Phason AutoFlex Connect II Control System User Guide

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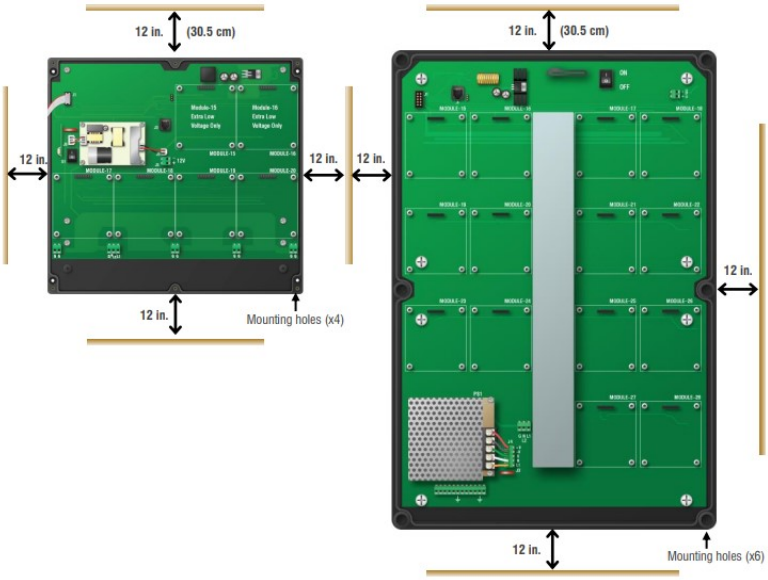
Contents

Mounting guidelines

- Mount the control on a sheltered, vertical surface
- Mount the control with the electrical knockouts facing down.
- Mount the control away from sources of moisture and heat

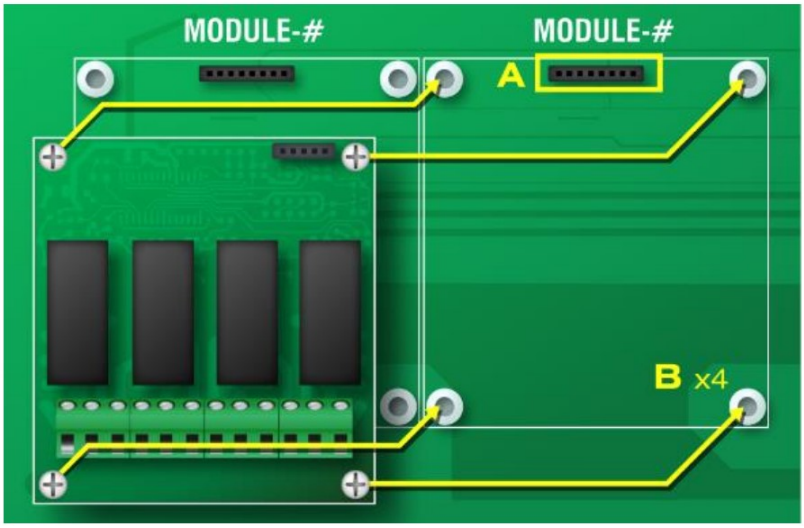


For the larger Auto Flex Connect:

- Mount high-voltage modules (ACT-1, ACT-1T, ACT-1V, RM 2, RM-2-3PH, RM-4, VAC-1, and LOOP-DRIVE) next to the trough, and then run the cabling through the trough.
- Mount low-voltage modules (IN-4, VDC-4, VCM-DC, and LOOP-SENSE) at the outer positions and run the cabling along the inside of the enclosure.

Installing modules

1. Position the module over the connector (A) and then press straight on to the connector.
2. Fasten the module in place using **all four screws** (B) provided.



