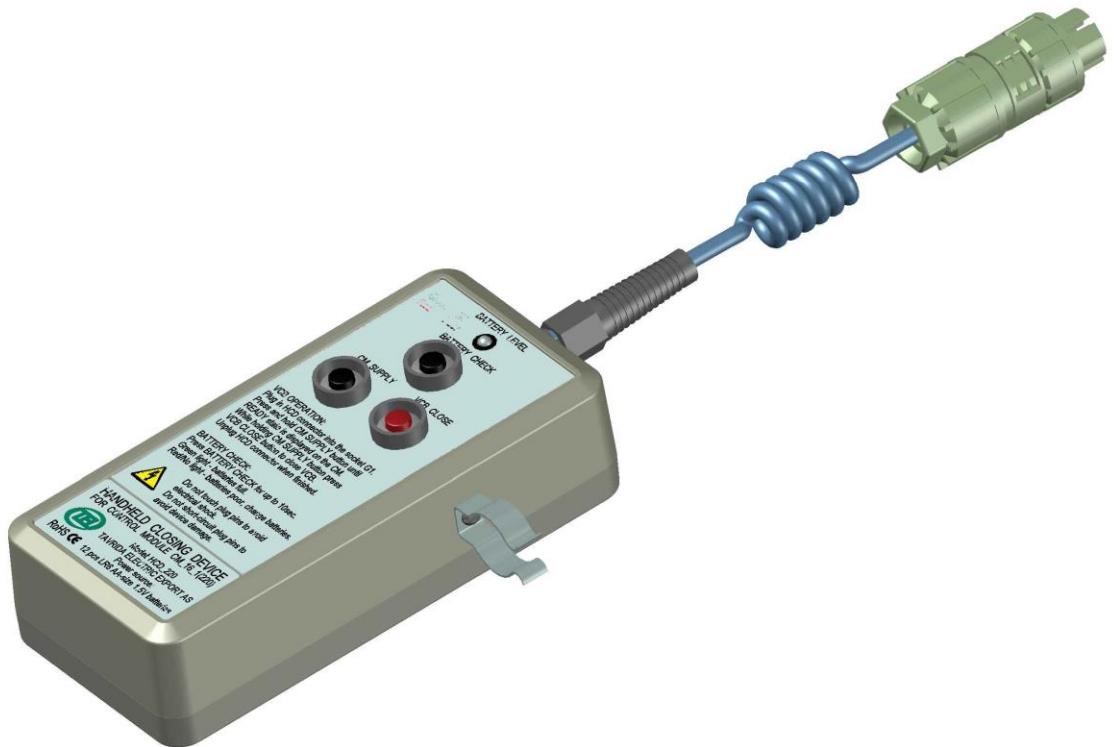


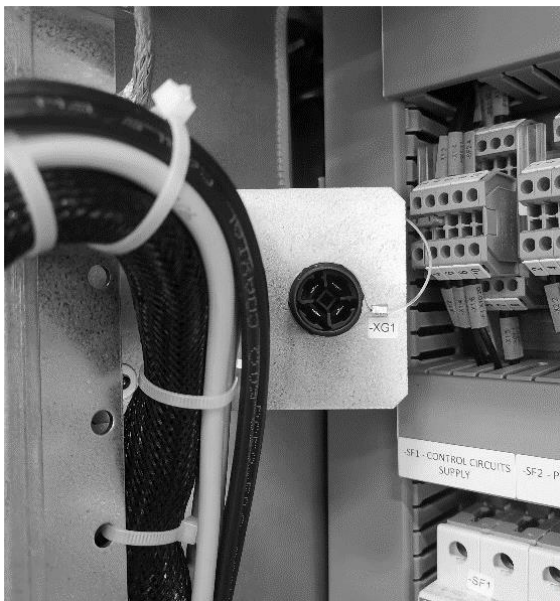
Handheld Closing Device (HCD)

Technical Manual



1. Introduction

The handheld closing device (HCD) is used to charge the Control Module capacitors to perform the first close in case of auxiliary power supply outage. It is kept in the low voltage compartment and used when needed. This device provides additional safety to an operator, compared to manual closing mechanisms of conventional circuit breakers. The operator can step aside from the switchgear panel at a safe distance before closing the ISM.



2. Technical Parameters

HCD (Type)	Voltage required for TEL Control Module	AA 1,5VDC Battery (Qty)
SGkit_HCD_60	24-60 VDC	12
SGkit_HCD_220	110-220 VDC	12

3. Operation Instruction

VCB OPERATION:

- Plug in HCD connector into the socket G1.
- Press and hold CM SUPPLY button until READY state is displayed on the CM.
- While holding CM SUPPLY button press VCB CLOSE button to close VCB.
- Unplug HCD connector when finished.

BATTERY CHECK:

- Press BATTERY CHECK for up to 10sec.
- Green light - batteries full.
- Red light or No light - batteries poor, change batteries.

**CAUTION!**

Do not touch plug pins to avoid electrical shock.
Do not short-circuit plug pins to avoid device damage.

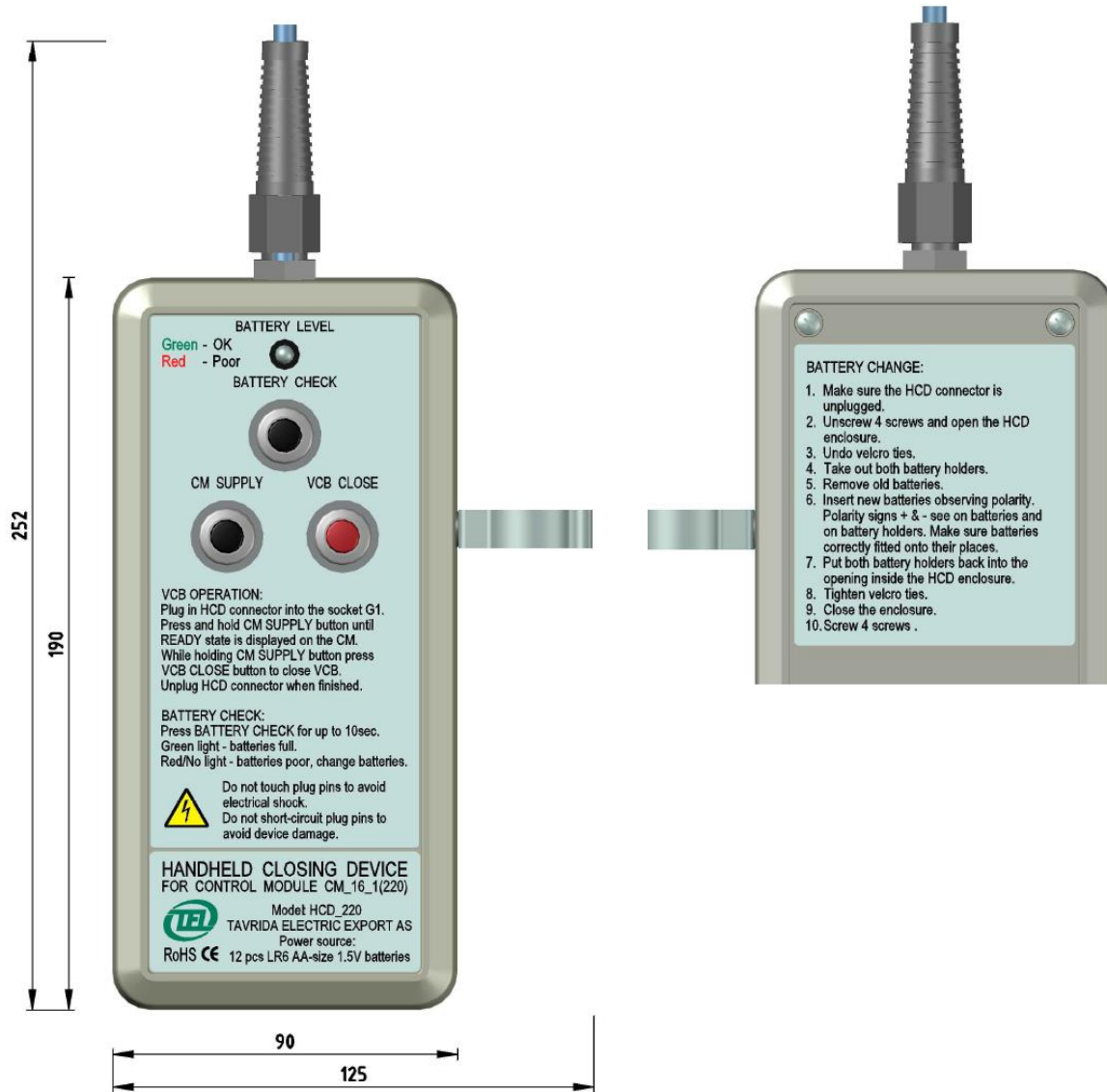
BATTERY CHANGE:

1. Make sure the HCD connector is unplugged.
2. Unscrew 4 screws and open the HCD enclosure.
3. Undo velcro ties.
4. Take out both battery holders.
5. Remove old batteries.
6. Insert new batteries observing polarity. Polarity signs + & - see on batteries and on battery holders. Make sure batteries correctly fitted onto their places.
7. Put both battery holders back into the opening inside the HCD enclosure.
8. Tighten velcro ties.
9. Close the enclosure.
10. Screw 4 screws.

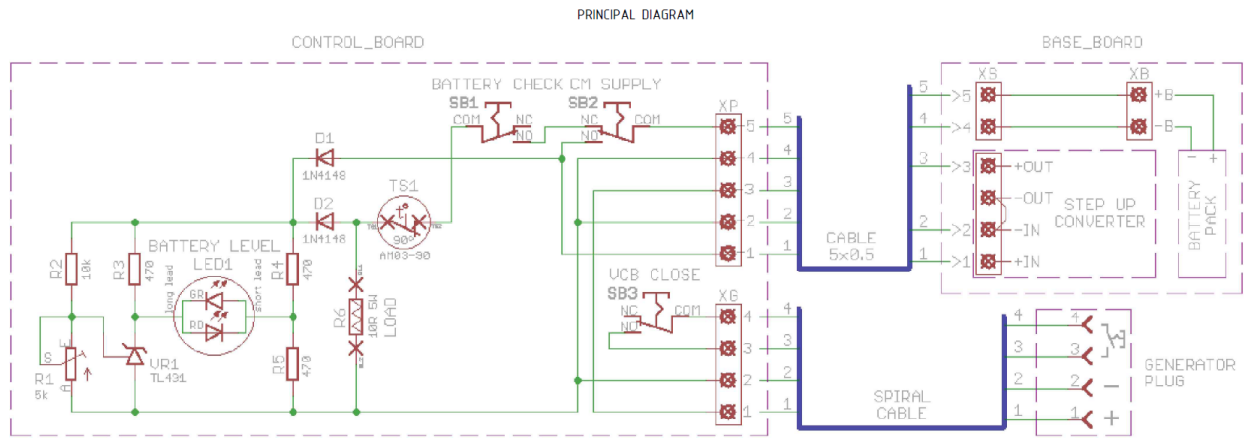
NB! Special requirement for longer battery life:

1. High quality batteries must be used from known manufacturers, such as Duracell, Energizer, Varta etc.
2. Only new manufactured batteries must be used. Storage of the batteries is totally prohibited at low ambient temperatures. Necessary storage and operational conditions for batteries are: indoor exploitation with heating and ventilation conditions, low concentration of dust, absence of low temperatures.
3. Replacement of all batteries in HCD must be done simultaneously; inserting new and used batteries together is prohibited.
4. Battery and battery cassette contacts must be cleaned of rust, dust, sand etc. during replacement time.
5. HCD push-buttons must not be accidentally pressed at storage time.
6. Test push button should be pressed only in reasonable cases. In Test mode condition batteries are also discharging. It is prohibited to press Test push button for fun.

4. Dimensions



5. Electrical Design



PICTURE 3.2.1 PRINCIPAL DIAGRAM

6. Document Revision

Revision	Date	Reason
-	28.05.2024	Initial version