

# MODEL 252

## 3-Phase Monitor



- Detects Phase Loss, Low Voltage and Phase Reversal
- 50 Hz and 60 Hz versions
- Automatic Reset

### DESCRIPTION

The Model 252 3-Phase Monitor continuously monitors 3-phase power lines for abnormal conditions. When properly adjusted, the Model 252 will detect phase loss on a loaded motor even when regenerated voltage is present.

This device consists of a solid-state voltage and phase-angle sensing circuit, driving an electromechanical relay with one SPDT and one SPST contact. When correct voltage and phase rotation are applied, the internal relay will energize. A fault condition will de-energize the relay. When the fault is corrected the Model 252 will automatically reset.

The Model 252 does not require a neutral connection and can be used with WYE or DELTA configured systems. Four versions cover 120V, 208/240V and 480V, 60Hz, and 380V, 50Hz. Adjustment ranges are sufficiently wide to allow for proper adjustment to existing conditions. Two LED indicators are provided to aid in adjustment and system troubleshooting.

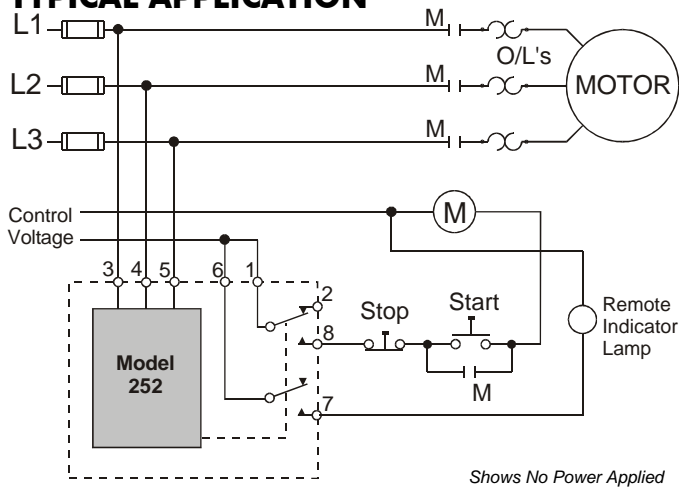


### SPECIFICATIONS

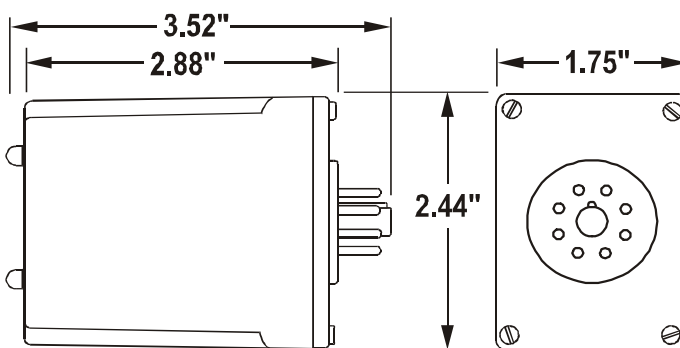
Model	B252B	252B	A252B	EX252B
Nominal AC Voltage	120VAC	208/240VAC	480VAC	380VAC
Adjustment Range	85-120VAC	160-240VAC	380-480VAC	300-380VAC
Frequency	60 Hz			50Hz
Power Consumption	0.25 W	0.50 W	1.5 W	1.25 W
Transient Protection	2500V for 10 msec			
Repeat Accuracy	0.1% of set point (fixed conditions)			
Response Time	0.05 seconds			
Reset Time	0.05 seconds			
Reset Type	Automatic			
Dead Band	2%			
Output Contacts	1 - SPDT		1 - SPST (N.O.)	
Contact Rating	5A at 240VAC resistive			
Expected Relay Life	Mech: 10 million operations Elec: 100,000 at rated load			
Operating Temp	- 40° to 131° F			
Humidity Tolerance	97% w/o condensation			
Enclosure Material	ABS plastic			
Mounting	8-pin socket (*order separately)			
Weight	5 oz.			
Agency Approvals	UL Recognized (U.S. & Canadian)			

\*Order 8-pin socket number 51X120

### TYPICAL APPLICATION



### DIMENSIONS



(dimensions have tolerance of  $\pm 0.06$ )



**TIME MARK**  
CORPORATION