Specifications

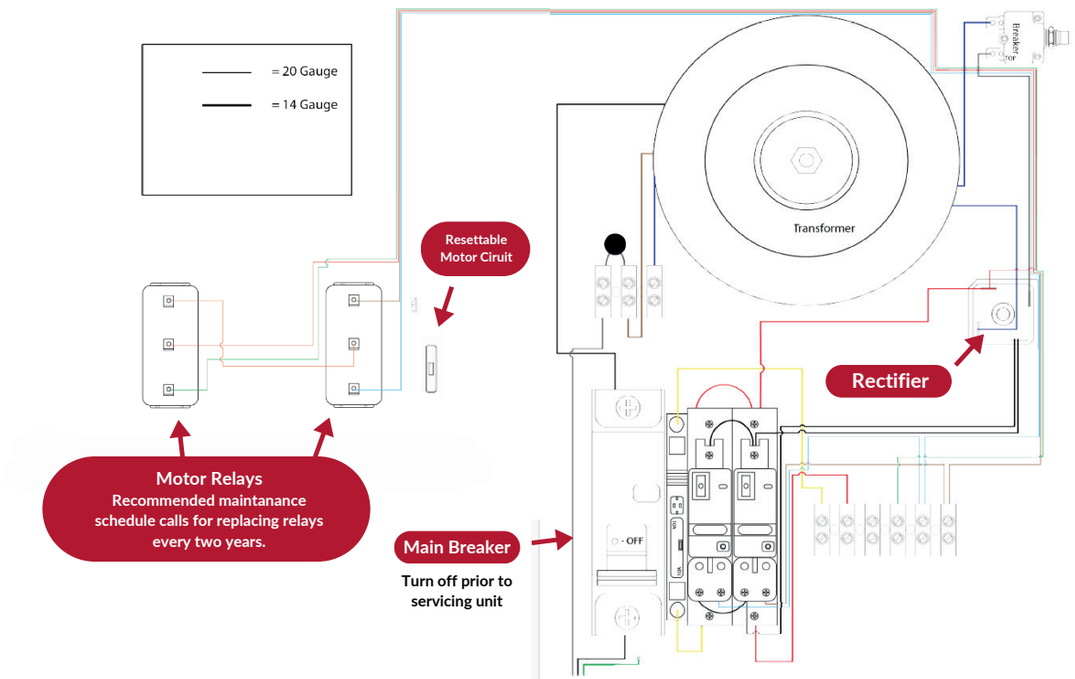
Transformer	300W
120V Primary Breaker	4A
240V Primary Breaker	2A
Secondary Breaker	10A
Motor Voltage	26-32V

All electrical connections must be made by a qualified, licensed electrician. All connections must be made in accordance with all state and local codes. The inside of the box housing the transformer has high voltage which can be dangerous.

Troubleshooting

My motor is not running. Confirm presence of 26-32V DC at the relay board terminals labeled "-24V+" (NOT the terminals labeled ("+24V"). If this voltage is not present, it is likely that the rectifier is damaged.

My breaker is tripping. (1) This is usually a sign of a damaged rectifier. Apply power with the DC rectifier terminals disconnected. If the breaker still trips, the rectifier needs replacement. (2) If the breaker does not trip with the DC rectifier terminals disconnected, disconnect the "24V+" wires from the relay boards one board at a timeto determine if the breaker trips. The board causing the tripping is suspect and should be substituted or replaced.



ADVANCING ALTERNATIVES

42-ECO1200

One Motor Interface Box

Quick Start Guide

Scan the QR Code to visit our Knowledge Center, which features the full instruction manual and other resources.

Warranty Registration:
advancingalternatives.com/register

Visit Advancing Alternatives' YouTube Channel to Access Video Tutorials

IMPORTANT
For detailed instructions and technical support, visit advancingalternatives.com/knowledge-center

Safety Information:

SHOCK HAZARD Electric shock can kill. Touching live electrical parts can cause fatal shocks or severe burns.

WARNING All electrical connections must be made by a qualified, licensed electrician. All connections must be made in accordance with all state and local codes.

What's Included:

42-ECO1200

Cable Glands (x2)

5A Breaker*

Plug-In Relays (x2)

Mounting Brackets (x4)

Mounting screws (x4)

Images not to scale.

Tools & Materials Required:

- Screwdriver (#1)
- Wire crimper
- Drill with 7/8" bit (if using provided cable glands)
- Motor wire
  - 14 AWG for less than 100' connections
  - 12 AWG for connections over 100'
- Signal Wire
  - 18-22 AWG

***Breakers Required for Motors**

LVM-60: 3A breaker
LVM-100: 5A breaker
LVM-180: 7.5A breaker
LVM-200: 10A breaker

PLEASE NOTE: Illustrations for example purposes only. Actual wiring and layout may vary. Read the 42-ECO1200 instruction manual for full details.

CAUTION: Equipment Damage
Do not expose the 42-ECO1200 to weather. Locate in a dry, protected area to prevent equipment damage.

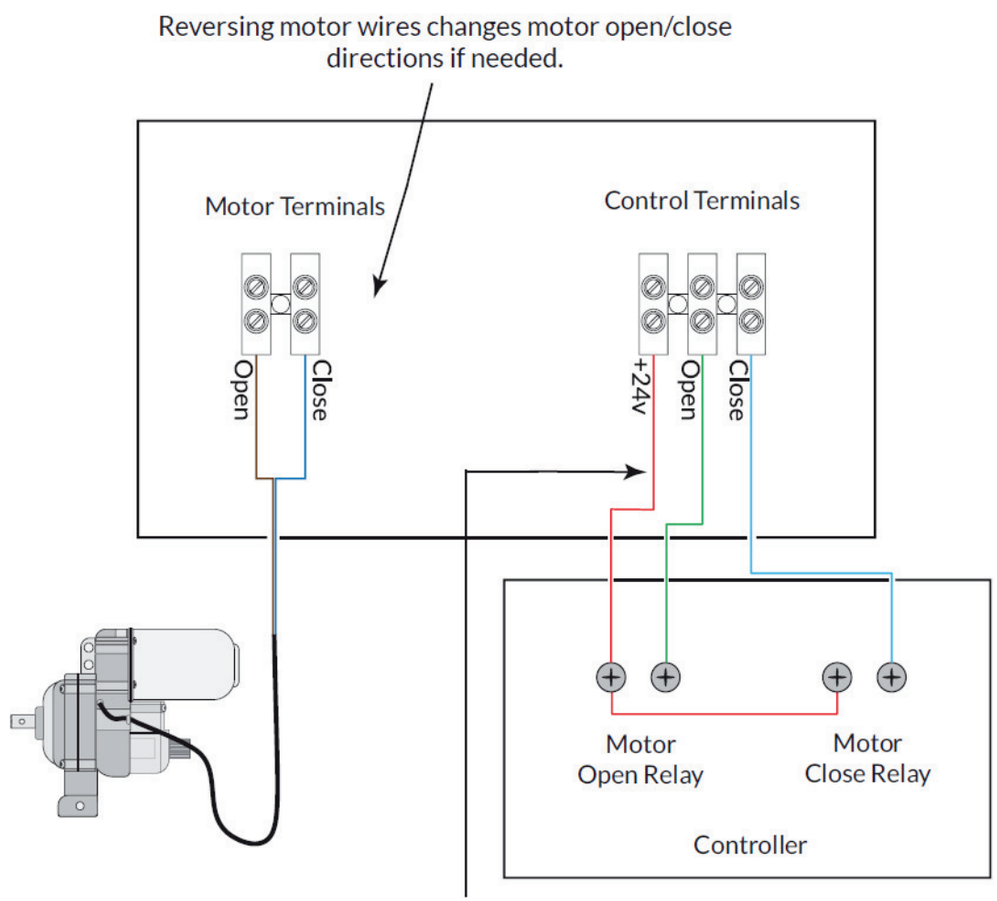
Installation Overview

- Connect the "+24V" terminal (in the interface box) to one terminal of the dry relay contacts designated for "Open" (in the controller). Connect the "Open" terminal (in the interface box) to the other dry contact terminal (in the controller).
- Repeat for "Close." (Note that only one +24V wire needs to be run, it can be "jumpered" inside the controller to other relay contact terminals as needed.)
- The two switches located on the front lid are for Auto/Manual . When in Manual you can open or close the motor, bypassing your environmental controller.
- Note: The motor interface box can be used in conjunction with an Advancing Alternatives environmental controller to operate 24V DC low voltage motors for rolling curtains or other types of vents. It can also be used as a stand-alone manual controller to operate low voltage motors in the forward and reverse direction.

- **Operation**: To operate a motor manually, set the "Auto/Manual" switch to "Manual", and use the "Open/Close" switch to run the motor. To operate a motor by remote control, set the motor's "Auto/Manual" switch to "Auto", allowing a connected controller to control the motors. Setting the "Auto/Manual" switch to "off" disables the motor.

- **Motor connections:** There are two terminal connections for the low voltage DC motor. The control box will apply approximately 30VDC to the pair of terminals connected to the low voltage DC motor. The polarity of the voltage determines the direction that the motor will run; in greenhouse operations this corresponds to whether a vent is being opened or closed. If, after making connections the vent runs in the wrong direction, simply reverse the wires.

Overview



This line sends 24 volts out to the controller, where it connects to the normally open relay contacts.

NOTE: The rectifier DC output is unfiltered DC voltage. Some meters may give slightly inaccurate readings with this type of voltage. Furthermore, abnormally high DC voltages may be seen with no load on the rectifier output. The most accurate DC voltage readings can be obtained with at least one relay engaged. This can be accomplished by setting a channel to "Manual" and setting the motor control to "Open' or "Close".