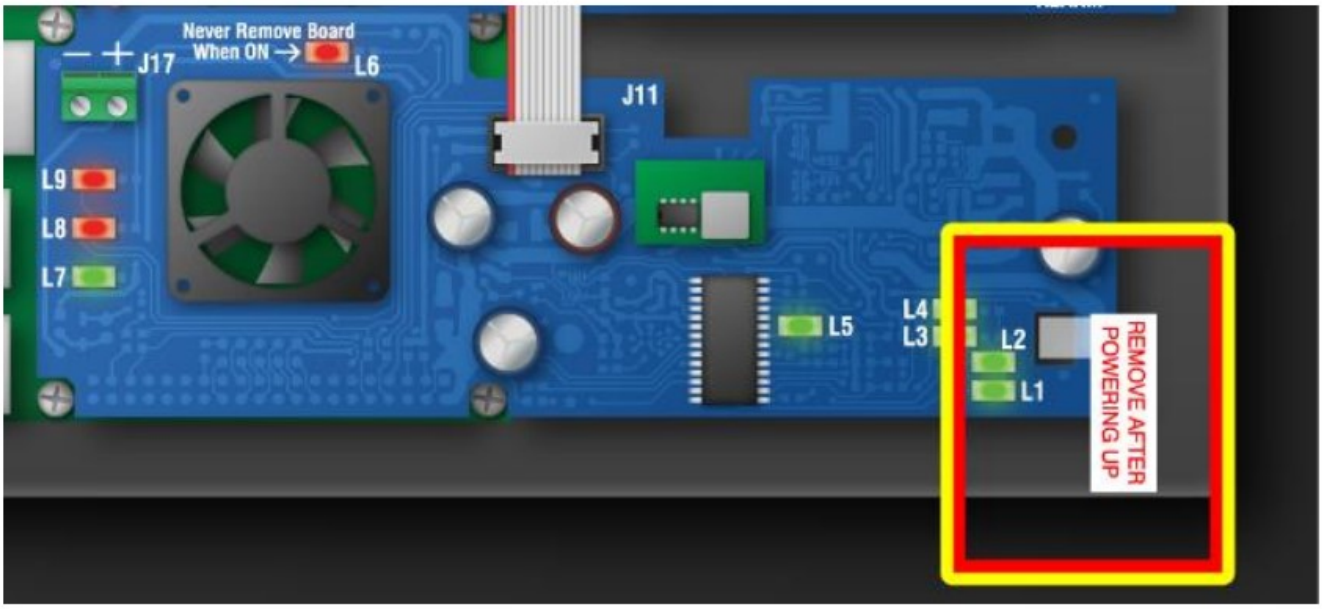
Electrical ratings

Control power	85 to 264 VAC, 50/60 Hz
Alarm relay	0.4 A at 125 VAC; 2 A at 30 VDC, resistive load 0.2 A at 125 VAC; 1 A at 30 VDC, inductive load
ACT-1 ACT-1V	15 A at 120/230 VAC, general-purpose (resistive) 1/2 HP at 120 VAC, 1 HP at 230 VAC 0-10 V DC signal fee dback (ACT-1V only)
ACT-1T LOOP-DRIVE RM-2	20 A at 120/230 VAC, general-purpose (resistive) 1 H P at 120 VAC, 2 HP at 230 VAC
RM-2-3PH	1 HP at 120 VAC, 2 HP at 230 VAC 230 VAC coil, 70 V A inrush, pilot duty
RM-4	15 A at 120/230 VAC, general-purpose (resistive) 1/2 HP at 120 VAC, 1 HP at 230 VAC
VAC-1	7 A at 120/230 VAC, general-purpose (resistive) 4.9 F LA at 120/230 VAC, PSC motor 1/2 HP at 120 VAC, 1 HP at 230 VAC 800 W @ 120 VAC, 1600 W @ 230 VA C
VCM-DC VDC-4	0 to 10 VDC, 2K Ω load

