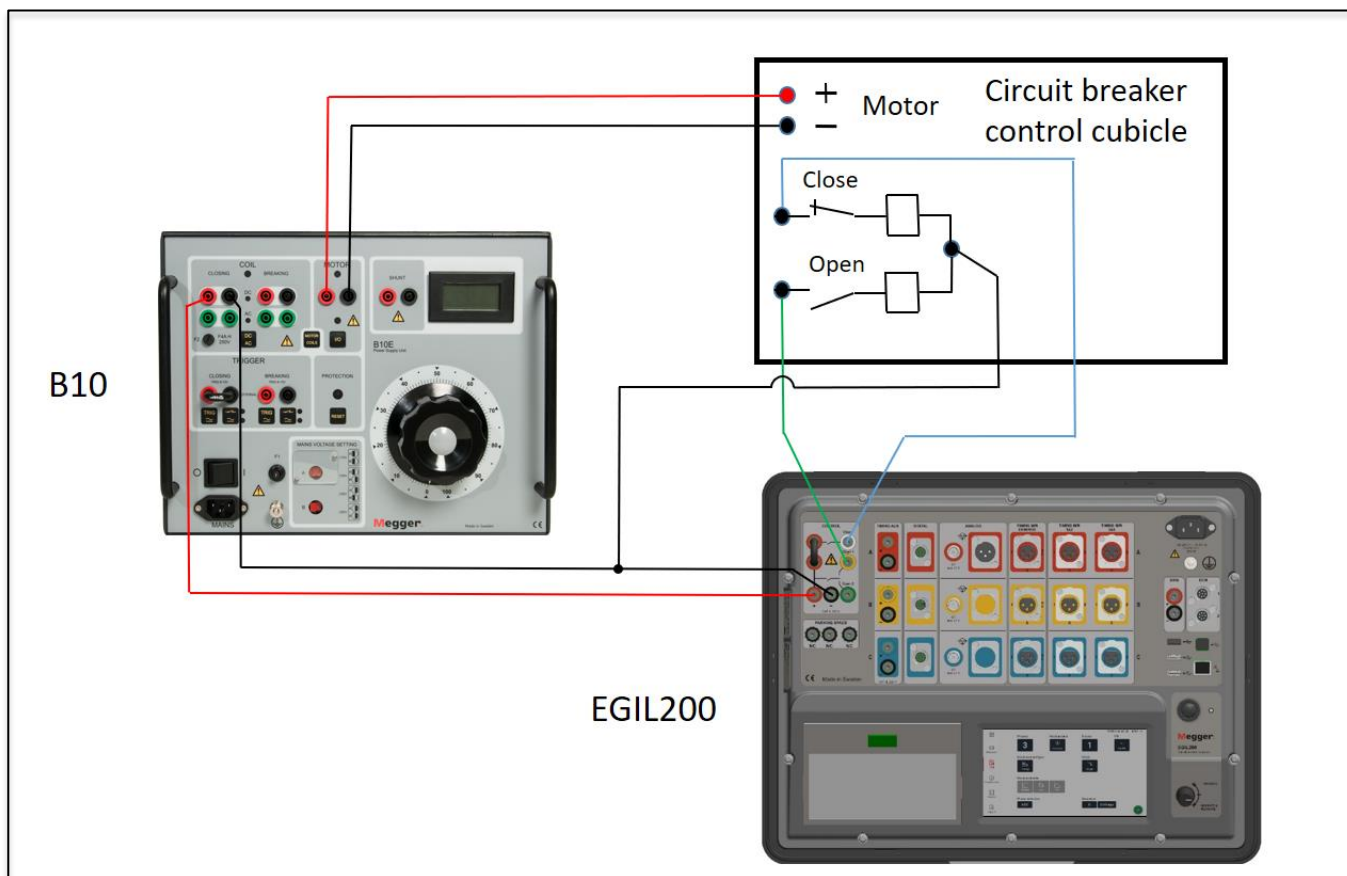**Megger.**

Minimum pick up voltage test with EGIL200

Learn how to set up EGIL200 for test with minimum pick up voltage. The minimum pickup voltage test is made to check at what minimum voltage the circuit breaker operates.
Both the open/close coil voltage are checked on the breaker. Current is recorded during test.
A printout from the minimum pick up voltage test is also presented.

