iVAC CONTACTOR C115-A-NA

User Guide R1.3

General Description

The iVAC Contactor has been designed to operate in conjunction with an iVAC Switch Box or iVAC Pro Switch 11520. This enables the control of the power to dust collectors that have current requirements above that of the iVAC Switch Box or iVAC Pro Switch. This may be 115Vac to 230Vac single phase, or up to 600VAC three phase.

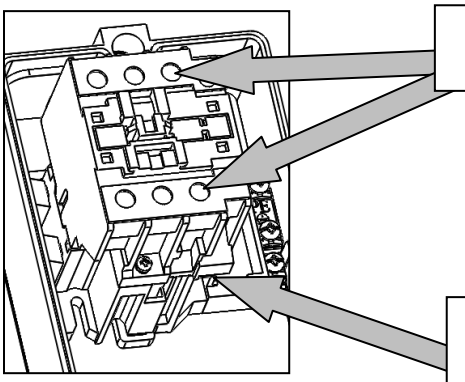
Dependent upon the configuration of the dust collector, the iVAC Contactor can control most dust collectors up to 10HP.
The iVAC Contactor is controlled by means of the Control Cable from the 115VAC output receptacle of the iVAC Switch Box or an iVAC Pro Switch 11520.

Warning

The iVAC contactor should only be installed and wired by a licensed electrician following all applicable local and national electrical codes. If you are unsure about the electrical codes in your area, consult a licensed electrician. When completed, your dust collector, with the iVAC contactor installed, must conform to all applicable local and national electrical codes.

The contactor should be protected from short circuits by protective devices in accordance with the local electrical code

The iVAC Contactor is supplied in an easily assembled kit format.



L1 to L3 Input Power
T1 toT3 Output Power

Contactor Specification
Three poles. Suitable for single or three phase power inputs

Contact Rating	600VAC
Carrying Current	42Amps
Control Voltage	120VAC

Coil terminal;
A2 as illustrated
A1 is on the other side of the contactor

The Kit contains the following material

- Contactor 3Pole 42 Amp 120Vac control cCSAus approved
- 6' Control Cable. 3 x 18G NEMA 5-15P UL/CSA approved
- 204x108x139 mm, IP65 CE Enclosures Box
- 2 x PG21 cable glands UL listed
- 1x PG16 cable gland UL listed

Assembly Instructions.

1 Mounting Cable Glands
Determine the orientation of mounting the Contactor in the Enclosure box.
The Contactor has three **Output Power** connections on one side and three **Input power** connections and two **Control Connections** on each side, (A1 and A2).
On the top side that will be closest to the ground terminal, remove the knockout for PG16 cable gland.
Remove the two PG21 knockouts on the two sides nearest to the Input / Output power connections.
2 Mount the three cable glands.

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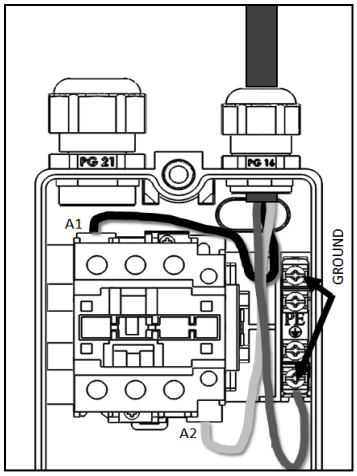
3 **Control Cable** connects to iVAC Switch Box or iVAC Pro Switch.



4 Pass the three wires of the Control Cable through the PG16 cable gland, until the strain relief is flush with the inside edge of the cable clamp. Tighten the cable gland to secure the cable.

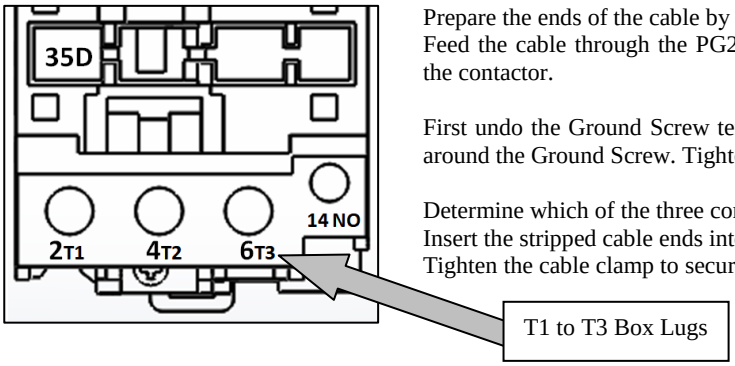
5 Remove the Ground Screw and secure the green wire of the Control Cable onto the Ground Screw.

6. Connect the Control cables to the coil terminal A1 and A2. The polarity is not important.

7. The Enclosure Box is now ready for mounting to a back board in its final position. Use 2x M5 screws. Do not connect Control Cable to iVAC Switch Box or iVAC Pro at this time.

8 **Output Power** Connection to Dust Collector.

As mentioned earlier the power requirements to the dust collector may be either single phase or three phase. Single phase use T1 and T2.



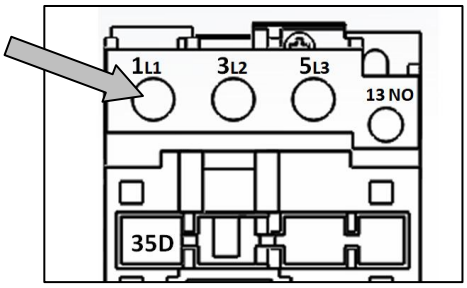
Prepare the ends of the cable by removing 3/8" of insulation.
Feed the cable through the PG21 cable gland in preparation to making the connections to the contactor.

First undo the Ground Screw terminal, sufficient to enable the ground wire to be wrapped around the Ground Screw. Tighten the ground screw to securely hold the ground wire.

Determine which of the three contactor poles are going to be used.
Insert the stripped cable ends into the 'T' box lugs and tighten.
Tighten the cable clamp to secure the cable.

9 **Input Power** connection.

First ensure that all power is disconnected from the input power cable.



Prepare the ends of the cable by removing 3/8" of insulation.
Feed the cable through the PG21 cable gland in preparation to making the connections to the Contactor.
First feed the ground wire to the Ground Screw, making sure that it is well away from the Control tabs on the Contactor. Wrap the ground wire around the Ground Screw and then tighten securely.
Make the connections to the 'L' box lugs ensuring that the cables match by color or voltage. T1 to L1, T2 to L2 etc.
Tighten the cable clamp to secure the cable.

10 Before applying the main power to the unit, check that the iVAC Switch Box or iVAC Pro Switch11520 operates the contactor by connecting the Control Cable to the iVAC unit and setting the Mode Switch to On. It is possible to hear the Contactor close and open.

11 The iVAC Contactor is now ready for operation.

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