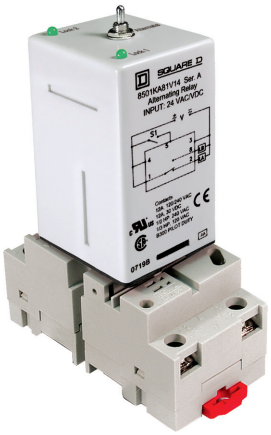


8501 KA alternating relays are designed to minimize pump and motor wear by equalizing run time between parallel components in a multi-pump system. These relays are controlled by an external control switch. This switch may be any type of contact closure; for example, the contacts of a timing relay or the closure of a float switch. The 8501 KA relays also have a toggle switch that allows the operator to lock one side of the duplex system, preventing alternation.

- 12 A Resistive Rating
- SPDT or DPDT
- Toggle switch for load control
- LED Load Indicators
- Horsepower Rated
- AC and DC Control
- UL Listed w/ SquareD Socket
- Rohs Compliant

Type KA – Alternating Relay

	Input Voltage	Contact Arrangement	Options	Type
	AC & DC	SPDT	LED, Toggle	8501KA81
	AC & DC	DPDT	LED, Toggle, Duplex Pumping	8501KA82
	AC & DC	DPDT (N.C.)	LED, Toggle	8501KA112
	AC & DC	DPDT (N.O.)	LED, Toggle	8501KA112A

Contact Ratings

Type	AC				DC	
	AC Volts	Resistive Amperes	HP	Pilot Duty	DC Volts	Resistive Amperes
8501KA•••	120	12	1/3	B300	30	12
	240	12	1/2	B300		

Relay Availability

Type	AC & DC Voltage			AC Voltage
	12	24	120	240
Voltage Code	V36	V14	V20	V24
8501KA•••		S	S	
8501KA•••		S	S	
8501KA•••		S	S	
8501KA•••		S	S	

AC Voltage = 50/60 Hz

S – Stocked. Stocked items do not require a minimum quantitiy and have a lead time of 2 weeks. All other part numbers require a minimum order quantity of 100 and have a lead time of 18 weeks.

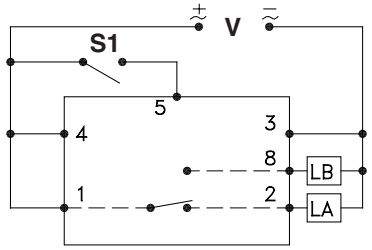
Alternating Functions

Diagram	Toggle Switch Position	Detail S1 = Control Switch 1 S2 = Control Switch 2 LA = Load 1 LB = Load 2
A, C & D	Alternate	Closing S1 alternates the loads between LA and LB.
	Lock 1	LA is ON and LB is OFF. S1 is not used in this mode.
	Lock 2	LA is OFF and LB is ON. S1 is not used in this mode.
B	Alternate	Closing S1 alternates the loads between LA and LB. S2 will only control LA.
	Lock 1	S1 will control LA and S2 will control LB.
	Lock 2	S1 will control LB and S2 will control LA.
	The cross wired option allows extra system load capacity through simultaneous operation of both motors when needed (LA and LB energize simultaneously when both S1 and S2 are closed - relay contacts are not isolated).	
All	Input voltage must be applied at all times for proper alternation. Use of a solid state control switch for S1 or S2 may not initiate alternation correctly. S1 or S2 voltage must be from the same supply as the unit's input voltage (see wiring diagrams). Loss of input voltage resets the unit; LA becomes the lead load for the next operation.	

Type KA – Alternating Relays
Wiring Diagrams and Approximate Dimensions

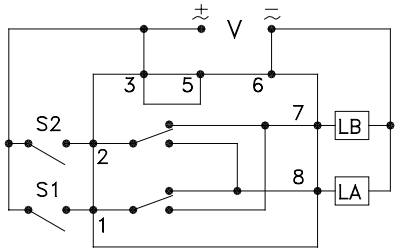
Wiring Diagrams

A



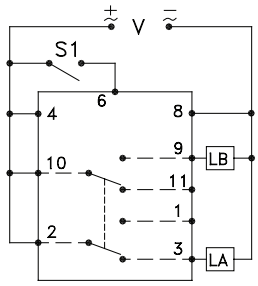
8501KA81•••
Socket = 8501NR51 or NR52

B



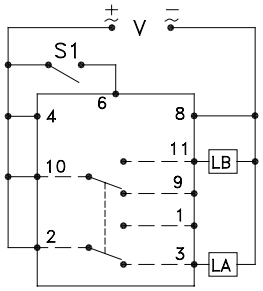
8501KA82•••
Socket = 8501NR51 or NR52

C



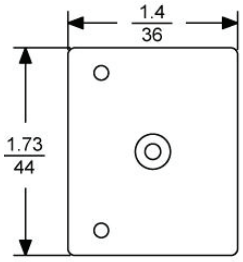
8501KA112•••
Socket = 8501NR61 or NR62

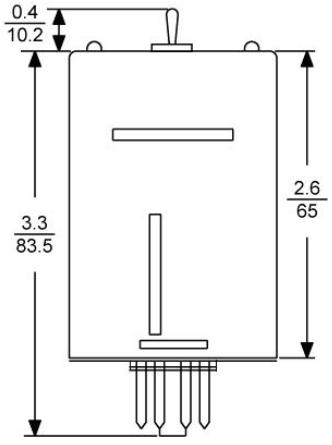
D



8501KA112A•••
Socket = 8501NR61 or NR62

Approximate Dimensions





FILE E78351 CLASS NLDX2

FILE 242675 CLASS 3211 07