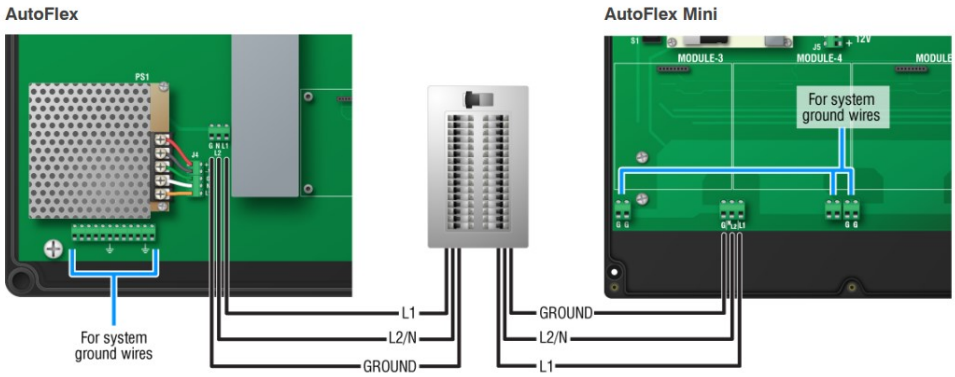
- Note You can connect more than one piece of equipment to a variable stage or relay if they are the same

type (such as fans) and the total current draw and horsepower does not exceed the limit.

- The maximum wire gauge for all terminals is 12 AWG, solid or stranded.
- ⚠ Immediately after powering up the control, remove the battery tab from the power supply on the back of the display



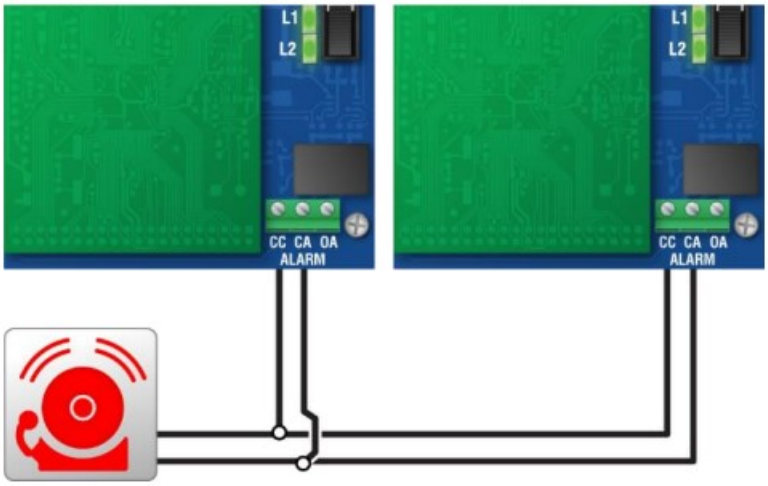
Incoming power



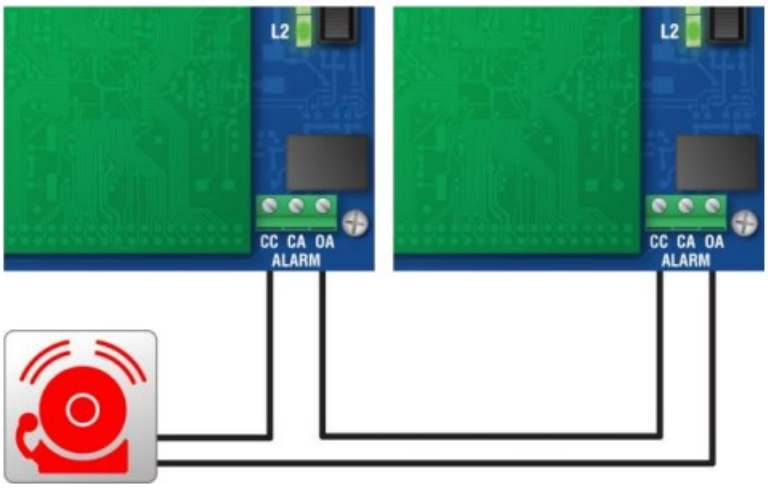
Alarm relay

Each AutoFlex control has an alarm relay connection on the inside of the cover. For complete installation information, read Connecting an alarm system in the AutoFlex Connect II installation guide.

