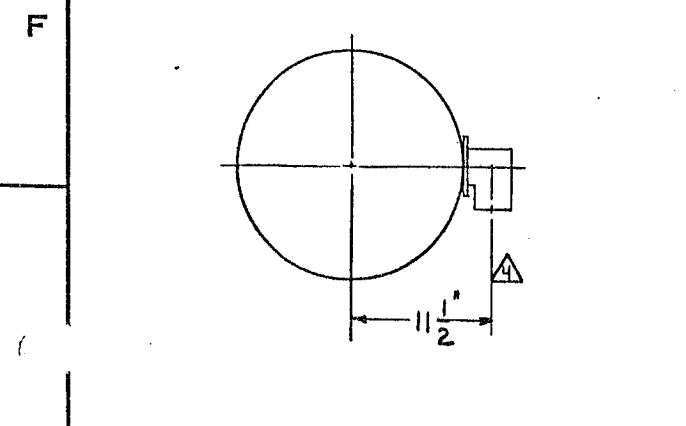
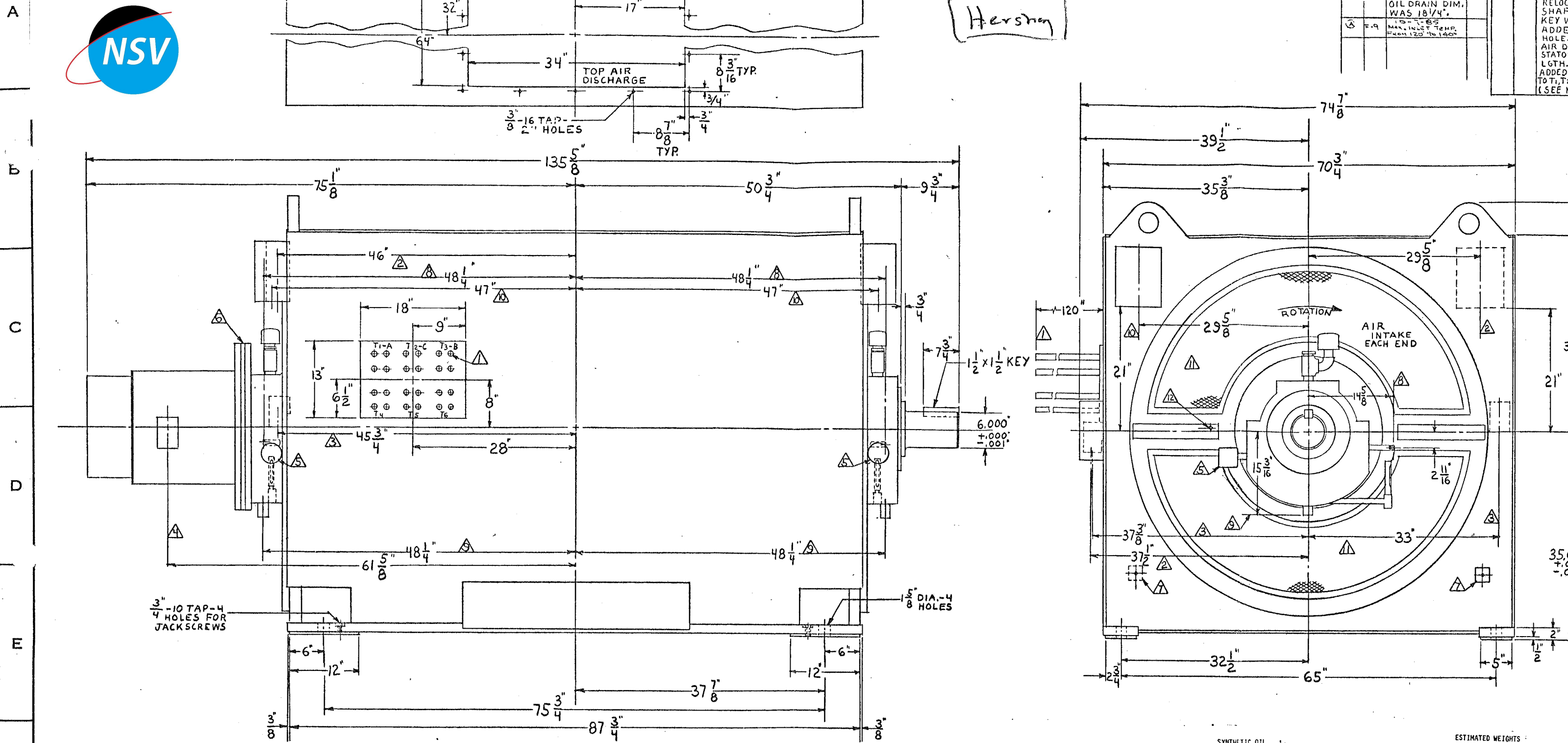


