

iVAC CONTACTOR

User Guide 10519-0000 R11.1

General Description

The iVAC Contactor (Contactor.) has been designed to operate in conjunction with an iVAC Switch Box (Switch Box.) or iVAC Pro Switch 115xx (S115xx). This enables the control of the AC Mains power to dust collectors that have current requirements above that of the Switch Box or the S115xx. This may be 115Vac to 230Vac single phase, or up to 600Vac three phase.

Dependant upon the configuration of the dust collector, the Contactor can control most dust collectors up to 10HP.

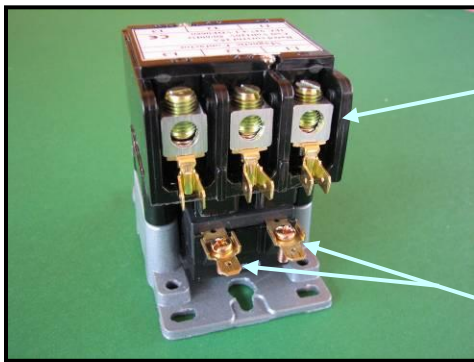
The Contactor is controlled by means of the Control Cable from the 115Vac output receptacle of the Switch Box or an S115xx.

Warning

This control unit is designed to be installed by a certified electrician.

Care must be exercised to comply with local provincial, state and national regulations, as well as safety practices, for this class of equipment.

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



L1 to L3 **Input Power**
Box Lugs

Contactor Specification

Three poles. Suitable for single or three phase power inputs

Contact Rating	600VAC
Carrying Current	40Amps
Surge Current	150Amps
Control Voltage	120VAC

Control Tabs; Quick Connect

The Contactor is supplied in an easily assembled kit format.



The Kit contains the following material

8" x 8" x 4" UL Approved Electrical Box
Contactor 3Pole 40 Amp 120Vac control cULus approved
6' Control Cable. 3 x 18G NEMA 5-15P UL/CSA approved

Hardware

4 x 10-32 x1/2" machine screws
4 x 10-32 nuts
4 x #10 star washers
3 x 1/2" cable clamp.

Assembly Instructions.

1 Mounting Cable Clamps

Determine the orientation of mounting the Contactor in the Electrical Box.

The Contactor has three **Output Power** connections on one side and three **Input power** connections and two **Control Connections** on the opposite side.

On the side that will be closest to the two control connections, remove the 1/2" knockout nearest to the ground terminal.

Remove the two 1/2" knockouts on the two sides nearest to the Input / Output power connections.

2 Mount the three 1/2" cable clamps.



BCTINT Limited
120 Iber Road, Unit 108, Stittsville, ON, K2S 1E9
www.BCTINT.com
Email: Info@BCTINT.com
Telephone: 613-599-8988, Toll free: 1-800-775-5579

iVAC CONTACTOR

User Guide 10519-0000 R11.1

- 3 Mount the Contactor into the Electrical Box using the four 10-32 Machine screws and the 4 nuts and star washers.

- 4 **Control Cable connects to a Switch Box or an S115xx.**



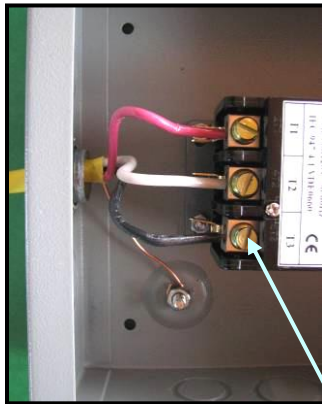
Pass the three wires of the Control Cable through the ½” cable clamp, until the strain relief is flush with the inside edge of the cable clamp. Tighten the cable clamp to secure the cable.

5 Remove the Ground Screw and place the ring terminal on the green wire of the Control Cable onto the Ground Screw. Replace the screw. Do not tighten.

6 Connect the quick connect crimp terminals to the two quick connect Control Tabs on the contactor. The polarity is not important.

7 The Electrical Box is now ready for mounting to a back board in its final position. Do not connect the Control Cable to the Switch Box or S115xx 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 ½” cable clamp 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.

T1 to T3 Box Lugs

- 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 ½” cable clamp 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 Switch Box or S115xx 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 Contactor is now ready for operation.