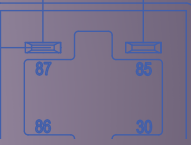


**CIT**  
Relay & Switch

# Selector Guide

relays & switches



# CIT Relay & Switch validation test lab

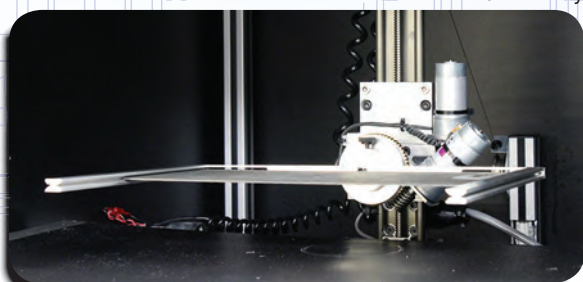
CIT Relay & Switch has a sophisticated test lab for failure analysis and material testing, helping our customers solve their toughest problems. Our aim is to establish long-lasting relationships with our customers by providing comprehensive technical expertise using our state-of-the-art test lab. Providing accurate, concise solutions, we give our customers the best explanation about why their components perform the way they do.

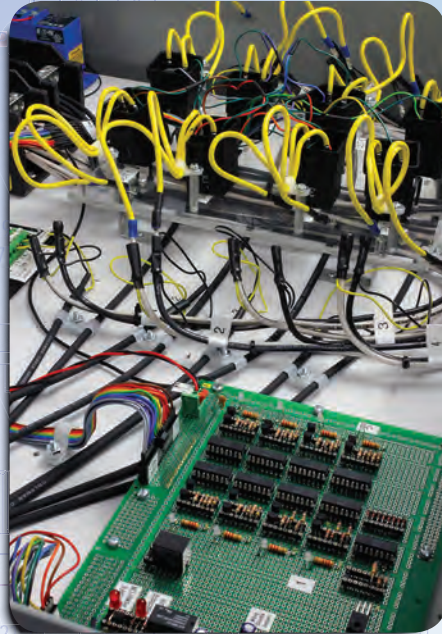
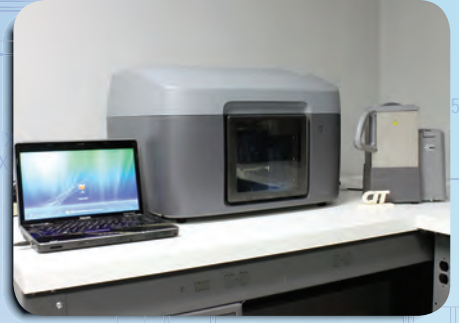
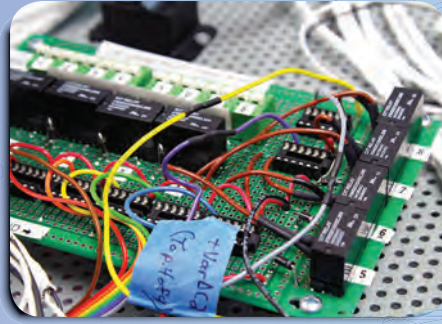
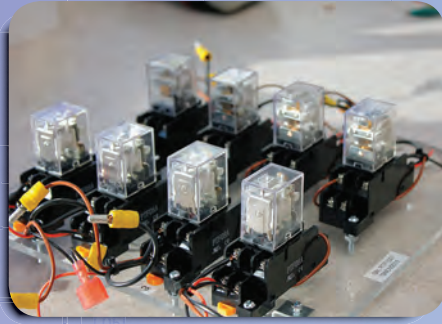
CIT's primary focus is on engineering design, IQC, extensive validation testing, correlated customer relay life test featuring Wieble curve documenttion at the CIT Technology Laboratory, bonded stock inventory, UL, cUL, TUV certification, raw material control, IPC continuity control and review.

The CIT IQC Test Lab, in coordination with the CIT Technology Lab, ensures documented reliability. Incoming products are tested including x-ray plating validation of contact material, continuity resistance, dielectric strength, solderability and other parameters. CIT maintains warehousing in Hong Kong and Minnesota to meet customer on-time delivery and freight cost requirements. Bonded stock, consignment, and other specialty logistical support programs have been developed to insure maximum customer satisfaction.

CIT Technical Engineering support is readily available. Application support is moments away. Technical expertise on plastics, metallurgy, contact material recommendation, in-rush protection, molding, process issues, sealing issues, vibration, temperature withstanding, gram force, silicone phenomena, dry circuit application issues, epoxy to contact adherence and many more questions can be asked and answered by email or phone. We're here to help!

Contact a CIT Application Engineer to validate product suitability for your application with real-time live testing backed with data.





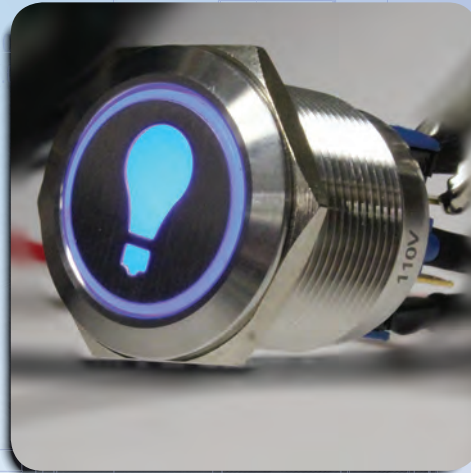
# CIT Relay & Switch featured product



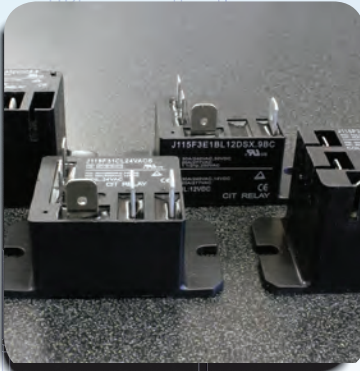
J115F1 Series  
UL approved relay



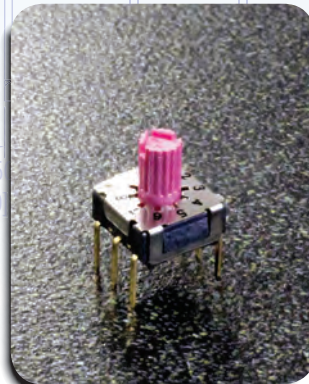
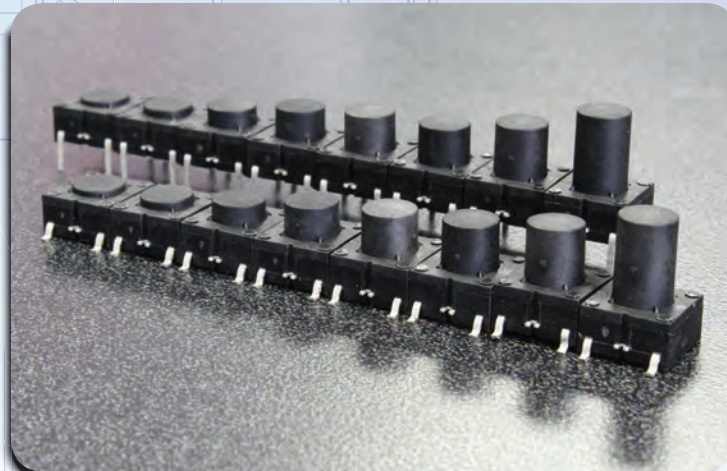
DH Series  
anti-vandal switch



ME Series  
process sealed  
tactile switch



J115F3 Series  
UL approved relay



RD07 & RD10 Series  
encoded rotary  
DIP switch

# CIT RELAY & SWITCH™

Division of Circuit Interruption Technology, Inc.

# index

**Switches**  
[.96]

Features:

- 100% Fail-Safe
- 100% Self-Reset
- 100% Self-Lock
- 100% Self-Latch
- 100% Self-Release
- 100% Self-Resettable
- 100% Self-Latching
- 100% Self-Locking
- 100% Self-Releaseable
- 100% Self-Resettable
- 100% Self-Latching
- 100% Self-Locking
- 100% Self-Releaseable

## Switches

4

**UL Recognized Relays**  
[.42]

Features:

- 100% Fail-Safe
- 100% Self-Reset
- 100% Self-Lock
- 100% Self-Latch
- 100% Self-Release
- 100% Self-Resettable
- 100% Self-Latching
- 100% Self-Locking
- 100% Self-Releaseable
- 100% Self-Resettable
- 100% Self-Latching
- 100% Self-Locking
- 100% Self-Releaseable

## UL Approved Relays

10

**Latching Relays**  
[.03]

Features:

- 100% Fail-Safe
- 100% Self-Reset
- 100% Self-Lock
- 100% Self-Latch
- 100% Self-Release
- 100% Self-Resettable
- 100% Self-Latching
- 100% Self-Locking
- 100% Self-Releaseable
- 100% Self-Resettable
- 100% Self-Latching
- 100% Self-Locking
- 100% Self-Releaseable

## Latching Relays

22

**Automotive Relays**  
[.38]

Features:

- 100% Fail-Safe
- 100% Self-Reset
- 100% Self-Lock
- 100% Self-Latch
- 100% Self-Release
- 100% Self-Resettable
- 100% Self-Latching
- 100% Self-Locking
- 100% Self-Releaseable
- 100% Self-Resettable
- 100% Self-Latching
- 100% Self-Locking
- 100% Self-Releaseable

## Automotive Relays

24

**Sockets**  
[.63]

Features:

- 100% Fail-Safe
- 100% Self-Reset
- 100% Self-Lock
- 100% Self-Latch
- 100% Self-Release
- 100% Self-Resettable
- 100% Self-Latching
- 100% Self-Locking
- 100% Self-Releaseable
- 100% Self-Resettable
- 100% Self-Latching
- 100% Self-Locking
- 100% Self-Releaseable

## Sockets

28

**Technical Data**  
[.03]

Features:

- 100% Fail-Safe
- 100% Self-Reset
- 100% Self-Lock
- 100% Self-Latch
- 100% Self-Release
- 100% Self-Resettable
- 100% Self-Latching
- 100% Self-Locking
- 100% Self-Releaseable
- 100% Self-Resettable
- 100% Self-Latching
- 100% Self-Locking
- 100% Self-Releaseable

## Technical Data

29

# Switches

Series Number	AH	AHU	BH
Appearance			
Features	Illuminated Pushbutton Switch • Vandal Proof, IP67 • Center Dot or Ring Illumination • 19mm, Panel Mount	Illuminated Pushbutton Switch  • UL/cUL Approved • Vandal Proof, IP67 • Center Dot or Ring Illumination • 19mm, Panel Mount	Illuminated Pushbutton Switch • Vandal Proof, IP67 • Center Dot or Ring Illumination • Flush or Raised Actuator • 16mm or 19mm, Panel Mount
Poles	SPST N.C. & N.O.	SPDT & DPDT	SPST
Function	Momentary	Latching & Momentary	Momentary
Contact Rating	up to 1A	up to 3A	up to 2A
Series Number	CH	DH	DH22U
Appearance			
Features	Illuminated Pushbutton Switch • Vandal Proof, IP67 • Center Dot or Ring Illumination • 16mm, Panel Mount	Illuminated Pushbutton Switch • Vandal Proof, IP67 • Center Dot or Ring Illumination • 22mm, 25mm, 28mm & 30mm • Panel Mount	Illuminated Pushbutton Switch  • UL/cUL Approved • Vandal Proof, IP67 • Ring Illumination • 22mm, Panel Mount
Poles	SPDT & DPDT	SPST N.O. & N.C.; DPST N.O. & N.C.	SPDT & DPDT
Function	Latching & Momentary	Latching & Momentary	Latching & Momentary
Contact Rating	up to 1A	up to 2A	up to 3A
Series Number	DHU	EH	FH
Appearance			
Features	Illuminated Pushbutton Switch  • UL/cUL Approved • Center Dot or Ring Illumination • 25, 28 or 30mm, Panel Mount	Pushbutton Switch • Illuminated Option • Small Size • IP67 Sealing Degree • 12mm, Panel Mount	Illuminated Pushbutton Switch • Vandal Proof, IP67 • Bi-Color LED Option • Center Dot or Ring Illumination • 12mm, Panel Mount
Poles	SPST, SPDT	SPST N.O.	SPST
Function	Latching & Momentary	Momentary	Momentary
Contact Rating	up to 16A	up to 2A	up to 2A

Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.

