


Type K - Plug-in Relay Dimensions and Wiring Diagram

8501 K relays are designed for multipole switching applications at 240 volts or lower. These relays have industry standard wiring and pin arrangements which allows for their use as replacements for many similar relays without wiring or hardware modifications.


- 10 or 15 Ampere Versions
- DPDT or 3PDT
- Manual Operator/
Red Pilot Light Options
- Horsepower Rated
- DPDT Latching Relay
- AC or DC Operation

Type KF – Flange Mounted – Spade Terminals

	Input Voltage	Contact Arrangement	Options	Type
	AC 50/60 Hz	DPDT	None Available	KF12*
		3PDT		KF13*
	DC	DPDT	None Available	KFD12*
		3PDT		KFD13*

* Socket is not required with Type KF relays.

Type KL – Latching Relay – Spade Terminals

	Input Voltage	Contact Arrangement	Options	Type
	AC 50/60 Hz	DPDT	None Available	KL12*
	DC	DPDT	None Available	KLD12*

Stocked Relays

Type	AC Voltage 50/60 Hz					Type	DC Voltage					
	6	12	24	120	240		6	12	24	48	110	125
Voltage Codes	V35	V36	V14	V20	V24	Voltage Codes	V50	V51	V53	V56	V60	V63
KP12	S	S	S	S	S	KPD12	S	S	S	S	S	S
KP12P14		S	S	S	S	KPD12P14		S	S	S	S	S
KP13		S	S	S	S	KPD13		S	S	S	S	S
KP13P14			S	S	S	KPD13P14			S			S
KU12		S	S	S	S	KUD12		S	S			
KU12M1						KUD12M1			S			
KU12P14			S	S		KUD12P14						
KU12M1P14			S	S	S	KUD12M1P14			S			
KU13		S	S	S	S	KUD13		S	S	S	S	
KU13M1						KUD13M1			S			
KU13P14			S	S		KUD13P14						
KU13M1P14			S	S	S	KUD13M1P14			S		S	S
KF12			S	S	S	KFD12			S	S		
KF13			S	S		KFD13			S			
KL12			S	S	S	KLD12		S	S			

S – Stocked


– Factory Order items require a **minimum** order quantity of 25 and have a lead time of 12 weeks.

* Voltage code must be specified to order this product. Refer to standard voltage codes listed in the Stocked Relays table above and insert as shown in How To Order.


How to Order:

To Order Specify:	Catalog Number		
<ul style="list-style-type: none"> • Class Number • Type Number • Voltage Code (See Stocked Relay Table above)	Class	Type	Voltage Code
	8501	KP12	V20

Type KP – Tubular Terminals

	Input Voltage	Contact Arrangement	Options	Type
	AC 50/60 Hz	DPDT	None	KP12*
		DPDT	Pilot Light	KP12P14*
		3PDT	None	KP13*
	DC	3PDT	Pilot Light	KP13P14*
		DPDT	None	KPD12*
		DPDT	Pilot Light	KPD12P14*
		3PDT	None	KPD13*
		3PDT	Pilot Light	KPD13P14*

Type KU – Spade Terminals

	Input Voltage	Contact Arrangement	Options	Type
	AC 50/60 Hz	DPDT	None	KU12*
		DPDT	Manual Operator	KU12M1*
		DPDT	Pilot Light	KU12P14*
		DPDT	Manual Operator and Pilot Light	KU12M1P14*
		3PDT	None	KU13*
		3PDT	Manual Operator	KU13M1*
		3PDT	Pilot Light	KU13P14*
		3PDT	Manual Operator and Pilot Light	KU13M1P14*
	DC	DPDT	None	KUD12*
		DPDT	Manual Operator	KUD12M1*
		DPDT	Pilot Light	KUD12P14*
		DPDT	Manual Operator and Pilot Light	KUD12M1P14*
		3PDT	None	KUD13*
		3PDT	Manual Operator	KUD13M1*
		3PDT	Pilot Light	KUD13P14*
		3PDT	Manual Operator and Pilot Light	KUD13M1P14*

Pilot Light Option – Available on Types KP and KU. Internal pilot lights are available in both ac and dc versions for positive indication of power to the coil. The pilot light will be a red bidirectional LED.

Manual Operator Option – Available on Type KU only. To speed circuit testing a manual operator can be provided. With this feature the relay can be manually switched to simulate normal operation.

