

REVISIONS					
ZONE	LTR	DESCRIPTION	DATE	DRAFT	CHK'D
A		REVISED PER FAA COMMENTS	2/23/73	RMF	elb
B		AS BUILT	4/29/73	RMF	elb
C		CHANGE MADE PER QA LIST 0352	6/14/73	RMF	elb

LEGEND

- AB₁ &₂ AIR BOX DAMPER SOLENOID
- ABS₁ &₂ AIR BOX SWITCH (I.N.O.)
- AM AC AMMETER
- AMM AUTO-MANUAL MODULE
- AMS AMMETER SWITCH
- BCO BATTERY CHARGER OVERLOAD BREAKER
- BCS BATTERY CHARGER SWITCH
- BCT BATTERY CHARGER TIMER (I.N.C.)
- BCX BATTERY CHARGER AUXILIARY RELAY (2 N.O., I.N.C.)
- BEC BATTERY CHARGER EQUALIZING SWITCH
- BTS BATTERY CHARGER TEST SWITCH
- C CAPACITOR
- CB CIRCUIT BREAKER, GENERATOR
- CI CRANKING INTERRUPTER TIMER (I.N.C.)
- CL CLUTCH (TDR TIMER)
- CR TRANSFER TIME DELAY RELAY
- CS CRANKING SPEED SWITCH
- CT_{1,2} &₃ CURRENT TRANSFORMER
- CT₄ CROSS CURRENT COMPENSATING TRANSFORMER
- D DIODE OR RECTIFIER
- DCA DC AMMETER
- DCL DC CONTROL INDICATOR LIGHT (GREEN)
- ECT EQUALIZING CHARGE TIMER (I.N.C.)
- ELS EXTENDED LOAD STOP PUSHBUTTON
- ELT EXTENDED LOAD TEST RELAY (I.N.O., I.N.C.)
- ELTL EXTENDED LOAD TEST LIGHT (AMBER)
- ESCS EMERGENCY STOP AND CONTROL CUT-OUT SWITCH
- ETM ELAPSED TIME METER
- EXC GENERATOR EXCITER
- FAR GOVERNOR CONTROL RHEOSTAT
- FM FREQUENCY METER
- FMRL RADIATOR FAN MOTOR RUNNING LIGHT (RED)
- FPS FUEL PRESSURE SWITCH
- FR FIELD RECTIFIER
- FSD FREQUENCY SENSING DEVICE
- FU FUSE
- GA GOVERNOR ACTUATOR
- GCB GOVERNOR CONTROL BOX
- GMP GOVERNOR MAGNETIC PICKUP
- IH IMMERSION HEATER
- IHS IMMERSION HEATER SWITCH
- LB LOAD BANK TERMINALS
- LTS LOAD TEST PUSHBUTTON
- M MOTOR (TDR TIMER)
- MC RADIATOR FAN MOTOR CONTACTOR
- MSCS MANUAL SYNCHRONIZING CONTROL SWITCH
- N NEUTRAL
- NL NORMAL POWER LINE
- NLTS NO LOAD TEST START PUSHBUTTON
- NLC₂ HEATER CONTACTOR NO.1 & 2
- SCP STARTER CONTACTOR PILOT RELAY (I.N.O.)
- OLX OVERLOAD, FAN MOTOR STARTER
- OPI OIL PRESSURE INTERLOCK SWITCH
- OPL OIL PRESSURE LIGHT (RED)
- OPR OIL PRESSURE RELAY (I.N.O., I.N.C.)
- OPS OIL PRESSURE SWITCH
- OPIH IMMERSION HEATER CUT-OUT SWITCH
- OPT OIL PRESSURE TIMER (I.N.O.)
- OPX OIL PRESSURE AUXILIARY RELAY (2 N.O.)
- OSL OVERSPEED LIGHT (RED)
- OSR OVERSPEED RELAY (2 N.O., I.N.C.)
- OSS OVERSPEED SWITCH
- OTL OVER TEMPERATURE LIGHT (RED)
- OTR OVER TEMPERATURE RELAY (I.N.O., I.N.C.)
- OTS OVER TEMPERATURE SWITCH
- PM PYROMETER
- PX BATTERY CHARGER POWER RELAY (2 N.O.)
- R RESISTOR
- RFM RADIATOR FAN MOTOR
- RMDS RADIATOR MOTOR DISCONNECT SWITCH
- RTH RADIATOR THERMOSTAT
- RTS SAFETY RESET AND LAMP TEST SWITCH
- SC STARTER MOTOR CONTACTOR
- SCX STARTER CONTACTOR AUXILIARY RELAY (2 N.O., I.N.C.)
- SDT SHUTDOWN TIMER (I.N.O.)
- SL₁ &₂ SYNCHRONIZING LIGHTS 1 AND 2 (CLEAR)
- SLSS SYNCHRONIZING LIGHTS / SYNCHROSCOPE SWITCH
- SS SYNCHROSCOPE
- SOL STARTING SOLENOID
- SPB SYNCHRONIZING PUSHBUTTON
- TB TERMINAL BOARD
- TC THERMOCOUPLE
- TDR TRANSFER TIME DELAY TIMER
- TH THERMOSTAT
- TR TRANSFER RELAY
- TS TRANSFER SWITCH
- TS₁₋₅ TRANSFER SWITCH AUXILIARY CONTACTS
- TVR TEMPERATURE COMPENSATED VOLTAGE SENSING RELAY (I.N.C.)
- TX TRANSFORMER
- VFS VOLTMETER / FREQUENCY METER
- VM VOLTMETER
- VMS VOLTMETER SWITCH
- VR VOLTAGE REGULATOR
- I-3PR POTENTIAL RELAY
- 4PR VOLTAGE FREQUENCY RELAY

