ELECTRICAL CONNECTION DIAGRAMS KAMAG 11, KAMAG 14 AND KAMAG 18 GENERATORS WITH KCR VOLTAGE REGULATORS

NOTE 1 CAUTION: UNIT MUST BE GROUNDED IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODES: GENERATOR NEUTRAL IS FACTORY GROUNDED TO GENERATOR FRAME

NOTE 2 SEE VOLTAGE RANGE CHART FOR APPLICABLE CONNECTION DIAGRAM. CONDUCTORS SHOWN AS DASHED LINES TO BE INSTALLED BY THE USER OF THE GENERATOR. CHECK ALL CONNECTIONS INCLUDING THOSE MADE TO VOLTAGE REGULATOR BEFORE OPERATING GENERATOR SET.

NOTE 3 CONNECTION OF OPTIONAL REGULATOR ON-OFF SWITCH IS SHOWN IN FIGURE 1A.

NOTE 4 CONNECTION OF OPTIONAL FIELD CIRCUIT BREAKER IS SHOWN IN FIGURE 1B.

*NOTE 5 IN APPLICATIONS WHERE PARALLEL OPTION IS NOT PROVIDED, A JUMPER MUST BE INSTALLED ACROSS TERMINALS CT1 AND CT2. IN THREE PHASE APPLICATIONS WHERE PARALLEL OPERATION VOLTAGE DROOP OPTION IS PROVIDED, REMOVE JUMPER AND CONNECT THE VOLTAGE DROOP CIRCUIT AS SHOWN IN FIGURE 1C. CURRENT TRANSFORMER MUST BE IN PHASE B LINE. FOR PARALLEL OPERATIONS OF GENERATORS CONNECTED SINGLE PHASE, CONSULT FACTORY.

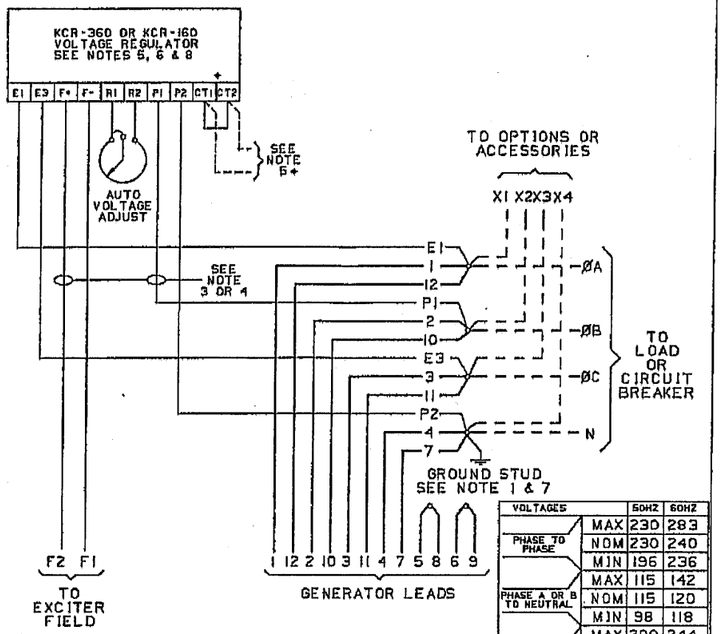
NOTE 6 VOLTAGE REGULATOR POWER (TERMINALS P1 AND P2) MUST BE 50/60 HERTZ 100 TO 139 VAC, SINGLE PHASE. SENSING (TERMINALS E1 AND E3) IS SET FOR 240 VAC NOMINAL. TO OBTAIN GOOD REGULATION ON SOME 50 HERTZ CONNECTIONS, IT MAY BE NECESSARY TO RESET SENSING ON KCR-360 VOLTAGE REGULATOR FOR 208 VAC. CONSULT REGULATOR MANUAL FOR PROCEDURE.

NOTE 7 WHEN OPERATING ON A 3 WIRE GROUNDED LEG DELTA SYSTEM, REMOVE LEADS 4, 7 AND L2 LEADS FROM GROUND STUD, BOLT THEM TOGETHER AND INSULATE THEM. THEN CONNECT THE DESIRED PHASE LEADS TO GROUND STUD.

NOTE 8 CAUTION: EXCITER FIELD CIRCUIT IS NOT ISOLATED. DO NOT ATTEMPT TO MANUALLY FLASH GENERATOR FIELD WHILE GENERATOR IS ROTATING.

