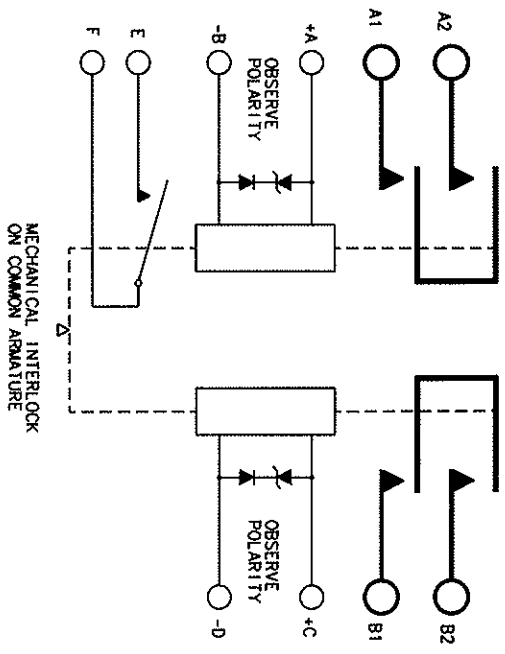
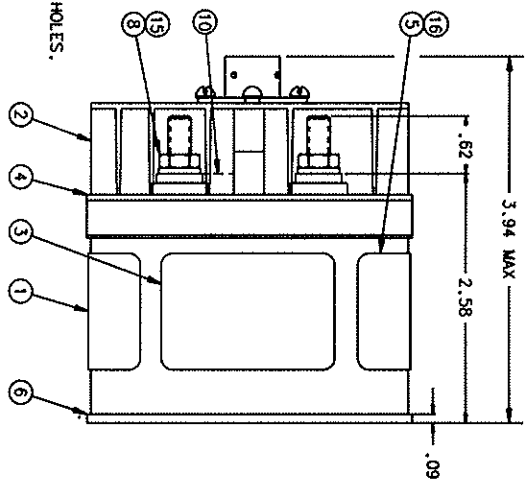
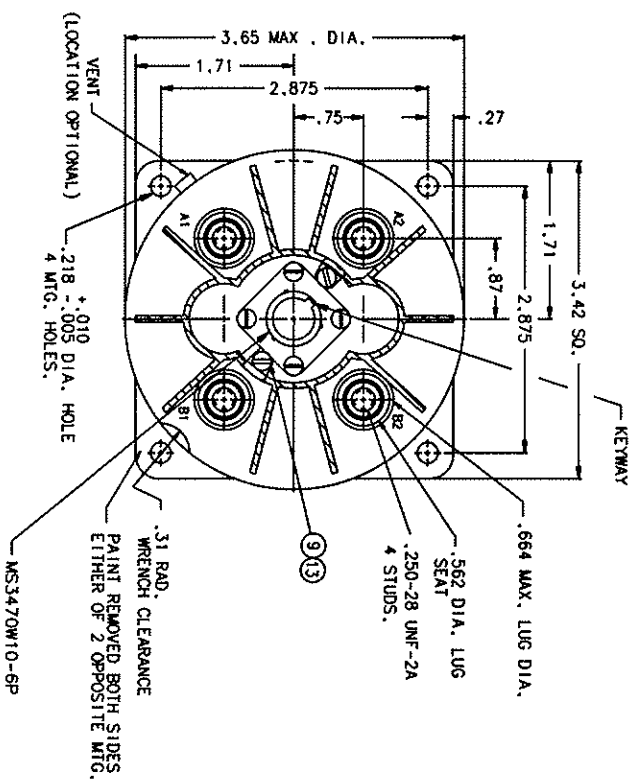


REV.	DESCRIPTION	DATE	APPROVED
P	25942 REDRAWN ON CAED'S, ITEM 8 WAS 50407-363, PARA. 7.0 REMOVED FROM SHIT 2.	94/05/09	WS
R	356990 SHIT 1 LUG DIA WAS .645 MAX. SHIT 2 LINE 2.4 .1 AMP ADDED	98/09/03	RS
T	40972 EVACUATION TUBE REMOVED FROM TOP VIEW	99/11/22	RS



