

Wiring Diagrams

DETROIT DIESEL



Automatic Transfer Switches
Bypass Isolation

Models:

SBS/SBP and SGS/SGP

Controls:

DXPower™ 1500



Product Identification Information

Product identification numbers determine service parts. Record the product identification numbers in the spaces below immediately after unpacking the products so that the numbers are readily available for future reference. Record field-installed kit numbers after installing the kits.

Transfer Switch Identification Numbers

Record the product identification numbers from the transfer switch nameplate.

Model Designation _____

Serial Number _____

[illegible]

This manual provides wiring diagrams for the automatic transfer switch, bypass isolation, models listed on the front cover.

Information in this publication represents data available at the time of print. The manufacturer of DDC/MTU Power Generation products reserves the right to change this publication and the products represented without notice and without any obligation or liability whatsoever.

Service Assistance

For professional advice on generator set power requirements and conscientious service, please contact your nearest DDC/MTU Power Generation distributor.

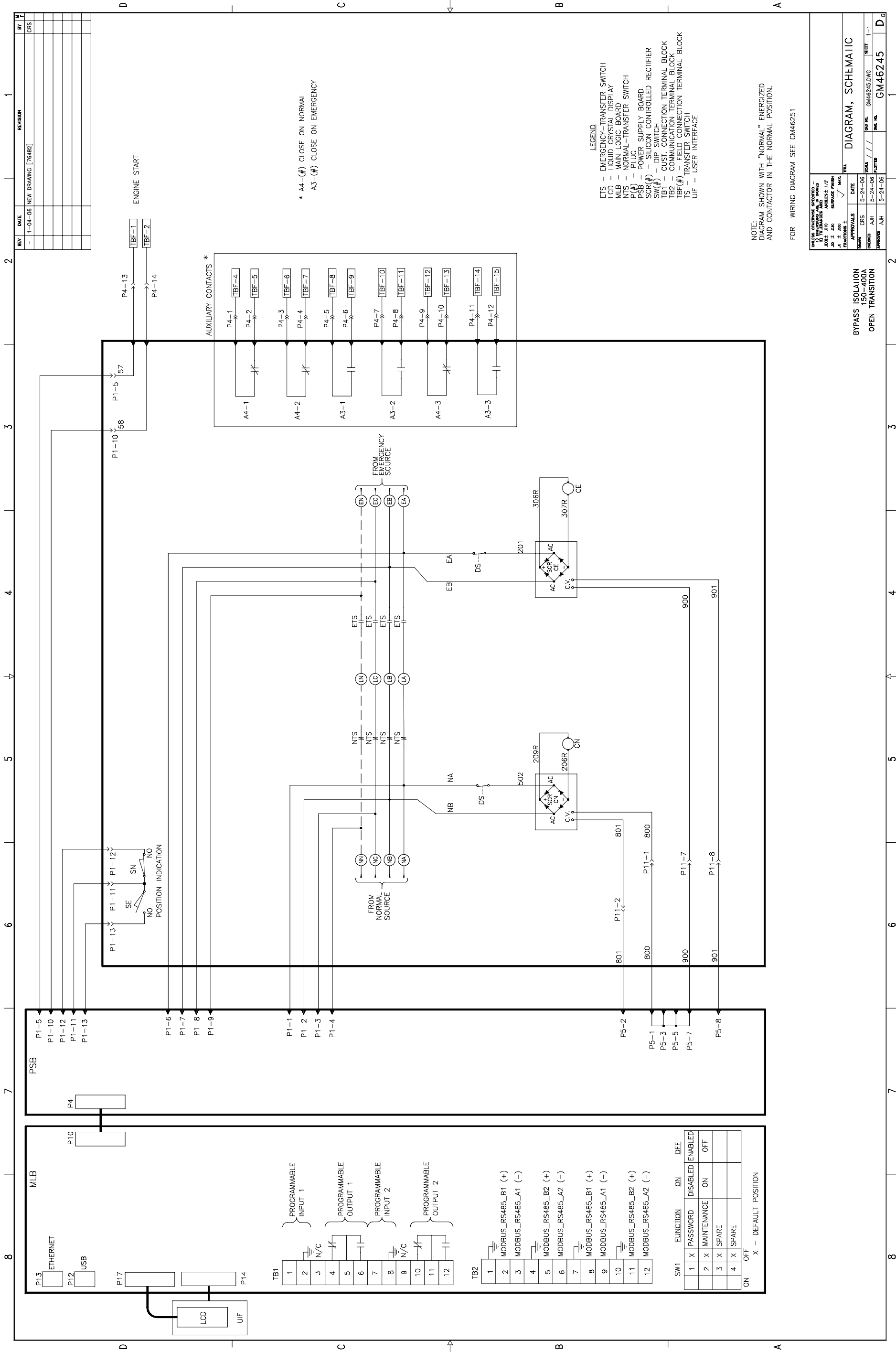
- Consult the Yellow Pages under the heading Generators—Electric
- Visit the DDC/MTU Power Generation website at DDCMTUPowerGeneration.com
- Look at the labels and stickers on your DDC/MTU Power Generation product or review the appropriate literature or documents included with the product

