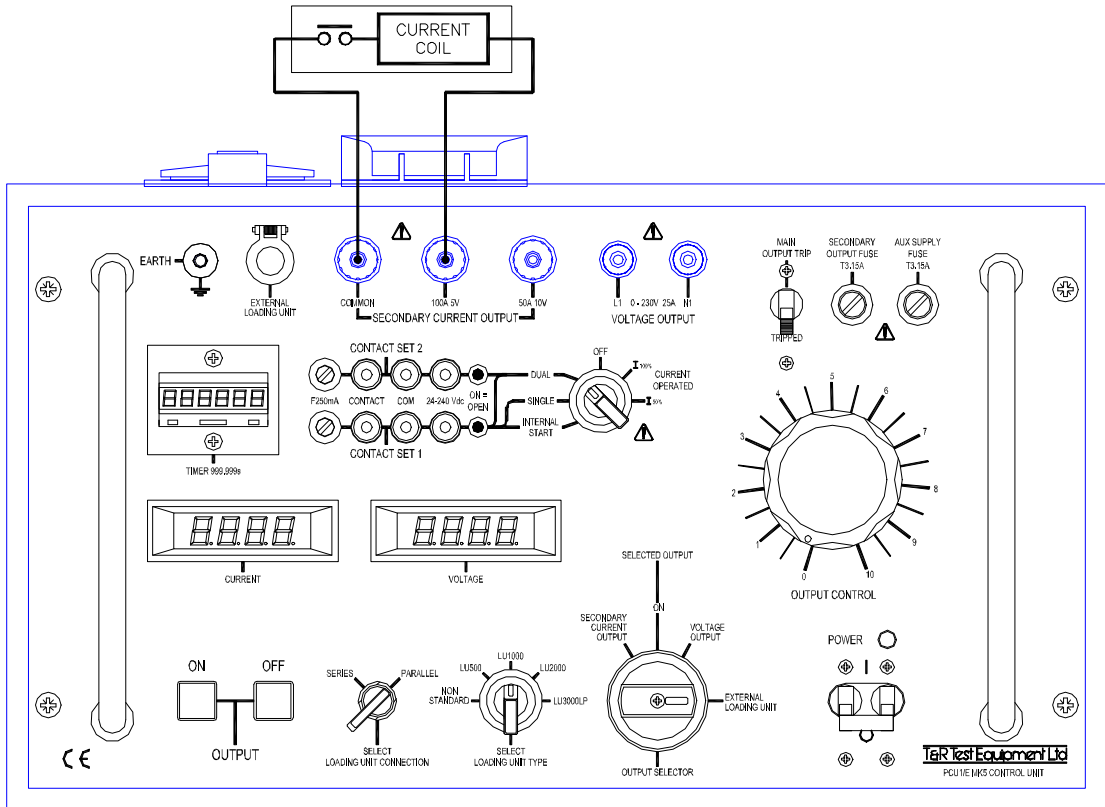
1. Timer mode switch setting to **SINGLE**
2. Relay contacts to **C1**
3. Relay coil to desired output

TEST PROCEDURES

1. Switch on main supply switch
2. Select timer mode switch to the **OFF** position
3. Ensure the output regulator is in the zero position
4. Select the desired ammeter range
5. Check that connections are made as above
6. Press output ON push-button and adjust output to the desired level
7. Press output OFF push-button
8. Select **SINGLE** position on the timer mode switch and ensure the timer is reading zero
9. Press output ON push-button
10. Relay will energise and, on reaching the trip position, will start the timer and switch off the output
11. Once the relay auto-resets the timer will stop thus displaying the dwell time

NOTE: Timings of less than 19ms are of doubtful accuracy and should be ignored

Figure 3f Timing Devices with NO Auxiliary Contacts



CONNECTIONS

1. Timer mode switch setting to **I** (Refer to 1.7.4)
2. Connect the device to the desired output

TEST PROCEDURES

1. Switch on the main supply switch
2. Select timer mode to the **OFF** position
3. Ensure that the output regulator is in the zero position
4. Select the desired ammeter range
5. Check that the connections are made as above and that the device is closed
6. Press output ON push-button and adjust to the desired output level
7. Press output OFF push-button
8. Select **I** position on the timer mode switch and ensure the timer is reading zero
9. Press the output ON push-button
10. Current will now flow through the device.
11. Once the device has tripped the timer will stop and the output will be switched off

NOTE: Timing results obtained with test currents below 20% on each ammeter range, and on measured times of 19ms and below, are of doubtful accuracy and should be ignored.

Figure 3g Connection Method When Using PCU1/E as a Separate Timer (Single contact operation)

CONNECTIONS

1. Connect contact to be timed to **C1**

TEST PROCEDURES

1. Switch ON main supply
2. Select timer mode to the **SINGLE** position
3. Ensure regulator is at zero
4. Make connections as above
5. Press output ON push-button
6. The timer system is now armed and ready to receive change of state signal from test contacts
7. The timer will start on the change of state, ie from N/C to N/O or vice versa
8. The timer will stop when the contacts revert to their original state.

NOTE: Timings of less than 19ms are of doubtful accuracy and should be ignored

Figure 3h Connection Method When Using PCU1/E as a Separate Timer (Dual contact operation)

CONNECTIONS

1. Connect contacts to be timed to the following
Start contact to **C1**
Stop contact to **C2**

TEST PROCEDURES

1. Switch ON main supply
2. Select mode to the **DUAL** position
3. Ensure regulator is at zero
4. Make connections as above
5. Press output ON push-button
6. The timer system is now armed and ready to receive a change of state signal from the start contacts
7. The timer will start on the change of state of the C1 contact
8. The timer will stop on the change of state of the C2 contact