Normally open alarm system



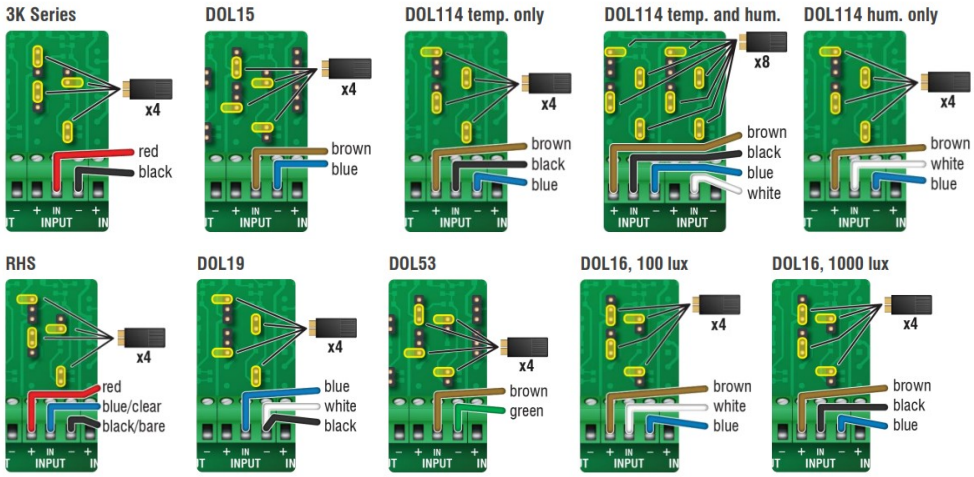
Normally closed alarm system

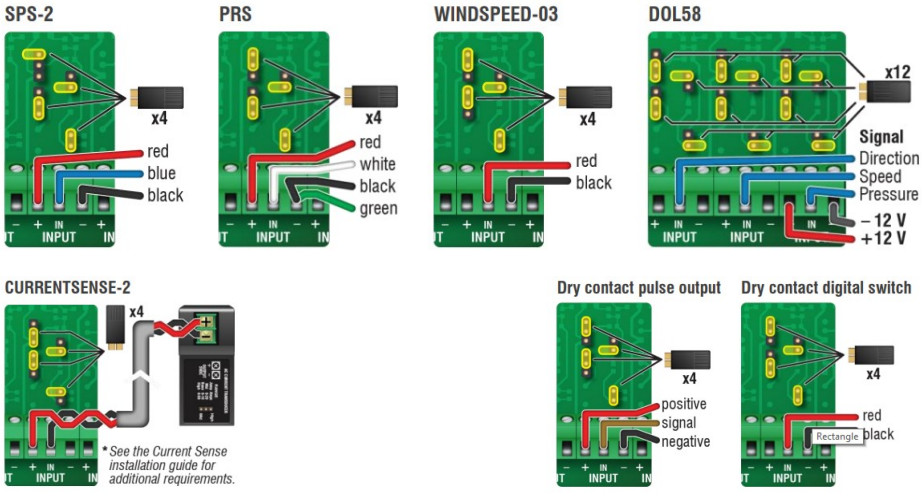


Input Module

The IN-4 is a Smart Module that has connections for four analog sensors, dry contact switches, or dry contact pulse outputs. For complete installation information and a list of supported sensors, read **Connecting sensors to IN-4 modules in the AutoFlex Connect II installation guide.**

Place the shunts in the proper positions for the type of sensor you are connecting. For each sensor, there are four shunts to position.





RM-2, RM-2-3PH, and RM-4 modules

The RM-2, RM-2-3PH, and RM-4 are Smart Modules that precisely control the equipment connected to them.

- The **RM-2 has** two high-capacity relays. Each relay has an integrated current sensor.
- The **RM-2-3PH** has two high-capacity relays and two pilot relays for controlling three-phase motors and equipment. The relays operate as pairs, with one high-capacity and one pilot relay in each pair. The highcapacity relays each have an integrated current sensor.
- The **RM-4 has** four relays. The RM-4 does not have current sensors.

For complete installation information, read **Connecting equipment to RM-2, RM-2-3PH, and RM-4** modules in the **Auto Flex Connect II installation guide.**

Note Wiring instructions are the same for the RM-2 and the RM-4 Relay Modules. The following examples use the RM-4.