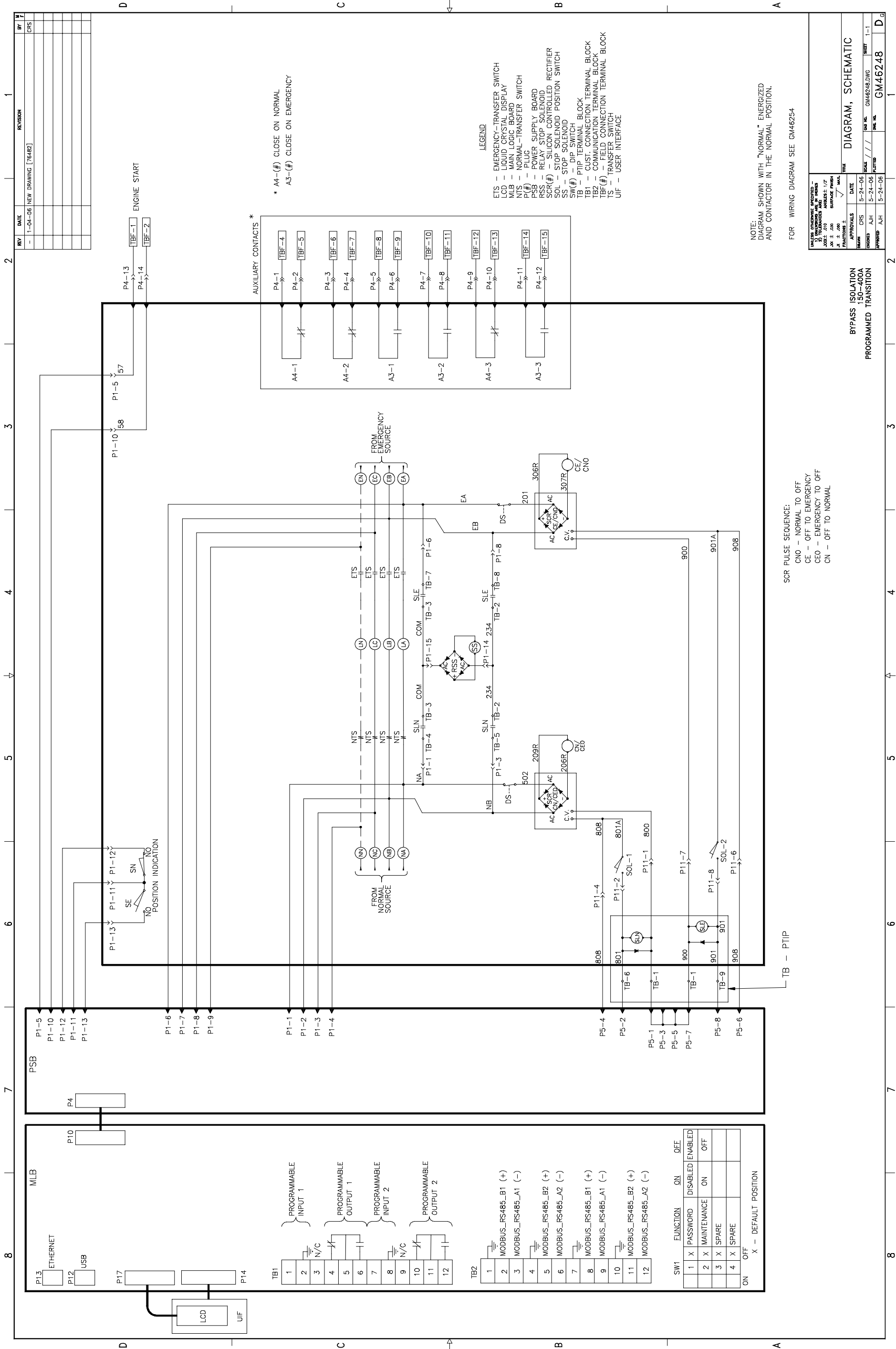
Schematics and Wiring Diagrams

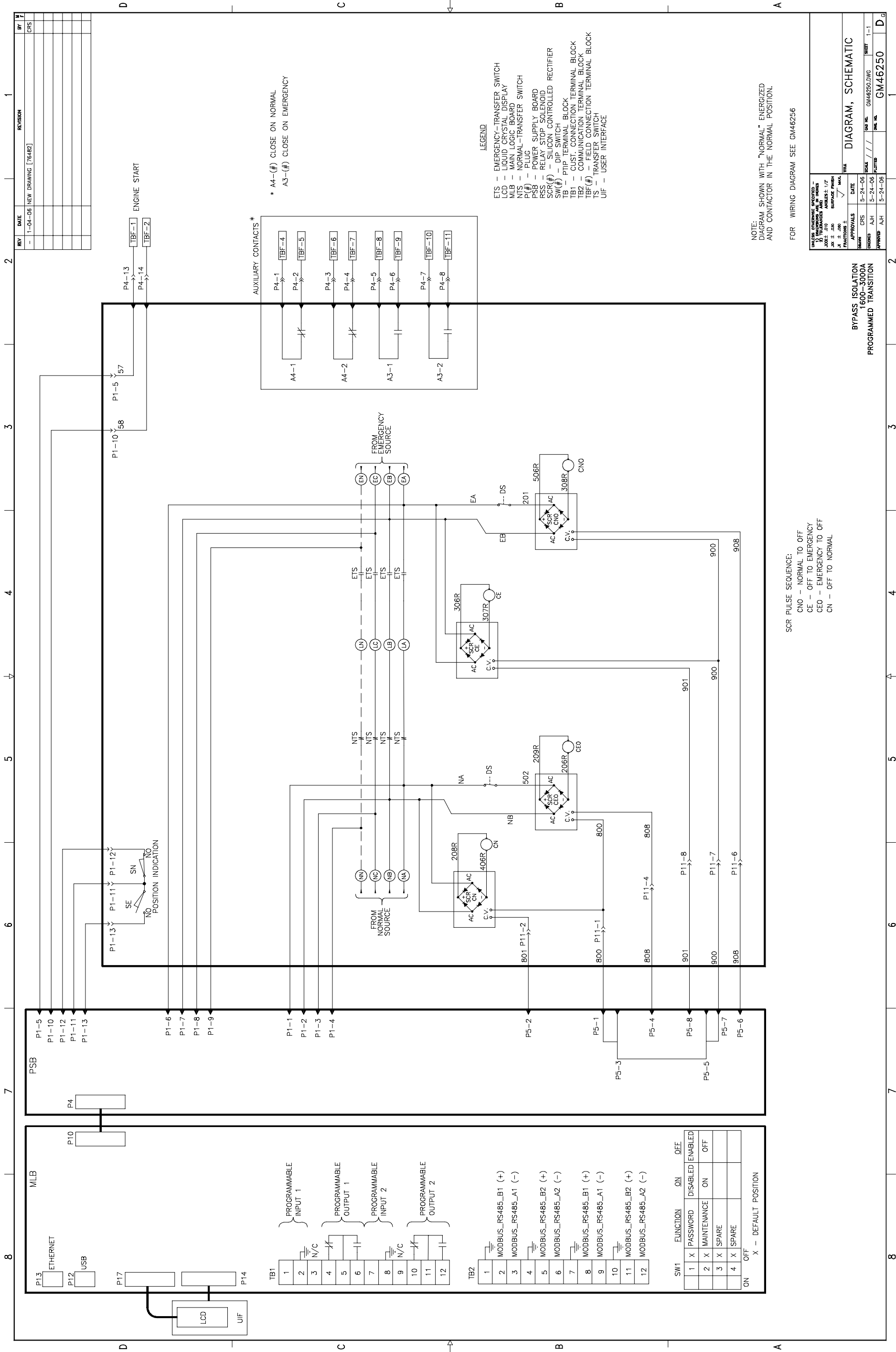
Model	Schematics	Part Number	Page
SBP	Programmed Transition, 150–400A, 2- and 3-Pole Page 1	GM46273A-S	31
	Page 2	GM46273B-S	32
SBP	Programmed Transition, 150–400A, 4-Pole Page 1	GM46274A-S	33
	Page 2	GM46274B-S	34
SBP	Programmed Transition, 600–1200A Page 1	GM46274A-S	33
	Page 2	GM46274B-S	34
SBP	Programmed Transition, 1600–3000A Page 1	GM46276A-S	35
	Page 2	GM46276B-S	36
SBP	Programmed Transition, 4000A	Contact Factory	—
SBS	Standard Transition, 150–400A	GM46269-S	25
SBS	Standard Transition, 600–1200A Page 1	GM46270A-S	26
	Page 2	GM46270B-S	27
SBS	Standard Transition, 1600–3000A Page 1	GM46271A-S	28
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SBS	Standard Transition, 4000A	GM46272-S	30
SGP	Programmed Transition, 150–400A	GM46248-S	10
SGP	Programmed Transition, 600–1200A	GM46249-S	11
SGP	Programmed Transition, 1600–3000A	GM46250-S	12
SGS	Standard Transition, 150–400A	GM46245-S	7
SGS	Standard Transition, 600–1200A	GM46246-S	8
SGS	Standard Transition, 1600–3000A	GM46247-S	9

