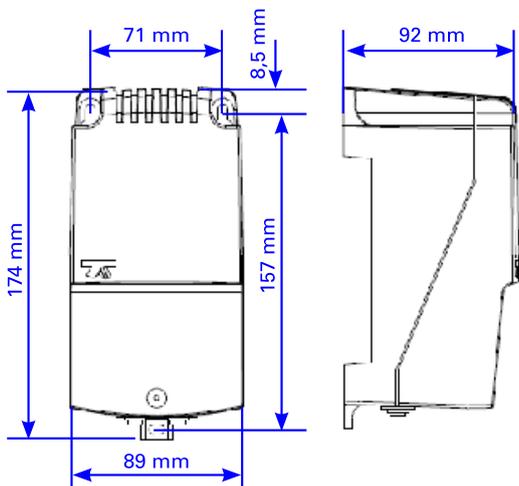


MOUNTING

The PVS144A transformer with a circuit breaker is mounted with screws according to the dimension sketch with the hole pattern below. Cable glands and strain reliefs are included.



CONNECTION

The illustration below shows how to connect the primary and secondary sides. The shield conductor on the 24V cable should be cut off.

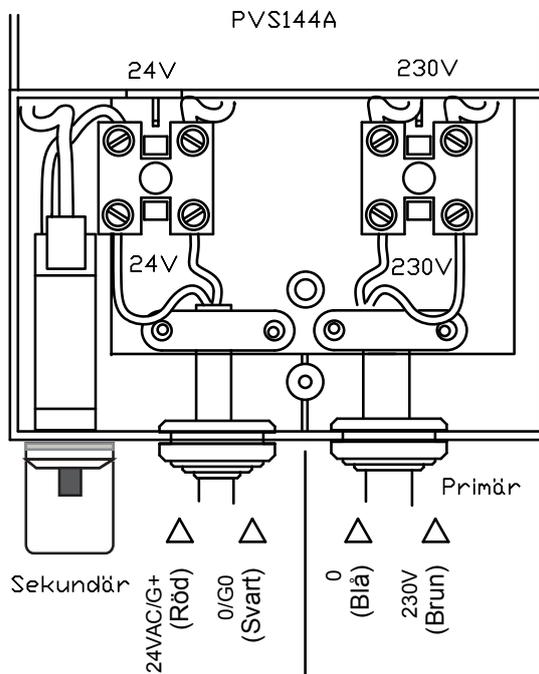


Illustration 31: Connect the conductors to PVS144A according to the color code.

ALTERNATIVE POWER SOURCE

Individual equipment can be powered via the plug-in transformer PFS20S. Connection to Lindinvent's communication loop should be made WITHOUT connecting the 24 VAC conductor.

For more information, see the product description for PFS20S.

NOTE WHEN CONNECTING THE TRANSFORMER TO THE LOOP

The number of nodes per transformer and the placement of the transformer.

Lindinvent’s control units are connected to a shielded 4-conductor cable where the red conductor is used for power supply and the black conductor is used for neutral. The white and blue conductors are used for communication. Control units connected to a common communication conductor form a loop. The voltage to each control unit must not drop below 22 VAC. To minimize voltage losses, transformers are placed along the loop. When designing, consider voltage drop in cables and calculate the total current draw from the control units served by the transformer. Also, consider the transformer’s capacity/fuse. In practice, the design is generally correct if planning for a maximum of 12 control units per transformer.

A transformer is "dosed" into the loop in the middle of the area it serves. This placement typically results in up to 6 control units on each side of the junction box where the transformer is connected.

Voltage Conductor G+ (24 VAC) must be interrupted between transformer areas

Since transformers must not have electrical contact, the 24 VAC conductor (Red) in the loop must be interrupted between adjacent transformer areas. The neutral, communication, and shield conductors should remain uninterrupted throughout the loop.

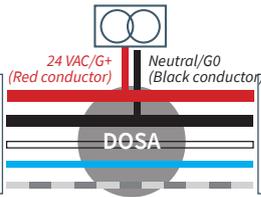
Warning: If the red conductor (G+) in the loop is not interrupted between adjacent transformer areas, 24 VAC can induce 230 VAC in a plug that is not connected.

Transformer Area

- Up to a total of 12 nodes served by the same transformer.
- A loop can be sectioned into multiple transformer areas.
- A red conductor (24 VAC/G+) between adjacent transformer areas on the same loop must always be interrupted.
- The transformer is typically placed between the middle nodes in the transformer area.



Up to 6 connected nodes on each side of the transformer's junction box.



Up to 6 connected nodes on each side of the transformer's junction box.

Adjacent Transformer Area

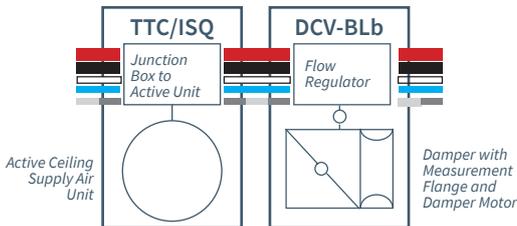
- The nodes (max 12) served by an adjacent transformer in the loop



Red (G+) interrupted in the loop between adjacent transformer areas.



Example of adjacent nodes within the same transformer area in a loop:



Notes on Electrical Work:

- Use the prescribed cable.
- Professional cable routing.
- Shielding tube on unprotected conductor.
- The screws in terminal blocks should be tightened properly with an appropriate flathead screwdriver when securing conductors.

Cable to Loop:

Shielded 4-conductor, FLAQQBR

- Red (G+)
- Black (G0)
- White (CANL)
- Blue (CANH)
- Shield