Hershey

REV.	DESCRIPTION
10-1-85	REMOVED OIL FLOW GUAGES - REV. NOTE 9 - OIL DRAIN DIM. WAS 18 1/4".
11-1-85	MAX. INLET TEMP. FROM 120° TO 140°



- ⚠ 6 STATOR LEADS. EACH LEAD CONSISTS OF 4 NUMBER 4/0, 5000 V. CABLE.
- ⚠ CENTERLINE OF HOLE FOR 1" CONDUIT FOR STATOR TEMPERATURE DETECTOR LEADS.
- ⚠ CENTERLINE OF HOLE FOR 1" CONDUIT FOR SPACE HEATER LEADS.
- ⚠ CENTERLINE OF HOLE FOR 1" CONDUIT FOR EXCITER FIELD LEADS.
- ⚠ CENTERLINE OF HOLE FOR 1/2" CONDUIT FOR BEARING TEMPERATURE DETECTOR LEADS.
- ⚠ THIS BEARING IS INSULATED TO PREVENT SHAFT CURRENTS. ALL CONNECTIONS TO BE INSULATED TO PRESERVE THE INTEGRITY OF THE BEARING INSULATION.
- ⚠ TWO GROUNDING PADS - 1/2-13 TAP, EACH END, DIAGONALLY OPPOSITE.
- ⚠ OIL SUPPLY CONNECTION 1/2" N.P.T. MALE THREAD ONE PER BEARING.
- ⚠ OIL DRAIN CONNECTION 1-1/2" PIPE - NO THREAD, ONE PER BEARING.
- ⚠ CENTERLINES FOR 1" CONDUIT FOR VIBRATION PROBES - 2 PER BRG.
- ⚠ REMOVABLE GUARD SCREENS, EACH END.
- ⚠ CENTERLINE OF 1/2" N.P.T. FOR VIBRATION PROBE

CERTIFICATION FOR: WILLIAMS & LANE ENERGY SYSTEMS  
391 TAYLOR BLVD.  
SUITE 110  
PLEASANT HILL, CA. 94523

ORDER NO: 88557-002  
D.O. SH-85-25  
FOR: HERSHEY CHOCOLATE CO.  
OAKDALE, CA.

S.O. 331924  
QUANTITY: 1

TYPE "SAB", HORIZONTAL, SYNCHRONOUS GENERATOR RATED:  
6200 KW, 7750 KVA, 4160 VOLTS, 1075.6 AMPS, 1800 RPM, 80°C TEMPERATURE RISE BY RTD, CONTINUOUS DUTY, ABOVE A 40°C AMBIENT TEMPERATURE, .80 POWER FACTOR, 3 PHASE, 6 WIRE, 60 HERTZ, FRAME 21320-34 WITH: CLASS "F" INSULATION  
GENERATORS TO HAVE THE FOLLOWING ELECTRICAL CHARACTERISTICS:  
DAMPER WINDINGS

S.O. 331925  
QUANTITY: 1

TYPE "FRBA" HORIZONTAL BRUSHLESS EXCITER RATED:  
25 KW 250 VOLTS, 100 AMPS, 1800 RPM, 80°C TEMPERATURE RISE BY RESISTANCE, CONTINUOUS DUTY, ABOVE A 40°C AMBIENT TEMPERATURE, FRAME BE12-8 WITH: CLASS "F" INSULATION

ESTIMATED WEIGHTS:  
ROTOR-----10660  
STATOR-----23960  
TOTAL-----34620

SYNTHETIC OIL  
EXXON 2380 H  
BEARING OIL REQUIREMENTS  
VISCOSITY-----EXXON 2380H (MIL-L-23699)  
PRESSURE-----15 TO 20 P.S.I.  
FLOW-----2.0 GPM/BRG  
MAX. INLET TEMP-----140°F  
LOSSES-----62% BTU/HR/BRG

