

## Wiring & Installation Instructions for Model # 82397COM2L3P Two Leg Three Phase 208 - 480V PCB applications

- 1) Be sure all power to your machine is turned off and that no power is present at the machine power supply source.
- 2) Locate where you would like to install your electrical quad box and run your power supply lines into one end of the box with your machines power input lines into the opposite end. If a cord installation is desired, it is recommended that the SafetyGate Commercial 2L3P unit be located approx 18-24" from the cord's power plug so as to not add additional strain to that cords power plug, however exact placement within the cord's length is at the users discretion.

NOTE: The SafetyGate must be installed prior to the machines on-off switch. If a breaker is being used to turn the machine on or off as opposed to a dedicated machine switch, the SafetyGate must be installed prior to the breaker.

- 3) On your SafetyGate Commercial 2L3P PCB you will find 5 wires:
  A single white "neutral" wire, two black "hot" wires and two red "hot" wires. Select which side of the PCB board you would like to use for each power leg. The SafetyGate Commercial uses the identity of **Line In 1** and **Line In 2**. Connect the neutral line of both your power source and, if required, your machine's neutral input line to the single white neutral wire of your SafetyGate Commercial 2L3P PCB using one of the supplied Inline Butt Splice connectors. (see illustration Fig 2-A)
- 4) Connect your power source's "Hot" #1 lead wire to the SafetyGate PCB's **BLACK** "Line 1 input" wire using one of the attached Inline Butt-Splice connectors. (see illustration Fig 2-A)
- 5) Connect the SafetyGate PCB's **BLACK** "Line 1 Out" wire to your machine's #1 "Hot" lead input wire using one of the attached Inline Butt-Splice connectors. (see illustration Fig 2-A)
- 6) Now repeat the process using the Line 2 leads. Connect your power source's "Hot" #2 lead wire to the SafetyGate PCB's **RED** "Line #2 input" wire using one of the attached Inline Butt-Splice connectors. (see illustration Fig 2-A)
- 7) Connect the SafetyGate PCB's **RED** "Line 2 Out" wire to your machine's #2 "Hot" lead input wire using one of the attached Inline Butt-Splice connectors. (see illustration Fig 2-A)
- 8) Your grounding wire is a pass through. Although it has no connection to the SafetyGate Commercial PCB, it should be connected from your supply source ground to your machine's ground input wire.
- 9) Using care to avoid unnecessary strain on the wiring or damage to the circuit board, place your SafetyGate Commercial 2L3P PCB into your electrical box with the LED indicator facing you, and the wiring carefully tucked behind the SafetyGate Commercial PCB board. If using the SafetyGate NEMA 4X rated enclosure, fasten the PCB to the enclosure using the supplied screws and standoffs. Align the transparent cover so that the LED is visible under the enclosure's "e" labeling.
- 10) With the machine's power switch in the "off" position, restore power to the machine. Verify that the machine turns on and off as in normal operation.
- 12) To test your installation of the SafetyGate Commercial, <u>be sure that no person or materials which could cause a hazardous condition is in the vicinity of the machine.</u>
- 13) Next, with the machine's power switch set to "off", cut power to the machine by either removing its plug from the wall outlet or turning off the breaker assigned to the machine. Then turn the machine's power switch to the "on" position.
- 14) With the machine's power switch still in the "on" position, restore the power to each leg of the machine to verify proper operation of your SafetyGate Commercial PCB. The SafetyGate Commercial's LED will illuminate indicating the presence of power at one or both legs but signaling that a current load is down line. The SafetyGate Commercial circuitry therefore stops the flow of electricity; preventing a dangerous restart.
- 15) To reset your SafetyGate, simply turn the machine's power switch to the "off" position. You will notice the SafetyGate Commercial's LED is now extinguished, letting you know that the machine is now ready to be started normally simply by turning the machine's power switch once again to the "on" position.

## Special Note;

The SafetyGate Circuitry prevents power flow upon recognition of any current draw or short circuit. Any current draw must be completely eliminated by use of a hard on-off switch in order to reset the SafetyGate. Indicators, clocks or other machine functions which remain on when a power switch is in the off position are recognized as a current draw by the SafetyGate circuitry, preventing a reset until that current draw is eliminated.

SOURCE SOURCE SOURCE SOURCE LEG 1 LEG 2 **NEUTRAL EARTH** LINE IN LINE IN

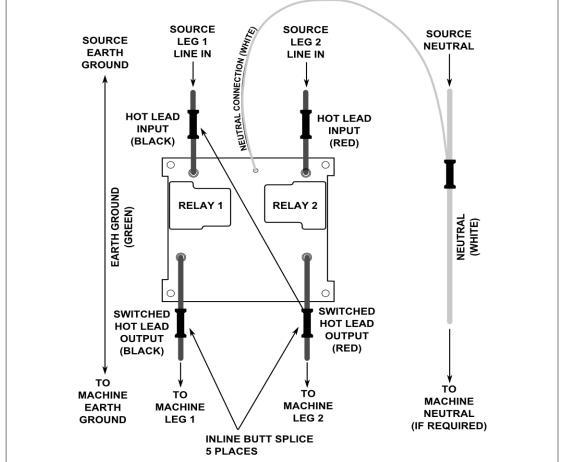


Figure 2-A

The patented SafetyGate™ Commercial is a Recognized Component under UL 508 and CSA C22.2 No. 14 Industrial Control Equipment and is designed to meet FDA mandated IEC 60601-1 Version 3, OSHA, NFPA and CSA standards in preventing the hazard of dangerous electrical restarts.



## Limited One (1) year Warranty:

Your SafetyGate<sup>TM</sup> Commercial product is warranted for one (1) year from date of purchase for manufacturing defects when installed by an authorized technician. Simply return your SafetyGate<sup>TM</sup> product along with original purchase receipt to:

> SafetyGate Warranty Replacement 80 Wells Hill Road, Suite 101 Weston, Connecticut 06883 USA

(Warranty is limited to replacement of unit and return shipping only) For more information on SafetyGate™ products, please visit: www.safestartsystems.com