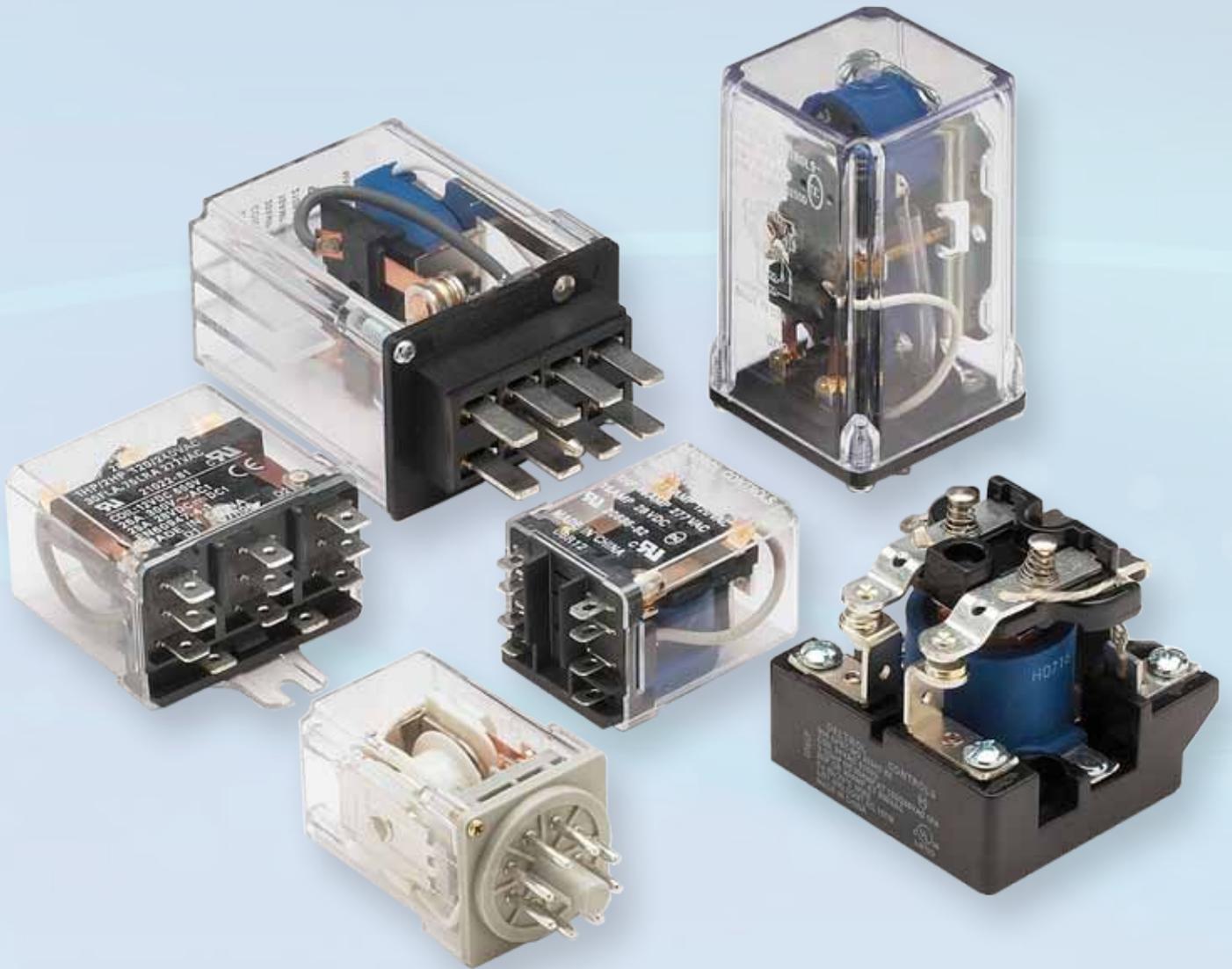


Relays





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 website at 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® PET 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 utilized 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 points on impact, which can cause the response characteristics to change.

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General Purpose Relays

	101U	105	160	260	263/268
					
Contact Rating	5 or 10 Amp	5 or 10 Amp	5 or 13 Amp	5, 10, or 15 Amp	15 Amp
Features	<ul style="list-style-type: none"> – Armature stop maintains adjustment – Replacement relay for many devices – RF radio frequency version available 	<ul style="list-style-type: none"> – Eight or eleven pin plug-in – Polycarbonate plastic cover 	<ul style="list-style-type: none"> – Low cost plug-in design – Coil terminals molded in coil – .187 QC or PC terminals – Wide variety of mounting options – Gusseted frame maintains alignment 	<ul style="list-style-type: none"> – Low cost – Coil terminals molded in coil – .250 QC terminals – Wide variety of mounting options – Gusseted frame maintains alignment 	<ul style="list-style-type: none"> – Low cost plug-in design – Coil terminals molded in coil – .187 QC or PC terminals – Wide variety of mounting options
Size in Inches WxDxH	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
Contact Configuration	Thru 3PDT	Thru 3PDT	Thru 3PDT	Thru 3PDT	Thru 3PDT
Coil Insulation Class	Class F Molded Rynite® PET	Class A Tape Wrap	Class F Molded Rynite® PET	Class F Molded Rynite® PET	Class F Molded Rynite® PET
Mounting Options	Panel Mount Bracket Mount	Socket Mount	Socket Mount Panel Mount PC Terminal	Panel Mount	Panel Mount
Sockets	N/A	Screw Terminal DIN Rail Mtg.	Screw Terminal DIN Rail Mtg. Back Connecting – PC Terminal – QC Terminal – Solder Tab	N/A	N/A
Typical Applications	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, Forklifts, Energy Management, HVAC