WR<sup>2</sup> = 8430 LB. FT<sup>2</sup>  
PR = 13448 KW PER ELECTRICAL RADIAN  
GENERATOR DESIGNED FOR 1/2" ROTOR END PLAY  
USE LIMITED END FLOAT COUPLING

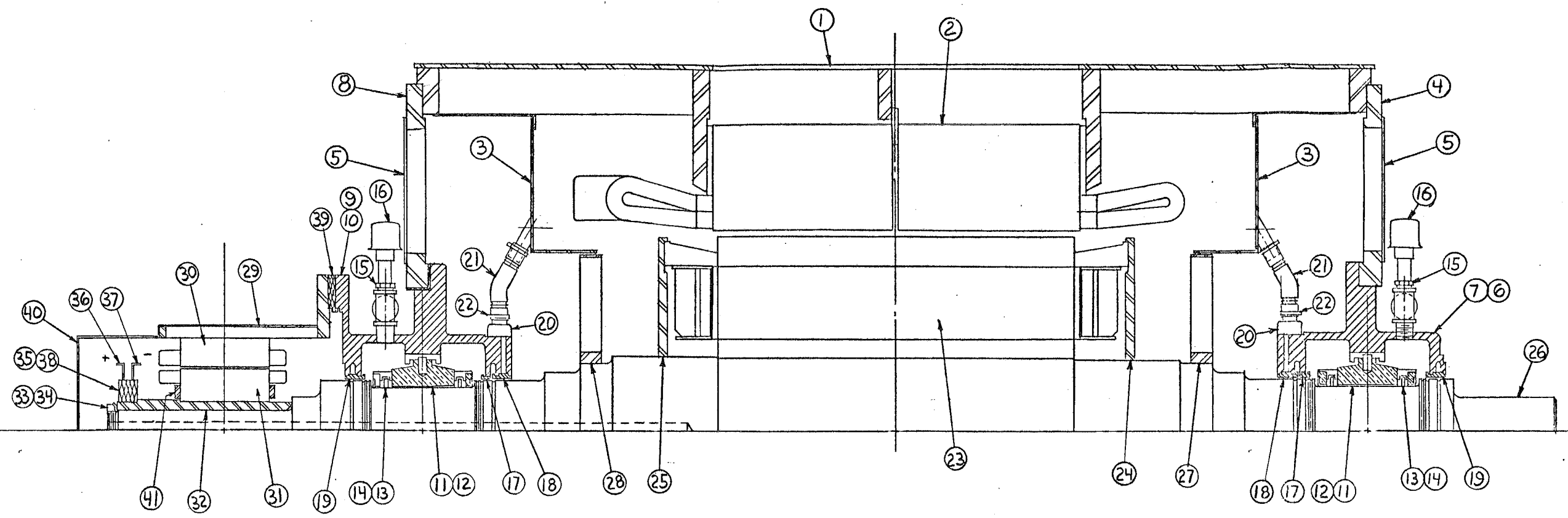
WORKING TOLERANCES UNLESS OTHERWISE SPECIFIED			QTY	MATL.	ITEM	DESCRIPTION
MACHINING	FABRICATING	SURFACE ROUGHNESS				
±.01 THRU 2.00"	±.12 THRU 24.00	MACHINING 125 MICRO 7. INCHES				
±.016 OVER 2.00" THRU 10.00"	±.24 OVER 24.00					
±.03 OVER 10.00"						
ANGLES ± 0.5°						
ALL THREADS TO BE CLASS 2 UNIFIED						
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DRAWN BY: R. Munch			CHECKED BY: J. P. ...			
IDEAL ELECTRIC COMPANY MANSFIELD, OHIO, U.S.A.			MICRO-FILM			

21320-34 & BE 12-8  
OUTLINE DRAWING  
SYN. GEN. WITH DIR. CONN. BR. EXC  
TWO 8" DIA. SLV. BRGS.

D-60441

REF. D-58391 SEMA

D-60441



TYPE RATING SPEED PHASE HERTZ VOLTS AMPS FRAME  
 SAB 6200KW 1800 3 60 4160 1075.6 21320-34 S.O. 331924

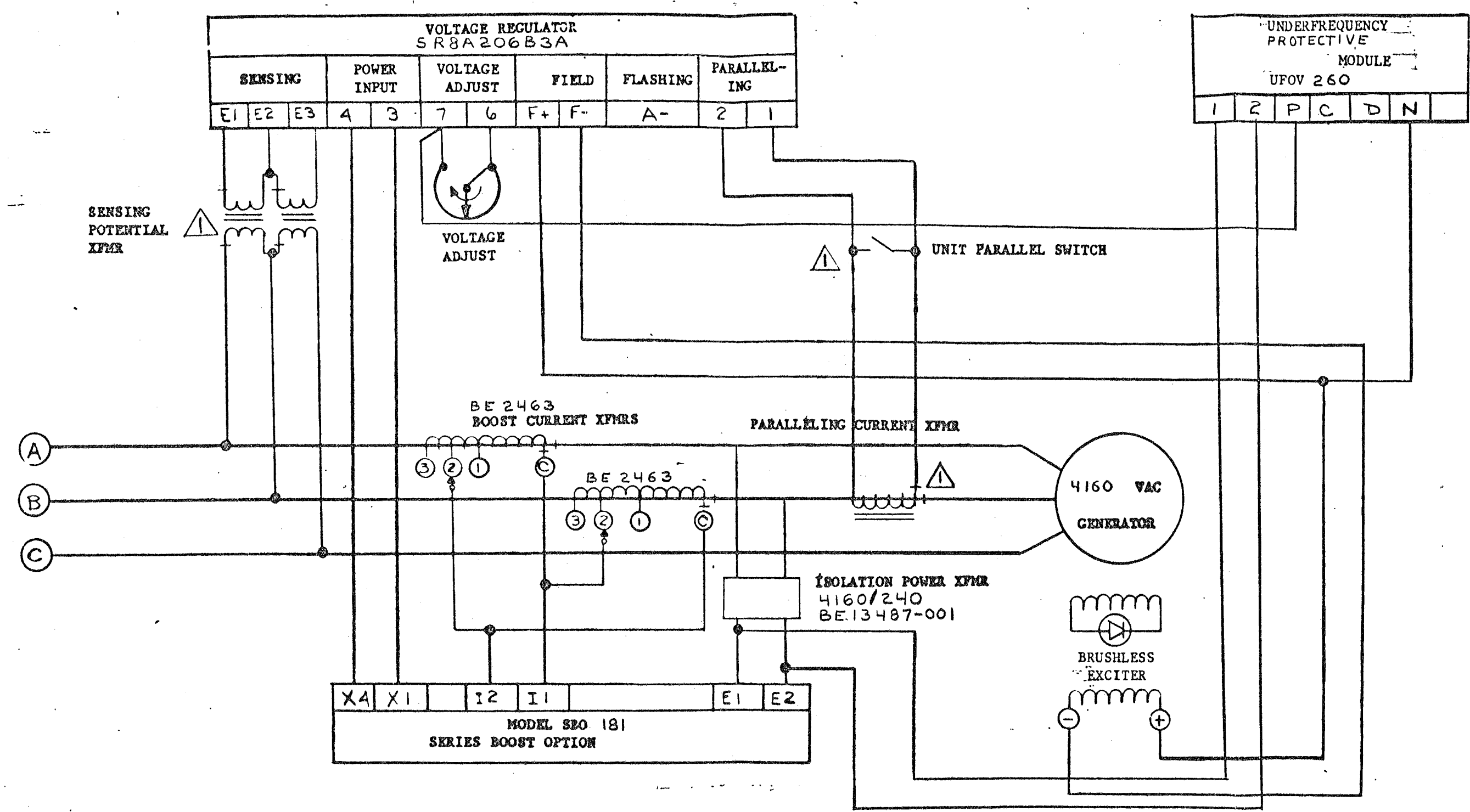
STATOR ROTOR FIELD ARMATURE CUSTOMER  
 23588 23587 22093 23590 WILLIAMS & LANE

ITEM	DRAWING	PATTERN	NAME OF PART	PCS
1	D-60449		FRAME	1
2	DATA #23588		STATOR	1
3	B-60451 GR #1		BAFFLE	2
4	C-55615		BEARING BRACKET (OPP. CONN. END)	1
5	C-48803		BRACKET COVERS	4
6	C-56762	4487	BEARING HOUSING	1
7	C-48887	4488	BEARING CAP	1
8	C-55616		BEARING BRACKET (CONN. END)	1
9	C-56767	4487-B	BEARING HOUSING	1
10	C-48889	4488-B	BEARING CAP	1
11 *	C-49256	3656	SLEEVE BEARING-UPPER	2
12 *	C-49255	3656	SLEEVE BEARING-LOWER	2
13	B-19175	3655	OIL RING	4
14	C-19354 IT #2		OIL WIPER	2
15	A-40683 GR #2		OIL SIGHT PLUG	2
16	VORTEX DC-125		BREATHER CAP	2
17 *	B-46803	4333	OIL SEAL-INNER	2
18 *	B-46804 DET #1	4433	OIL SEAL-AIR PRESSURE	2
19 *	B-46804 DET #2	4333	OIL SEAL-OUTER	2
20	B-56681	4228	HOUSING AIR VENT	2
21	PENHTUBE CT. FLEX. 1-1/4" I.D. x 8" LG		VENT HOSE	2
22	AERO SEAL 1-3/8" SIZE		HOSE CLAMPS	4
23	DATA #23587		ROTOR	1
24	C-60453 GR #1		BALANCE RING (OPP. CONN. END)	1
25	C-60453 GR #2		BALANCE RING (CONN. END)	1
26	D-60452		SHAFT	1
27	B-60454		FAN (OPP. CONN. END)	1
28	B-60455		FAN (CONN. END)	1
29	C-60462		EXCITER FIELD FRAME	1