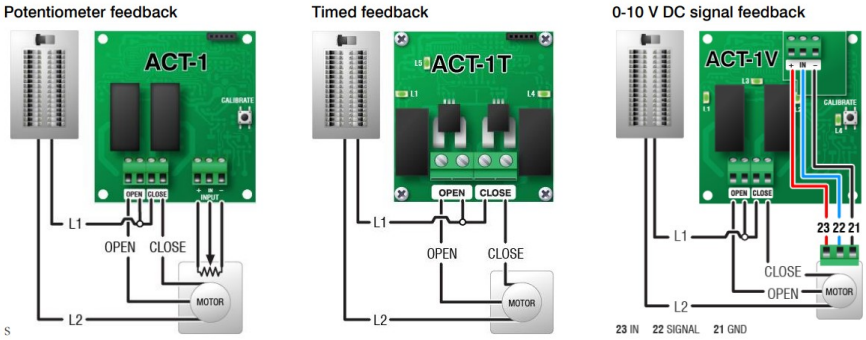
ACT-1, ACT-1T, and ACT-1V modules

Actuator Modules are Smart Modules that have one OPEN and one CLOSE relay specifically for actuator and curtain control. The ACT-1 uses potentiometer feedback ACT-1T uses timed feedback, and ACT-1V uses 0-10 V DC-signal feedback.

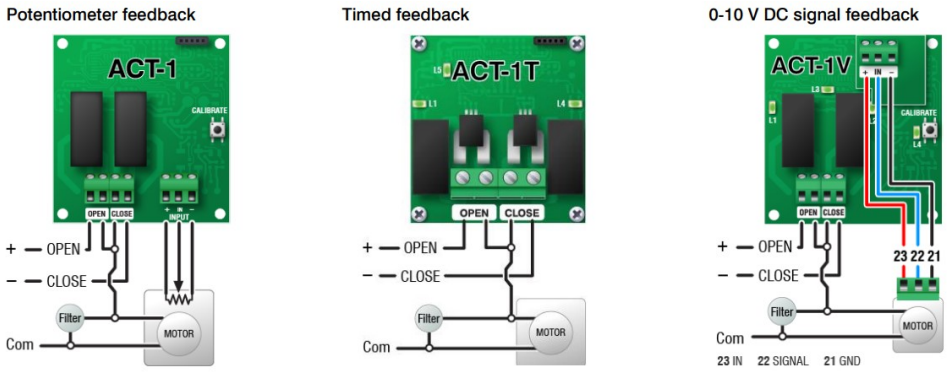
For complete installation information, read **Connecting equipment to ACT-1, ACT-1T, and ACT-1V** modules in the **AutoFlex Connect II installation guide.**

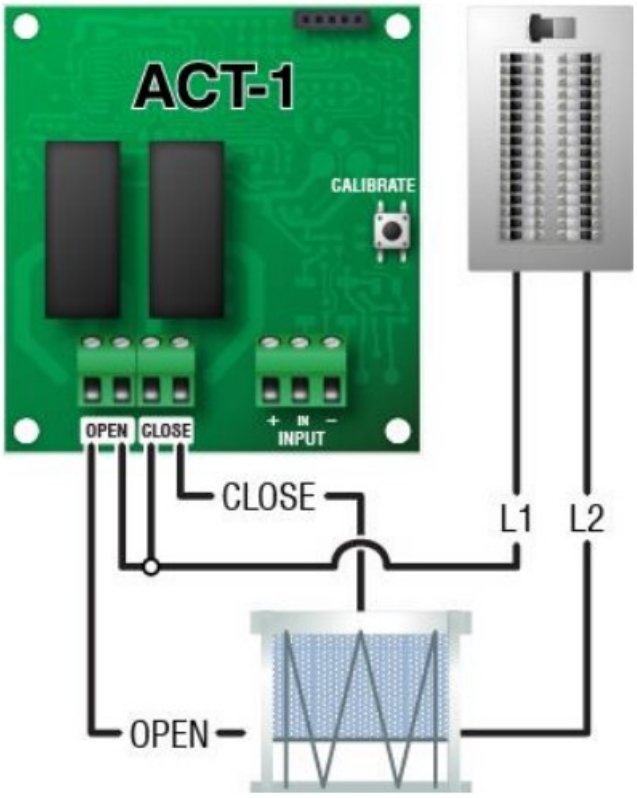
- Note Do not run actuator feedback wires in or along the same conduit as AC-power lines.
- If you are unsure of the potentiometer wiring for your actuator, read Determining correct actuator feedback wiring in the AutoFlex Connect II installation guide.
- If you are measuring AC power with a digital multimeter (DMM) and a limit switch opens the circuit, the DMM measures voltage after the relay switch even if the relay is open

