

# **SR-2H Two Hand Safety Module**

*Installation and instruction manual.*

*Ver. 1.1*

# SR-2H Two Hand Safety Module

## Description

The SR-2H module monitors two Cieco STT-2 Safety Touch Buttons with 24v sourcing complimentary outputs, or two mechanical palm buttons with one NO and one NC contact. The module provides two monitored, redundant, forced-guided outputs which close when both palm buttons are activated within .5 seconds of each other. If the machine operator removes one or both hands from the actuating device(s), the Module relays de-energize, causing the output contacts to open. The relays will not re-energize until both actuating devices are deactivated and then simultaneously reactivated.

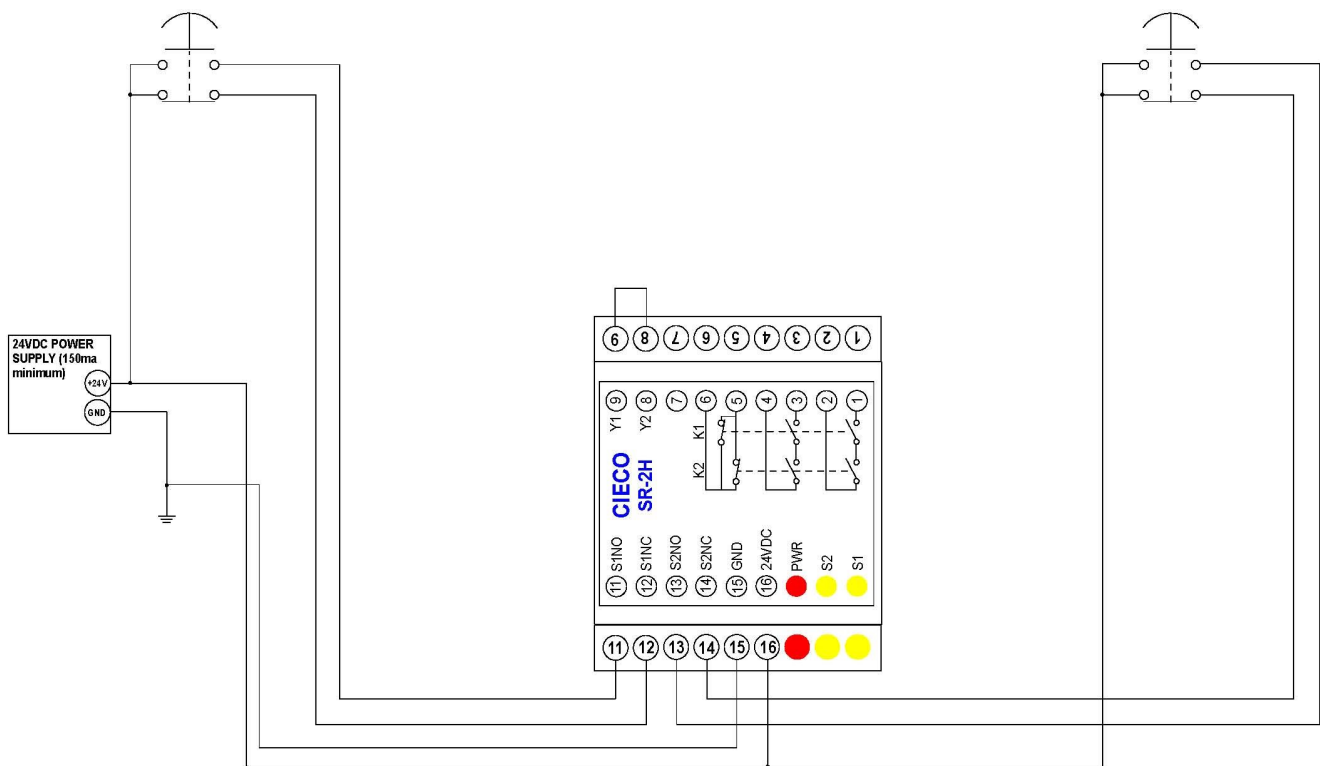
## Features

- Feedback inputs are included to monitor external machine control elements.
- Status indicator LEDs for Power, Concurrent time, Input 1, Input 2 and Output are provided. Red LED illuminated indicates the unit is powered. S1 and S2 leds off indicate that both buttons are not pushed or concurrent timer has expired. Output relays K1 and K2 are de-energized. S2 yellow LED only lit indicates button 2 is pushed for less than .5 seconds. Output