30	DATA #22093		EXCITER FIELD CORE & WINDING	1
31	DATA #23590		EXCITER ARMATURE CORE AND WINDING	1
32	B-52591		ARMATURE SLEEVE	1
33 *	AN-18		LOCKNUT	1
34 *	W-18		LOCKWASHER	1
35	D-52592 GR #1		RECTIFIER & PROTECTOR ASSEMBLY	1
36 *	B-52883F (+)		RECTIFIER	3
37 *	B-52883R (-)		RECTIFIER	3
38 *	B-57826 GR #1 (ST-2KVS26-12A12-BBS)		PROTECTOR ASSEMBLY	1
39	C-53804 GR #6		INSULATION RING	1
40	C-45450		RECTIFIER COVER	1
41	B-29522		ARMATURE HEADS	2

\* RECOMMENDED ON HAND SPARE PARTS

WORKING TOLERANCES UNLESS OTHERWISE SPECIFIED			ACR.	LEV	MATL.	ITEM	DESCRIP.
MACHINING	FABRICATING	SURFACE ROUGHNESS					
±.01 THRU 2.00"	±.12 THRU 24.00	MACHINING 120 MICHO 7 INCHES					21320-4-33&BE 12-8
±.015 OVER 2.00"	±.24 OVER 24.00						LAYOUT & ASSEMB
±.03 OVER 10.00"							SYN. GEN. WITH DIR. CONN. B
ANGLES ± 0.5°							TWO 8" DIA. SLV. BASS. SYNTH
ALL THREADS TO BE CLASS 3, 8 PITCH							
DRAWN BY: [Signature] CHECKED BY: [Signature] IDEAL ELECTRIC CO. PART							

UNLESS OTHERWISE SPECIFIED  
ALL MACHINING DIMENSIONS TO HAVE A TOLERANCE OF ± 0.005  
ALL THREADS TO BE CLASS 2 UNIFIED.



- NOTES:
- 1. SUPPLIED BY OTHERS.
  - 2. PHASE ROTATION SHOWN A-B-C.

PCS.	PATT. NO.	MATL.	ITEM	DESCRIPTION
				INTERCONNECTION DIAGRAM
				DRAWN BY <i>R. Mink</i>
				CHECKED BY <i>DBA</i>
				THE IDEAL ELECTRIC & MANUFACTURING CO. MANSFIELD, OHIO, U.S.A.