Series Number	GH	AS	ES
Appearance			
Features	Pushbutton Switch <ul style="list-style-type: none"> <li>• Vandal Proof, IP67</li> <li>• Non-Illuminated or Ring Illumination</li> <li>• Raised Actuator</li> <li>• 10mm, Panel Mount</li> </ul>	Illuminated Indexing Switch <ul style="list-style-type: none"> <li>• 45° &amp; 90° Options</li> <li>• Bi-Color LED Option</li> <li>• IP67 Sealing Standard</li> <li>• 2 &amp; 3 Position Available</li> </ul>	Illuminated Pushbutton Switch <ul style="list-style-type: none"> <li>• Bi-Color LED Option</li> <li>• Matte Finish</li> <li>• Round or Flat Actuator</li> <li>• IP67 Sealed Standard</li> </ul>
Poles	SPST	SPDT & DPDT	SPST N.O. & SPST N.C.
Function	Latching & Momentary	Indexing	Latching & Momentary
Contact Rating	up to 2A	up to 1A	up to 125mA
Series Number	AD	BT	DG
Appearance			
Features	Illuminated Pushbutton Switch <ul style="list-style-type: none"> <li>• 2 Function Options</li> <li>• Multiple Actuator Options</li> <li>• Multiple LED Color Options</li> <li>• Multiple Cap and Diffuser Options</li> </ul>	Illuminated Pushbutton Switch <ul style="list-style-type: none"> <li>• Bi-Color LED Option</li> <li>• Multiple Caps with Laser Etching Option</li> <li>• 4 Frame Options</li> </ul>	Illuminated Pushbutton Switch <ul style="list-style-type: none"> <li>• Panel Mount</li> <li>• Bi-Color LED Option</li> <li>• Gold Contacts</li> </ul>
Poles	SPST N.O.	DPDT	SPST
Function	Momentary	Latching & Momentary	Momentary
Contact Rating	up to 100mA	up to 100mA	up to .4VA
Series Number	JC	JH	MH
Appearance			
Features	Illuminated Pushbutton Switch <ul style="list-style-type: none"> <li>• Dual LED Option</li> <li>• 5 Color Options</li> <li>• Multiple Cap Options, Laser Etching</li> <li>• Panel Mount &amp; PCB</li> </ul>	Illuminated Pushbutton Switch <ul style="list-style-type: none"> <li>• Dual LED Option</li> <li>• 3 LED Color Options</li> <li>• 6 Cap Styles with 9 Color Options</li> </ul>	Illuminated Pushbutton Switch <ul style="list-style-type: none"> <li>• Right Angle</li> <li>• Bi-Color LED Option</li> <li>• Available with or without Cap</li> <li>• Over-Travel &amp; Positive Feel</li> </ul>
Poles	SPDT & DPDT	SPDT	SPDT
Function	Latching & Momentary	Momentary	Momentary
Contact Rating	up to 500mA	up to 50mA	up to 100mA

Specifications and availability subject to change without notice.

Dimensions shown in mm. Dimensions are shown for reference purposes only.

# Switches

Series Number	RT	DSA	JA
Appearance			
Features	Illuminated Pushbutton Switch <ul style="list-style-type: none"> <li>• Miniature Size</li> <li>• Bi-Color LED Option</li> <li>• Multiple Cap Styles</li> </ul>	Double Action Key Switch <ul style="list-style-type: none"> <li>• Single Action Available</li> <li>• Small Compact Design</li> <li>• Large Actuator Surface</li> </ul>	Illuminated Tactile Switch <ul style="list-style-type: none"> <li>• Bi-Color LED Option</li> <li>• Multiple Lens Colors</li> <li>• 2 Actuation Force Options</li> </ul>
Poles	SPST	SPST N.O. & SPDT	SPST
Function	Momentary	Momentary Double Action	Momentary
Contact Rating	up to 100mA	up to 30mA	up to 50mA
Series Number	NC	SH	CITR2
Appearance			
Features	Miniature Pushbutton Switch <ul style="list-style-type: none"> <li>• Positive Snap Feel</li> <li>• 6 Cover Styles</li> <li>• 9 Cover Colors</li> <li>• Multiple Cap Styles</li> </ul>	Miniature Pushbutton Switch <ul style="list-style-type: none"> <li>• Illuminated Option with Laser Etching Available</li> <li>• Bi-Color LED Option</li> <li>• Multiple Cap Styles</li> </ul>	Circuit Breaker Switch  <ul style="list-style-type: none"> <li>• 2 ~ 20 Amp</li> <li>• Illuminated</li> <li>• UL/cUL Approved</li> </ul>
Poles	SPST	SPST	SPST
Function	Momentary	Momentary	On-Off Circuit Breaker
Contact Rating	up to 25mA	up to 50mA	up to 20A
Series Number	RA	RC	RL
Appearance			
Features	Illuminated Rocker Switch  <ul style="list-style-type: none"> <li>• Multi-Function &amp; Illuminated</li> <li>• Numerous Actuator Markings</li> <li>• Right &amp; Left Angle Style Option</li> <li>• UL/cUL Approved</li> </ul>	Illuminated Rocker Switch  <ul style="list-style-type: none"> <li>• Illuminated</li> <li>• Numerous Actuator Markings</li> <li>• Right &amp; Left Angle Style Option</li> <li>• UL/cUL Approved</li> </ul>	Miniature Rocker Switch  <ul style="list-style-type: none"> <li>• Two Housing Color Options</li> <li>• Multiple Printing Styles</li> <li>• Multiple Color Options</li> <li>• UL/cUL Approved</li> </ul>
Poles	SPST & SPDT	SPST & DPST	SPST
Function	Multiple	On - Off	Multiple
Contact Rating	up to 15A	up to 12A	up to 12A

Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.



Series Number	RR	RW	CL1200
Appearance			
Features	Round Rocker Switch  <ul style="list-style-type: none"> <li>• LED, Neon or Tungsten Lamp Illumination</li> <li>• Multiple Printing Styles &amp; Colors</li> <li>• UL/cUL Approved</li> </ul>	Wide Rocker Switch  <ul style="list-style-type: none"> <li>• Neon or Tungsten Lamp Illumination</li> <li>• Multiple Printing Styles</li> <li>• Multiple Color Options</li> <li>• UL/cUL Approved</li> </ul>	Illuminated Tactile Switch <ul style="list-style-type: none"> <li>• Bi-Color LED Option</li> <li>• Multiple Cap Styles with 5 Colors</li> <li>• SMT &amp; Right Angle Available</li> </ul>
Poles	SPST & SPDT	SPDT & DPDT	SPST
Function	Multiple	Multiple	Momentary
Contact Rating	up to 15A	up to 20A	up to 50mA
Series Number	JS	NL	TJ
Appearance			
Features	Illuminated Tactile Switch <ul style="list-style-type: none"> <li>• 12mm x 12mm</li> <li>• 4 LED Color Choices</li> <li>• 7 Cap Styles</li> </ul>	Illuminated Tactile Switch <ul style="list-style-type: none"> <li>• Ultra Sub-Miniature</li> <li>• Surface Mount</li> <li>• Dual LED</li> <li>• 2 Cap Options</li> </ul>	Illuminated Tactile Switch <ul style="list-style-type: none"> <li>• Process Sealed</li> <li>• SMD &amp; Through-Hole</li> <li>• Vertical &amp; Right Angle</li> <li>• Navigation Switch Configuration</li> </ul>
Poles	SPST	SPST	SPST N.O.
Function	Momentary	Momentary	Momentary
Contact Rating	up to 50mA	up to 50mA	up to 50mA
Series Number	ME	CR & CT	ST
Appearance			
Features	SMT or Thru-Hole Tactile Switch <ul style="list-style-type: none"> <li>• Multiple Actuator Lengths</li> <li>• Solid One Piece Integrated Cap</li> <li>• 10,000,000 Cycles</li> <li>• Process Sealed</li> </ul>	Thru-Hole Tactile Switch <ul style="list-style-type: none"> <li>• Ammo Pack</li> <li>• Multiple Actuator Lengths</li> <li>• Multiple Actuation Forces</li> <li>• Process Sealed Available</li> </ul>	SMT or Thru-Hole Tactile Switch <ul style="list-style-type: none"> <li>• IP67 Sealing Degree</li> <li>• Multiple Actuator Lengths</li> <li>• Multiple Actuation Forces</li> <li>• Right Angle Available</li> </ul>
Poles	SPST	SPST	SPST
Function	Momentary	Momentary	Momentary
Contact Rating	up to 50mA	up to 50mA	up to 50mA

Specifications and availability subject to change without notice.

Dimensions shown in mm. Dimensions are shown for reference purposes only.

# Switches

Series Number	CS	K	RD07 & RD10
Appearance			
Features	Surface Mount Tactile Switch <ul style="list-style-type: none"> <li>• Multiple Actuator Lengths</li> <li>• Multiple Actuation Forces</li> <li>• Vertical &amp; Right Angle</li> <li>• Process Sealed Available</li> </ul>	DIP Switch <ul style="list-style-type: none"> <li>• Full &amp; Low Profile Styles</li> <li>• Standard, Half Pitch, Piano &amp; Right Angle</li> <li>• Thru Hole &amp; Surface Mount</li> </ul>	Coded Rotary DIP Switch <ul style="list-style-type: none"> <li>• 7 or 10mm</li> <li>• IP67 Process Sealed</li> <li>• Multiple Actuator &amp; Position Options</li> <li>• Straight or Gull Wing Terminations</li> </ul>
Poles	SPST	SPST ~ 12PST	4 to 16 positions
Function	Momentary	On-Off	Multiple
Contact Rating	up to 50mA	up to 25mA	up to 50A
Series Number	SM3 & VM3	LP	DS
Appearance			
Features	Mini & Sub-Mini Snap Action <ul style="list-style-type: none"> <li>• Multiple Force Options</li> <li>• Multiple Lever Options</li> <li>• Multiple Terminal Options</li> <li>• Latching Option</li> </ul>	Miniature Pushbutton Switch <ul style="list-style-type: none"> <li>• Numerous Cap Styles</li> <li>• PC Terminal or Snap-In PC</li> <li>• 2 ~ 4 Pole</li> </ul>	Illuminated Pushbutton Switch <ul style="list-style-type: none"> <li>• PC Mount</li> <li>• Bi-Color LED Option</li> <li>• Available with or without Cap</li> </ul>
Poles	SPST N.C. & N.O., SPDT	DPDT & 4PDT	SPST N.O. & DPST N.O.
Function	Latching & Momentary	Latching & Momentary	Momentary
Contact Rating	up to 16A	up to 100mA	up to 200mA
Series Number	LPH	DL	MP
Appearance			
Features	Illuminated Pushbutton Switch <ul style="list-style-type: none"> <li>• Bi-Color LED Option</li> <li>• Multiple Finish Options</li> <li>• Laser Etching Option</li> <li>• Right Angle</li> </ul>	Horizontal Pushbutton Switch <ul style="list-style-type: none"> <li>• Piggyback Style Available</li> <li>• Multiple Cap Styles</li> <li>• 2 ~ 10 Poles</li> <li>• Interlocked/Ganged Option</li> </ul>	Horizontal Pushbutton Switch <ul style="list-style-type: none"> <li>• Solder Lug or PC Pin Terminal</li> <li>• Two Case Styles</li> <li>• PC or Panel Mount</li> </ul>
Poles	DPDT & 4PDT	DPDT ~ 10PDT	SPDT & DPDT
Function	Latching & Momentary	Latching & Momentary	Latching & Momentary
Contact Rating	up to 300mA	up to 500mA	up to 100mA

Dimensions shown in mm. Dimensions are shown for reference purposes only.

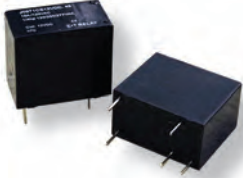


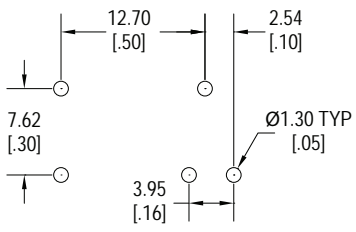
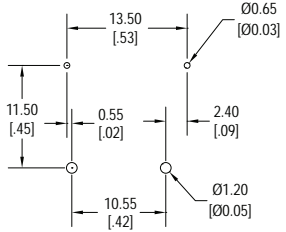
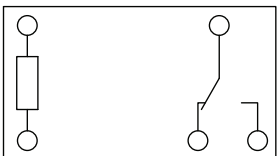
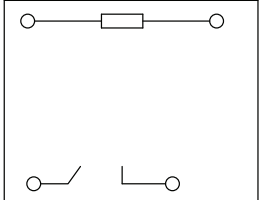
Specifications and availability subject to change without notice.