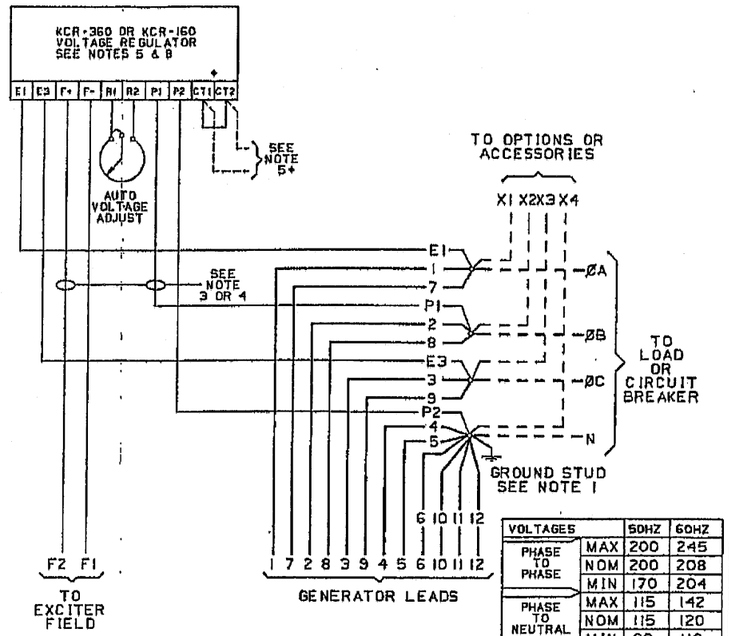
NOTE 9 LEAD MARKINGS SHOWN GIVES A-B-C PHASE ROTATION WHEN THE GENERATOR IS ROTATING CCW, AS VIEWED FROM THE EXCITER END. (CW FACING DRIVE END).

*APPLIES TO REGULATOR MODEL KCR-360 ONLY



VOLTAGES		50HZ	60HZ
PHASE TO PHASE	MAX	230	283
	NOM	230	240
	MIN	196	236
PHASE A OR B TO NEUTRAL	MAX	115	142
	NOM	115	120
	MIN	98	118
PHASE C TO NEUTRAL	MAX	200	244
	NOM	200	208
	MIN	170	204

FIGURE 2 SERIES DELTA CONNECTION THREE PHASE LOADS



VOLTAGES		50HZ	60HZ
PHASE TO PHASE	MAX	200	245
	NOM	200	208
	MIN	170	204
PHASE TO NEUTRAL	MAX	115	142
	NOM	115	120
	MIN	98	118

