DARE® Electronics, Inc.
3245 S. County Rd. 25A, Troy, Ohio 45373
Phone (937) 335-0031 Fax (937) 339-6948

PHASE SEQUENCE MONITOR

DARE phase sensors are used to monitor the phase sequence of three phase power being applied to electrical equipment that is sensitive to incorrect phase sequence (rotation) such as cranes, hoists, elevator motors, flap actuators and heavy machinery. The solid state sensing circuit continuously monitors the three phase power line for correct phase sequence (normally A-B-C) or loss of phase. When the phase sequence is correct the output will energize. If the phase sensor detects an incorrect phase rotation or loss of phase, the output will de-energize. Contacts can be used to disconnect the load, operate alarm circuits, or both.

DARE phase sequence sensors can be used to:

- Protect aircraft electrical equipment during interconnect of ground power to system power
- Monitor for loss of phase (open or grounded)
- Automatically correct phase sequence (when used with power contactors)
- Protect phase sensitive loads

DESIGN FEATURES

- 50 Hz, 60 Hz, or 400 Hz operation with voltage and / or frequency sensing option available
- Powered from sensing input lines or from separate AC or DC supply
- Relay output configurations from SPDT to 4PDT up to 10 amperes rating or solid state normally open outputs available
- Indicating lamps or phase loss sensing for resistive or inductive loads available
- Available with time delays on pull-in and/or drop-out or with customized voltage-time trip curves
- Wide variety of finishes, enclosures, connectors, and mounting arrangements

GENERAL SPECIFICATIONS

ELECTRICAL Input (Operating)				
Nominal Voltage:	115/220/440 VRMS or 28 Vdc			
Nominal Frequency:	50/60/400 Hz ± 20%			
Voltage Transients:	MIL-STD-704, Limits 1, 2, 3			
Input (Sense)				
Voltage Operation Band:	115, 220 Vrms ± 20% wye			
Frequency Operation Band:	50/60/400 Hz ± 20%			
Phase Sequence:	A-B-C			
Output Contacts				
Configuration:	SPDT up to 4PDT			
Contact Rating @ 28 VDC				
Resistive:	2 A	5A	10 A	25A
Inductive:	.75 A	3A	6 A	12A
Contact Life:	50,000 operations, minimum			
Contact Resistance, Initial:	.075 ohms, maximum			
Dielectric Strength:	1000 VRMS @ 60 Hz			
Insulation Resistance	100 meagohms @ 500 Vdc			

ENVIRONMENTAL CHARACTERISTICS	
Temperature:	Per MIL-STD-810, Methods 501, 502
Operating:	-55°C to +125°C -or- -40°C to +85°C
Storage:	-65°C to +150°C
Vibration:	Per MIL-STD-810, Method 514 Procedure I 10-2000 Hz., 20 G's
Acceleration:	Per MIL-STD-810, Method 513 Procedure I and II, ±10 G's
Shock:	Per MIL-STD-810, Method 516 Procedure I, 50 G's - 11 ms
Humidity:	Per MIL-STD-810, Method 507, Procedure II
Altitude:	Per MIL-STD-810, Method 504 Category 6 Equipment, Sea Level to 70,000 Ft.
CONSTRUCTION	
Enclosure	Hermetically sealed and encapsulated or gasket sealed (See drawings of basic styles):
Connector	Terminal Block, Glass to metal seal, solder hook, or circular type connector (See wiring diagram of typical pin-out connections)
Finish:	Various finishes available