Series Number	RPH	1000 & MS Slide	SMS
Appearance			
Features	Horizontal Pushbutton Switch <ul style="list-style-type: none"> <li>• PC Terminal or Snap-In PC</li> <li>• Panel Mount Chassis</li> <li>• 2 ~ 6 Poles</li> </ul>	Miniature & Sub-Miniature <ul style="list-style-type: none"> <li>• Standard &amp; Right Angle</li> <li>• Multiple Actuator Lengths</li> <li>• Steel &amp; Nylon Housings</li> <li>• Thru Hole, Surface Mount &amp; Panel</li> </ul>	Ultra Sub-Miniature Slide <ul style="list-style-type: none"> <li>• IP65 Process Sealed</li> <li>• Standard &amp; Right Angle</li> </ul>
Poles	DPDT, 4PDT & 6PDT	SPDT ~ 4P3T	SPDT, DPDT
Function	Latching & Momentary	Multiple	Multiple
Contact Rating	up to 100mA	up to 5A	0.4mA
Series Number	ANP, ASP, BNP, BSP	ANR, ASR, BNR, BSR	ANT, AST, BNT, BST
Appearance			
Features	Mini & Sub-Mini Pushbutton Switch <ul style="list-style-type: none"> <li>• Non-Sealed &amp; Sealed Types</li> <li>• Wide Variety of Terminals</li> <li>• Panel Mount, Thru-Hole &amp; PCB</li> <li>• Gold Contacts Available</li> </ul>	Mini & Sub-Mini Rocker Switch <ul style="list-style-type: none"> <li>• Non-Sealed &amp; Sealed Types</li> <li>• Wide Variety of Terminals</li> <li>• Panel Mount, Thru-Hole &amp; PCB</li> <li>• Gold Contacts Available</li> </ul>	Mini & Sub-Mini Toggle Switch <ul style="list-style-type: none"> <li>• Non-Sealed &amp; Sealed Types</li> <li>• Wide Variety of Terminals</li> <li>• Panel Mount, Thru-Hole &amp; PCB</li> <li>• Gold Contacts Available</li> </ul>
Poles	SPST, SPDT, DPDT	SPDT ~ 4PDT	SPDT ~ 4PDT
Function	Latching & Momentary	Multiple	Multiple
Contact Rating	up to 3A	up to 5A	up to 3A or up to 5A
Series Number	CSP, CSR, CST	SSP & SST	
Appearance			
Features	Sealed Ultra Sub-Miniature <ul style="list-style-type: none"> <li>• Pushbutton, Rocker or Toggle</li> <li>• IP67 Process Sealed</li> <li>• PC Pin, Horizontal or Vertical</li> <li>• Gold Plated Contacts</li> </ul>	Sub-Miniature Surface Mount Switch <ul style="list-style-type: none"> <li>• Pushbutton or Toggle</li> <li>• Process Sealed</li> <li>• Surface Mount</li> <li>• Silver or Gold Plated Contacts</li> </ul>	
Poles	SPST, SPDT, DPST, DPDT	SPST & SPDT	
Function	Momentary	Multiple	
Contact Rating	0.4mA	up to 3A	

Specifications and availability subject to change without notice.

Dimensions shown in mm. Dimensions are shown for reference purposes only.

# UL Recognized Relays

Series Number	J097	J099
Appearance		
Features	<ul style="list-style-type: none"> <li>• Switching Capacity up to 10A</li> <li>• Small Size &amp; Light Weight</li> <li>• Low Coil Power Consumption</li> <li>• High Contact Load</li> <li>• Agency Approval : E197851 </li> </ul>	<ul style="list-style-type: none"> <li>• High Sensivity</li> <li>• Small Size &amp; Light Weight</li> <li>• Switching Current up to 12A</li> <li>• PC Board Mounting</li> <li>• Agency Approval : E198751 </li> </ul>
Dimensions (L x W x H mm)	18.0 x 10.0 x 15.3	18.4 x 15.0 x 10.3
Contact Arrangement	1C	1A
Contact Material	AgSnO <sub>2</sub>	AgSnO <sub>2</sub>
Contact Ratings	10A @ 120VAC Resistive, 10K cycles 10A @ 277VAC Resistive, 10K cycles 5A @ 240VAC Resistive, 10K cycles 3A @ 120VAC Resistive, 10K cycles TV-5 @ 120VAC, 25K cycles 1/4hp @ 120/240/277VAC, 6K cycles	10A @ 277VAC General Purpose, 100K cycles 10A @ 30VDC General Purpose, 100K cycles 12A @ 125VAC Resistive, 100K cycles
Coil Voltage Options	3 ~ 48VDC	5VDC, 12VDC, 24VDC
Coil Power Options	.45W	.45W
Contact Resistance	< 50m Ω	< 50m Ω
Insulation Resistance	1000M Ω @ 500VDC	100M Ω @ 500VDC
Electrical Life	100K cycles	100K cycles
Mechanical Life	10M cycles	10M cycles
Dielectric Strength	Contact to Contact Contact to Coil	1000V rms 4000V rms 2500V rms
Operating Temperature	-40°C to 85°C	-40°C to 85°C
Mounting Methods	PC Pin	PC Pin
PC Board Layouts		
Schematics		

Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.





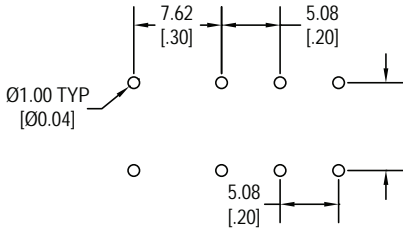
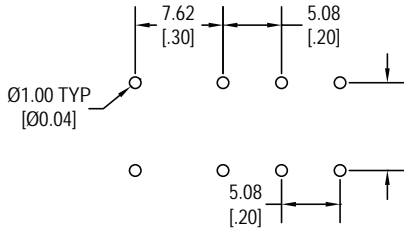
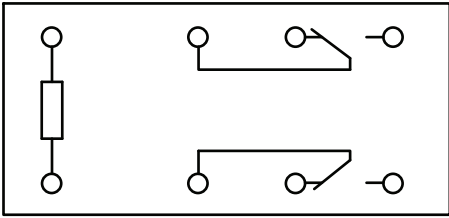
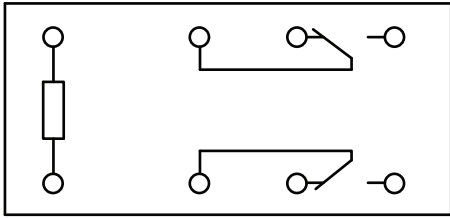
# UL Recognized Relays

J100	J102	J103
<ul style="list-style-type: none"> <li>• Switching Capacity up to 10A</li> <li>• Small Size &amp; Light Weight</li> <li>• Low Coil Power Consumption</li> <li>• High Contact Load</li> <li>• Agency Approval : E197851</li> </ul>	<ul style="list-style-type: none"> <li>• High Sensitivity &amp; Super Light Weight</li> <li>• Low Coil Power Consumption</li> <li>• PC Board Mounting</li> <li>• Ideal for High Density Mounting</li> <li>• Agency Approval : E197851</li> </ul>	<ul style="list-style-type: none"> <li>• Low Coil Power Consumption</li> <li>• High Sensitivity, Small Size &amp; Light Weight</li> <li>• Conforms to FCC Part 68</li> <li>• PC Board Mounting</li> <li>• Agency Approval : E197851</li> </ul>
18.3 x 10.3 x 15.5	15.5 x 10.5 x 11.25	12.5 x 7.5 x 10.0
1A	1A, 1B, 1C	1C
AgSnO <sub>2</sub>	AgNi + Au, Ag + Au	Ag + Au
10A @ 120VAC Resistive, 10K cycles 10A @ 277VAC Resistive, 10K cycles 5A @ 240VAC Resistive, 10K cycles 3A @ 30VDC Resistive, 10K cycles TV-5 @ 120VAC, 25K cycles 1/4hp @ 120/240/277VAC, 6K cycles	AgNi 3A & 5A @ 125VAC General Purpose 3A & 5A @ 30VDC Resistive  Ag 1A & 3A @ 125VAC General Purpose 1A & 3A @ 30VDC Resistive Pilot Duty 270VA, 120VAC	2A @ 120VAC Resistive 2A @ 24VDC Resistive
3 ~ 48VDC	3 ~ 24VDC	3 ~ 24VDC
.20W, .45W	.20W, .36W & .45W	.15W & .20W
< 50m Ω	< 50m Ω	< 50m Ω
100M Ω @ 500VDC	100M Ω @ 500VDC	100M Ω @ 500VDC
100K cycles	100K cycles	100K cycles
10M cycles	10M cycles	5M cycles
1000V rms 4000V rms	500V rms 1250V rms	1000V rms 1500V rms
-55°C to 125°C	-40°C to 85°C	-40°C to 85°C
PC Pin	PC Pin	PC Pin

Specifications and availability subject to change without notice.

Dimensions shown in mm. Dimensions are shown for reference purposes only.

# UL Recognized Relays

Series Number	J104A	J104B
Appearance		
Features	<ul style="list-style-type: none"> <li>• Bifurcated Contacts for High Reliability</li> <li>• High Sensitivity &amp; Light Weight</li> <li>• Bifurcated Contacts</li> <li>• Conforms to FCC Part 68</li> <li>• Agency Approval : E197851</li> </ul> 	<ul style="list-style-type: none"> <li>• Bifurcated Contacts for High Reliability</li> <li>• High Sensitivity &amp; Light Weight</li> <li>• Bifurcated Contacts</li> <li>• Conforms to FCC Part 68</li> <li>• Agency Approval : E197851</li> </ul> 
Dimensions (L x W x H mm)	20.0 x 9.8 x 10.8	20.0 x 9.8 x 10.8
Contact Arrangement	2C	2C
Contact Material	AgNi + Au Clad	AgNi + Au Clad
Contact Ratings	2A @ 30VDC Resistive 3A @ 30VDC NO Resistive .6A @ 125VAC Resistive	2A @ 30VDC Resistive 3A @ 30VDC NO Resistive .6A @ 125VAC Resistive
Coil Voltage Options	3 ~ 48VDC	3 ~ 48VDC
Coil Power Options	.40W & .55W	.15W & .20W
Contact Resistance	< 50m Ω	< 50m Ω
Insulation Resistance	100M Ω @ 500VDC	100M Ω @ 500VDC
Electrical Life	500K cycles	500K cycles
Mechanical Life	100M cycles	100M cycles
Dielectric Strength	Contact to Contact 1000V rms Contact to Coil 1500V rms	1000V rms 1500V rms
Operating Temperature	-40°C to 85°C	-40°C to 85°C
Mounting Methods	PC Pin	PC Pin
PC Board Layouts		
Schematics		

Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.