AC-powered actuators



DC-powered actuators

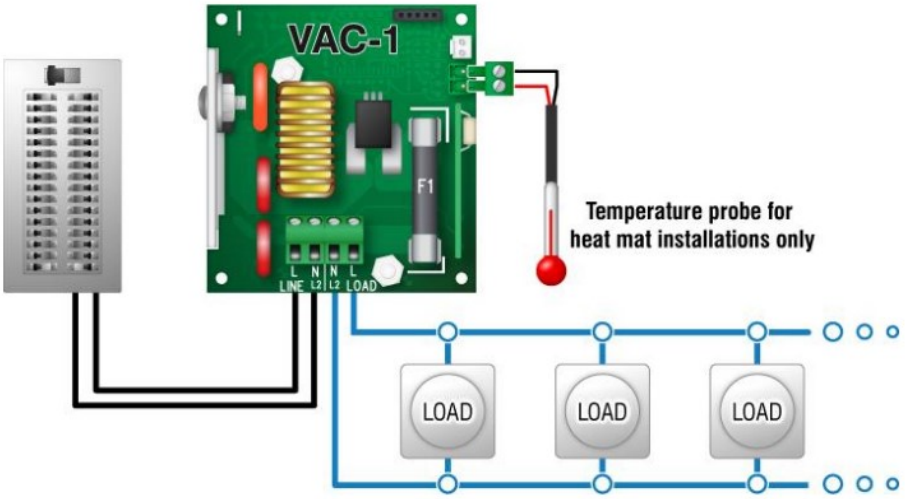




VAC-1 module

The VAC-1 is a single-output Smart Module with a **current sensor** that can control variable-speed fans, heat mats, and lights. A temperature probe connector is included for heat mat control. For complete installation information, read **Connecting equipment to VAC-1 modules** in the **Auto Flex Connect II installation guide.**

