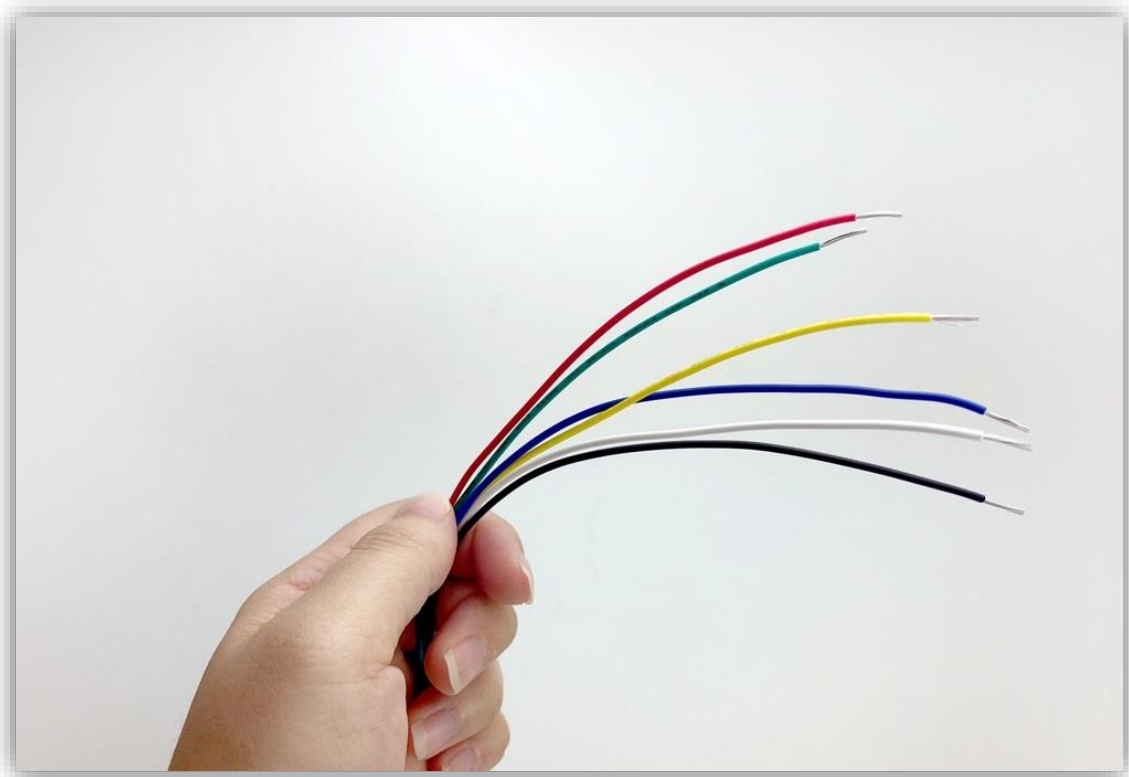


Auber Wire and Wiring Fitting Kit Application Guide

This is an application guide to show how to properly use the wire and wiring fittings in the kit.