FIGURE 3 PARALLEL WYE CONNECTION THREE PHASE LOADS

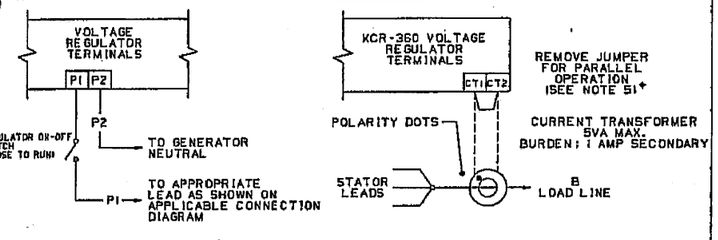


FIG. 1A REGULATOR ON-OFF SWITCH OPTION

FIG. 1C PARALLEL VOLTAGE DROOP OPTION

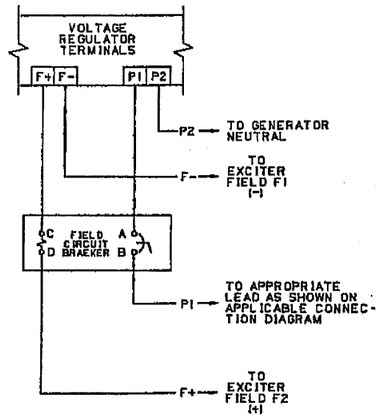
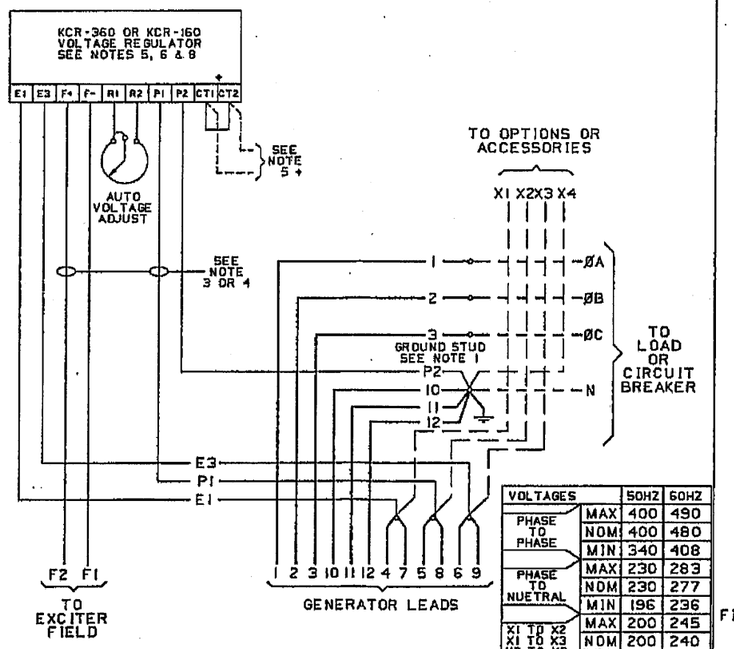


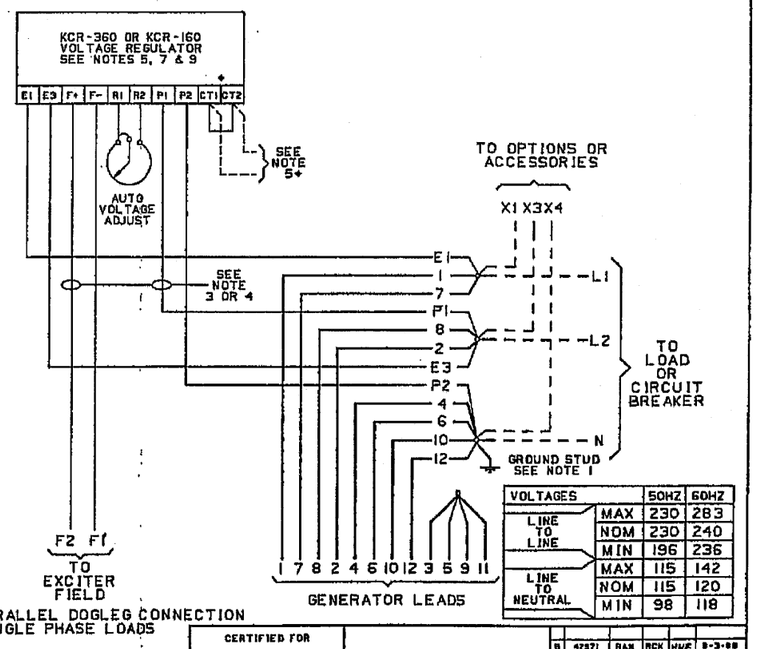
FIG. 1B FIELD CIRCUIT BREAKER OPTION



VOLTAGES		50HZ	60HZ
PHASE TO PHASE	MAX	400	490
	NOM	400	480
	MIN	340	408
PHASE TO NUETRAL	MAX	230	283
	NOM	230	277
	MIN	196	236
X1 TO X2 X1 TO X3 X2 TO X3	MAX	200	245
	NOM	200	240
	MIN	170	204
X1 TO X4 X2 TO X4 X3 TO X4	MAX	115	142
	NOM	115	139
	MIN	98	118

FIGURE 4 SERIES WYE CONNECTION THREE PHASE LOADS

TESTED AT FACTORY AS ILLUSTRATED IN FIGURE ——



VOLTAGES		50HZ	60HZ
LINE TO LINE	MAX	230	283
	NOM	230	240
	MIN	196	236
LINE TO NEUTRAL	MAX	115	142
	NOM	115	120
	MIN	98	118

FIGURE 5 PARALLEL DOGLEG CONNECTION SINGLE PHASE LOADS

CERTIFIED FOR		B	42571	RAN	RCK	HMF	8-3-88
		A					
		ORIGINAL					
KVA	DISTRIBUTION: RAD,REK,RJV,RRC,RSK, RST	REV	ECO	ENGR	DR	CK	DATE
VOLTAGE	ORIGINAL AT RMK	MATL					
P.O.		SCALE			1ST S/N		
KATO S/N	TITLE	DRAWING NUMBER			SH 1 OF 1		
DATE SIGN	GENERATOR CONTROLS	P8800-728					