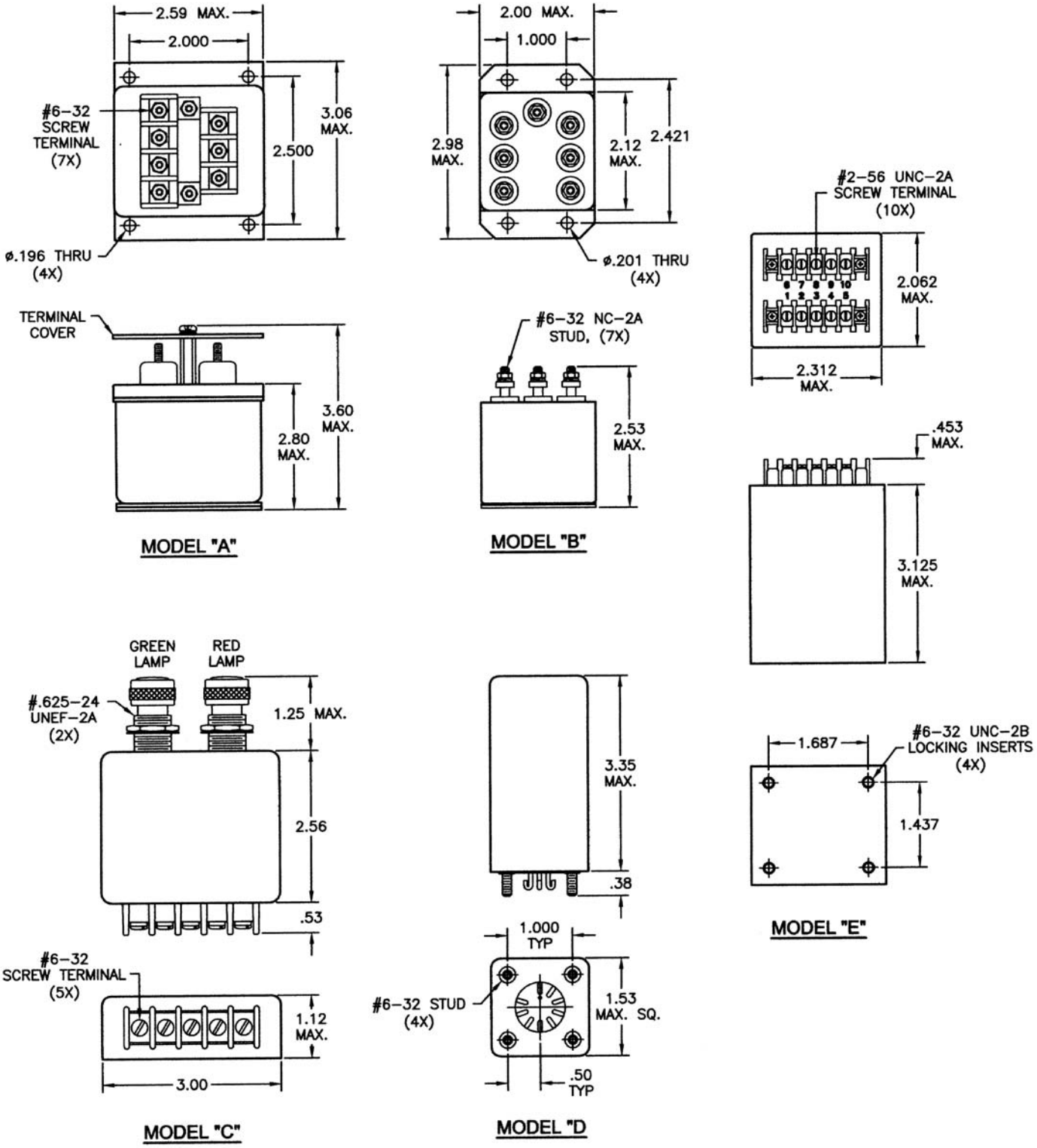
- Contact factory for special requirements

CALL 1-800-FON-DARE

DARE® Electronics, Inc.
3245 S. County Rd. 25A, Troy, Ohio 45373
Phone (937) 335-0031 Fax (937) 339-6948

PHASE SEQUENCE MONITOR

STANDARD ENCLOSURE STYLES



Contact Factory for Additional Styles & Options

CALL 1-800-FON-DARE