FIND NO	QTY	RECD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	FSCM NO	DRAWING OR SPECIFICATION	MATERIAL OR NOTE
16	2		39529-002	OVERLAY			
15	4		51807-034	WASHER - LOCK NO. 1/4 SPL IT	MS35358-101		BRONZE
14							
13	2		51805-011	WASHER - LOCK NO. 5 SPL IT			BRONZE
12							
11							
10	2		51701-180	WASHER - .015 X .103 X 3/16			INVAR
9	2		51205-351	SCREW - 5-40 X 7/8 RD. HD.			BRASS
8	4		50407-364	NUT 1/4-28 X 7/16 X 3/16 HEX.	MS35650-32555		BRASS
7							
6	1		41529-020	CONTACTOR ASSEMBLY - PRIMARY			
5	1		42277-001	PLATE - WIRING DIAGRAM			
4	1		42530-001	PLATE - BASE COVER			
3	1		25695-001	PLATE - WARNING			
2	1		17539-005	SHIELD - TERMINAL			
1	1		16043-001	PLATE - NAME			

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES (DIMENSIONS ON DRAWINGS ON)		REF. DOUGLAS 500040-1	
2 PL DEC. 1/2 PL DEC. ANGLES	* .06	* .010	* 1*
DR BY	RS	99/12/15	
CHK BY	RS	99/12/15	
ENGR	WS	99/12/15	
MFG	WS	99/12/15	
RELEASE			
CONTR NO.			
GOVT APPVL			

HARTMAN ELECTRICAL MANUFACTURING MANSFIELD, OHIO	
RELAY, EM, 2 SPST CENTER OFF	100 AMP., 28 VDC
SIZE	CODE IDENT
C	74063
SCALE	NONE
DWG NO.	D-32A
SHEET	1 OF 2

