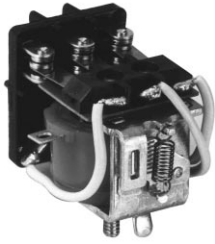








**Relays**  
[www.deltrol-controls.com](http://www.deltrol-controls.com)



# General Purpose Relays

	101U	105	160	260	263/268
					
<b>Contact Rating</b>	5 or 10 Amp	5 or 10 Amp	5 or 13 Amp	5, 10, or 15 Amp	15 Amp
<b>Features</b>	<ul style="list-style-type: none"> <li>– Armature Stop Maintains Adjustment</li> <li>– Replacement Relay for Many Devices</li> <li>– RF Radio Frequency Version Available</li> </ul>	<ul style="list-style-type: none"> <li>– Eight or Eleven Pin Plug-In</li> <li>– Polycarbonate Plastic Cover</li> <li>– Gusseted Frame Maintains Alignment</li> </ul>	<ul style="list-style-type: none"> <li>– Low Cost Plug-In Design</li> <li>– Coil Terminals Molded in Coil</li> <li>– .187 QC or PC Terminals</li> <li>– Wide Variety of Mountings</li> <li>– Gusseted Frame Maintains Alignment</li> </ul>	<ul style="list-style-type: none"> <li>– Low Cost</li> <li>– Coil Terminals Molded in Coil</li> <li>– .250 QC Terminals</li> <li>– Wide Variety of Mountings</li> <li>– Gusseted Frame Maintains Alignment</li> </ul>	<ul style="list-style-type: none"> <li>– Low Cost Plug-In Design</li> <li>– Coil Terminals Molded in Coil</li> <li>– .187 QC or PC Terminals</li> <li>– Wide Variety of Mountings</li> </ul>
<b>Size in Inches WxDxH</b>	1.76 x 1.25 x 1.22	1.38 x 1.38 x 2.00	1.50 x 1.38 x 2.20	1.50 x 1.38 x 2.25	1.50 x 1.38 x 2.25
<b>Contact Configuration</b>	Thru 3PDT	Thru 3PDT	Thru 3PDT	Thru 3PDT	Thru 3PDT
<b>Coil Insulation Class</b>	Class F Molded Rynite®	Class F Molded Rynite®	Class F Molded Rynite®	Class F Molded Rynite®	Class F Molded Rynite®
<b>Mounting Options</b>	Panel Mount Bracket Mount	Socket Mount	Socket Mount Panel Mount PC Terminal	Panel Mount	Panel Mount
<b>Sockets</b>	N/A	Screw Terminal DIN Rail Mtg.	Screw Terminal DIN Rail Mtg. Back Connecting – PC Terminal – QC Terminal – Solder Tab	N/A	N/A
<b>Typical Applications</b>	Lighting Control, Time Delay Controls	Common Replacement Relay for Many Types of Existing Equipment	Industrial Machine Control, Energy Management Systems Control Panels	Industrial Machine Control, Lighting Control	Industrial Machine Control, Fork Lifts, Energy Management, HVAC

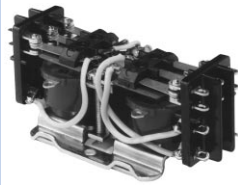



Specifications indicated may not apply to all versions of product. Check individual data pages for final determination at [www.deltrol-controls.com](http://www.deltrol-controls.com). Specifications subject to change without notice.

