

CBCU-30 HOOK-UP

WARNING

IMPROPER INSTALLATION OR OPERATION OF THIS CONTROL MAY RESULT IN INJURY TO PERSONNEL OR ELECTRONIC FAILURE. THE CONTROL MUST BE INSTALLED AND GROUNDED IN ACCORDANCE WITH LOCAL, STATE, AND NATIONAL SAFETY CODES. AT NO TIME SHOULD THE CIRCUIT CONTINUITY BE CHECKED BY SHORTING TERMINALS WITH A SCREWDRIVER OR OTHER METAL DEVICE.

PLEASE READ COMPLETELY BEFORE MAKING ANY ADJUSTMENTS

HOOK-UP & TERMINAL IDENTIFICATION

- 1) Before attempting to wire the control, make sure all power is turned off. (120 VAC input recommended for 90 VDC particle clutch / brake application)
- 2) The CBCU-30 controller comes with built-in fusing (250VAC 2.5A, Littlefuse PN 021602.5 or equivalent) wired in line with AC1.

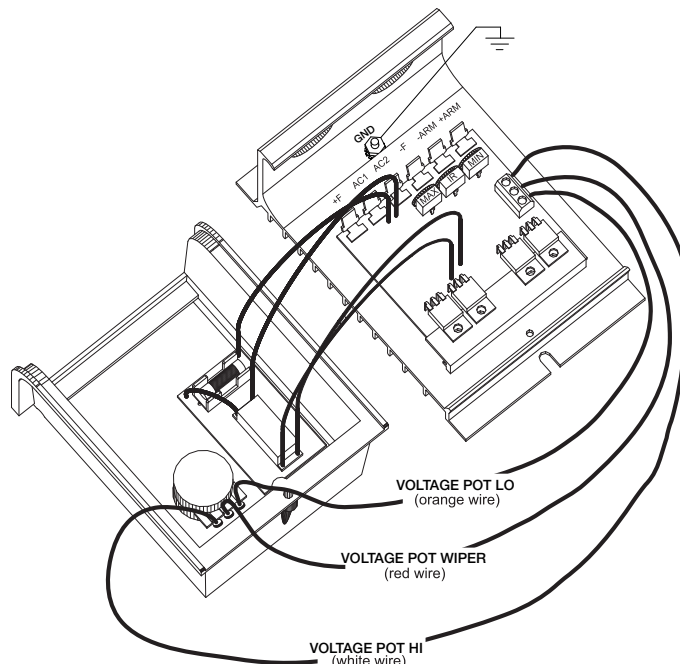
ALL SINGLE PHASE AC SYSTEMS SHOULD HAVE HOT AC CONNECTED TO AC1(L) PIN. FOR 240 VAC SUPPLIES WITH TWO HOT LINES, AN EXTERNAL FUSE WILL NEED TO BE ADDED IN SERIES WITH THE AC2(N) PIN. CAUTION SHOULD BE USED IN SELECTING THE SIZE OF HOOK-UP WIRING. LIMIT THE VOLTAGE DROP THROUGH THE WIRING TO 5% OF THE LINE VOLTAGE AT FULL LOAD.

- 3) Connect clutch / brake leads to the ARM + and ARM – terminals. These terminals will produce 0-90 VDC for 120 VAC input, and 0-180 VDC for 240 VAC input. **IT IS NOT RECOMMENDED THAT A 240 VAC INPUT BE USED FOR MAGNETIC PARTICLE CLUTCH / BRAKE APPLICATIONS WHERE THE COIL OPERATING VOLTAGE IS 90 VDC.** If a 240 VAC input is used then the MAX trimpot should be adjusted accordingly to the correct coil operating voltage.
- 4) AC1 and AC2: 120/240 VAC - Connect hot AC Line to AC1 and the other AC line or Neutral to AC2
- 5) +FIELD: Do not use for magnetic particle clutch / brake applications.
- 6) -FIELD: Do not use for magnetic particle clutch / brake applications.