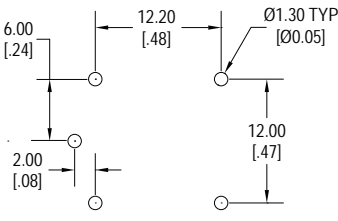
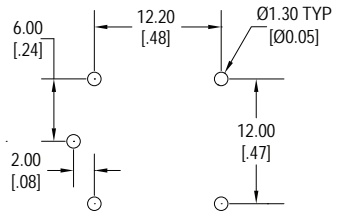
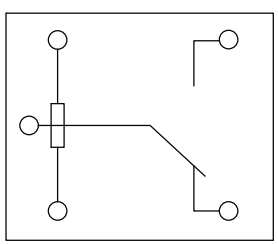
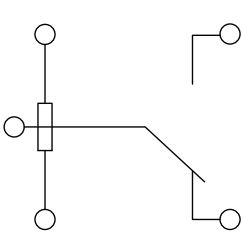
# UL Recognized Relays

J104C	J104D	J105D
<ul style="list-style-type: none"> <li>Standard Contacts - Low Cost Version</li> <li>High Sensitivity &amp; Light Weight</li> <li>Bifurcated Contacts</li> <li>Conforms to FCC Part 68</li> <li>Agency Approval : E197851</li> </ul>	<ul style="list-style-type: none"> <li>High Sensitivity, Low Cost</li> <li>Clearance &gt;1.2mm Between Coil and Contacts</li> <li>Creepage &gt;1.9mm Between Coil and Contacts</li> <li>Bifurcated Contacts for High Reliability</li> <li>Agency Approval : E197851</li> </ul>	<ul style="list-style-type: none"> <li>Switch Capacity up to 10A</li> <li>Small Size, Light Weight</li> <li>Low Coil Power Consumption</li> <li>High Contact Load</li> <li>Agency Approval : E198751</li> </ul>
21.0 x 9.8 x 10.8	20.4 x 10.1 x 11.0	20.6 x 10.2 x 15.8
2C	2C	1A, 1C
Ag	AgNi + Au Clad	AgSnO <sub>2</sub>
1A @ 24VDC Resistive 1A @ 125VAC Resistive	2A @ 24VDC Resistive 1A @ 120VAC Resistive	NO : 10A @ 120VAC Resistive ; 10A @ 277VAC Resistive; 5A @ 240VAC Resistive 3A @ 30VDC Resistive; TV-5 @ 120VAC; ¼ hp @ 120/240/277VAC  NC : 10A @ 120VAC Resistive; 5A @ 240VAC Resistive; 3A @ 30VDC Resistive; ¼ hp @ 120/240/277VAC
3 ~ 48VDC	3 ~ 48VDC	3 ~ 48VDC
.20W , .36W & .51W	.15W, .20W, .36W & .45W	.20W & .45W
< 50m Ω	< 50m Ω	< 50m Ω
100M Ω @ 500VDC	100M Ω @ 500VDC	100M Ω @ 500VDC
500K cycles	100K cycles	100K cycles
100M cycles	100M cycles	10M cycles
500V rms 1000V rms	500V rms 1000V rms	1000V rms 4000V rms
-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
PC Pin	PC Pin	PC Pin

Specifications and availability subject to change without notice.

Dimensions shown in mm. Dimensions are shown for reference purposes only.

# UL Recognized Relays

Series Number	J107E3	J107F
Appearance		
Features	<ul style="list-style-type: none"> <li>• 10A Economical Version</li> <li>• PC Board Mounting</li> <li>• Small Size, Light Weight</li> <li>• Agency Approval : E198751</li> </ul> 	<ul style="list-style-type: none"> <li>• F Class Insulation Standard</li> <li>• Small Size, Light Weight</li> <li>• PC Board Mounting</li> <li>• Agency Approval : E198751</li> </ul> 
Dimensions (L x W x H mm)	19.0 x 15.5 x 15.3	19.0 x 15.5 x 15.3
Contact Arrangement	1A, 1B, 1C	1A, 1B, 1C
Contact Material	AgSnO <sub>2</sub>	AgSnO <sub>2</sub>
Contact Ratings	10A @ 250VAC 10A @ 30VDC	20A Contact 20A @ 16VDC / 125VAC General Purpose 10A @ 250VAC General Purpose 1/3hp @ 125VAC / 277VAC 15A Contact 15A @ 125VAC General Purpose 6A @ 227VAC General Purpose 12A Contact 12A @ 125VAC / 28VDC General Purpose
Coil Voltage Options	3 ~ 48VDC	3 ~ 48VDC
Coil Power Options	.36W & .45W	.36W, .45W & .80W
Contact Resistance	< 50m Ω	< 50m Ω
Insulation Resistance	100M Ω @ 500VDC	100M Ω @ 500VDC
Electrical Life	100K cycles	100K cycles
Mechanical Life	10M cycles	10M cycles
Dielectric Strength Contact to Contact Contact to Coil	750V rms 1500V rms	750V rms 1500V rms
Operating Temperature	-40°C to 85°C	-55°C to 125°C
Mounting Methods	PC Pin	PC Pin
PC Board Layouts		
Schematics		

Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.



# UL Recognized Relays

## J109F

## J113



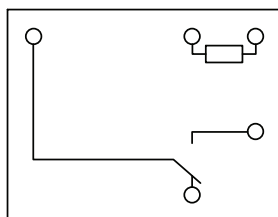
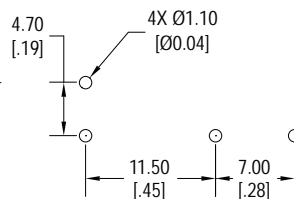
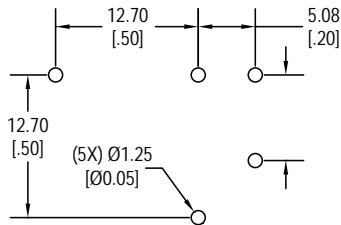
- F Class Insulation Standard
- Small Size, Light Weight
- PC Board Mounting
- Agency Approval : E198751



- Small Size, Light Weight
- Low Power Consumption
- High Density Mounting, Narrow Width: 7.1mm
- UL / cUL Certified
- Agency Approval : E198751



22.3 x 17.3 x 14.5	20.5 x 7.1 x 15.2
1A, 1B, 1C	1A
AgSnO <sub>2</sub>	AgNi
10A Contact 6A @ 28VDC & 300VAC Resistive 10A @ 28VDC & 125VAC General Purpose	5A @ 277VAC Resistive, 100k cycles 5A @ 30VDC Resistive, 100k cycles
12A Contact 12A @ 28VDC & 125VAC General Purpose 1/3hp @ 120VAC & 240VAC	
5 ~ 48VDC	5VDC, 12VDC, 18VDC, 24VDC
.36W, .45W, .50W & .80W	.20W
< 50m Ω	< 50m Ω
100M Ω @ 500VDC	100M Ω @ 500VDC
100K cycles	100K cycles
10M cycles	500K cycles
1000V rms 2500V rms	750V rms 4000V rms
-55°C to 125°C	-40°C to 85°C
PC Pin	PC Pin





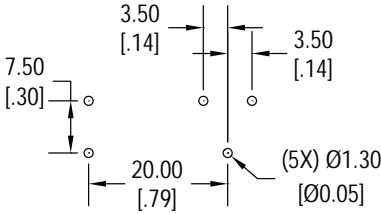
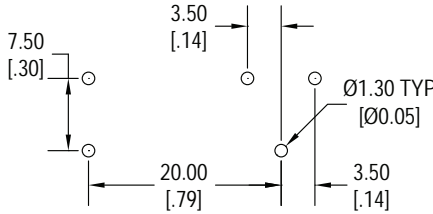
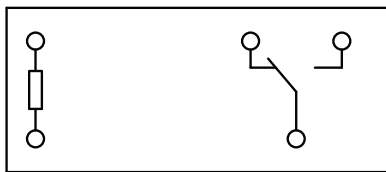
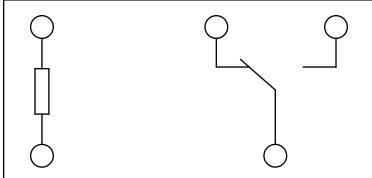


J115F 50amp Series  
UL approved  
Heavy contact load  
Economical

Specifications and availability subject to change without notice.

Dimensions shown in mm. Dimensions are shown for reference purposes only.

# UL Recognized Relays

Series Number	J114AF	J114FL
Appearance		
Features	<ul style="list-style-type: none"> <li>Switching Capacity up to 16A</li> <li>20mm Height</li> <li>UL / cUL Certified</li> <li>F Class Insulation Standard</li> <li>Agency Approval : E198751</li> </ul> 	<ul style="list-style-type: none"> <li>Switching Capacity up to 16A</li> <li>Low Profile : 15.7mm</li> <li>F Class Insulation Standard</li> <li>UL / cUL Certified</li> <li>Agency Approval : E198751</li> </ul> 
Dimensions (L x W x H mm)	29.0 x 12.7 x 20.0	29.2 x 13.2 x 15.7
Contact Arrangement	1A, 1C, 2A, 2C	1A, 1C, 2A, 2C
Contact Material	AgSnO <sub>2</sub>	AgSnO <sub>2</sub>
Contact Ratings	1A & 1C : 16A @ 250VAC, 30VDC Resistive, 70°C 1AH & 1CH : 16A @ 240VAC, 30VDC Resistive 2A & 2C : 8A @ 250VAC Resistive, 70°C 2A & 2C : 8A @ 30VDC Resistive, 70°C	12A @ 250VAC, 30VDC General Purpose, 85°C 16A @ 250VAC, 30VDC General Purpose, 85°C 8A @ 277VAC, 30VDC General Purpose, 85°C
Coil Voltage Options	3 ~ 48VDC	5 ~ 48VDC
Coil Power Options	.53W & .72W	.41W
Contact Resistance	< 50m Ω	< 50m Ω
Insulation Resistance	100M Ω @ 500VDC	100M Ω @ 500VDC
Electrical Life	100K cycles	100K cycles
Mechanical Life	10M cycles	10M cycles
Dielectric Strength	Contact to Contact Contact to Coil	Contact to Contact Contact to Coil
Operating Temperature	-55°C to 105°C	-55°C to 105°C
Mounting Methods	PC Pin	PC Pin
PC Board Layouts		
Schematics		

Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.

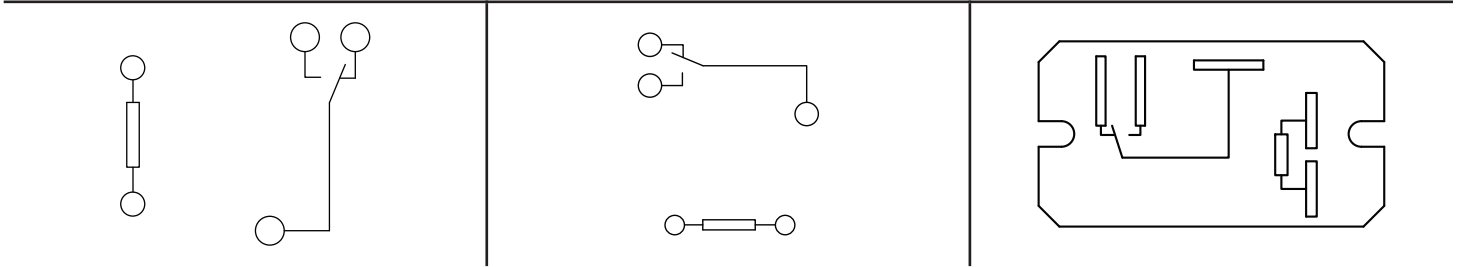
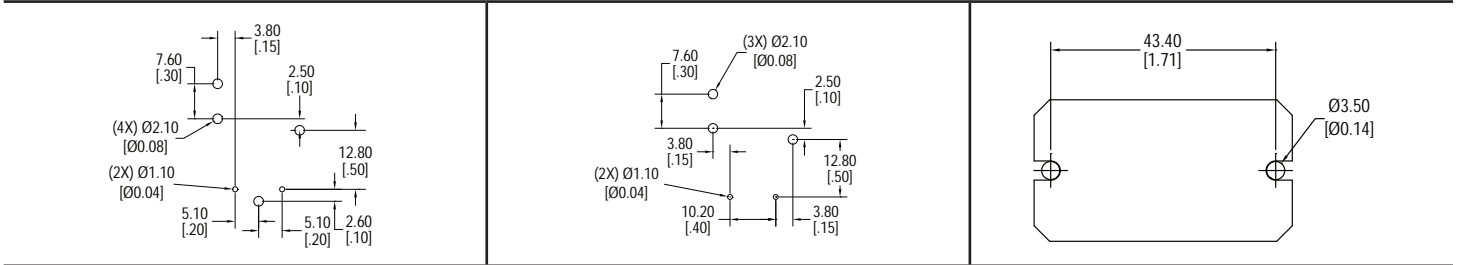
# UL Recognized Relays

J115F1	J115F2	J115F3
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- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"> <li>• F Class Insulation Standard</li> <li>• Small Size, Light Weight</li> <li>• Heavy Contact Load</li> <li>• Strong Shock &amp; Vibration Resistance</li> <li>• Agency Approval : E198752 &amp; TÜV</li> </ul> | <ul style="list-style-type: none"> <li>• F Class Insulation Standard</li> <li>• Small Size, Light Weight</li> <li>• Heavy Contact Load</li> <li>• Strong Shock &amp; Vibration Resistance</li> <li>• Agency Approval : E198752 &amp; TÜV</li> </ul> | <ul style="list-style-type: none"> <li>• F Class Insulation Standard</li> <li>• Small Size, Light Weight</li> <li>• Heavy Contact Load</li> <li>• Strong Shock &amp; Vibration Resistance</li> <li>• Agency Approval : E198752 &amp; TÜV</li> </ul> |
|---|---|---|