22-AWG Wire, UL AWM Style 1007



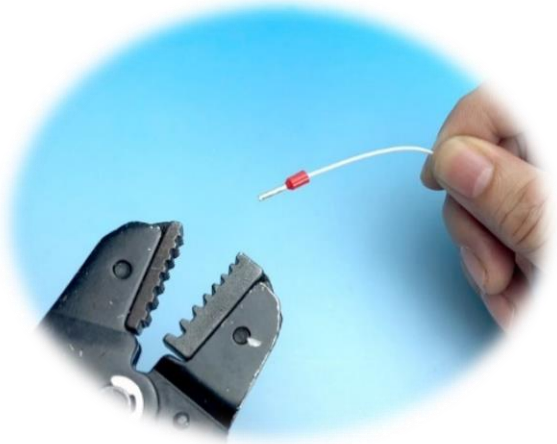
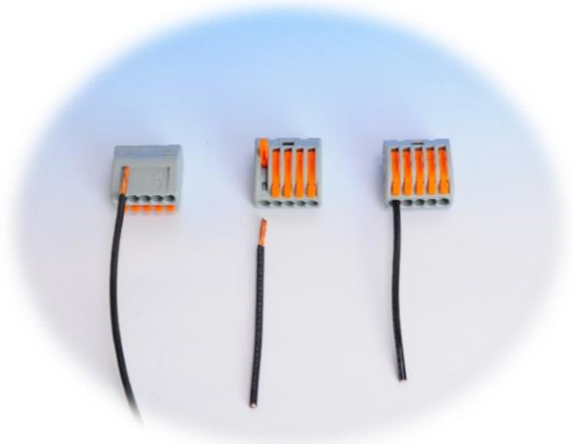
The 22AWG wire is for conducting control signal and low power load. The multi-color option is good for identifying different signals/control wires. Common terminals used for this wire are spade connector or ferrule.

Specifications

Conductor Material	Tinned Copper
Jacket Material	PVC
Diameter	1.58mm
Thickness	0.38mm
Maximum Voltage Rating	300 V
Maximum Temperature	80 °C
Certification	UL, RoHS
Wire Type	Stranded
Color	Black, white, red, yellow, green blue, pink, purple, orange and gray.

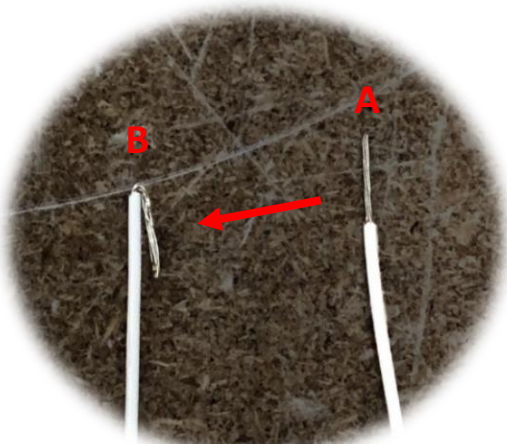


Select the right crimp slot to strip the wire.



Insert bare wire end into the splicing connector.

Crimp it with a ferrule.



Crimping tips: a folded 22AWG wire (B) is needed to make good attachment with a spade connector. If you crimp the spade connector with a straight wire (A), it might pinch off the wire while tightening the connector barrel.

14-AWG CU THHN Wire



This 14-AWG wire is used for wiring small load rated 15A or less; for example, a pump, light, fan and other electrical products can be used on a standard household outlet. Common terminals are spade connector, ferrule and ring terminal.

Specifications

Conductor Material	Copper
Jacket Material	Nylon
Stranded or Solid	Stranded
Maximum Voltage Rating	600 V
Maximum Temperature	194 °F (90 °C)
Certification	UL, CSA
Wire Type	Stranded
Color	Black, white, and green.

10-AWG CU THHN Wire



The 10-AWG wire provided is for large household appliances rated 30A or less. When feeding the components such as circuit breaker, DIN Rail mounted contactor or terminal block, it does not require any connectors to terminate the end. For connecting the SSR output, please use spade terminal to fasten with the terminal screw. Good connection for these high current conducting wires is critical. A loose connection of the wire will have higher contact resistance. It could heat up and cause fire when conducting high current. Due to the rigidity of thick multistrand wire, it is difficult to make a tight connection with terminals. When put it into the terminals, make sure the screw it tight. You might need to tight them again the next day because the wires take some times to set. If possible, we suggest you tin the wire end with solder so that the strand wire will not move over time. After you installed wire, you should give the wire a hard pull to check if it is secure in the terminal.

Specifications

Conductor Material	Copper
Jacket Material	Nylon
Stranded or Solid	Stranded
Maximum Voltage Rating	600 V
Maximum Temperature	194 °F (90 °C)
Certification	UL, CSA
Wire Type	Stranded
Color	Black, white, and green.



