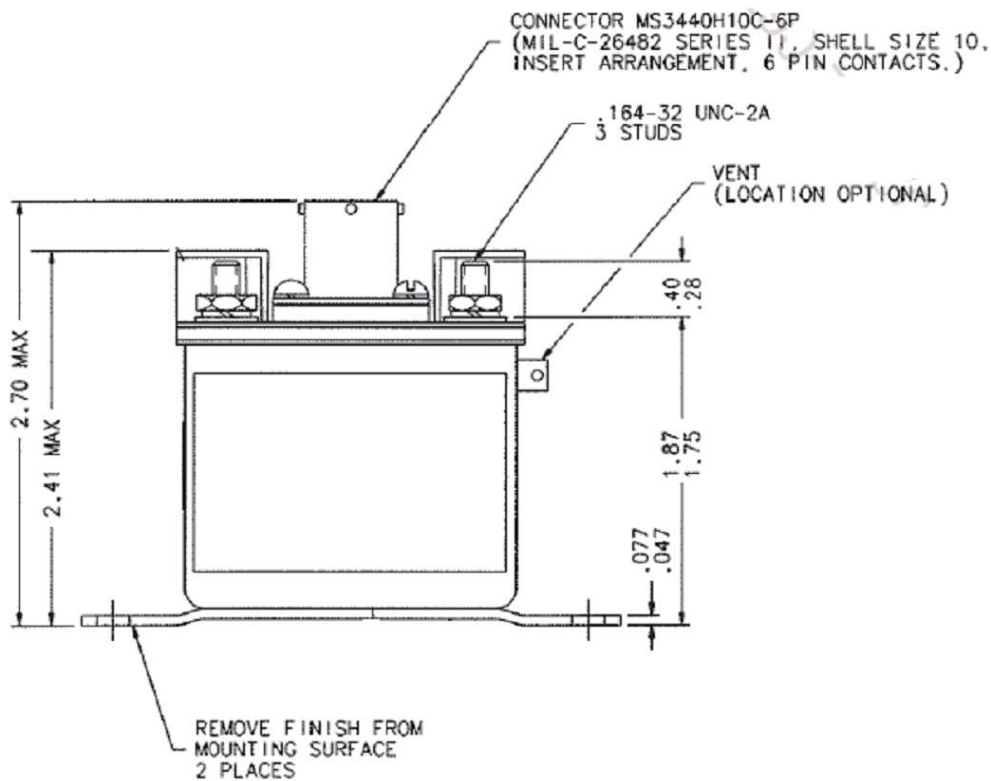
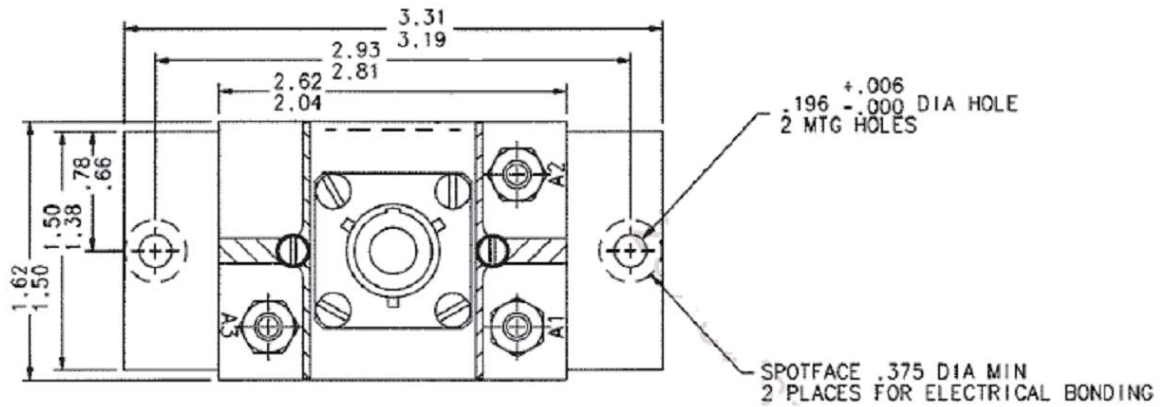