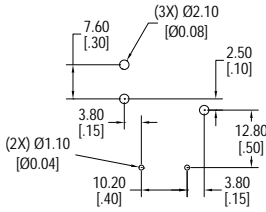
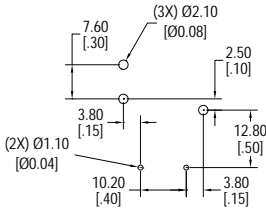
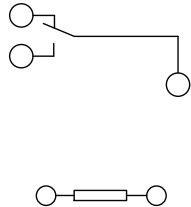
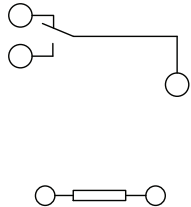
31.7 x 26.9 x 20.3	31.9 x 26.8 x 28.1	32.4 (50.0) x 26.8 x 28.1
1A, 1B, 1C	1A, 1B, 1C	1A, 1B, 1C
AgSnO <sub>2</sub> , AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>	AgSnO <sub>2</sub> , AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>	AgSnO <sub>2</sub> , AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>
NO : 40A @ 240VAC Resistive; 20A @ 240VAC Resistive, 250k cycles 30A @ 277VAC General Purpose; 25A @ 277VAC Resistive, 100k cycles; 5A @ 280VAC Ballast; 2hp @ 250VAC 1hp @ 125VAC, 50K cycles, 40°C	NO : 40A @ 240VAC Resistive; 20A @ 240VAC Resistive, 250k cycles 30A @ 277VAC General Purpose; 25A @ 277VAC Resistive, 100k cycles; 5A @ 280VAC Ballast; 2hp @ 250VAC 1hp @ 125VAC, 50K cycles 40°C	NO : 40A @ 240VAC Resistive; 20A @ 240VAC Resistive, 250k cycles 30A @ 277VAC General Purpose; 25A @ 277VAC Resistive, 100k cycles; 5A @ 280VAC Ballast; 2hp @ 250VAC 1hp @ 125VAC, 50K cycles 40°C
NC : 30A @ 240VAC Resistive; 20A @ 240VAC General Purpose; 20A @ 277VAC General Purpose; 30A @ 30VDC Resistive; 5A @ 280VAC Ballast; 1 1/2hp @ 250VAC 1hp @ 125VAC, 50K cycles 40°C	NC : 30A @ 240VAC Resistive; 20A @ 240VAC General Purpose; 20A @ 277VAC General Purpose; 30A @ 30VDC Resistive; 5A @ 280VAC Ballast; 1 1/2hp @ 250VAC 1hp @ 125VAC, 50K cycles 40°C	NC : 30A @ 240VAC Resistive; 20A @ 240VAC General Purpose; 20A @ 277VAC General Purpose; 30A @ 30VDC Resistive; 5A @ 280VAC Ballast; 1 1/2hp @ 250VAC 1hp @ 125VAC, 50K cycles 40°C
5 ~ 110VDC & 12 ~ 277VAC	5 ~ 110VDC & 12 ~ 277VAC	5 ~ 110VDC & 12 ~ 277VAC
DC : .60W & .90W AC : 2VA	DC : .60W & .90W AC : 2VA	DC : .60W & .90W AC : 2VA
< 30m Ω	< 30m Ω	< 30m Ω
1000M Ω @ 500VDC	1000M Ω @ 500VDC	1000M Ω @ 500VDC
100K cycles	100K cycles	100K cycles
10M cycles	10M cycles	10M cycles
1500V rms 4000V rms & 2500V rms	1500V rms 2500V rms	1500V rms 2500V rms
-55°C to 125°C	-55°C to 125°C	-55°C to 125°C
PC Pin	PC Pin	Panel Mount



Specifications and availability subject to change without notice.

Dimensions shown in mm. Dimensions are shown for reference purposes only.

# UL Recognized Relays

Series Number	J115F_E	J115F_50amp
Appearance		
Features	<ul style="list-style-type: none"> <li>• 30A Economical Version</li> <li>• Small Size, Light Weight</li> <li>• Low Coil Power Consumption</li> <li>• Strong Shock &amp; Vibration Resistance</li> <li>• Agency Approval : E198752 &amp; TÜV </li> </ul>	<ul style="list-style-type: none"> <li>• 50A Economical Version</li> <li>• Small Size, Light Weight</li> <li>• Low Coil Power Consumption</li> <li>• Heavy Contact Load</li> <li>• Agency Approval : E198752 </li> </ul>
Dimensions (L x W x H mm)	31.7 x 26.9 x 20.3	21.5 x 15.8 x 16.5
Contact Arrangement	1A, 1B, 1C	1A, 1B, 1C
Contact Material	AgSnO <sub>2</sub> , AgCdO	AgSnO <sub>2</sub> , AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>
Contact Ratings	TÜV NO : 30A @ 240VAC; 14VDC NC : 20A @ 240VAC; 14VDC  UL Rating NO : 30A @ 240VAC Resistive NC : 20A @ 240VAC Resistive	NO : 50A @ 240VAC Resistive, 10k cycles NC : 35A @ 240VAC Resistive, 10k cycles
Coil Voltage Options	5 ~ 110VDC	5 ~ 110VDC
Coil Power Options	.60W & .90W	1.5W
Contact Resistance	< 30m Ω	< 30m Ω
Insulation Resistance	1000M Ω @ 500VDC	1000M Ω @ 500VDC
Electrical Life	100K cycles	100K cycles
Mechanical Life	10M cycles	10M cycles
Dielectric Strength Contact to Contact Contact to Coil	1500V rms 4000V rms or 2500V rms	1500V rms 4000V rms or 2500V rms
Operating Temperature	-55°C to 125°C	-55°C to 125°C
Mounting Methods	PC Pin, Panel Mount	PC Pin, Panel Mount
PC Board Layouts		
Schematics		

Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.





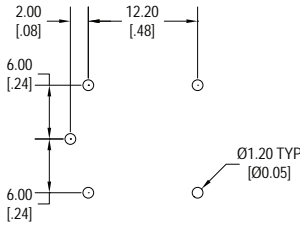
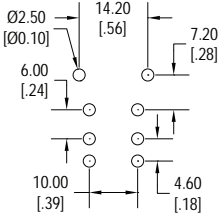
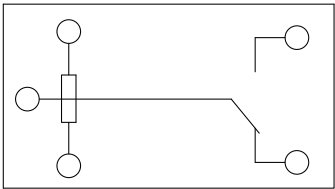
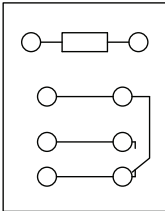
# UL Recognized Relays

J117F	J118	J120D
<ul style="list-style-type: none"> <li>F Class Insulation Standard</li> <li>Low Profile : 12.3mm, Narrow Width</li> <li>High Dielectric Strength</li> <li>Creepage &gt; 8mm Between Coil and Contacts</li> <li>Agency Approval : E198751 </li> </ul>	<ul style="list-style-type: none"> <li>Low Coil Power Consumption</li> <li>Small Size, Light Weight</li> <li>PC Board Mounting</li> <li>Wide Range of Applications</li> <li>Agency Approval : E198752 </li> </ul>	<ul style="list-style-type: none"> <li>Switching Capacity up to 20A</li> <li>PC Pins and Quick Connect Terminals</li> <li>Strong Resistance to Shock &amp; Vibration</li> <li>Designed to Withstand High In-Rush</li> <li>Agency Approval : E198751 </li> </ul>
28.5 x 10.1 x 12.3	15.5 x 12.2 x 13.8	30.0 x 15.5 x 23.3 (33.0)
1A, 1C	1A, 1B, 1C	1A
AgSnO <sub>2</sub>	AgSnO <sub>2</sub>	AgSnO <sub>2</sub>
8A @ 250VAC 8A @ 30VDC 100K Cycles at 70°C Ambient	NO : 10A @ 120VAC Resistive 20A @ 14VDC Resistive NC : 10A @ 14VDC Resistive 1/2hp @ 125VAC TV-5 @ 120VAC	20A @ 250VAC General Purpose
5 ~ 24VDC	9 ~ 24VDC	5 ~ 48VDC
.22W	.60W & .80W	.90W
< 50m Ω	< 50m Ω	< 50m Ω
100M Ω @ 500VDC	100M Ω @ 500VDC	100M Ω @ 500VDC
100K cycles	100K cycles	100K cycles
10M cycles	10M cycles	10M cycles
1000V rms 5000V rms	500V rms 500V rms	1500V rms 4500V rms
-55°C to 125°C	-40°C to 85°C	-30°C to 55°C
PC Pin	PC Pin	PC Pin, Quick Connect

Specifications and availability subject to change without notice.

Dimensions shown in mm. Dimensions are shown for reference purposes only.

# UL Recognized Relays

Series Number	J123F	J151		
Appearance				
Features	<ul style="list-style-type: none"> <li>• F Class Insulation Standard</li> <li>• Small Size, Light Weight</li> <li>• Capable of Handling 1000W Lamp Loads</li> <li>• Designed to Withstand High In-Rush</li> <li>• Agency Approval : E198752 </li> </ul>	<ul style="list-style-type: none"> <li>• Switching Capacity up to 20A</li> <li>• Low Coil Power Consumption</li> <li>• High Contact Load</li> <li>• Strong Resistance to Shock &amp; Vibration</li> <li>• Agency Approval : E198752 </li> </ul>		
Dimensions (L x W x H mm)	19.5 x 16.1 x 17.1	21.6, 30.6, 40.6 x 27.6 x 35.0		
Contact Arrangement	1A, 1C	1A, 2A, 3A, 4A, 1B, 2B, 3B, 4B, 1C, 2C, 3C, 4C		
Contact Material	AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>	AgCdO		
Contact Ratings	20A @ 125VAC 16A @ 277VAC 10A @ 250VAC General Purpose, 20k, 85°C 1hp @ 125/250 NO 1/2hp @ 125/250 NC TV-8 @ 120VAC	<table border="0"> <tr> <td>1 Pole 20A @ 277VAC General 20A @ 28VDC General</td> <td>2, 3 &amp; 4 Pole 12A @ 250VAC General 12A @ 28VDC General 10A @ 277VAC General 1/2hp @ 125VAC</td> </tr> </table>	1 Pole 20A @ 277VAC General 20A @ 28VDC General	2, 3 & 4 Pole 12A @ 250VAC General 12A @ 28VDC General 10A @ 277VAC General 1/2hp @ 125VAC
1 Pole 20A @ 277VAC General 20A @ 28VDC General	2, 3 & 4 Pole 12A @ 250VAC General 12A @ 28VDC General 10A @ 277VAC General 1/2hp @ 125VAC			
Coil Voltage Options	5 ~ 48VDC	12 ~ 220VDC & 12 ~ 240VAC		
Coil Power Options	.36W & .45W	DC : .9W, 1.4W & 1.5W & AC : 1.2VA, 2VA & 2.5VA		
Contact Resistance	< 50m Ω	< 50m Ω		
Insulation Resistance	100M Ω @ 500VDC	100M Ω @ 500VDC		
Electrical Life	100K cycles	100K cycles		
Mechanical Life	10M cycles	10M or 20M cycles		
Dielectric Strength	Contact to Contact 1500V rms Contact to Coil 2500V rms	1500V rms 1500V rms		
Operating Temperature	-55°C to 125°C	-40°C to 85°C		
Mounting Methods	PC Pin	PC Pin, Solder Lug		
PC Board Layouts				
Schematics				

Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.


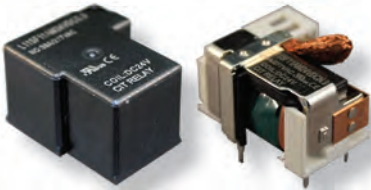


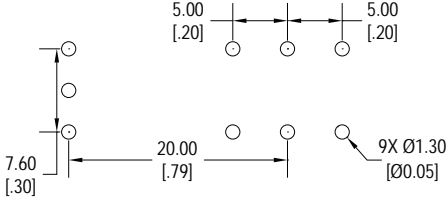
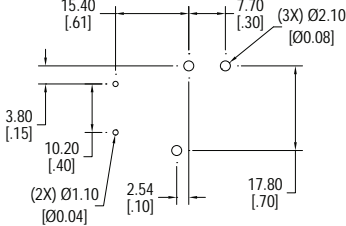
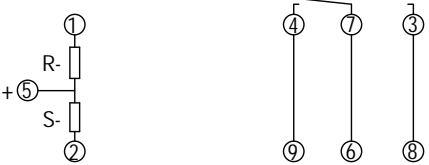
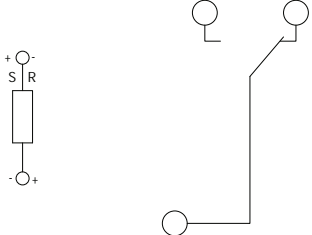
# UL Recognized Relays

J152		J850 & J850SM	J860
<ul style="list-style-type: none"> <li>Switching Capacity up to 10A</li> <li>Low Coil Power Consumption</li> <li>High Contact Load</li> <li>Strong Resistance to Shock &amp; Vibration</li> <li>Agency Approval : E198751</li> </ul>		<ul style="list-style-type: none"> <li>Monostable</li> <li>Conforms to FCC Part 68</li> <li>Ultra Low Profile : 4.90mm Height</li> <li>Agency Approval : E198751</li> </ul>	
27.0 x 21.0 x 35.0		14.0 x 9.0 x 4.9	
2A, 3A, 4A, 2B, 3B, 4B, 2C, 3C, 4C		2C	
AgCdO		AgPd Stationary Contact, Au Plated	
UL Rating: 2 & 3 Pole 10A @ 220VAC General 10A @ 28VDC General		1A @ 30VDC Resistive .5A @ 125VAC Resistive	
UL Rating: 4 Pole 5A @ 220VAC General 5A @ 28VDC General		2A @ 30VDC .5A @ 125VAC	
TÜV Rating: 2 Pole 5A @ 220VAC, 28VDC			
12 ~ 110VDC & 12 ~ 220VAC		3 ~ 24VDC	
DC : .90W & AC : 1.2W		.14W & .20W	
< 50m Ω		< 50m Ω	
100M Ω @ 500VDC		100M Ω @ 500VDC	
500K, 200K or 100K cycles		200K cycles	
20M or 10M cycles		100M cycles	
1500V rms 1500V rms		1000V rms 1000V rms	
-40°C to 85°C		-40°C to 85°C	
PC Pin, Solder Lug		PC Pin	

Specifications and availability subject to change without notice.

Dimensions shown in mm. Dimensions are shown for reference purposes only.

# Latching Relays

Series Number	L114FL	L115F1
Appearance		
Features	<ul style="list-style-type: none"> <li>• Single Coil or Double Coil Latching</li> <li>• Creepage Distance 8.4mm</li> <li>• Heavy Contact Load</li> <li>• Strong Shock &amp; Vibration Resistance</li> <li>• Agency Approval : E198751 </li> </ul>	<ul style="list-style-type: none"> <li>• Single Coil Latching</li> <li>• UL F Class Rated Standard</li> <li>• Heavy Contact Load</li> <li>• Strong Shock &amp; Vibration Resistance</li> <li>• Agency Approval : E198752 </li> </ul>
Dimensions (L x W x H mm)	29.0 x 12.7 x 15.7	26.9 x 31.7 x 20.3
Contact Arrangement	1A, 1C	1A, 1B, 1C
Contact Material	AgSnO <sub>2</sub> , AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>	AgSnO <sub>2</sub> , AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>
Contact Ratings	NO : 16A @ 240VAC Resistive; 50k cycles; 85°C ambient NC : 16A @ 240VAC Resistive; 50k cycles; 85°C ambient	NO : 30A @ 277VAC Resistive; 6k cycles; 25°C ambient 40A @ 277VAC Resistive; 6k cycles; 25°C ambient 50A @ 277VAC Resistive; 6k cycles; 25°C ambient NC : 30A @ 277VAC Resistive; 6k cycles; 25°C ambient 40A @ 277VAC Resistive; 6k cycles; 25°C ambient 50A @ 277VAC Resistive; 6k cycles; 25°C ambient
Coil Voltage Options	3 ~ 24VDC	5 ~ 48VDC
Coil Power Options	.40W & .60W	.90W & 1.50W
Contact Resistance	< 50m Ω	< 50m Ω
Insulation Resistance	1000M Ω @ 500VDC	1000M Ω @ 500VDC
Electrical Life	50K cycles	50K cycles
Mechanical Life	500K cycles	1M cycles
Dielectric Strength	Contact to Contact Contact to Coil	Contact to Contact Contact to Coil
Operating Temperature	-40°C to 85°C	-55°C to 125°C
Mounting Methods	PC Pin	PC Pin
PC Board Layouts		
Schematics		

Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.



# Latching Relays

## L115F2



- Single Coil Latching
- UL F Class Rated Standard
- Heavy Contact Load
- Strong Shock & Vibration Resistance
- Agency Approval : E198752



31.9 x 26.8 x 28.1

1A, 1B, 1C

AgSnO<sub>2</sub>, AgSnO<sub>2</sub>In<sub>2</sub>O<sub>3</sub>

NO : 30A @ 277VAC Resistive; 6k cycles; 25°C ambient  
 40A @ 277VAC Resistive; 6k cycles; 25°C ambient  
 50A @ 277VAC Resistive; 6k cycles; 25°C ambient  
 NC : 30A @ 277VAC Resistive; 6k cycles; 25°C ambient  
 40A @ 277VAC Resistive; 6k cycles; 25°C ambient  
 50A @ 277VAC Resistive; 6k cycles; 25°C ambient

5 ~ 48VDC

.90W & 1.50W

< 50m Ω

1000M Ω @ 500VDC

50K cycles

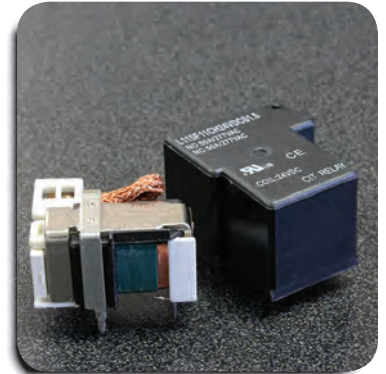
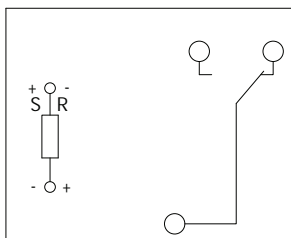
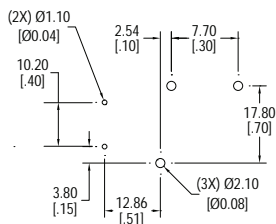
1M cycles

1500V rms

2500V rms

-55°C to 125°C

PC Pin





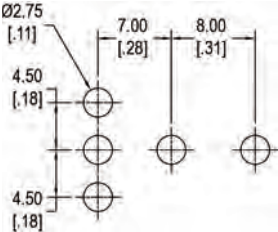
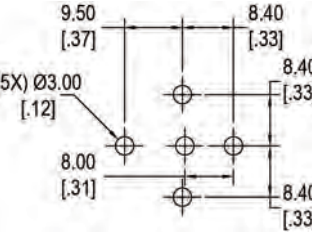
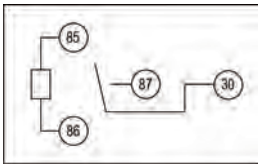
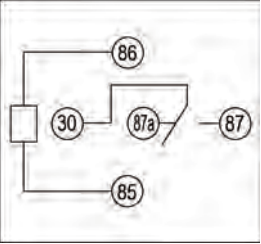
Latching Relays  
 UL approved; maintains  
 its contact position  
 after the coil power has  
 been removed



Specifications and availability subject to change without notice.

Dimensions shown in mm. Dimensions are shown for reference purposes only.

# Automotive Relays

Series Number	A1 & A1M	A2
Appearance		
Features	<ul style="list-style-type: none"> <li>Switching Capacity up to 30A</li> <li>Suitable for Automobile &amp; Lamp Accessories</li> <li>PCB Pin &amp; Quick Connect Mounting</li> </ul>	<ul style="list-style-type: none"> <li>Large Switching Capacity up to 40A</li> <li>PCB Pin &amp; Quick Connect Mounting</li> <li>Suitable for Automotive &amp; Lamp Accessories</li> <li>Two Style Mounting Flange Available</li> </ul>
Dimensions (L x W x H mm)	22.8 x 15.3 x 25.8 / 20.0 x 15.2 x 22.0	26.0 x 26.0 x 24.5 (39.5)
Contact Arrangement	1A, 1C / 1A, 1B	1A, 1B, 1C
Contact Material	AgSnO <sub>2</sub>	
Contact Ratings	1A : 25A @ 14VDC 30A @ 14VDC 1C : 20A @ 14VDC	1A : 20A @ 14VDC 1B : 15A @ 14VDC 1A : 40A @ 14VDC 1B : 30A @ 14VDC 1C : 40A @ 14VDC NO 30A @ 14VDC NC
Coil Voltage Options	6 ~ 48VDC / 12VDC & 24VDC	6 ~ 48VDC
Coil Power Options	1.2W & 1.5W / 1.16W	1.6W & 1.9W
Contact Resistance	< 50m Ω	< 30m Ω
Insulation Resistance	100M Ω @ 500VDC	100M Ω @ 500VDC
Electrical Life	100K cycles	100K cycles
Mechanical Life	10M cycles	10M cycles
Dielectric Strength	Contact to Contact Contact to Coil	1500V rms / 1000V rms 2500V rms / 1500V rms
Operating Temperature	-40°C to 85°C	-40°C to 125°C
Mounting Methods	PC Pin, Quick Connect	PC Pin, Quick Connect
PC Board Layouts		
Schematics		

Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.



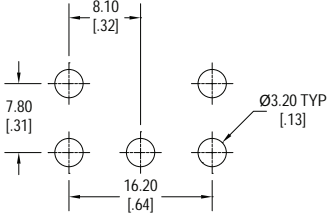
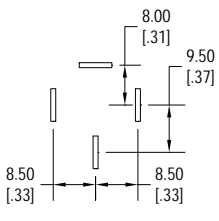
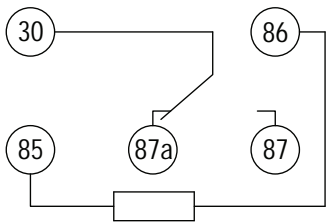
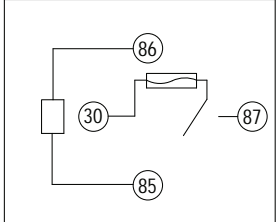
# Automotive Relays

A3		A4	A5	
<ul style="list-style-type: none"> <li>• Large Switch Capacity up to 80A</li> <li>• PCB Pin &amp; Quick Connect Mounting</li> <li>• Suitable for Automotive &amp; Lamp Accessories</li> <li>• QS-9000, ISO-9002 Certified Manufacturing</li> </ul>		<ul style="list-style-type: none"> <li>• Low Coil Power Consumption</li> <li>• Switching Current up to 20A</li> <li>• Dual Relay Available</li> <li>• Suitable for Household Appliances &amp; Automotive Applications</li> </ul>	<ul style="list-style-type: none"> <li>• Switching Capacity up to 40A</li> <li>• Small Size, Light Weight</li> <li>• Suitable for Automotive &amp; Lamp Accessories</li> <li>• Two Footprint Styles Available</li> </ul>	
28.5 x 28.5 x 26.5 (40.0)		16.9 x 14.5 (29.7) x 19.5	25.8 x 20.5 x 20.8	
1A, 1B, 1C, 1U		1A, 1C, 1U, 1W, 2A, 2C, 2U, 2W	1A, 1B, 1C	
AgSnO <sub>2</sub> /In <sub>2</sub> O <sub>3</sub>		AgSnO <sub>2</sub>	AgSnO <sub>2</sub>	
Standard 1A : 60A @ 14VDC 1B : 40A @ 14VDC 1C : 60A @ 14VDC NO 40A @ 14VDC NC 1U : 2x25A @ 14VDC	Heavy Duty 1A : 80A @ 14VDC 1B : 70A @ 14VDC 1C : 80A @ 14VDC NO 70A @ 14VDC NC 1U : 2x25A @ 14VDC	1A, 1C, 2A, 2C : 10A @ 120VAC 10A @ 28VDC 20A @ 14VDC 1U, 1W, 2U, 2W : 2x10A @ 120VAC 2x10A @ 28VDC 2x20A @ 14VDC	1A : 40A @ 14VDC 20A @ 120VAC 15A @ 28VDC 1B : 30A @ 14VDC 20A @ 120VAC 15A @ 28VDC	1C : 40A @ 14VDC 30A @ 14VDC 20A @ 120VAC 15A @ 28VDC
12VDC & 24VDC		12VDC & 24VDC	9 ~ 24VDC	
1.8W		1.0W	1.6W & 1.9W	
< 30m Ω		< 30m Ω	< 50m Ω	
100M Ω @ 500VDC		100M Ω @ 500VDC	100M Ω @ 500VDC	
100K cycles		100K cycles	100K cycles	
10M cycles		10M cycles	10M cycles	
500V rms 500V rms		750V rms 1500V rms	500V rms 750V rms	
-40°C to 125°C		-40°C to 85°C	-40°C to 85°C	
PC Pin, Quick Connect		PC Pin	PC Pin	

Specifications and availability subject to change without notice.