Test procedure to check the minimum pick up voltage:

Test equipment included EGIL200 and the Megger instrument B10E that can be used to supply the EGIL200 and the circuit breaker control cubicle.


NOTE! The above are an example of a connection for minimum pick up voltage.
For more information about application notes on circuit breaker testing.
See: Application notes circuit breaker test from www.megger.com.

To set up the pick up test on EGIL200

From the start up menu.

Select the "Measurement type" and click on "Pickup"

(If the "Phases" button is greyed out, click the ⠿ button and from there select a new test.)
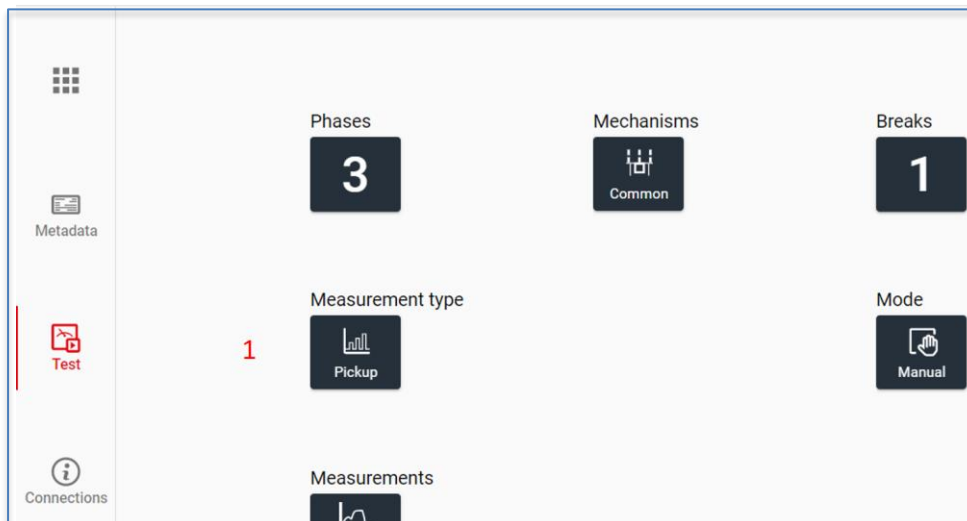
In this example, the motor spring in the circuit breaker cubicle shall be fed with 110V DC.

Charge with use of the power supply from B10E, set to "MOTOR" output.

Next is to set the B10E for COIL supply.

1. Set the voltage on the external power supply(B10E) to a low value, for example 20% of the nominal control voltage.
2. Measure by turning the rotary switch to "Operate & Measure".
3. Increase the voltage from B10E, for example with 5% of the nominal control voltage.
4. Measure again.
5. Repeat step 3 and 4 until the breaker has operated.
6. After the phase(s) has operated, do one final measurement in order to complete the test.

When the coil spring has operated. EGIL200 will present the test result direct and automatically, or by clicking on the latest test on the table next (left) to the graph.

Connect a USB memory to do a report, and finally select "WRITE PDF TO USB".

From the "Results" menu, reports can be printed by using the printer in EGIL200.

Tests performed on breaker can be set either in close " C " or open " O " position.

Test report

Below is the report from the "Pick up" test.

Test report

Date	2023-02-01	Time	10:37:18
Test ID		Type of test	
Operator		Reference	
Operation counter	0		

Evaluation settings

Main contact threshold	10000 Ω	Resistor contact threshold	10 Ω
Auxiliary contact threshold	10 V	Resistor contact	✗

Breaker info

ID 1	2023-02-01	ID 2	10:35:48
ID 3		ID 4	
Serial number		Number of interrupters per phase	1
Common operating mechanism	✔	Number of phases	3
Time unit	ms	Length unit	mm
Pressure unit	kPa	speedUnit	m/s

Pickup Cls #1

Date	2023-02-01	Time	10:37:18

Parameters

No.	ID	A	B	C	Unit
606	C Pickup V CCIR1		70.7		V
608	Cls Coil R CCIR1		1278.5		Ohm

Graph