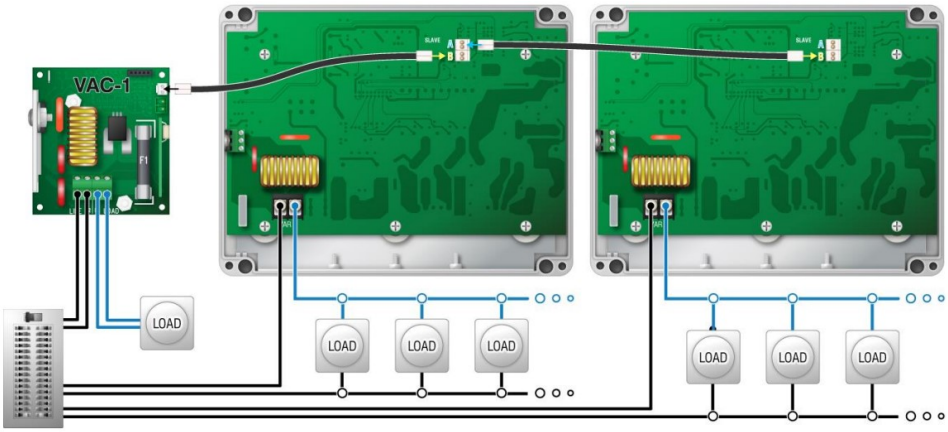
Heat mats



VLX-20 Variable Load Expansion Box

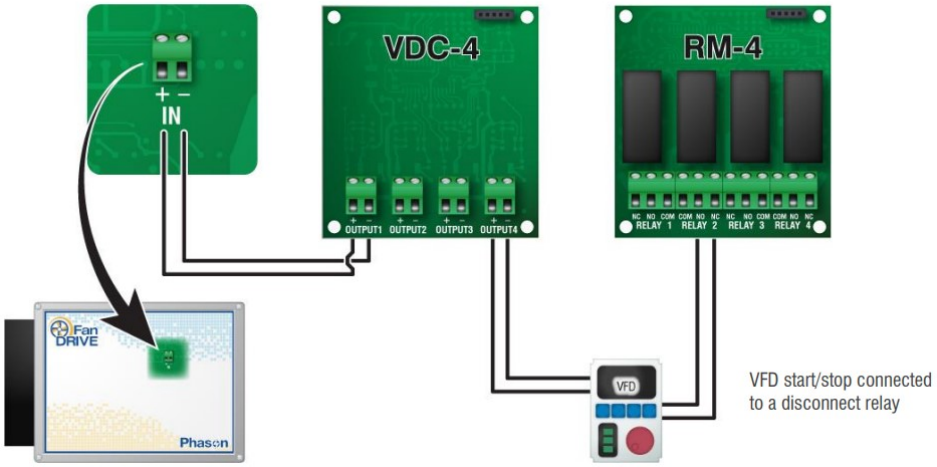
The VLX-20 has a 20 A variable AC stage that allows you to increase the capacity of the VAC-1. The VLX-20 is ideal for controlling loads such as heat mats, heat lamps, and incandescent lights.

The VAC-1 and VLX-20 must be on the same phase.

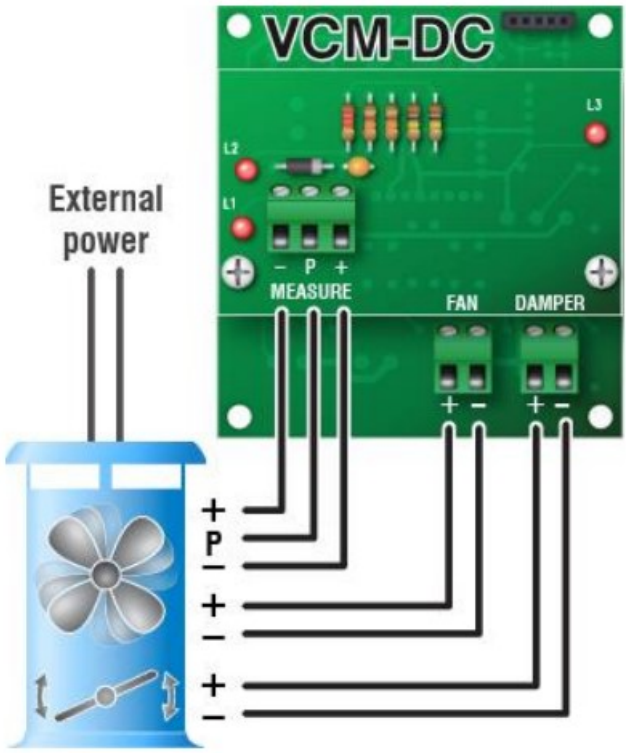


VDC-4 module

The VDC-4 is a Smart Module that has four outputs for controlling variable frequency drives (VFD), Fan DRIVEs, or other equipment requiring a 0 to 10 V DC signal. For complete installation information, read **Connecting equipment to VDC-4 modules in the Auto Flex Connect II installation guide.**

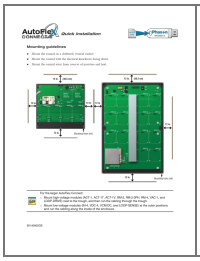


The disconnect relay for the variable frequency drive is a relay on an RM-4 module. Configure the relay to follow the variable DC output. For more information, refer to the online help at the Auto Flex Connect display



AutoFleX CONNECT II

Documents / Resources

	Phason AutoFlex Connect II Control System [pdf] User Guide AutoFlex Connect II Control System, AutoFlex, Connect II Control System, Control System