Dimensions shown in mm. Dimensions are shown for reference purposes only.

# Automotive Relays

Series Number	A6	A9
Appearance		
Features	<ul style="list-style-type: none"> <li>• Low Coil Power Consumption</li> <li>• Small Size, Light Weight</li> <li>• Switching Current up to 30A</li> <li>• Suitable for Household Appliances and Automotive Applications</li> </ul>	<ul style="list-style-type: none"> <li>• Switching Capacity up to 40A</li> <li>• Accomodates Standard Sized Automotive Fuse</li> <li>• Insert Mounting Footprint</li> <li>• Metal Mounting Tab</li> </ul>
Dimensions (L x W x H mm)	22.5 x 15.0 x 25.2	35.5 x 25.5 x 21.0
Contact Arrangement	1A, 1C	1A
Contact Material	AgSnO <sub>2</sub>	AgSnO <sub>2</sub>
Contact Ratings	1A : 30A @ 14VDC 1C : 30A @ 14VDC NO 20A @ 14VDC NC	40A @ 14VDC
Coil Voltage Options	12VDC & 24VDC	12VDC & 24VDC
Coil Power Options	.9W & 1.3W	1.8W
Contact Resistance	< 50m Ω	< 50m Ω
Insulation Resistance	100M Ω @ 500VDC	100M Ω @ 500VDC
Electrical Life	100K cycles	100K cycles
Mechanical Life	10M cycles	10M cycles
Dielectric Strength	Contact to Contact 500V rms Contact to Coil 500V rms	500V rms 750V rms
Operating Temperature	-40°C to 85°C	-40°C to 85°C
Mounting Methods	PC Pin	Quick Connect
PC Board Layouts		
Schematics		

Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.

# Automotive Relays

A10	A16	A17
<ul style="list-style-type: none"> <li>Switching Capacity up to 30A</li> <li>Dual Relay Available</li> <li>Withstands High Temperature</li> <li>PC Pin Mounting</li> <li>Ultra Light Weight - 4g</li> </ul>	<ul style="list-style-type: none"> <li>Small Size, Light Weight</li> <li>25A Switching Capacity</li> <li>F Class Insulation Standard</li> <li>QS-9000, ISA-9002 Certified Manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>Switching Capacity up to 30A</li> <li>Small Size and Light Weight</li> <li>Suitable for Automotive &amp; Lamp Accessories</li> </ul>
12.0 (23.8) x 12.9 x 9.9	14.5 x 7.7 x 13.7	16.5 x 15.5 x 24.3
1A, 1C, 2A, 2C	1C	1A
AgSnO <sub>2</sub>	AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>	AgSnO <sub>2</sub>
1A : 25A, 30A @ 14VDC 1C : 25A, 30A @ 14VDC NO 20A, 25A @ 14VDC NC 2A : 25A, 30A @ 14VDC 2C : 25A, 30A @ 14VDC NO 20A, 25A @ 14VDC NC	25A @ 14VDC	20A @ 14VDC NO 30A @ 14VDC NO
5 ~ 24VDC	12VDC	12VDC & 24VDC
.55W	.64W & .80W	.96W
< 30m Ω	< 50m Ω	< 50m Ω
100M Ω @ 500VDC	100M Ω @ 500VDC	100M Ω @ 500VDC
100K cycles	100K cycles	100K cycles
10M cycles	10M cycles	10M cycles
500V rms 500V rms	1000V rms 1500V rms	500V rms 750V rms
-40°C to 105°C	-40°C to 105°C	-40°C to 105°C
PC Pin	PC Pin	PC Pin

Specifications and availability subject to change without notice.

Dimensions shown in mm. Dimensions are shown for reference purposes only.

**Features**

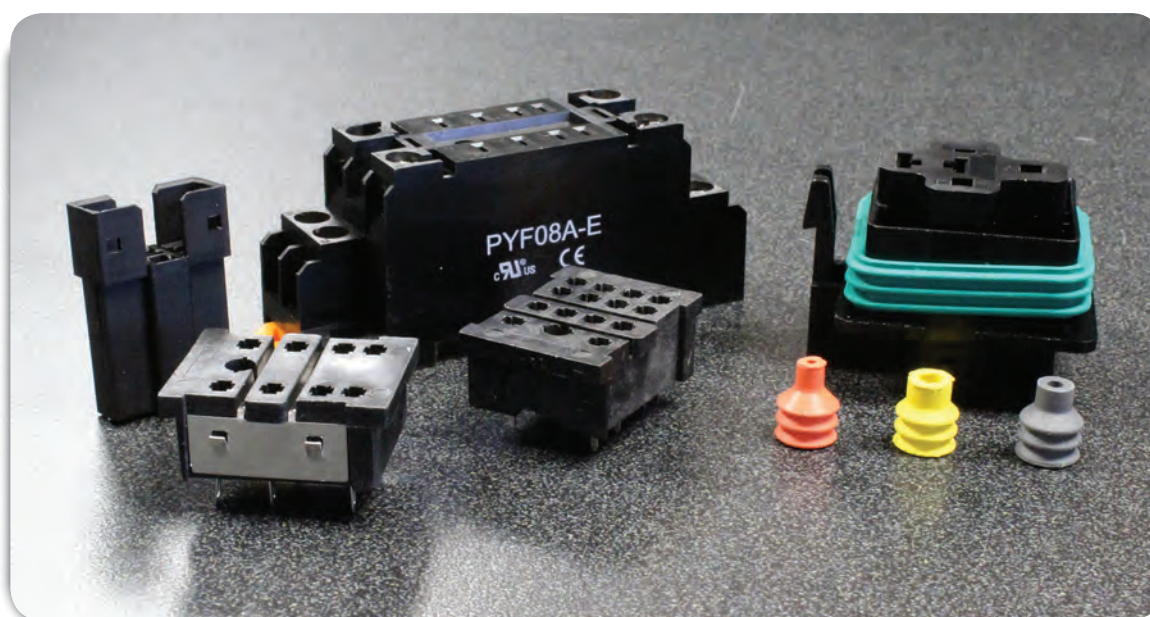
- Used with J114FL/J114AF, J151, J152, A2 & A9 relays
- Snap-In, PC Pin and Screw Terminal Types
- Secure fit for relay
- Easy installation of relay onto PC Board
- Hold down clips also available

**Ordering Information**

*UL Recognized sockets are shaded*

	A2 / A9	J114FL / J114AF / L114FL	J151 2C	J151 3C	J151 4C	J152 2C	J152 3C	J152 4C
<b>Panel Mount / Wire Assembly</b>	HD-1001 HD-1002 HD-1004		PT08			PY08	PY11	PY14
<b>PC Pin</b>	HD-1003	P2R05P P2R08P	PT08-0	PT11A		PY08-02	PY11-02	PY14-02
<b>DIN Rail Mountable</b>		P2F08S	PTF08A	PTF11A	PTF14A	PYF08A	PYF11A	PYF14A
<b>DIN Rail Mountable Finger Safe</b>		P2F08N	PTF08A-E			PYF08A-E	PYF11A-E	PYF14A-E

Dimensions shown in mm. Dimensions are shown for reference purposes only.



Specifications and availability subject to change without notice.

# Technical Data

## Contact Material Review

Contact Material	Chemical Composition	Typical Loads Recommended	Advantages	Disadvantages	Notes
Gold	Au	Dry Circuit < 0.4VA	No corrosion forms Low electrical noise	Poor resistance to metal transfer with loads greater than 1/2A	Gold clad is often used to block polymer buildup. Where gold plating is used, CIT recommends 15 micro-inch over a nickle base or standard silver rivet. All CIT relay contacts can be gold plated.
Silver Paladium	AgPd	1 milliamp @ 1 Volt min, 5A max	Resistant to sulfidation Resistant to oxidation Good contact wear Good resistance to metal transfer Low electrical noise level Life expectancy of 10 times that of fine silver	Expensive Low electrical conductivity Poly buildup in dry circuit condition Contacts should be bifurcated to ensure make	Has yet to prove cost effective.
Fine Silver	Ag	10 milliamp @ 5 Volt min, 40A max	High electrical conductivity High thermal conductivity Resistant to oxidation	Sulfidation easily forms Easily welds at higher current levels High electrical noise	
Silver Nickel	AgNi10	10 milliamp @ 5 Volt min, 40A max	Good contact wear Good resistance to welding	Higher contact resistance	90% Silver, 10% Nickel
Silver Cadmium Oxide	AgCdO	10 milliamp @ 5 Volt min, 40A max	Good contact wear Good resistance to welding Superior resistance to metal loss & transfer	Environmental concerns Higher contact resistance Sulfidation easily forms	Relay manufacturers are phasing out this material due to RoHS requirements
Silver Tin Oxide	AgSnO <sub>2</sub>	100 milliamp @ 5 Volt min, 50A max	High thermal conductivity Excellent resistance to welding	High contact resistance Low electrical conductivity Sulfidation easily forms	CIT standardized contact of choice
Silver Tin Oxide Indium Oxide	AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>	100 milliamp @ 5 Volt min, 50A max	High thermal conductivity Excellent resistance to welding Used with very high in-rush loads High melting point	High contact resistance Low electrical conductivity Contact wear Sulfidation easily forms	CIT contact for very severe in-rush loads.

Specifications and availability subject to change without notice.

## Temperature & Insulation Class

A variety of applications call for relays which can run at higher temperatures typical caused by high ambient temperatures and/or high contact switching current, which can lead to field failure.

CIT Relay & Switch offers its J107F, J109F, J114AF, J114FL, J115F, J117F and J123F styles with the higher UL Class F (155°C) rating as standard; these relays are often used in high temperature applications including HVAC, industrial, spa & pool, automotive and appliance controls. Selection of the correct insulating system UL Class A, B or F is essential because it separates the coil (control side of the relay) from the switching side (contacts) of the relay. Maximum ambient temperatures in the application should be considered to determine the correct UL temperature class selection. UL designed specific test procedures to insure that field breakdown does not occur from aging and heating and has been assigned the ratings in the table below to approve and describe relays falling into specific categories. CIT Relay & Switch relay product has been tested by UL and its temperature class ratings are included in its UL documentation and catalog specifications. The "Hot Spot" temperature noted in the table relates directly to coil temperature which is a result of the self-heating temperature. At normal room and office temperatures most coils will not exceed 130°C under full contact load and continuous operation. In higher ambient temperatures it is possible that temperatures will exceed this level in which case the UL F class 155°C relay may be the best solution. For extreme temperatures exceeding 155°C, contact CIT Relay & Switch for solutions up to 180°C.

Maximum Hot Spot Temperatures of Insulating Systems\*

System Class**	°C
A	105
B	130
F	155

\* Insulation System - Defined as the combination of insulating materials used in the relay coil inclusive of magnet wire coating and the outer wrapping of the relay coil

\*\* Figures derived from UL standard 1446

Dimensions shown in mm. Dimensions are shown for reference purposes only.

## RoHS Compliance Declaration & REACH Statement

### RoHS Certificate of Compliance

#### Restriction of the use of certain Hazardous Substances (RoHS)

CIT Relay & Switch declares its products are in compliance with RoHS Directive EU 2015/863 and its amendment directives.