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Dimensions	page 8
Sockets	page 14

Type K — Plug-in Relay

Application Data, Dimensions, Wiring Diagrams

Contact Ratings

Type	AC			DC	
	AC Volts	Resistive 75% PF Continuous Amperes	HP	DC Volts	Resistive Amperes
KP ^a	120	10	1/3	28	10
	240	10 ^b	1/2		
KU ^a KF ^a	120	15 ^a	1/3	28	10
	240	10 ^b	1/2		
KL	120	10	1/3	28	10
	240	10	1/2		

^a 8501 KP, KU, and KF relays have a B300 rating.

^b 3 pole devices have a 20 A max. total (sum of currents in all 3 poles), continuous rating.

^a 3 pole devices have a 30 A max. total (sum of currents in all 3 poles), continuous rating.

Operating Data

	Type	Comments
Typical Pick-Up Time	KP	AC coil: approximately 12 ms DC coil: approximately 18 ms
	KF, KU	AC coil: approximately 8 ms DC coil: approximately 11 ms
	KL	approximately 25 ms
Typical Drop-Out Time	KP	AC coil: approximately 12 ms DC coil: approximately 7 ms
	KF, KU	AC coil: approximately 8 ms DC coil: approximately 7 ms
	KL	approximately 25 ms
Operating Temperature Range	KF, KP, KU	AC: 2 pole: -40°C to +55°C (-40°F to +131°F) 3 pole: -40°C to +45°C (-40°F to +113°F) DC: -40°C to +70°C (-40°F to +158°F)
	KL	AC/DC: -45°C to +70°C (-49°F to +158°F)

Contacts

Configuration	2PDT or 3PDT (2 or 3 Form C)
Ratings	See contact ratings table above.
Material	KF, KU, and KL—Silver cadmium oxide KP—Silver nickel

Coils

Duty	Continuous rated coils	
Available Voltages	See Stocked Relays page 7.	
Operate	AC: +10, -15% of Nominal Voltage at 25°C (77°F) DC: +10, -25% of Nominal Voltage at 25°C (77°F)	
Typical Burden	Types KP, KU, KF	AC: 3.6 VA inrush, 2.5 VA sealed DC: 1.5 watts standard, 3 watts maximum
	Type KL	AC: 2.0 VA latch, 0.8 VA unlatch DC: 1.2 watts

General

Terminals: Solder/plug-in

UL/CSA:

For 8501 KP, KU, and KF:



File CCN E197072
NRNT2



File Class 212845
3211 07



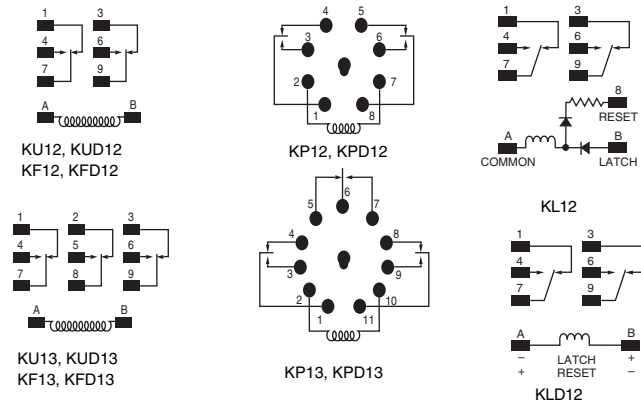
For 8501 KP, KU, and KL:



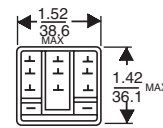
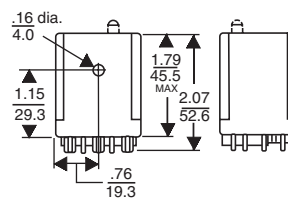
File CCN E78351
NLDX

When used with the appropriate 8501NR socket.

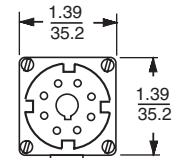
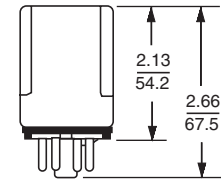
Wiring Diagrams



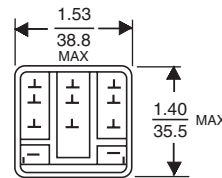
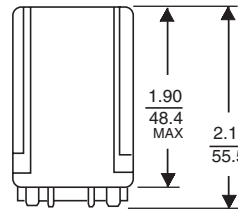
Approximate Dimensions



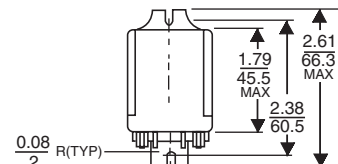
Type KU



Type KP



Type KL



Type KF

Dual Dimensions: Inches
Millimeters

For 8501 KL:



File CCN E78351
NLDX2



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3211 04