Tips: tinning the multi-stranded 10AWG wire with solder will make a solid connection. It also prevent the small strands comes out and gets short with nearby conductors.



After connect the wire with a DIN Rail terminal block, one should try to pull it to test if the wire had been hold tightly.



Flanged receptacles have positive crimp lock wire clamp, one can simply connect it with a stripped wire.



NEMA L6-30R Flushing Receptacle

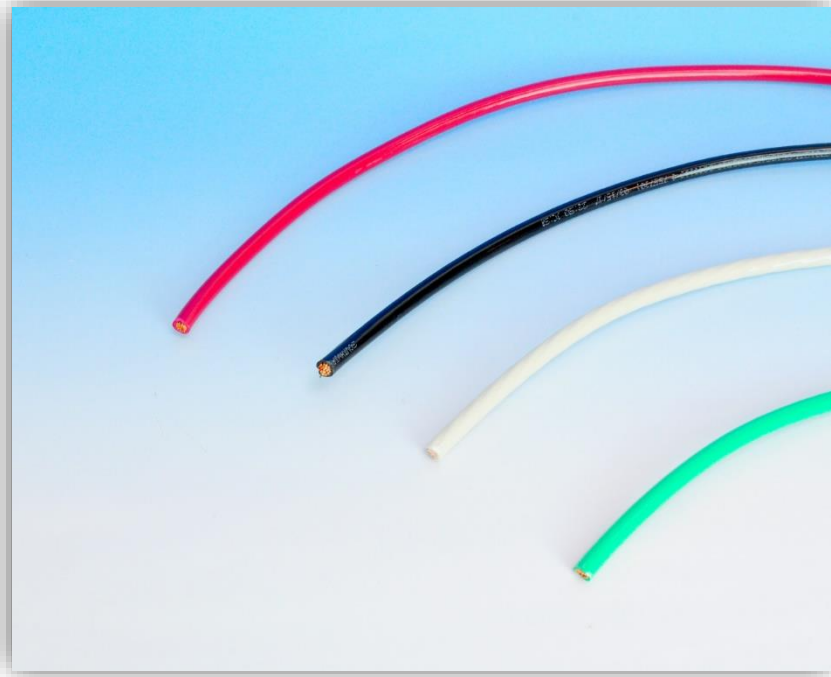


Circuit Breaker (Breaker Switch)



DIN Rail Mounted Contactor

6-AWG CU THHN Wire



The 6-AWG wire is for wiring the input power line of a 50-60A control panel. To connect it with a power inlet, for example CS6375 (California Style 50A 250V), you can simply strip it and fit the wire into the nylon housing for secure gripping. To connect it to a DIN Rail 60A terminal block, it is recommended to tin the multi-stranded wire tip with solder (as the 10 AWG wire we provided) to make sure a tight and clean connection.

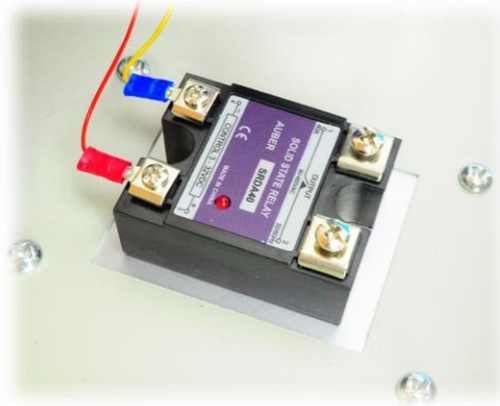
Specifications

Conductor Material	Copper
Jacket Material	Nylon
Stranded or Solid	Stranded
Allowable Ampacities	75
Maximum Voltage Rating	600 V
Maximum Temperature	167 ° F (75 °C)
Certification	UL, RoHS
Color	Black, white, red and green.