# Power Relays

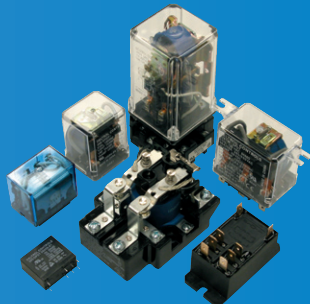
	177	270/275	295	375	900
					
<b>Contact Rating</b>	15 or 30 Amp	35 Amp	30 Amp	30 Amp	30 or 50 Amp
<b>Features</b>	<ul style="list-style-type: none"> <li>– Heavy Duty 1/4" Dia. Contacts</li> <li>– Compact Size</li> <li>– Up-Stop for Contact Protection on SPST-NO-DM</li> </ul>	<ul style="list-style-type: none"> <li>– High Power Switching in a Compact Size</li> <li>– Can Often Replace Small Contactors</li> </ul>	<ul style="list-style-type: none"> <li>– High Power Switching in a Compact Size</li> <li>– Switches Tungsten Lamp Loads up to 2.4kw @ 240 VAC</li> <li>– Exceeds NEMA STD TS2-2003</li> </ul>	<ul style="list-style-type: none"> <li>– 3 Pole High Power Switching</li> <li>– Switches 30 Amp on Both NC &amp; NO Terminals</li> <li>– Compact Size Saves Valuable "Real Estate"</li> </ul>	<ul style="list-style-type: none"> <li>– High Power Switching for Motors, Heaters, etc.</li> <li>– Rugged, Easy Access Construction</li> <li>– Screw Terminal Connections</li> </ul>
<b>Size in Inches WxDxH</b>	1.88 x 1.63 x 1.25	1.50 x 1.38 x 2.15	1.75 x 2.38 x 3.90	2.1 x 1.38 x 2.15	2.5 x 2.5 x 2.2 Short Base 2.5 x 3.3 x 2.2 Long Base
<b>Contact Configuration</b>	Thru SPDT SPST-NO-DM	Thru DPDT	DPDT	3PDT 3PST-NC 3PST-NO	Thru DPDT
<b>Coil Insulation Class</b>	Class F Molded Rynite®	Class F Molded Rynite®	Class F Molded Rynite®	Class F Molded Rynite®	Class F Molded Rynite®
<b>Mounting Options</b>	Panel Mount	Panel Mount PC Terminal	Standard 8 pin Jones Plug	Panel Mount PC Terminal	Panel Mount
<b>Sockets</b>	N/A	N/A	N/A	N/A	N/A
<b>Typical Applications</b>	Motor Control Lighting Control Surge Protection	Electric Heat, Motor Control, HVAC, Laundry Equipment, Welding Equipment	Traffic Controller Equipment	Electric Heat, Motor Control, Power Supplies	Motor Control, Control Panel Switching, Spa Controls

Specifications indicated may not apply to all versions of product. Check individual data pages for final determination at [www.deltrol-controls.com](http://www.deltrol-controls.com). Specifications subject to change without notice.

# Latching Relays & Buzzers

	101ML	105ML	166ML	BZ
				
<b>Contact Rating</b>	5 or 10 Amp	5 or 10 Amp	5 or 10 Amp	N/A
<b>Features</b>	<ul style="list-style-type: none"> <li>– Permanent Magnet Locks Armature in Place</li> <li>– Maintains Status Without Coil Power</li> <li>– Pulse Activated</li> </ul>	<ul style="list-style-type: none"> <li>– Permanent Magnet Locks Armature in Place</li> <li>– Maintains Status Without Coil Power</li> <li>– Pulse Activated</li> <li>– 8, 11, or 20 Pin Octal Type Base</li> </ul>	<ul style="list-style-type: none"> <li>– Low Cost Design</li> <li>– Maintains Status Without Coil Power</li> <li>– Single and Dual Coil Designs</li> </ul>	<ul style="list-style-type: none"> <li>– AC Buzzer</li> <li>– Easy Screw Mount</li> <li>– Compact Size</li> <li>– Molded Coil</li> </ul>
<b>Size in Inches WxDxH</b>	1.69 x 1.38 x 3.38	1.94 x 1.94 x 3.25	1.50 x 1.38 x 2.20	1.06 x 1.26 x 1.0
<b>Contact Configuration</b>	Thru 6PDT	Thru 5PDT	Thru 3PDT	N/A
<b>Coil Insulation Class</b>	Class F Molded Rynite®	Class F Molded Rynite®	Class F Molded Rynite®	Class F Molded Rynite®
<b>Mounting Options</b>	Panel Mount	Socket Mount	Panel Mount Socket Mount	Screw Mount
<b>Sockets</b>	N/A	Screw Terminal DIN Rail Mtg.	Screw Terminal DIN Rail Mtg. Back Connecting – PC Terminals – QC Terminals – Solder Tab	N/A
<b>Typical Applications</b>	Railroads, Public Transit, Pump Controllers	Railroads, Public Transit	Laundry & Textile Equipment, HVAC	Commercial Appliances, Laundry Equipment

Specifications indicated may not apply to all versions of product. Check individual data pages for final determination at [www.deltrol-controls.com](http://www.deltrol-controls.com). Specifications subject to change without notice.