REV.	DESCRIPTION	DATE	APPROVED
1	SEE SHEET 1 FOR REVISIONS		RS

- 1.0 COIL DATA
- 1.1 NOMINAL OPERATING VOLTAGE 28 VDC
- 1.2 MAXIMUM OPERATING VOLTAGE 30 VDC
- 1.3 PICK-UP VOLTAGE 18 VDC MAX. (OVER TEMP. RANGE)
- 1.4 DROPOUT VOLTAGE 21 VDC MAX. DURING HIGH TEMP. TEST.
- 1.5 HOLD VOLTAGE 22.5 VDC MAX. CONT. CURRENT TEST
- 1.6 COIL RESISTANCE AT 77°F 1.5-7.5 VDC (OVER TEMP. RANGE)
- 1.7 COIL CURRENT AT 77°F & 30 VDC 8.0 VDC (OVER TEMP. RANGE)
- 1.8 DUTY CYCLE CONTINUOUS
- 1.9 PEAK INDUCED TRANSIENT VOLTAGE (BACK EMF) ±45 VOLTS
- 2.0 CONTACT DATA MAIN (2-SPST) 28 VDC AUXILIARY (SPST) 28 VDC
- 2.1 RESISTIVE 100 AMP
- 2.2 INDUCTIVE 100 AMP
- 2.3 MOTOR 80 AMP
- 2.4 LAMP 50 AMP
- 2.5 CONTACT DROP MAX. 1 AMP
- 2.6 OVERLOAD 150 MV INITIAL
- 2.7 RUPTURE 175 MV AFTER START OF LIFE TESTS.
- 2.8 MINIMUM OPERATING CYCLES (LIFE) 800 AMP DC (N.O. CONTACTS) 1000 AMP DC (N.O. CONTACTS) 50,000 AT RATED RESISTIVE LOAD 50,000 AT RATED INDUCTIVE LOAD DC 1 RATED MOTOR LOAD 50,000 AT RATED LAMP LOAD 100,000 AT 25% RATED RESISTIVE LOAD.
- 3.0 ENVIRONMENTAL DATA
- 3.1 TEMPERATURE RANGE -55°C TO +71°C
- 3.2 ALTITUDE MAXIMUM 50,000 FT.
- 3.3 DIELECTRIC STRENGTH
- 3.3.1 AT SEA LEVEL (2-5 SEC) 28 VDC 115 VAC
- COIL TO CASE 1250 VRMS 1500 VRMS
- ALL OTHER POINTS 1250 VRMS 1500 VRMS
- AFTER LIFE TEST 1000 VRMS 1125 VRMS
- 3.3.2 AT ALTITUDE 50,000 FEET (60 SEC) 500 VRMS
- ALL POINTS 500 VRMS
- 3.4 INSULATION RESISTANCE 100 MEGOHMS MINIMUM AT 500 VDC. INITIAL 50 MEGOHMS MINIMUM AT 500 VDC. AFTER ENVIRONMENTAL TESTS.
- 3.5 VIBRATION (SINUSOIDAL) .06 DA (10-55 HZ) 10 G'S (55-500 HZ) MAX. DURATION CONTACT OPENING, 2 MILLISECONDS
- 3.6 SHOCK (REF. MIL-STD-202 METHOD 213) 25 G'S FOR SIX (6) MILLI-SECONDS. NO CONTACT OPENING IN EXCESS OF TWO (2) MILLISECONDS.
- 3.7 ACCELERATION 15 G'S
- 4.0 OPERATIONAL DATA
- 4.1 OPERATE TIME AT 77°F 28 VDC .050 SECOND MAX.
- 4.2 RELEASE TIME AT 77°F 28 VDC .040 SECOND MAX.
- 4.3 CONTACT BOUNCE TIME AT 77°F 28 VDC .002 SECOND MAX. MAKE
- 5.0 PHYSICAL DATA
- 5.1 CONSTRUCTION GASKET SEALED (VENTED)
- 5.2 TERMINAL STRENGTH SIZE 1/4"-28 50 LB. TORQUE 75 LB.-IN.
- 5.3 FINISH: BLACK LACQUER SHALL NOT DETERIORATE WHEN EXPOSED TO SKYDROL. ID-4 MIL-H-83282.
- 5.4 TERMINALS: IN CONFORMANCE WITH MIL-R-6106 AND AS SPECIFIED HEREIN.
- 5.5 WEIGHT: 1 LB. 15 OZ. MAX.
- 6.0 NOTES
- 6.1 THIS PART MEETS APPLICABLE MIL-R-6106 CONFORMANCE REQUIREMENTS. THIS DEVICE HAS AUXILIARY CONTACTS RATED FOR LOW LEVEL OPERATION (3 MA-100 MA)
- 6.2 DIODES ARE: JAN1X IN4249 (1000 PIV) ZENER JAN1X IN4479 (45 VOLTS) TERMINALS SHALL BE SUPPLIED WITH SPECIFIED HARDWARE REF. TABLE ON SHEET ONE (1).
- 6.3 HARDWARE:
- 6.4 IDENTIFICATION SHALL BE PER MIL-STD-1285 AND SHALL ALSO INCLUDE THE FOLLOWING INFORMATION: (FUNCTIONAL DESCRIPTION) (CIRCUIT DIAGRAM)
- 6.5 MARKING SHALL PROVIDE FOR GOOD LEGIBILITY AND WILL NOT ERODE.
- 6.6 WARNING LEGEND SHALL READ: *DO NOT DIELECTRIC COIL CIRCUIT*
- 6.7 UNLESS OTHERWISE SPECIFIED PARAMETER AND TEST TERMINOLOGY USED HEREIN IS AS DEFINED IN MIL-R-6106.
- 6.8 REMOVE PAINT FROM BOTH SIDES AT EITHER OF TWO OPPOSITE MOUNTING HOLES TO TERMINAL SHIELD 2 IS SECTIONED TO CLARIFY TOP VIEW.

REF. DOUGLAS 5D0040-1		HARTMAN ELECTRICAL MANUFACTURING MANSFIELD, OHIO	
DR BY	RS	99/12/15	RELAY, EM, 2 SPST CENTER OFF 100 AMP., 28 VDC
CHK BY	RS	99/12/15	
ENGR	RS	99/12/15	
MFG	RS	99/12/15	SIZE CODE IDENT DWG NO. C 74063 D-32A
RELEASE			SCALE NONE SHEET 2 OF 2
CONTR NO.			
GOVT APPV.			

2 PL DEC. 3 PL DEC. ANGLES	*	*	* 1 *
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON			