

EPO switch——Emergency power off protection

1. Introduction

Emergency Power Off (EPO) switch is used to maximise safety and minimise damage by quickly disconnecting power to equipment or systems in the event of an emergency or hazardous event.

The hybrid inverter can be connected to the EPO switch. When the EPO switch is activated, the inverter will shut down all power sources, including the grid and battery side, and the EPS function will not work. To restart the equipment simply release the switch and turn it approximately 45° clockwise so that it springs back, essentially releasing the button.

2. DC Breaker

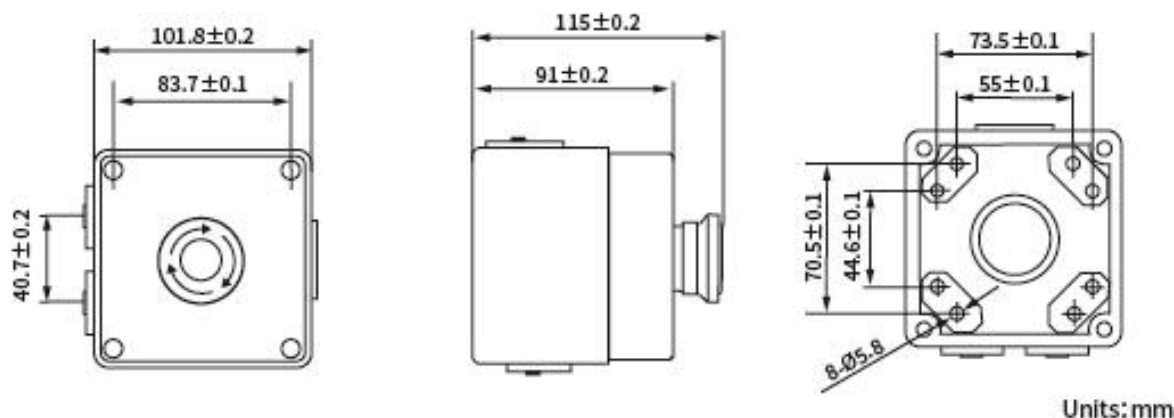
2.1. Technical characteristics

- Robust, reliable, up to 3 million mechanical cycles, 500,000 electrical lifetimes
- Flat-voltage slow-acting contacts with larger electrical clearance and greater current carrying capacity
- Contacts contain 30% silver and can carry high currents
- Anti-falling design of fastening ring, coarse matte buttons, not easy to slip
- IP66 degree of protection

2.2. Technical Parameters

- Rated Current: 10A
- Rated Voltage: 37V~440V
- Number of Contacts: 1NO+1NC
- Operating Temperature: -25°C ~ +85°C
- Waterproof Rate: IP66
- Mechanical Life: >500000 mating cycles

2.3. Dimensions



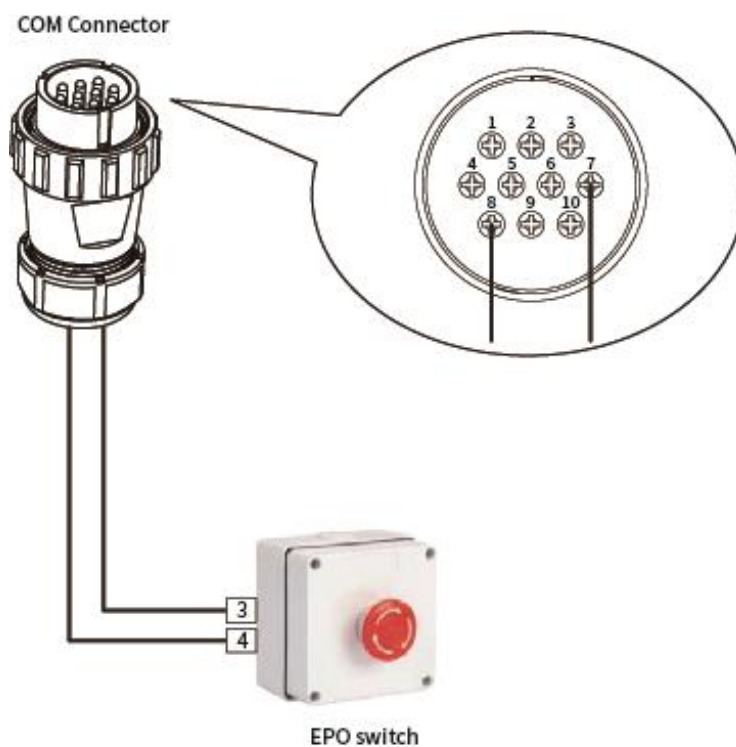
3. EPO switch and hybrid inverter connection

The COM port of the inverter is designed for the connection of the EPO switch, so please connect and install the EPO switch correctly.

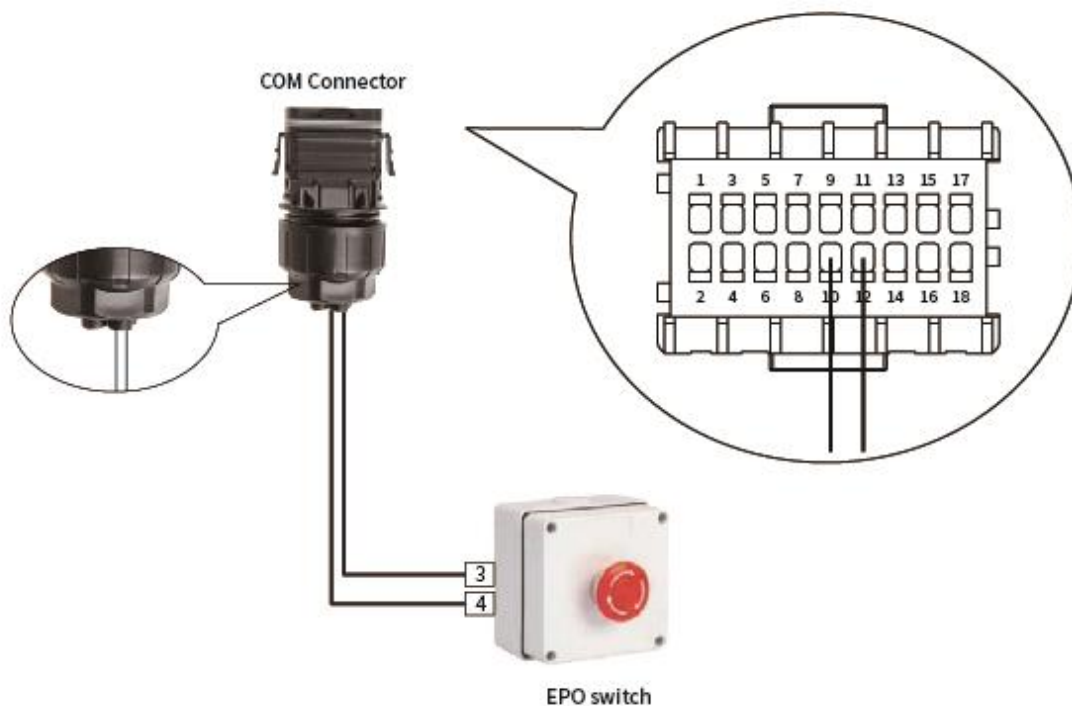
The EPO switch ports are defined as follows:

PIN	Description
1/2	NC
3/4	NO

3.1. EPO switch and 6KW single-phase hybrid inverter wiring



3.2. EPO switch and 12KW three-phase hybrid inverter wiring

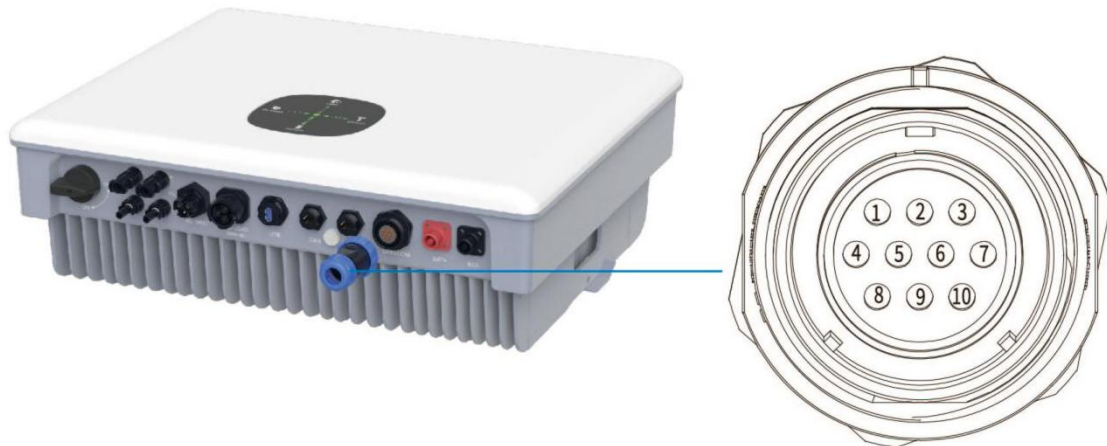


Notice:

1. Use a wire no less than 24AWG for connection.
2. Please check the reliability of EPO cable connection periodically. If any abnormality occurs, please strengthen all connection terminals.

Appendix

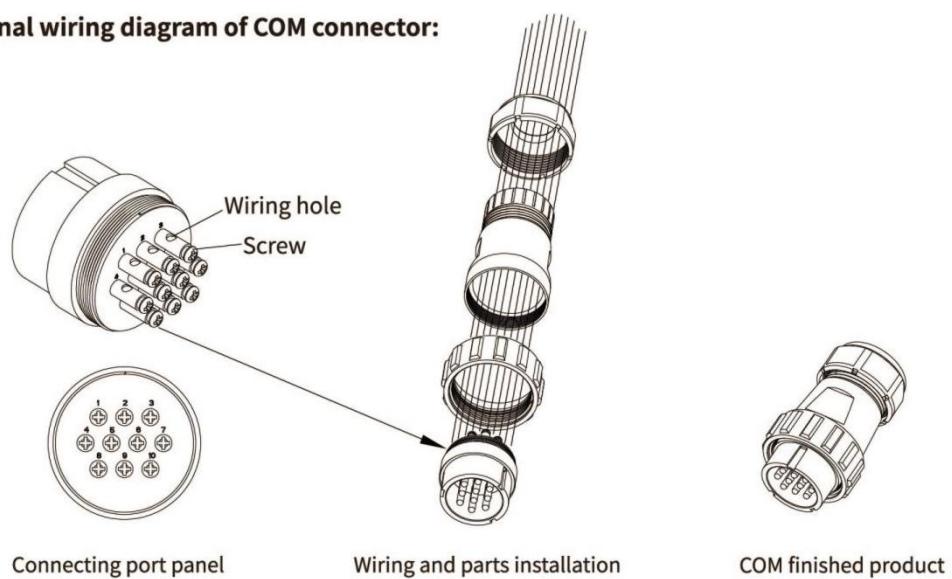
1. 6KW Single Phase Hybrid Inverter COM Terminal Definition and Installation



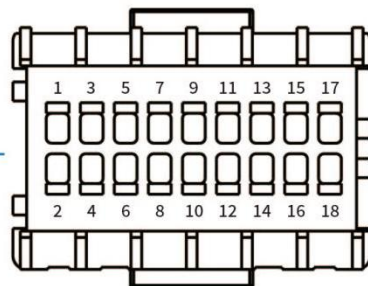
- | | | | |
|--------------------------------------|-----------------------------|----------|----------|
| ① COM/DRM0 | ② REFGEN | ③ DRM4/8 | ④ DRM3/7 |
| ⑤ DRM2/6 | ⑥ DRM1/5 | ⑦ EPO+ | ⑧ EPO- |
| ⑨ RLY_+12V
(Dry contact positive) | ⑩ RLY(Negative dry contact) | | |

1. Route the signal cable through the terminal protection cover, as shown in the figure.
2. Insert the signal cable into the wiring hole and tighten it with Phillips screwdriver.
3. Install and lock the parts of the connector according to the figure.

Internal wiring diagram of COM connector:

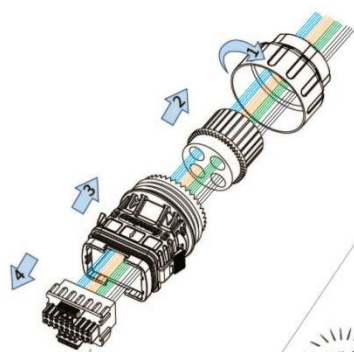


2. 12KW Three Phase Hybrid Inverter COM Terminal Definition and Installation



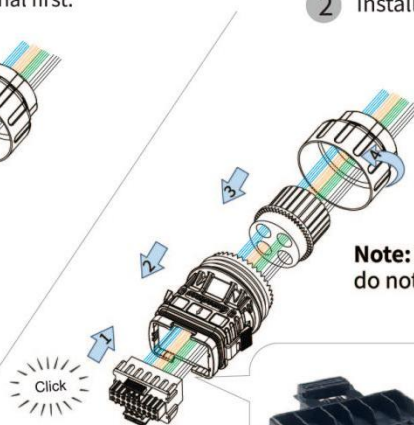
1. DRM 1/5	2. 485_A	3. DRM 2/6	4. 485_B
5. DRM 3/7	6. COM/DRM 0	7. DRM4/8	8. REF
9. GND_S	10. EPO+	11. WET_RLY	12. EPO-
13.14. +12VS	15.16. DO-	17.18. DO+	

1 Disassemble the COM terminal first.



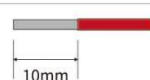
Press and hold the buckles on both ends at the same time.

2 Install the wires as shown below.



Note: Wire colors in this illustration do not represent actual colors.

1. Press and hold the yellow button.
2. Insert the stripped end of the wire into the hole.
3. Release the yellow button.



3 Connect the COM to the inverter plug until both are tightly locked on the inverter.

