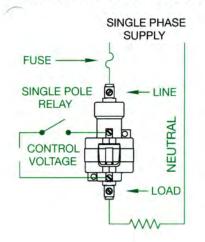
WIRING & FUSING

MERCURY CONTACTORS



FUSE

TWO POLE

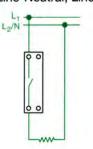
RELAY

CONTROL VOLTAGE

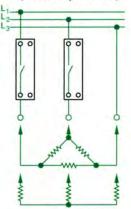
SINGLE PHASE SUPPLY

SOLID STATE

Single pole relay application Line-Neutral, Line-Line

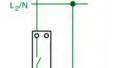


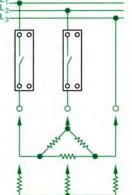
2 Single Pole Relays in 3-Phase application **Delta and Star Connection** (Economy Switch)



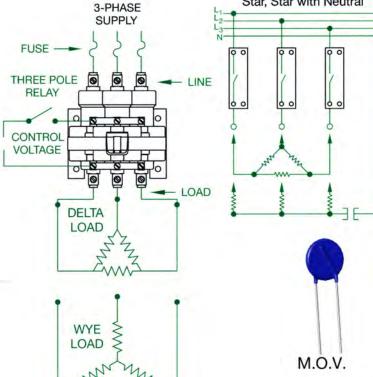
LINE

LOAD





3 Single Pole Relays in 3-Phase Application Delta. Star, Star with Neutral



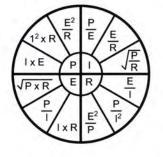
Proper Fusing is Required

- 1. While MDI Mercury contactors handle high inrush, such as lamps, mercury contactors are susceptible to damage by short circuit currents, and should be fused to minimize short circuit fault currents. UL class RK-1 and class J fuses and semiconductor I2t fuses more effectively protect relays. These are low current-peak fuses designed to limit short circuit currents. Regardless, when there is a short circuit, relay operations should be closely monitored afterward because of the possibility of concealed damage that could cause the relays to behave inconsistently.
- 2. For sizing of relay see below
- 3. For data on standard coils see pages 5, 6, 11, & 13.
- 4. MDI RELAYS must mount vertically, ±10°.
- 5. Control line can be protected with metal oxide varistors (MOV). Use suffix -11.
- 6. Disconnect power before installing or servicing. Observe all electrical and safety codes and ordinances such as national electric code (NEC) and the occupational safety and health act (OSHA).

-RECOMMENDED-

Solid State Relays	Mercury Relays		
Please see our	250 VOLT	600 VOLT	
web page!	KTN-R	KTS-R	
https://www.mdius.com	JJN/A3T	JJS	
or call		JKS/A4J	
(800) 634-4077		KTK-R	

SIZING RELAY	3 Ø AC	FACTORS
To find AMPS per pole	208 V	2.776
3 Ø Balanced Heater loads	220 V	2.624
AMPS per pole - KW X 1,000	240 V	2.406
AMPS per pole = $\frac{KW \times 1,000}{VOLTS \times 1.732}$	277 V	2.084
Or multiply the kilowatts times	480 V	1.203
the appropriate factor	600 V	0.962



TORQUE SPECIFICATIONS

- · For coils 8 in. Lb. max.
- For line and load terminals see ratings labels.

MOV CHART

FOR	SIEMENS	HARRIS	C.K.E.	M.D.I.
24 VOLTS	S14K30	V47ZA7	-	PM-567-5
120 VOLTS	S20K130	V150LA20B	Z150LA20B	PM-567-1
220 VOLTS	S20K275	V275LA40B	Z275LA40B	PM-567-2
277 VOLTS	S20K385	V320LA20B	Z320LA20B	PM-567-3