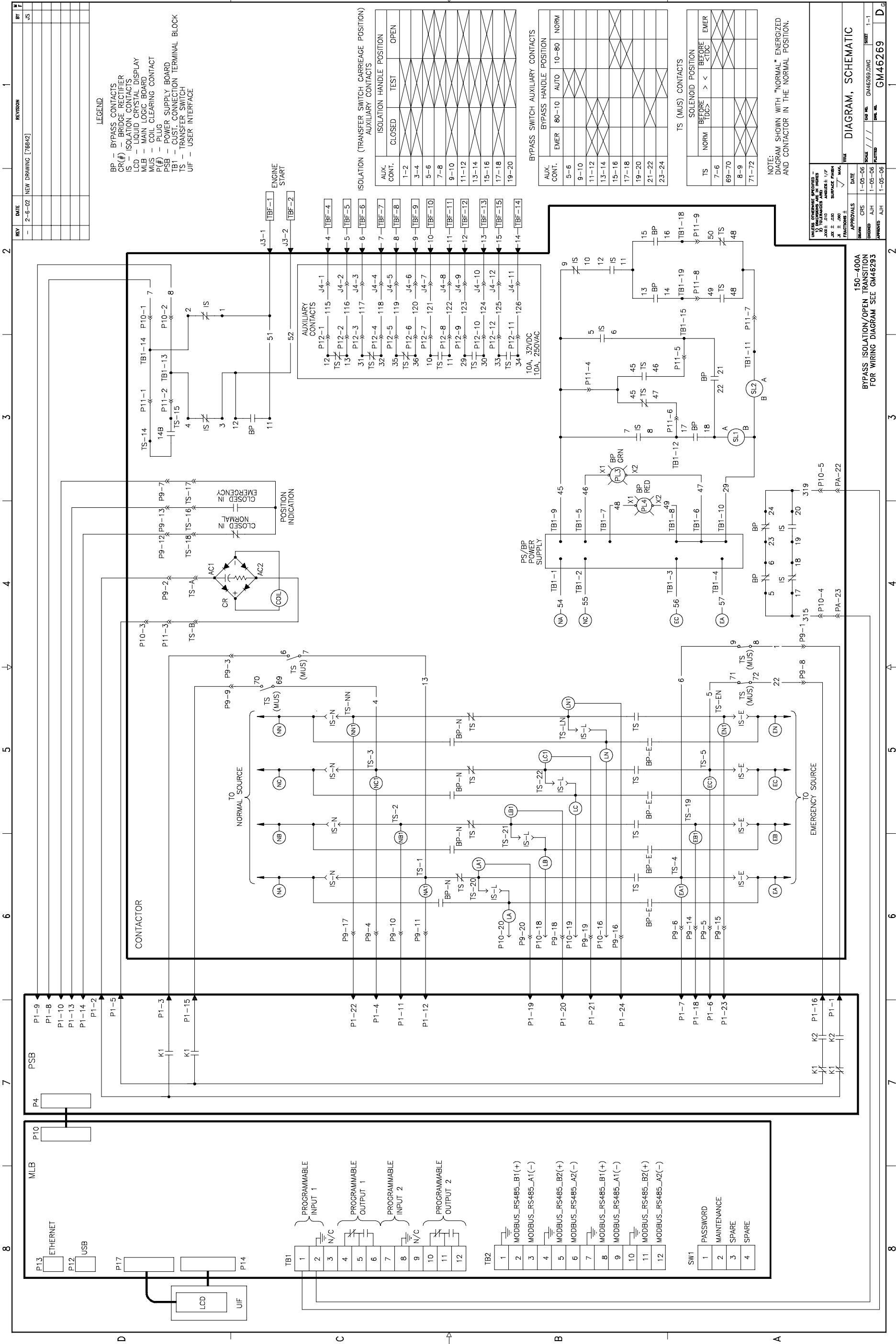
Model	Wiring Diagrams	Part Number	Page
SBP	Programmed Transition, 150-400A, 2- and 3-Pole	GM46297-S	41
SBP	Programmed Transition, 150-400A, 4-Pole Page 1	GM46298A-S	42
	Page 2	GM46298B-S	43
SBP	Programmed Transition, 600-1200A Page 1	GM46298A-S	42
	Page 2	GM46298B-S	43
SBP	Programmed Transition, 1600-3000A	GM46300-S	44
SBP	Programmed Transition, 4000A	Contact Factory	—
SBS	Standard Transition, 150-400A	GM46293-S	37
SBS	Standard Transition, 600-1200A	GM46294-S	38
SBS	Standard Transition, 1600-3000A	GM46295-S	39
SBS	Standard Transition, 4000A	GM46296-S	40
SGP	Programmed Transition, 150-400A Page 1	GM46254A-S	19
	Page 2	GM46254B-S	20
SGP	Programmed Transition, 600-1200A Page 1	GM46255A-S	21
	Page 2	GM46255B-S	22
SGP	Programmed Transition, 1600-3000A Page 1	GM46256A-S	23
	Page 2	GM46256B-S	24
SGS	Standard Transition, 150-400A Page 1	GM46251A-S	13
	Page 2	GM46251B-S	14
SGS	Standard Transition, 600-1200A Page 1	GM46252A-S	15
	Page 2	GM46252B-S	16
SGS	Standard Transition, 1600-3000A Page 1	GM46253A-S	17
	Page 2	GM46253B-S	18