REVISIONS

REV.	ECO	DESCRIPTION	DATE	APPROVED
E	43228	NOTES 4.1 & 4.2-OPERATE TIME WAS .040 SECOND MAX, RELEASE TIME WAS .030 SECOND MAX	28SEP2000	CC

NN-233D  
CONTACTOR-SPDT, 25 AMP, AC,  
WITH AUXILIARY CONTACTS .1 AMP (SPDT)



ALL DIMENSIONS ARE IN INCHES



TE CONNECTIVITY  
 175 N, DIAMOND STREET MANSFIELD,  
 OHIO 44902

TITLE

CONTACTOR, SPDT, 25 AMP AC  
 50 AMP DC, .1 AMP SPDT AUX

TE P.N.

1616095-3

DWG NO.

NN-233D

DS DATA SHEET

CAGE CODE  
 74063

SCALE  
 NONE

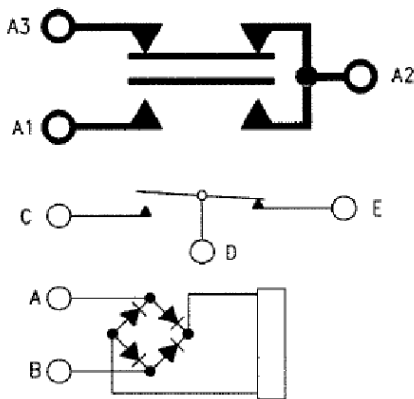
SHEET  
 1 OF 2

REV  
 E

## GENERAL SPECIFICATION

<p>1.0 COIL DATA</p> <p>1.1 NOMINAL OPERATING VOLTAGE 115 VAC</p> <p>1.2 MAXIMUM OPERATING VOLTAGE 120 VAC</p> <p>1.3 PICK-UP VOLTAGE 90 VAC MAX. (OVER TEMP. RANGE)</p> <p style="margin-left: 20px;">* 90 VAC MAX. AT 25°C</p> <p style="margin-left: 20px;">92 VAC MAX. DURING HIGH TEMP. TEST.</p> <p style="margin-left: 20px;">95 VAC MAX. MAX. CONT. CURRENT TEST.</p> <p>1.4 DROPOUT VOLTAGE 5-45 VAC (OVER TEMP. RANGE)</p> <p style="margin-left: 20px;">* 5-45 VAC AT 25°C</p> <p>1.6 COIL CURRENT AT 25°C &amp; 120 VAC. * .06 AMP MAX.</p> <p>1.7 DUTY CYCLE CONTINUOUS</p> <p>2.0 CONTACT DATA (MAIN SPDT) AUXILIARY (SPDT)</p> <p style="margin-left: 20px;">115 VAC 60/400 HZ 28VDC</p> <p>2.1 RESISTIVE 50 AMP .1 AMP</p> <p>2.2 INDUCTIVE 50 AMP .1 AMP</p> <p>2.3 MOTOR</p> <p>2.4 LAMP</p> <p>2.5 CONTACT DROP MAX. *150 MV INITIAL</p> <p style="margin-left: 20px;">175 MV AFTER START OF LIFE TESTS.</p> <p>2.6 OVERLOAD 400 AMP AC N.O. CONTACTS</p> <p>2.7 RUPTURE 500 AMP AC N.O. CONTACTS</p> <p>2.8 MINIMUM OPERATING CYCLES 50,000</p> <p style="margin-left: 20px;">100,000 AT 25% RATED RESISTIVE LOAD</p> <p style="margin-left: 20px;">10,000 LOAD TRANSFER</p> <p>2.9 AUX. MIN. OPERATING LEVEL</p> <p style="margin-left: 20px;">3 MILLIAMPS AT 6 VDC</p> <p style="margin-left: 20px;">2 OHM MAX. CONTACT RESISTANCE</p> <p>3.0 ENVIRONMENTAL DATA</p> <p>3.1 TEMPERATURE RANGE -55°C TO +71°C</p> <p>3.2 ALTITUDE MAXIMUM 50,000 FT.</p> <p>3.3 DIELECTRIC STRENGTH</p> <p>3.3.1 AT SEA LEVEL (2-5 SEC.)</p> <p style="margin-left: 20px;">COIL TO CASE AND AUXILIARY CONTACTS *1250 VRMS</p> <p style="margin-left: 20px;">ALL OTHER POINTS *1250 VRMS</p> <p style="margin-left: 20px;">AFTER LIFE TEST 1000 VRMS</p> <p style="margin-left: 20px;">ALL POINTS</p> <p>3.3.2 AT ALTITUDE 50,000 FEET (60 SEC)</p> <p style="margin-left: 20px;">ALL POINTS 500 VRMS</p> <p>3.4 INSULATION RESISTANCE *100 MEGOHMS MINIMUM AT 500 VDC, INITIAL.