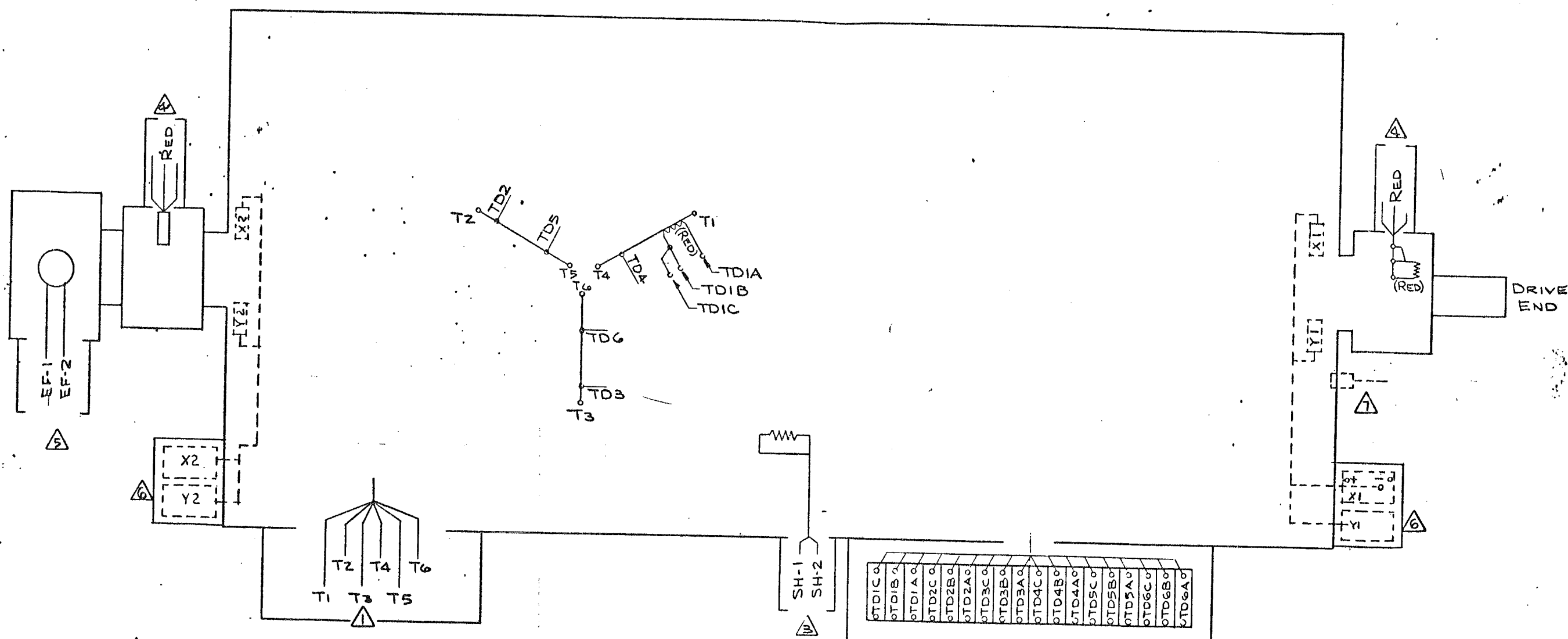
B-60384

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S.O. 331925

B-60384

REV.	ZONE	CHANGE DESCRIPTION	BY
0		8-2-85	
		9-10-85 NOTE 6, VIB. DET. CHANGED, NOTE 7 ADDED	



- ▲ STATOR LEADS - LEADS ARE 4-4/0 OF 5000 VOLTS CABLE PER PHASE
- ▲ STATOR TEMPERATUR DETECTOR LEADS - DETECTORS ARE 100 OHM @ 0°C.
- ▲ SPACE HEATER LEADS - SPACE HEATERS ARE RATED 2000 WATTS, 120 VOLTS, SINGLE PHASE, 60 HERTZ.
- ▲ BEARING TEMPERATURE DETECTOR LEADS - DETECTORS ARE 100 OHM @ 0°C
- ▲ EXCITER FIELD LEADS.
- ▲ VIBRATION DETECTORS, METRIX 5465, SUPPLIED BY WILLIAMS & LANE
- ▲ VIBRATION DETECTOR, METRIX 5484, SUPPLIED BY WILLIAMS & LANE

WORKING TOLERANCES UNLESS OTHERWISE SPECIFIED			PCB.	NET U/M	MATL.	ITEM	DESCRIPTION
MACHINING	FABRICATING	SURFACE ROUGHNESS					INTERCONNECTION DIAGRAM
±.01 THRU 2.00"	±.12 THRU 24.00	MACHINING 125 MICRO ✓. INCHES					
±.015 OVER 2.00" THRU 10.00"	±.24 OVER 24.00						
±.03 OVER 10.00"							
ANGLES ± 0.5°							
ALL THREADS TO BE CLASS 2 UNIFIED							
DRAWN BY <i>R. Minch</i> CHECKED BY <i>H. Deuman</i>							
IDEAL ELECTRIC COMPANY MANFIELD, OHIO, U.S.A.				MICRO-FILM		c. 60446	

c-60446

REF. SKPIA C-59130