## **Relay Product Features**

This product brochure provides general information on our standard product line of relays. Complete product information can be obtained by visiting our web site at [www.deltrol-controls.com](http://www.deltrol-controls.com). The following is a description of just some of the relay features that make up the *Deltrol Difference*.

## **Molded Coils**

Deltrol Controls pioneered the plastic encapsulated coil. Virtually all our general purpose relays are available with DuPont Rynite® encapsulation, a UL recognized Class F insulation system. Encapsulation locks the coil terminals into place, eliminating breakage, puts the copper winding in direct contact with its wrap, allowing for the most efficient heat transfer, and protects against moisture and fungus problems that can occur with other wraps. Insist on Deltrol Controls encapsulated coils; look-alike, snap-on plastic covers do not offer the same protection.

## **Precision Contacts**

Deltrol Controls utilizes the latest improvements in contact metallurgy. An example is our Series 270/275, which now has a 35 Amp rating in a DPDT configuration - the highest in the industry for this package.

## **Skeined Wire**

Studies have shown that there is a substantial reduction in the copper wire diameter when soldering takes place. While this is not a problem with heavier wire, finer gauge wires are seriously compromised. Over time the stresses of thermocycling can cause the wire to break, leaving an open circuit. That's why Deltrol Controls skeins all fine gauge wire when constructing its coil. This process triples the thickness of the wire gauge at the ends where it is soldered to the terminal, allowing it to easily handle the stresses of heating and cooling.

## **Gusseted Frames**

All Deltrol Controls relay frames incorporate a small but important feature, the frame gusset. This small buttress is created by an extra stamping process during frame fabrication. This gusset supplies rigidity to the frame, which in turn maintains the alignment of the contact/panel assembly and the moving armature. This assures long-life and resistance to changes during shipment and handling.

## **Armature Stop/Retainer**

Deltrol Controls takes many extra steps in the assembly of our relays. An example is a riveted retainer/stop that eliminates the chance the armature will "pop" off during handling and shipping, and it provides a stop for armature movement. Relays without this feature are subject to bending and setting of the moveable contact blades on impact, which can cause the response characteristics to change.

[www.deltrol-controls.com](http://www.deltrol-controls.com)



## *Other Deltrol Controls Products*

In addition to our relays, Deltrol Controls also designs and manufactures solenoids, liquid dispensing valves, and custom assemblies. We offer an extensive line of standard products, and have an in-house engineering staff that will work with you to design a custom product specific to your application.

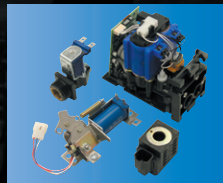
Please visit [www.deltrol-controls.com](http://www.deltrol-controls.com) for further information.



*Solenoids*



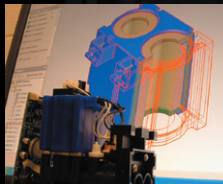
*Dispensing Valves*



*Custom Assemblies*

## *Deltrol Controls Overview*

**Deltrol Controls** has supplied world-class products to industries for over 40 years. Our products are made at our 110,000-sq. ft. manufacturing facility in Milwaukee, WI, and other ISO-compliant facilities worldwide. We have extensive in-house engineering and manufacturing capabilities that allow us to design and manufacture products that exceed our customers' expectations. Please feel free to contact us to discuss your specific application.



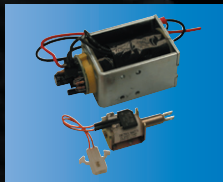
*Custom Product Engineering/Manufacturing*



*On-Site Product Testing*



*Product Manufacturing*



*Value Added Assembly*