The following restricted or banned substances are not used in the manufacture of this product:

#### Relays

- Cadmium
- Lead\*
- Mercury
- Hexavalent Chromium
- Polyvinyl Chloride (PVC)
- Polybrominated Biphenyls (PBB)
- Polybrominated Diphenyl Ethers (PBDE)
- Decabromodiphenyl ether (DecaDBE)
- Red Phosphorus
- Bis(2-Ethylhexyl) phthalate (DEHP)
- Dibutyl phthalate (DBP)
- Diisobutyl phthalate (DIBP)

#### Switches

- Cadmium
- Lead\*
- Mercury
- Hexavalent Chromium
- Polyvinyl Chloride (PVC)
- Polybrominated Biphenyls (PBB)
- Polybrominated Diphenyl Ethers (PBDE)
- Decabromodiphenyl ether (DecaDBE)
- Red Phosphorus
- Bis(2-Ethylhexyl) phthalate (DEHP)
- Dibutyl phthalate (DBP)
- Diisobutyl phthalate (DIBP)

This declaration conforms to the following Regulations, Directives and Rules:

- EU 2015/863
- EU 76/769/EEC
- EU 2000/53/EC
- EU 2002/95/EU and its amendment directives
- EU 2011/65/EU and its amendment directives
- Sony Technical Standard SS-00259 (Green Partner Program)

\*Exemption - Copper containing up to 0.1% (1000ppm) Lead by weight

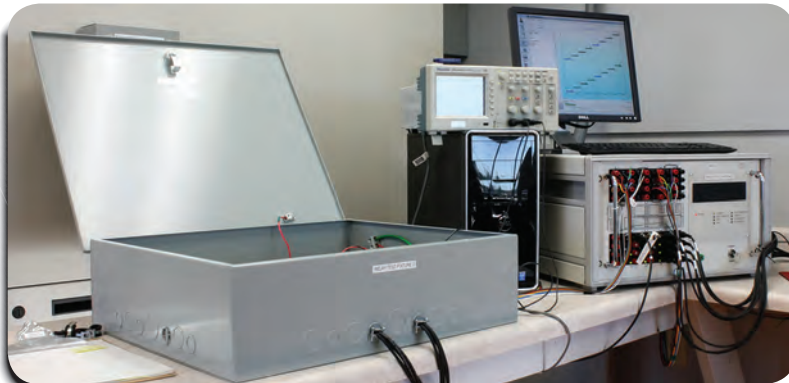
\*\*Compliance provided by SGS Taiwan Ltd., Korea Environment & Merchandise Testing Institute, CTI Shenzhen, and TÜV Rheinland Hong Kong Ltd.

### CIT Relay & Switch EU REACH Statement

Per the European Union (EU) regulation 1907/2006 of 18 December 2006, Registration, Evaluation, Authorization and Restriction of Chemicals also known as REACH, CIT Relay & Switch is considered a provider of "articles." All of our products are assemblies/components, not raw materials.

Per the last updated list (Jan. 2, 2019) of the REACH Regulation per ECHA (European Chemical Agency), CIT "articles" does not contain any of the 197 substances SVHC (Substance of Very High Concern) above 0.1% weight by weight (w/w)

The total sum of all our assemblies/components in our "articles" imported into the EU is less than one metric ton per year (Ref. Title II, Chapter 1, Article 7). Given these conditions our current products are exempt from REACH pre-registration and later registration activities.

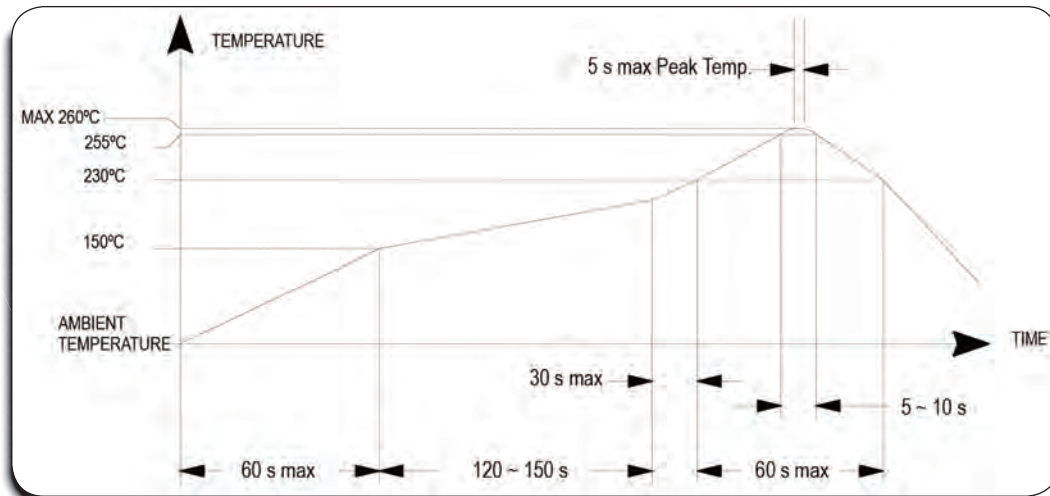


Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.



### Guidelines for Soldering



### Guidelines for Wave Soldering

CIT Relay & Switch recommends using a no-clean flux during any wave soldering process. The terminal area on most CIT product is epoxy sealed, thus reducing the incidence of flux wicking into the inner cavity via the terminals. Most switch covers, actuators and bushings are not sealed and care should be taken to ensure that the product is not immersed or sprayed with flux during the soldering process. Good venting is required during the wave soldering process. Flux vapors can enter unsealed portions of the product and condense inside of the cavity contaminating the contact area. If a cleaning process is required, care should be taken to ensure that the product is not immersed or sprayed with any fluids or solutions. Generally sealed components withstand these issues.\* A cooling period between the flow soldering process and board washing with enhance the outcome.

#### Preheat Temperature & Time

Circumferential temperature of the PC board not to exceed 100°C (212°F) for 45 seconds

#### Soldering Temperature & Time

Solder bath temperature not to exceed 260°C (482°F) for 5 seconds

### Guidelines for Hand Soldering

CIT Relay & Switch recommends using a no-clean flux during any hand soldering process. The terminal area on most CIT product is epoxy sealed, thus preventing flux from wicking into the inner switch cavity via the terminals. The contact path on all insert-molded parts from the inner switch cavity to the tip of each terminal is irregular in shape to prevent flux migration. However, the covers, actuators and bushings are not sealed and care should be taken to ensure that the product is not immersed or sprayed with flux during the soldering process. Good venting is required during the wave soldering process. Flux vapors can enter unsealed portions and condense inside of the cavity contaminating the contact area. If a cleaning process is required, care should be taken to ensure that the component is not immersed or sprayed with any fluids or solutions

#### Hand Soldering Temperature & Time

Recommended soldering irons not to exceed 50W. Solder and iron should contact terminals for maximum of 5 seconds.

\* Prior to pre-tinning terminals, flux is applied. Afterwards the terminals are washed prior to the final process of cover installation and epoxy seal application. Epoxy will not adhere to terminal areas in the rare instance where flux remains present after the wash/cleaning process.

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# General Information

## Warranty

Buyer accepts that Seller's warranty prevails on orders confirmed by Seller. Seller warrants its products to be free from defects in materials and workmanship at the time of shipment under normal use and service in accordance with Seller's specifications or drawings for a period of one (1) year after date of shipment by Seller. Seller's obligations with respect to warranty claims are limited to only repair, replacement or refund of the purchase price actually paid for the product, after return of the product. This warranty does not extend to any product sold by Seller that has been subjected to misuse, neglect, accident, improper installation, a use in violation of instructions furnished by Seller, or that has been soldered or altered during assembly and is not capable of being tested by Seller. The foregoing warranty supersedes and replaces any and all warranties, whether oral, written, express, implied or statutory. Implied warranties of fitness for a particular purpose and merchantability are specifically excluded and shall not apply. Buyer agrees that Seller is not liable for any special, incidental or consequential damages including, but not limited to, damages resulting from loss of profit or revenue, recall costs, claims for service interruptions or failure to supply, downtime, testing, installation or removal costs, costs of substitute products, property damage, personal injury, death or legal expenses. Seller's products are not designed, manufactured or intended for critical use in end products, which include, but are not limited to, nuclear facilities applications, human medical, including implantable devices, or life support or critical care systems. Seller is not liable, in whole or in part, for any claims or damages arising from such use. It is up to the end user to test and determine the suitability for end product.

## About Us

CIT Relay & Switch located in the greater Minneapolis, MN area is a designer and manufacturer of quality electromechanical relays and switches supported by sales offices and distributors worldwide serving HVAC, Industrial, Audio, Broadcasting, Automotive, Lighting, White goods, Security, custom and more standard designs requirements. Its state of the art test lab allows CIT to analyze applications as well as custom testing for the most critical projects.

CIT Relay and Switch places the customer first working directly with customers from simple to complicated projects, tailoring custom solutions and designs. When you contact CIT, you are immediately connected to a professional. Our technical and customer support personnel are well trained, and can help with your design requirements. With our test lab we can address any custom or standard test requirements that you may need. From small to large projects, we are here to help with your testing needs. Join the many customers who have come to rely on the good folks at CIT.

## Mission

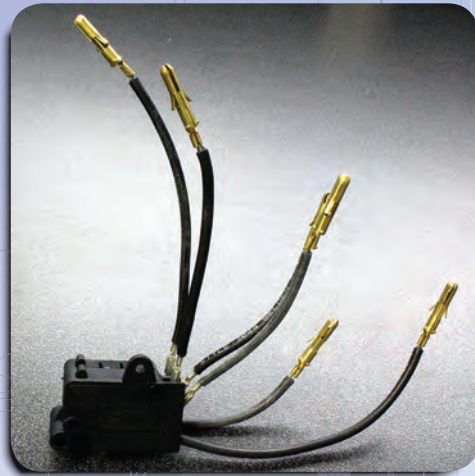
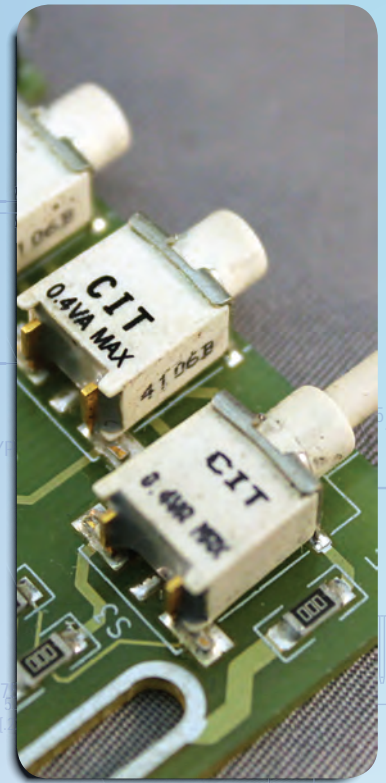
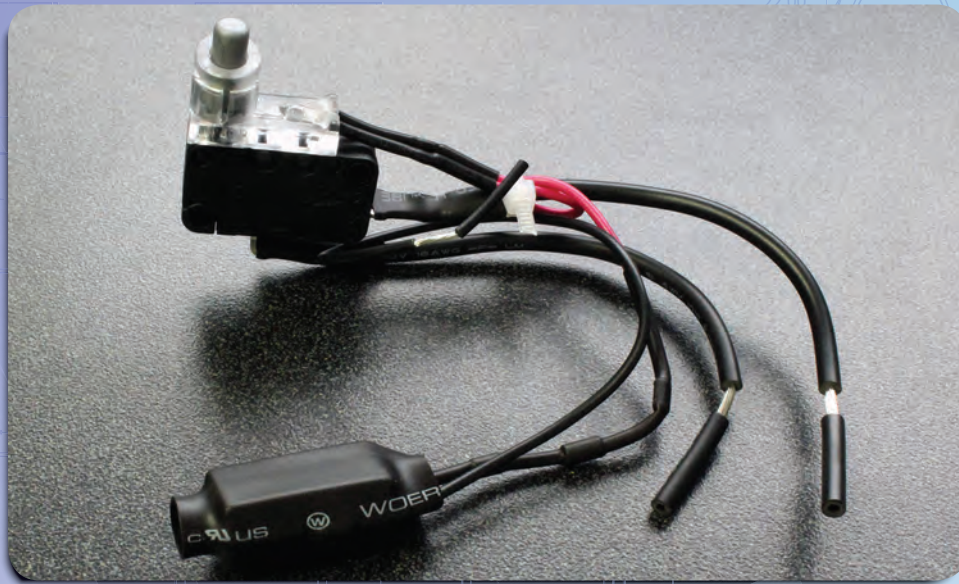
CIT Relay & Switch is committed to you.

Wherever opportunities arise, CIT Relay & Switch works to give its customers the best product for the application and most compelling support experience. Continued growth through paramount service, selection, quality, and value – we strive to be the best.



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**CIT Relay & Switch**  
**custom product**  
 contact us at [sales@citrelay.com](mailto:sales@citrelay.com)

# CIT RELAY & SWITCH™

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