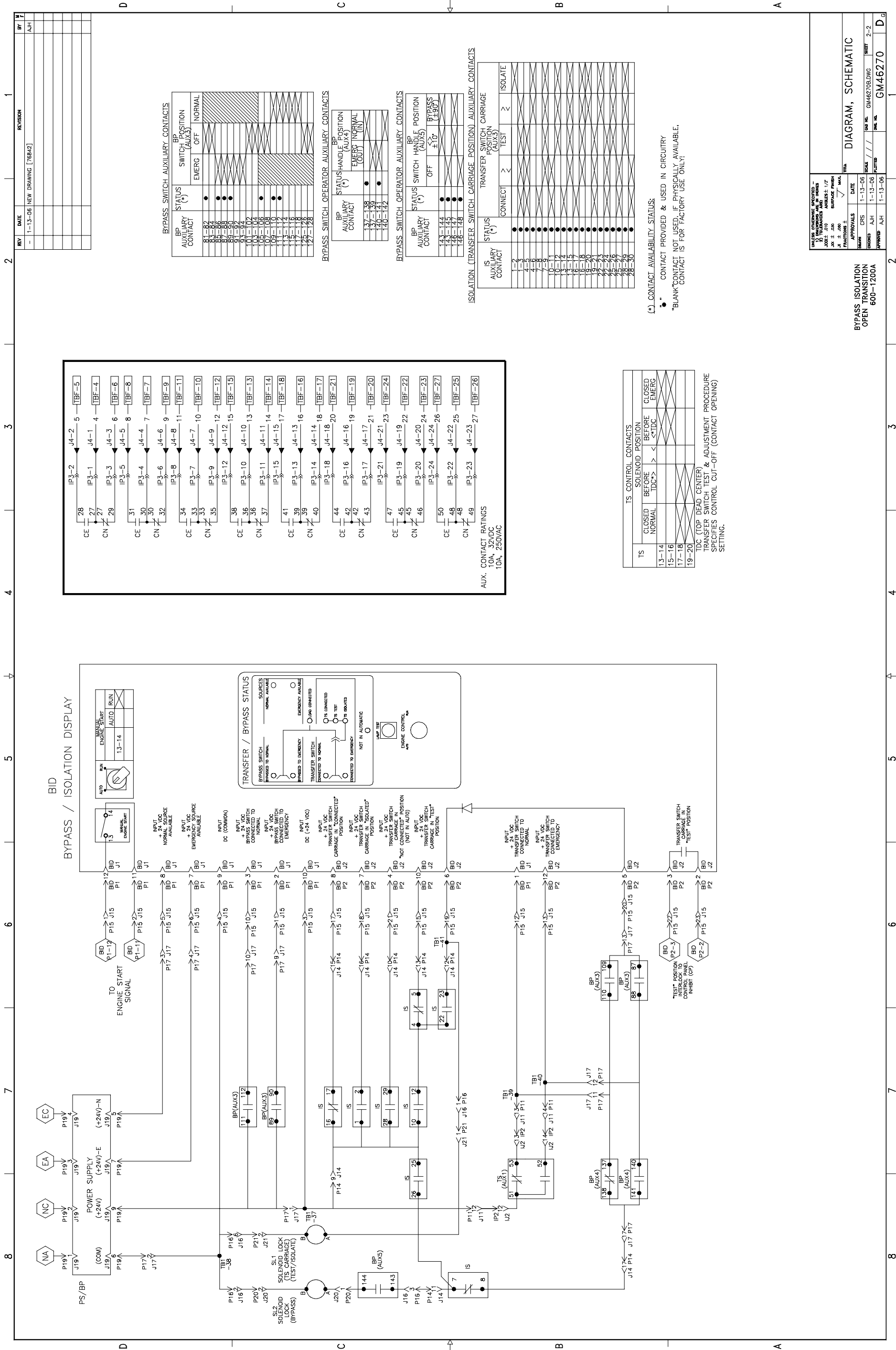
Notes

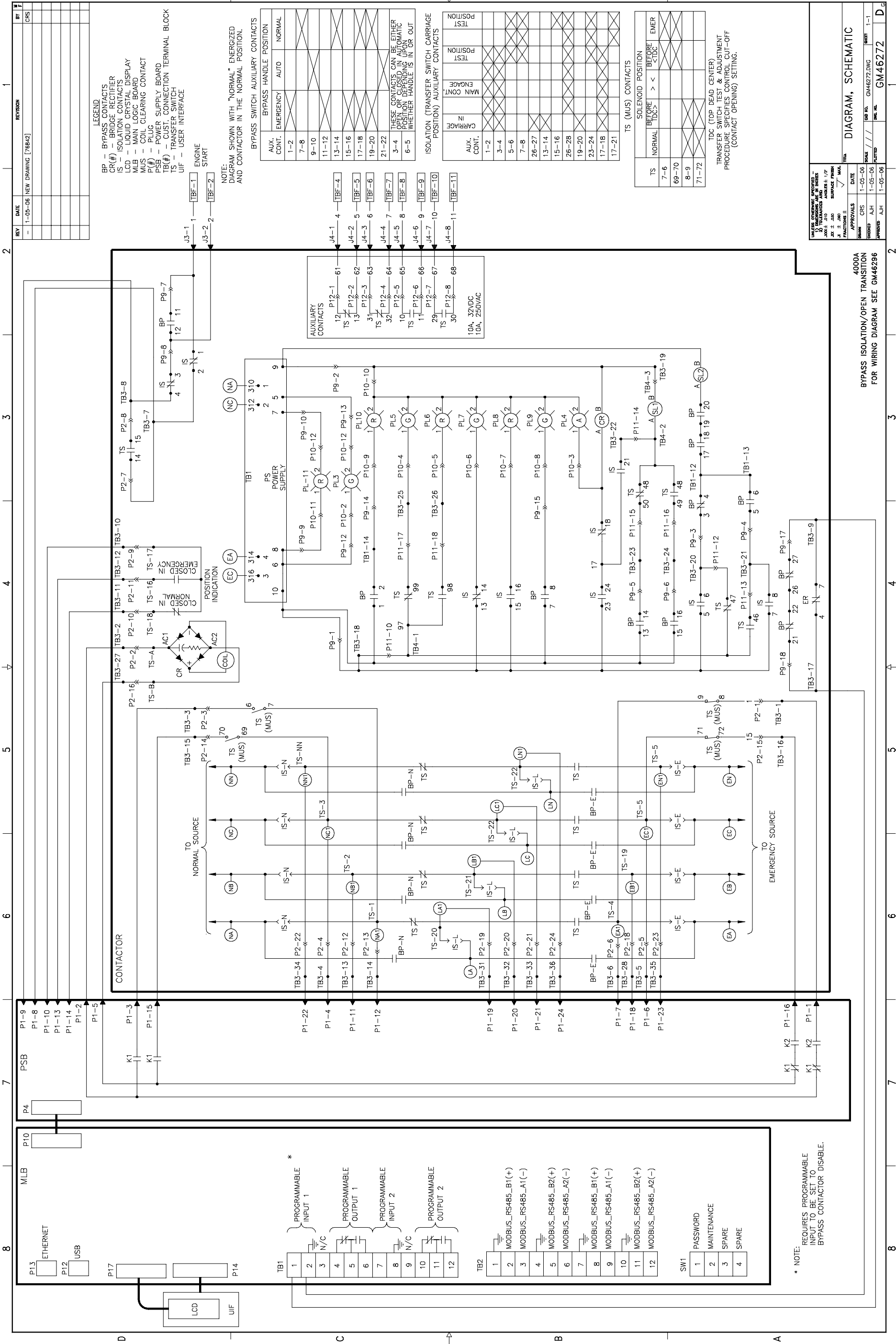