Specifications given may not apply to all versions of product. Check individual data pages for final determination at www.deltrol-controls.com.
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Power Relays

	177	270/275	295	375	900
					
Contact Rating	15 or 30 Amp	35 Amp	30 Amp	30 Amp	30 or 50 Amp
Features	<ul style="list-style-type: none"> – Heavy duty 1/4" dia. contacts – Compact size – Up-stop for contact protection on SPST-NO-DM 	<ul style="list-style-type: none"> – High power switching in a compact size – Can often replace small contactors 	<ul style="list-style-type: none"> – High Power switching in a compact size – Switches tungsten lamp loads up to 2.4 kw. @ 240 VAC – Exceeds NEMA STD TS2-2003 	<ul style="list-style-type: none"> – 3 pole high power switching – Switches 30 amp on both NC & NO terminals – Compact size saves valuable "Real Estate" 	<ul style="list-style-type: none"> – High power switching for motors, heaters, etc. – Rugged easy access construction – Screw terminal connections
Size in Inches WxDxH	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
Contact Configuration	Thru SPDT SPST-NO-DM	Thru DPDT	DPDT	3PDT 3PST-NC 3PST-NO	Thru DPDT
Coil Insulation Class	Class F Molded Rynite® PET	Class F Molded Rynite® PET	Class F Molded Rynite® PET	Class F Molded Rynite® PET	Class F Molded Rynite® PET
Mounting Options	Panel Mount	Panel Mount PC Terminal	Standard 8 Pin Jones Plug	Panel Mount PC Terminal	Panel Mount
Sockets	N/A	N/A	N/A	N/A	N/A
Typical Applications	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 Controls, Control Panel Switching, Spa Controls

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Latching Relays & Buzzers

	101ML	105ML	166ML	BZ
				
Contact Rating	5 or 10 Amp	5 or 10 Amp	5 or 10 Amp	N/A
Features	<ul style="list-style-type: none"> - Permanent magnet locks armature in place - Maintains status without coil power - Pulse activated 	<ul style="list-style-type: none"> - Permanent magnet locks armature in place - Maintains status without coil power - Pulse activated - 8, 11 or 20 pin octal type base 	<ul style="list-style-type: none"> - Low cost design - Maintains status without coil power - Single and dual coil designs 	<ul style="list-style-type: none"> - AC buzzer - Easy screw mount - Compact size - Molded coil
Size in Inches WxDxH	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
Contact Configuration	Thru 6PDT	Thru 5PDT	Thru 3PDT	N/A
Coil Insulation Class	Class F Molded Rynite® PET	Class F Molded Rynite® PET	Class F Molded Rynite® PET	Class F Molded Rynite® PET
Mounting Options	Panel Mount	Socket Mount	Panel Mount Socket Mount	Screw Mount
Sockets	N/A	Screw Terminal DIN. Rail Mtg.	Screw Terminal DIN Rail Mtg. Back Connecting <ul style="list-style-type: none"> - PC Terminals - QC Terminals - Solder Tab 	N/A
Typical Applications	Railroads Public Transit Pump Controllers	Railroads Public Transit	Laundry & Textile Equipment, HVAC	Commercial Appliances, Laundry Equipment

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Deltrol Controls Products

Deltrol Controls designs and manufactures dispensing valves, inlet valves, solenoids, relays, hose sets and fittings, proportional 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 for further information.



Dispensing Valves



Inlet Valves



Relays



Solenoids



Hose Sets



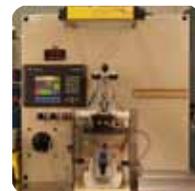
Custom Assemblies

Deltrol Controls Overview

Deltrol Controls is located in Milwaukee, Wisconsin USA and is a wholly-owned subsidiary of Deltrol Corp. For over 45 years, we have designed and manufactured valves, solenoids, relays, and custom assemblies for a variety of applications. Our Milwaukee operation employs approximately 110 employees, working out of a 110,000 sq. ft. ISO 9001:2008 Registered manufacturing facility. We also have manufacturing capabilities in other parts of the world that allow us to be a globally competitive supplier.



Custom Product Engineering/ Manufacturing



On-Site Product Testing



Product Manufacturing



Value Added Assembly



www.deltrol-controls.com

2740 S. 20th St. Milwaukee, WI 53215 USA | P: 414.671.6800 | F: 414.671.6809 | sales@deltrol.com

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