NOTES
 1. ALL CIRCUITS ARE SHOWN DE-ENERGIZED
 2. TRANSFER SWITCH SHOWN IN COMMERCIAL POSITION.

SWITCH LEGEND

POSITION	POSITION			CONTACT
	1	2	3	
1-2	X-X			CONTACT
3-4		X-X		
5-6			X-X	
7-8	X-X		X-X	
9-10	X-X	X-X		VOLTAGE REGULATOR (VMS)
13-14	X-X			

POSITION	POSITION			CONTACT
	OFF	1	2	
1-2		X		CONTACT
3-4			X	
5-6		X-X		
7-8	X-X		X-X	

TRANSFORMER RATINGS
 TX_{1,2}—60HZ—480/240V—40VA—TRANSFER SWITCH
 TX₃—60HZ—460/120V—1KVA—REGULATOR SENSING
 TX₄—60HZ—480/38V—575VA—BATTERY CHARGER
 TX₅—8—60HZ—277/115V—50VA—METERING & GOVERNOR CONTROL

TERMINAL BOARDS
 LB—LOAD BANK
 TB₂—FF—FREQUENCY-SENSING DEVICE
 XX—BYPASS SWITCH INTERLOCK
 TBI—YY—ALARM RELAY CONNECTION
 ZZ—LOAD DROPPING RELAY