relays K1 and K2 are de-energized. S1 yellow LED only lit indicates button 1 is pushed for less than .5 seconds. Output relays K1 and K2 are de-energized. S1 and S2 leds lit indicates that both buttons were pushed within .5 seconds of each other and are currently still pushed. Output relays K1 and K2 are energized.
- Power: 24vdc +/- 15% at 100ma (250ma with STT-2 buttons)
- Supply protected against reverse polarity and transient voltages
- Relay contact rated load: 6A 250V AC, 6A 30V DC
- Relay contact Mechanical life: 10 million operations minimum
- Relay contact Electrical life: 100,000 operations minimum at rated load
- Use transient suppression across inductive loads. Never install suppressors across output contacts.
- DIN-rail-mountable housing Dimensions: L x W x H 3.55" x 2.10" x 2.20"

**When electronic buttons like the Cieco STT-2 touch buttons are used with the SR-2H Safety Module, the electronic buttons and the Safety Module must be powered by the same voltage and share a common ground.**

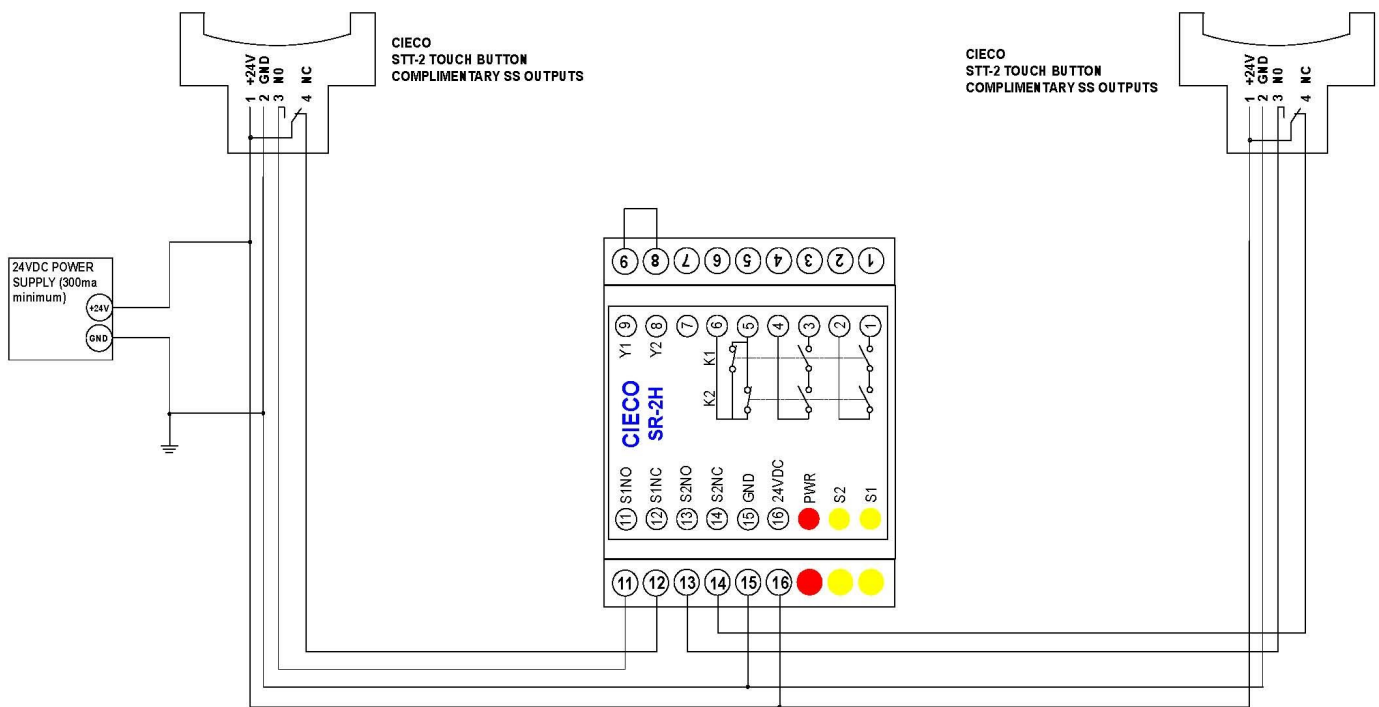
**The user is responsible for ensuring that all local, state, and national laws and regulations relating to the use of this device are complied with.**