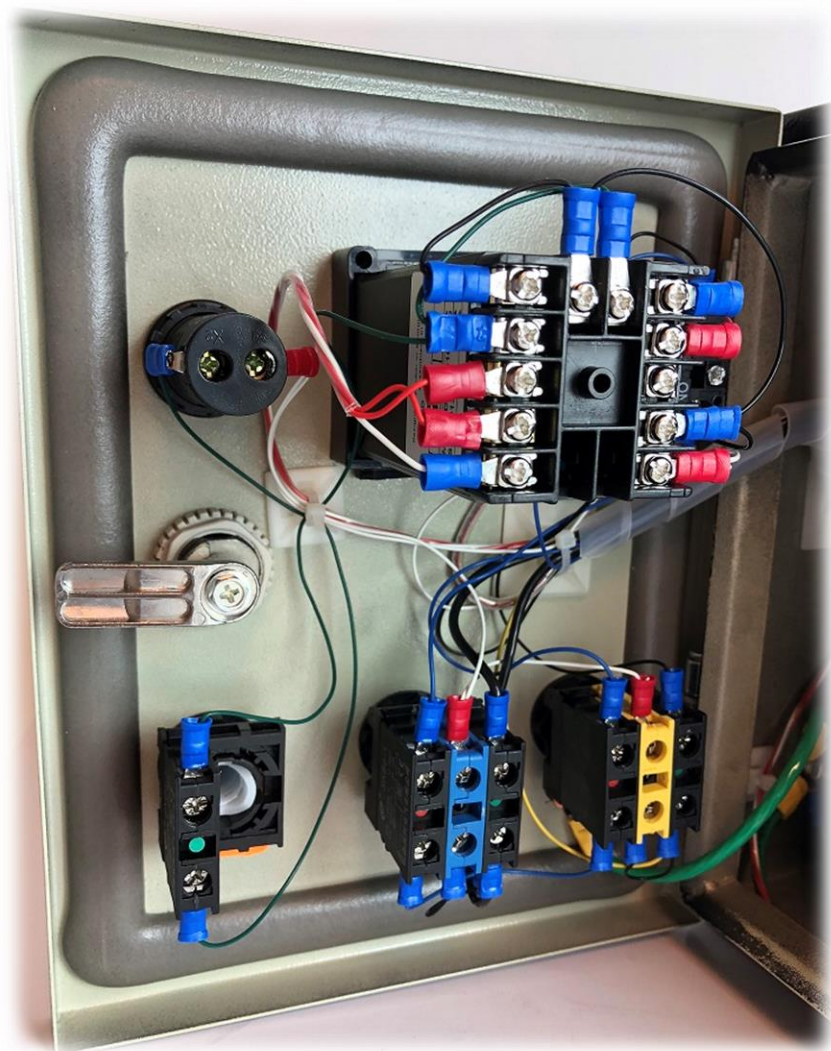
Wire Termination Examples



#6 Spade Terminal (Cable size: 0.5 ~1.5mm²).



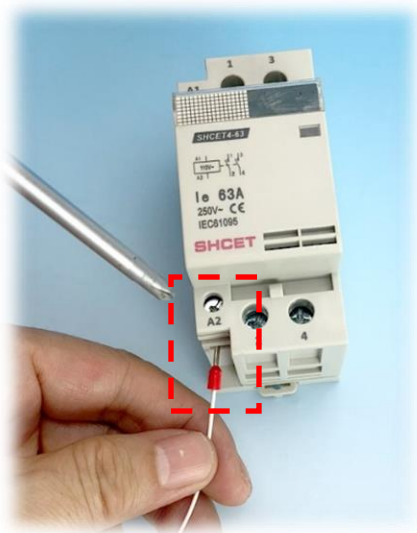
SSR Input.