AMMETER SWITCH	QTY REQ	QTY REQ	QTY REQ	ITEM	PART NO.	MANUFACTURER	DESCRIPTION	SYM

PARTS LIST

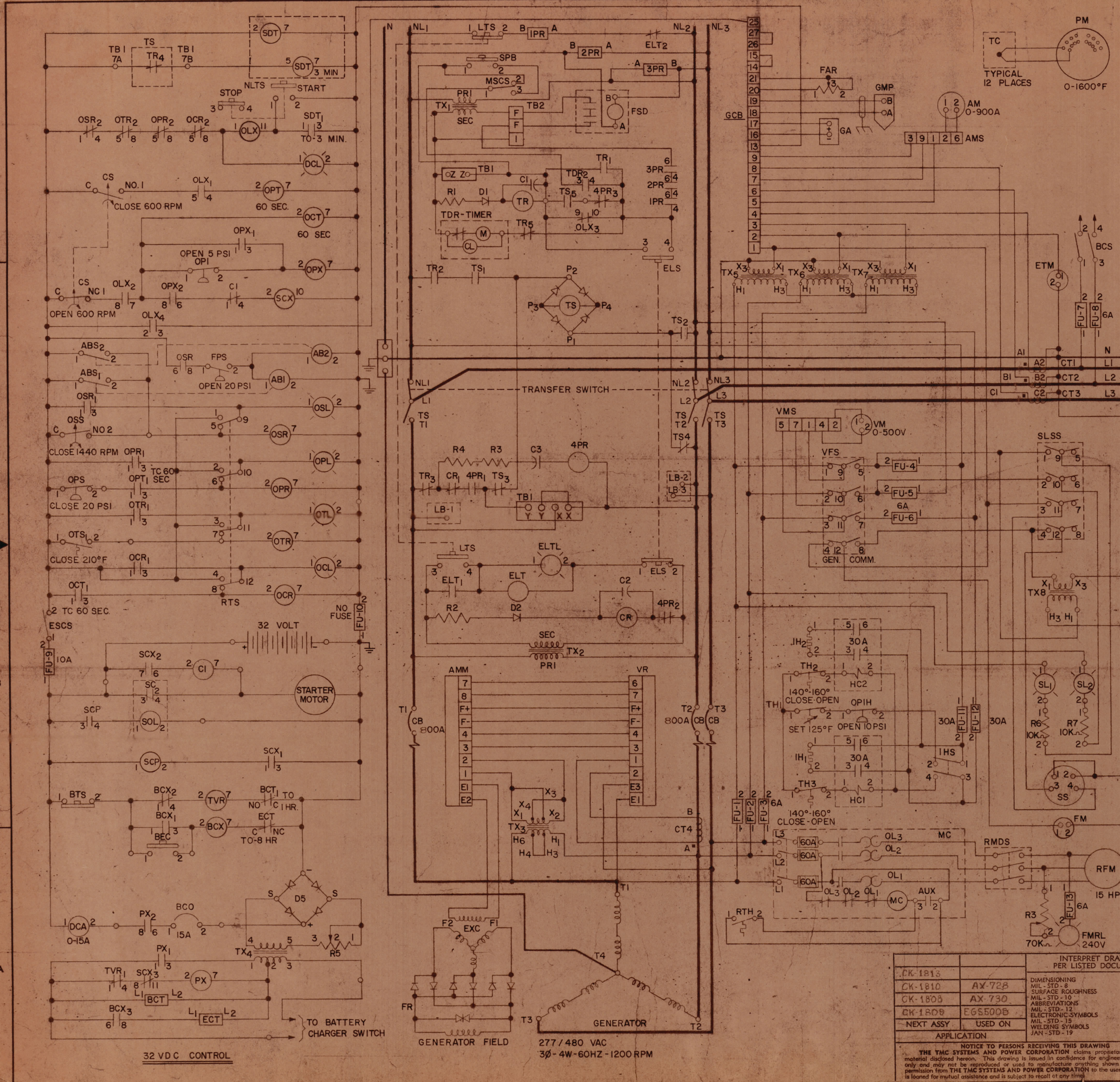
DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
1-9-73	25 Jan 73	25 Jan 73	25 Jan 73	25 Jan 73	25 Jan 73	25 Jan 73	25 Jan 73	25 Jan 73

THE TMC SYSTEMS AND POWER CORPORATION
 SPRINGFIELD, VIRGINIA

SCHEMATIC DIAGRAM
425KW ENGINE GENERATOR SET
277/480 VAC

SIZE	CODE IDENT NO	DWG. NO.	REV
D	24146	CK 1807	C

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32 VDC CONTROL

GENERATOR FIELD
 277/480 VAC
 30-4W-60HZ-1200 RPM

CK1807

A

C