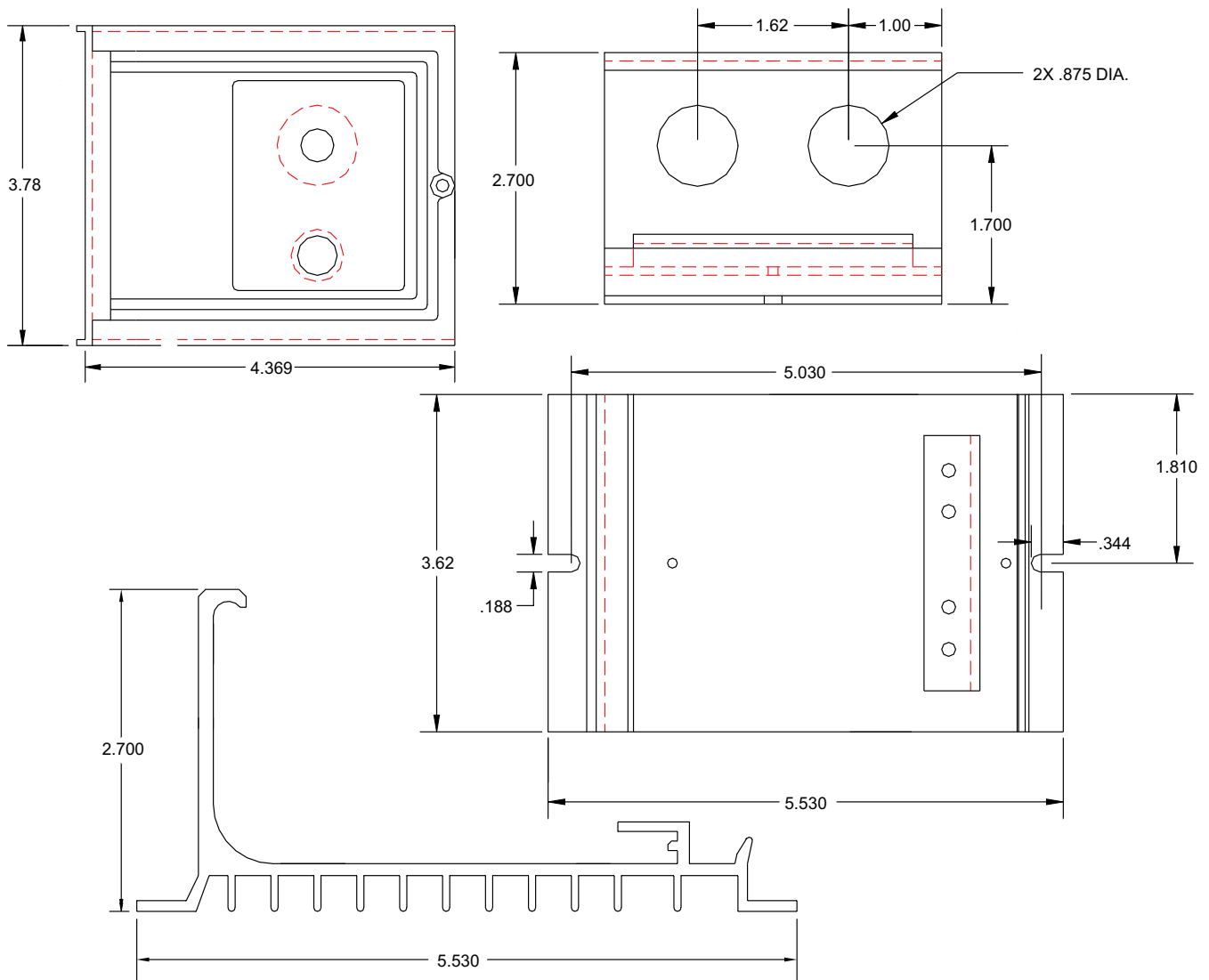
CAUTION: DO NOT ATTEMPT TO PERFORM A HI-POT TEST ACROSS AC LINES WITH CONTROL IN CIRCUIT. THIS WILL RESULT IN IMMEDIATE OR LONG TERM DAMAGE TO THE CONTROL.

ADJUSTMENTS

- 1) Preset trimpots in the counter-clockwise (CCW) position.
- 2) Apply power and set the power on/off switch to the on position.
- 3) Rotate the Voltage Pot fully CW and adjust MAX trimpot in the CW direction until the maximum desired voltage is obtained.
- 4) Rotate the Voltage Pot fully counter-clockwise (CCW) and adjust the MIN trimpot in the CW direction until deadband or the minimum desired voltage is obtained.
- 5) The IR COMP trimpot - This trimpot generally doesn't have to be adjusted for magnetic particle clutch / brake applications and should typically be left at a full CCW setting.
- 6) Recheck and readjust trimpots if necessary. Trimpot interaction with each other will be minimal.



HEATSINK DIMENSIONS & IDENTIFICATION



CBCU-30 SPECIFICATIONS

AC Input Voltage	± 10% Rated Line Voltage
Input Voltage	120 VAC recommended for magnetic particle clutch / brake applications
Amps Max - DC Output	2.5 Amps
Input Frequency	50 / 60 Hertz
Max. Trimpot Voltage	Adjustable voltage setting from 40-120% of base voltage
Min. Trimpot Voltage	Adjustable voltage setting from 0-30% of max voltage
Output Voltage	Adjustable torque from 0-100% using voltage potentiometer
Voltage Control	5K Ohm Potentiometer
Temperature Range	-10° to 40° C. Ambient (15° to 105° F)
Transient Protection	G-Mov
Dimensions	3.78" wide, 5.53" high, 3.49" deep
Weight	weighs 13.76 oz.