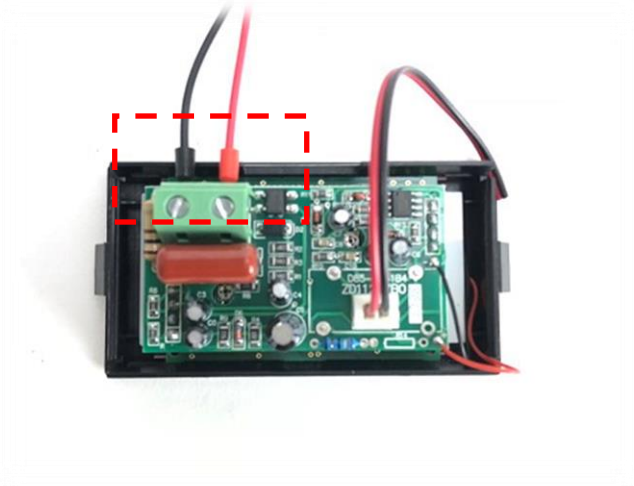
Using spade terminal with controller/timer, flashing buzzer/indicator and switches.



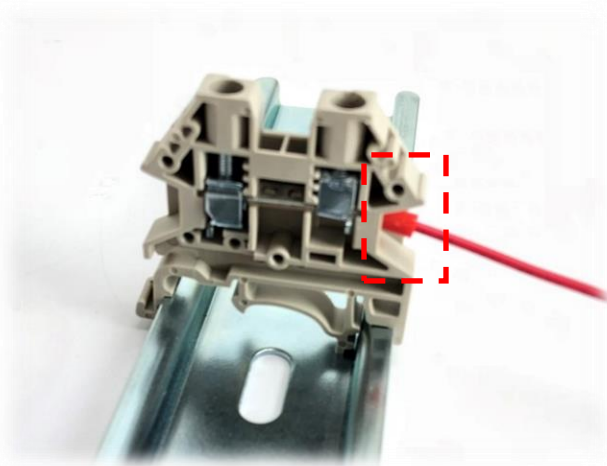
E0508 Ferrule (Cable size:0.5mm, fit 22 AWG wire).



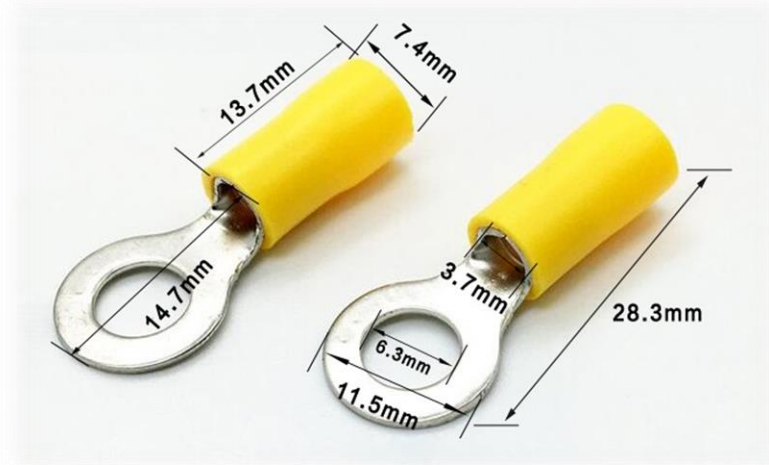
DIN Rail Mounted Contactor Coil connection.



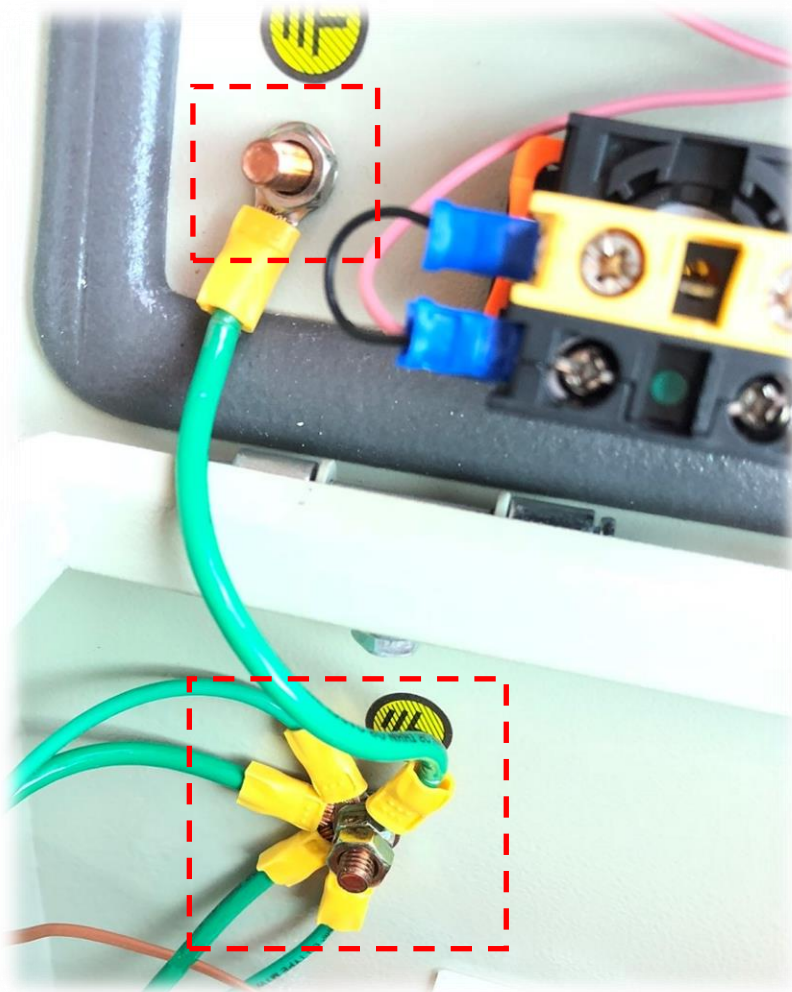
Power Meter input power wiring.



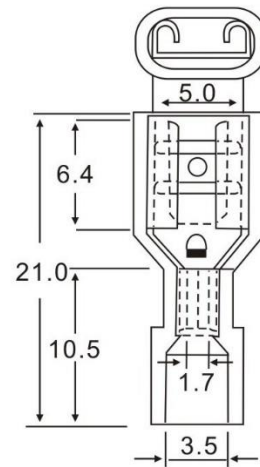
DIN Rail Terminal Block feeding.



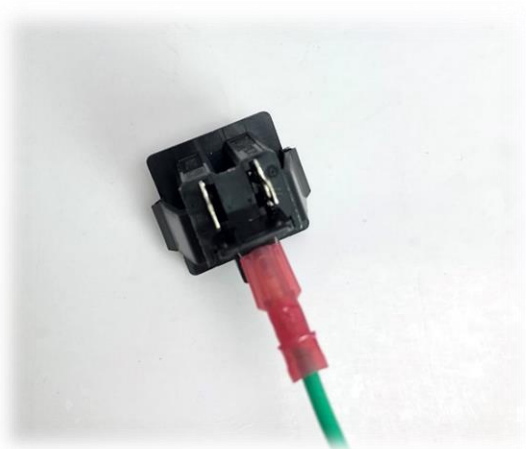
#10 Ring Terminal (Cable size: 4 ~ 6mm², fit 12 ~ 10 AWG wire).



Ground post with ring terminal.

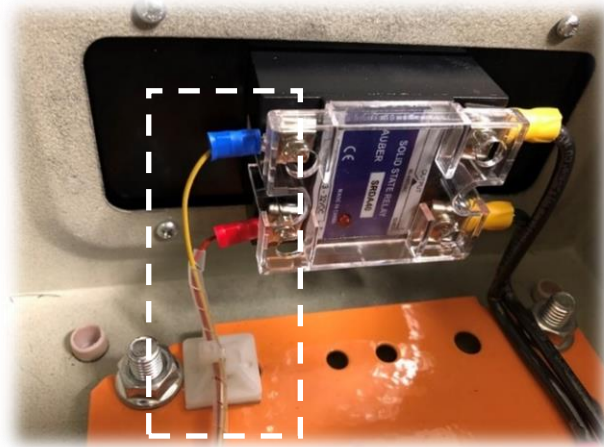


Red Fully Insulated Disconnect Terminals (Cable size: 0.5 ~ 1.5mm², fits 22 ~ 16 AWG Wire)

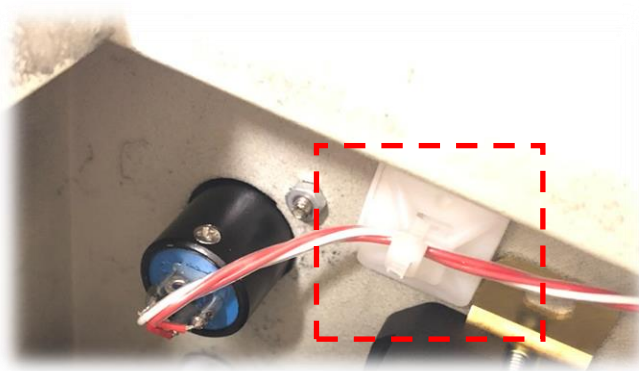


This terminal can be used with a snap-on NEMA 5-15R receptacle to serve a small load (for example, a brew pump). The current rating for the terminal is only 10A.

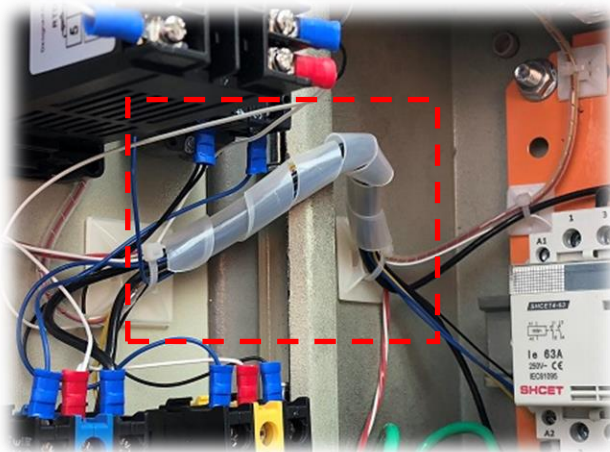
To add more security to your electric wiring, one can use cable tie, mounting pad and cable wrap.



SSR input Connection: using 1/8" (3mm) OD cable wrap and 3/4" (19mm) mounting pad.



Hold Sensor connector with 3/4" (19mm) mounting pad and cable tie.



Wrap all wires from front panel to back plate with 3/8" (10mm) OD cable wrap and 1" (28mm) mounting pad

Tool Recommendation List (not included)

- A. Philip Screw Driver Set.
- B. Flat-Head Screw Driver Set.
- C. Wire Cutter and Stripper (10 - 22 AWG).
- D. Wire Cutter and Stripper (16 - 26 AWG).
- E. Wire Terminal Crimper (10-22 Insulated Terminal).
- F. Ferrule Crimper (12 - 22 AWG).
- G. Ferrule Crimper (23 - 10 AWG).
- H. Caliper & Ruler.
- I. Soldering Station.

Sample photo for the tools are below:



Ferrule Crimper for 12-22 AWG wire.



Ferrule Crimper for 23 – 10 AWG wire.

Ampacity Chart

Wire Gauge Size	Allowable Ampacities
1	110
2	95
3	85
4	70
6	55
8	40
10	30
12	20
14	15
16	10
18	7
20	5
22	3
24	2

Note: Table above is for a reference for general purpose. Chassis wiring (< 10 ft) can handle more currents than transmission wiring.