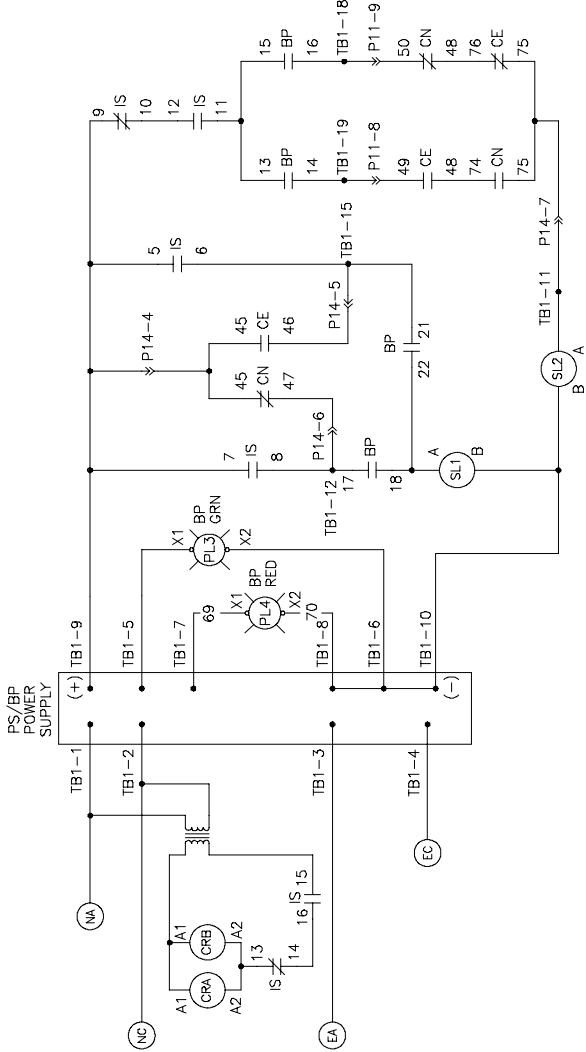








REV	DATE	REVISION	BY
-	1-05-06	NEW DRAWING [76542]	CRS



SOLENOID INTERLOCKS:

SL1: INTERLOCKS THE TRANSFER SWITCH ISOLATION CRANK WITH THE TRANSFER SWITCH AND BYPASS SWITCH TO INSURE THAT THE TRANSFER SWITCH CAN NEVER BE DISCONNECTED WITHOUT BEING BYPASSED AND THAT IT CAN NEVER BE RECONNECTED UNLESS IT IS IN THE SAME POSITION AS THE BYPASS SWITCH.

SL2: INTERLOCKS THE BYPASS SWITCH OPERATOR, WHILE IN THE CONNECTED POSITION, SO THAT THE BYPASS SWITCH CAN NEVER BE OPERATED TO THE SOURCE OPPOSITE OF WHICH THE TRANSFER IS CONNECTED.

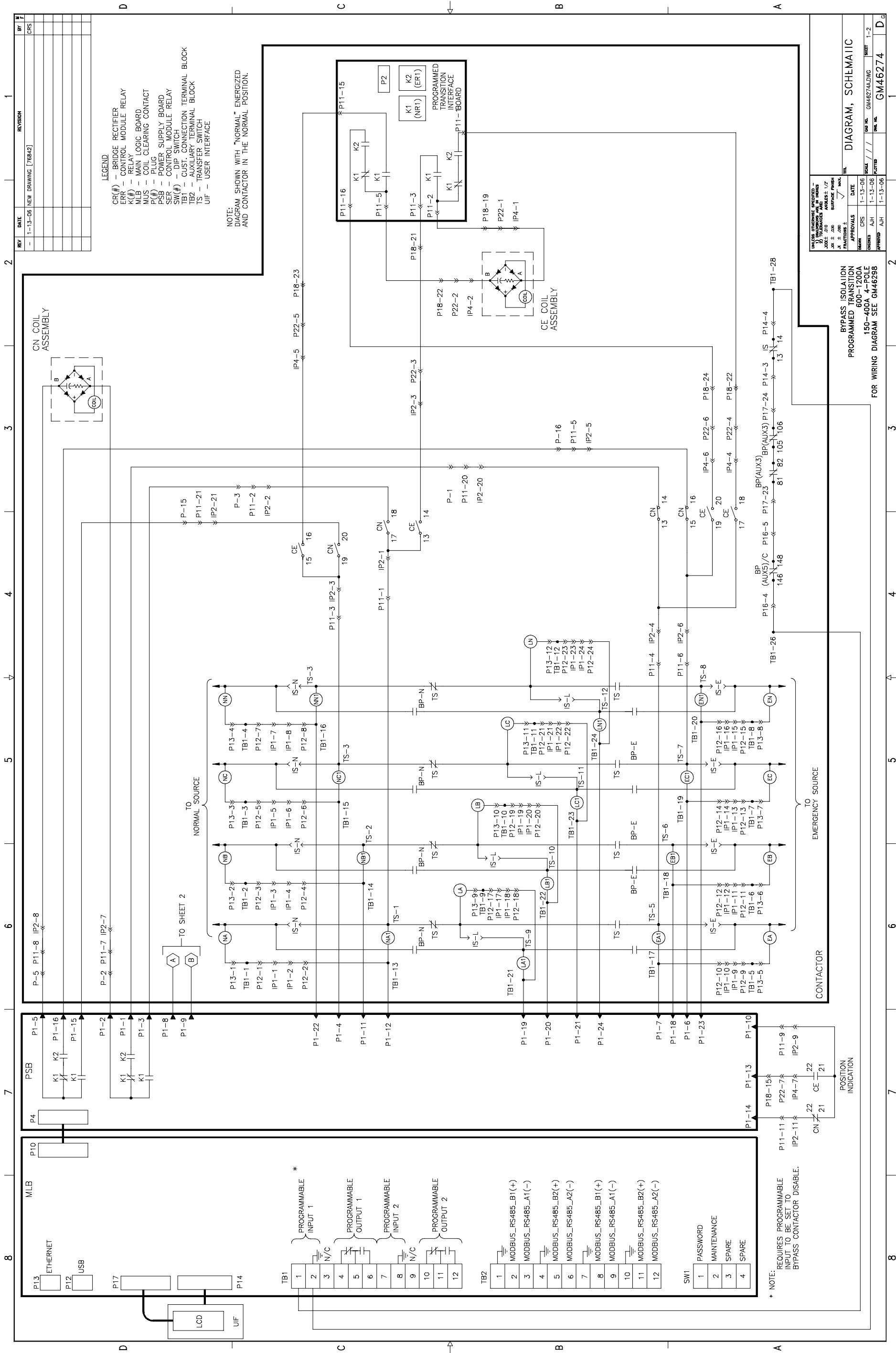
ISOLATION (TRANSFER SWITCH CARRIAGE POSITION) AUXILIARY CONTACTS

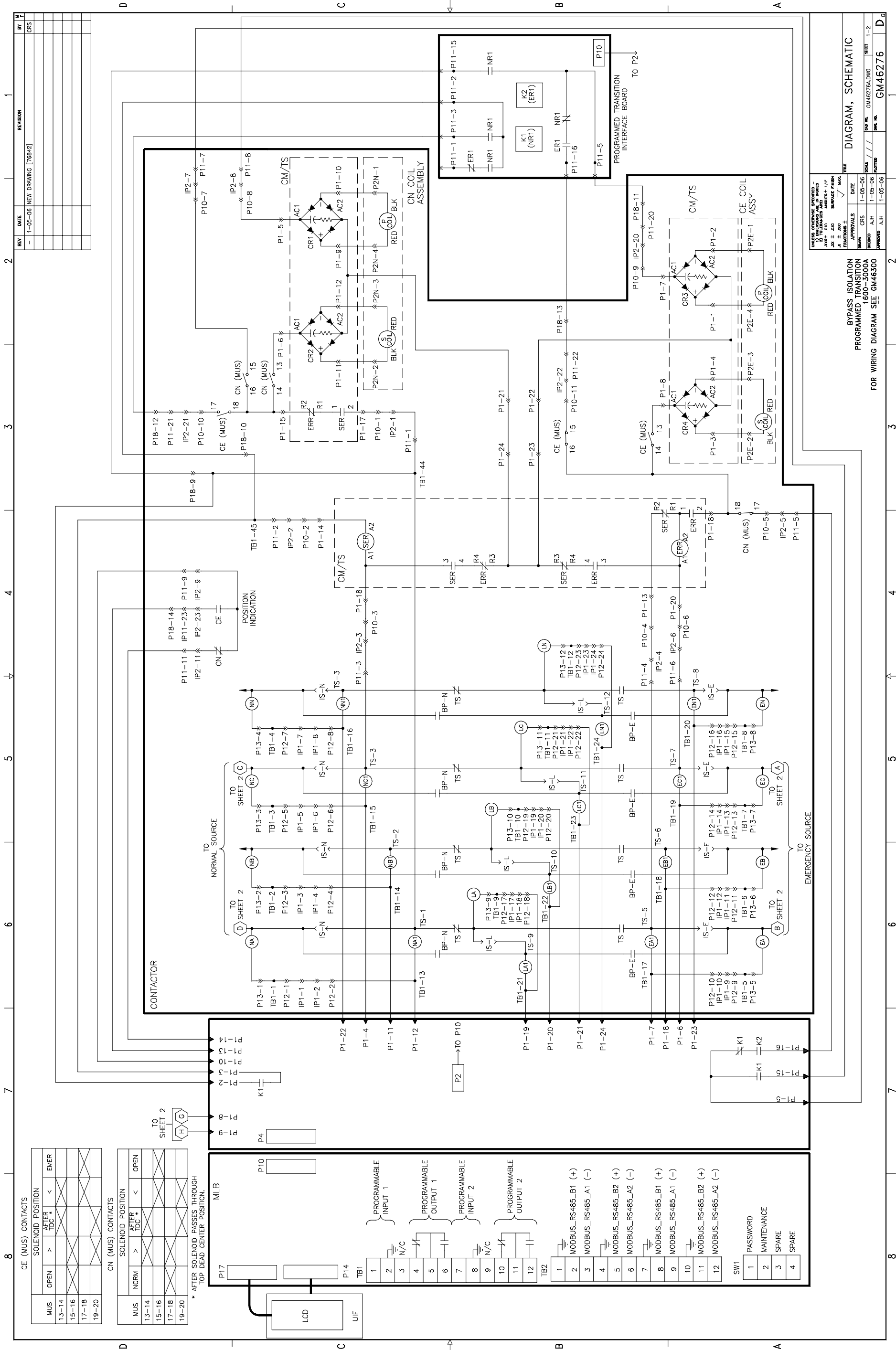
AUX. CONT.	ISOLATION HANDLE POSITION		
	CLOSED	TEST	OPEN
1-2			
3-4			
5-6			
7-8			
9-10			
11-12			
13-14			
15-16			
17-18			
19-20			
21-22			
23-24			