</p> <p style="margin-left: 20px;">50 MEG OHMS MINIMUM AT 500 VDC, AFTER ENVIRONMENTAL TESTS.</p>	<p>3.5 VIBRATION (SINUSOIDAL) 10 G'S (70-500 HZ)</p> <p style="margin-left: 20px;">5 G'S (500-2000 HZ)</p> <p>3.6 SHOCK (REF. MIL-STD-202 METHOD 213) NO CONTACT OPENING IN EXCESS OF TWO (2) MILLISECONDS.</p> <p style="margin-left: 20px;">25 G'S FOR SIX (6) MILLI-SECOND'S. NO CONTACT OPENING IN EXCESS OF TWO (2) MILLISECONDS.</p> <p>3.7 ACCELERATION 15 G'S</p> <p>4.0 OPERATIONAL DATA</p> <p>4.1 OPERATE TIME AT 25°C *115 VAC: .050 SECOND MAX.</p> <p>4.2 RELEASE TIME AT 25°C *115 VAC: .050 SECOND MAX.</p> <p>4.3 CONTACT BOUNCE TIME AT 25°C *115 VAC: .003 SECOND MAX.</p> <p>5.0 PHYSICAL DATA</p> <p>5.1 CONSTRUCTION SEALED (VENTED)</p> <p>5.2 DIODES ARE: JANTX, (1000 PIV), GLASS CASE</p> <p style="margin-left: 20px;">ZENER, JANTX, GLASS CASE</p> <p>5.3 TERMINAL STRENGTH (REF: MIL-STD-202, METHOD 211)</p> <p style="margin-left: 20px;">PULL TORQUE</p> <p style="margin-left: 40px;">35 LB. 20.0 LB.-IN</p> <p>5.4 FINISH: COVER TO BE TREATED WITH BLACK EPOXY COATING TO MEET THE REQUIREMENTS OF PARA 4.6.12 OF MIL-C-5026E.</p> <p>5.5 WEIGHT: 9 OZ MAX</p> <p>6.0 NOTES</p> <p>6.1 REMOVE FINISH FROM THE MOUNTING SURFACE, BOTH SIDES AT TWO (2) PLACES FOR ELECTRICAL BONDING.</p> <p>6.2 IDENTIFICATION SHALL BE PER MIL-STD-1285 AND SHALL INCLUDE THE FOLLOWING INFORMATION:</p> <p style="margin-left: 20px;">RELAYS</p> <p style="margin-left: 20px;">FUNCTIONAL DESCRIPTION</p> <p style="margin-left: 20px;">CIRCUIT DIAGRAM</p> <p>6.3 WARNING LEGEND SHALL READ: DO NOT DIELECTRIC COIL CIRCUIT</p> <p>6.4 HARDWARE TERMINALS SHALL BE SUPPLIED WITH SPECIFIED HARDWARE.</p> <p>6.5 THREADS SHALL BE PER MIL-S-7742.</p> <p style="text-align: center;">*ASTERISK DENOTES 100% TESTING BY PRODUCTION</p>
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## SCHEMATIC



TE CONNECTIVITY  
175 N, DIAMOND STREET MANSFIELD,  
OHIO 44902

TITLE

CONTACTOR, SPDT, 25 AMP AC  
50 AMP DC, .1 AMP SPDT AUX

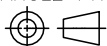
TE P.N.

1616095-3

DWG NO.

NN-233D

THIRD ANGLE PROJECTION



THIS DRAWING PREPARED  
IN ACCORDANCE WITH  
ANSI/ASMEY14.5M-1982

CAGE CODE

76043

SCALE

NONE

SHEET

2 OF 2

REV

E