# Cieco Two-Hand Safety Module #SR2H With Palm Buttons

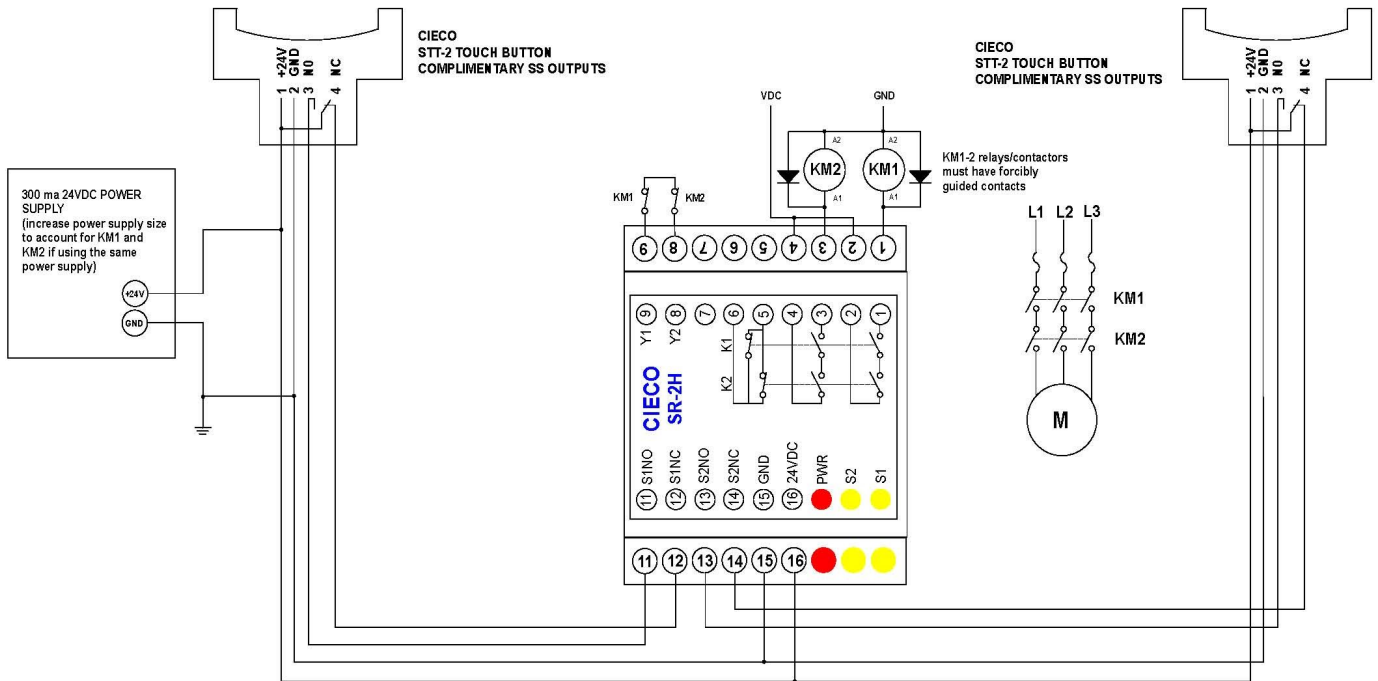


# Cieco Two-Hand Safety Module #SR2H

## With Cieco Touch Buttons #STT-2



# Cieco Two-Hand Safety Module #SR2H with contact reinforcement from external force guided contactors.



## Safeguarding using the SR-2H.

A safeguarding device is a device that detects or prevents inadvertent access to a hazard.

When used as a safeguarding device each two-hand device shall be designed and constructed to protect each hand control against unintended or inadvertent operation. Protecting the hand controls against unintended or inadvertent operation is usually accomplished by the use of ring guards or other fabricated shields.

The two-hand device shall have the individual hand controls arranged by design, construction, or separation to require the use of both hands for actuation. The design or installation of the operator control should be such that the operator cannot operate the two controls by the use of one hand and an elbow (or other portion) of the same arm. A means to meet this requirement is to separate the hand controls by a distance equal to or greater than 22 inches in a single linear dimension.

The SR-2H two-hand safety module requires the synchronous use of both the operator's hands to initiate a machine cycle and concurrent actuation of the operator's hand controls during the machine cycle. Release of either hand control during the machine cycle shall initiate an immediate stop command.

The SR-2H two-hand safety module requires the release of both hand operator controls and the re-actuation of both actuating controls before a machine cycle can be reinitiated.

Components, subassemblies or modules of two-hand control devices shall be control reliable.

The operator's hand controls of the two-hand device shall be located and maintained at a distance from the nearest hazard such that the operator cannot reach the hazard before cessation of hazardous motion. See ANSI B11.19 for distance calculations.