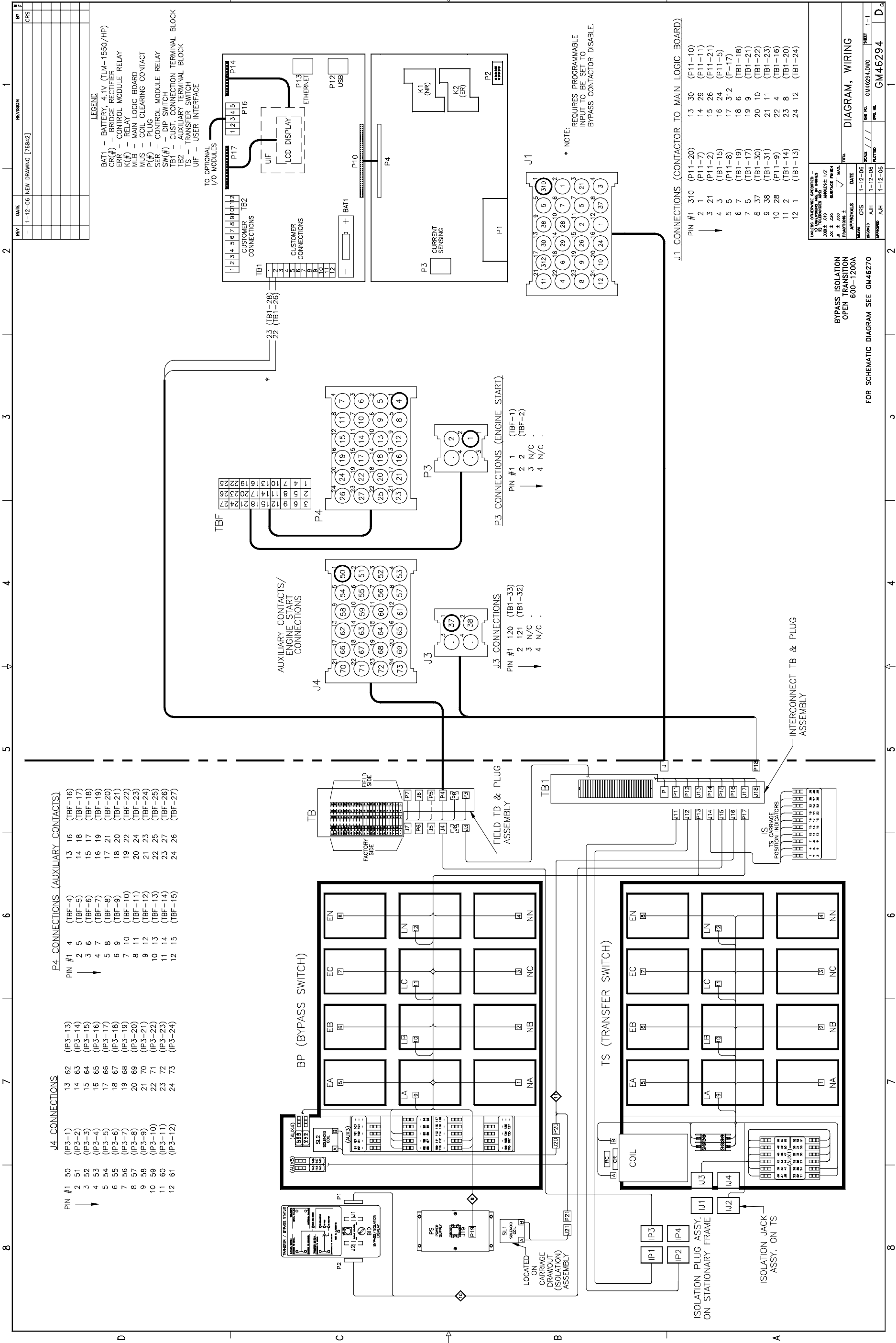
BYPASS SWITCH AUXILIARY CONTACTS

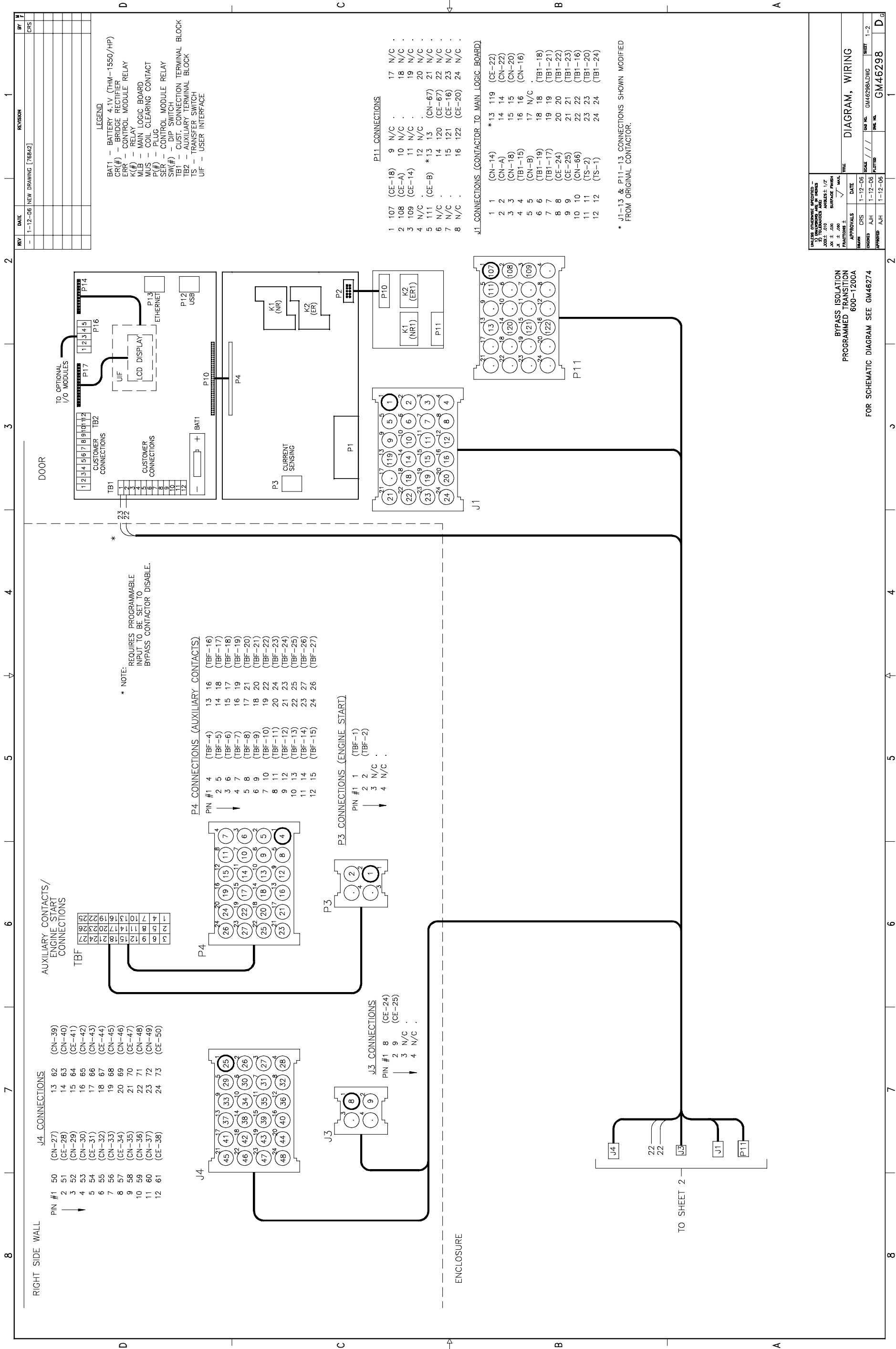
AUX. CONT.	BYPASS HANDLE POSITION		
	EMER	80-10	AUTO
1-2			
5-6			
7-8			
9-10			
11-12			
13-14			
15-16			
17-18			
19-20			
21-22			
23-24			
29-30			
31-32			

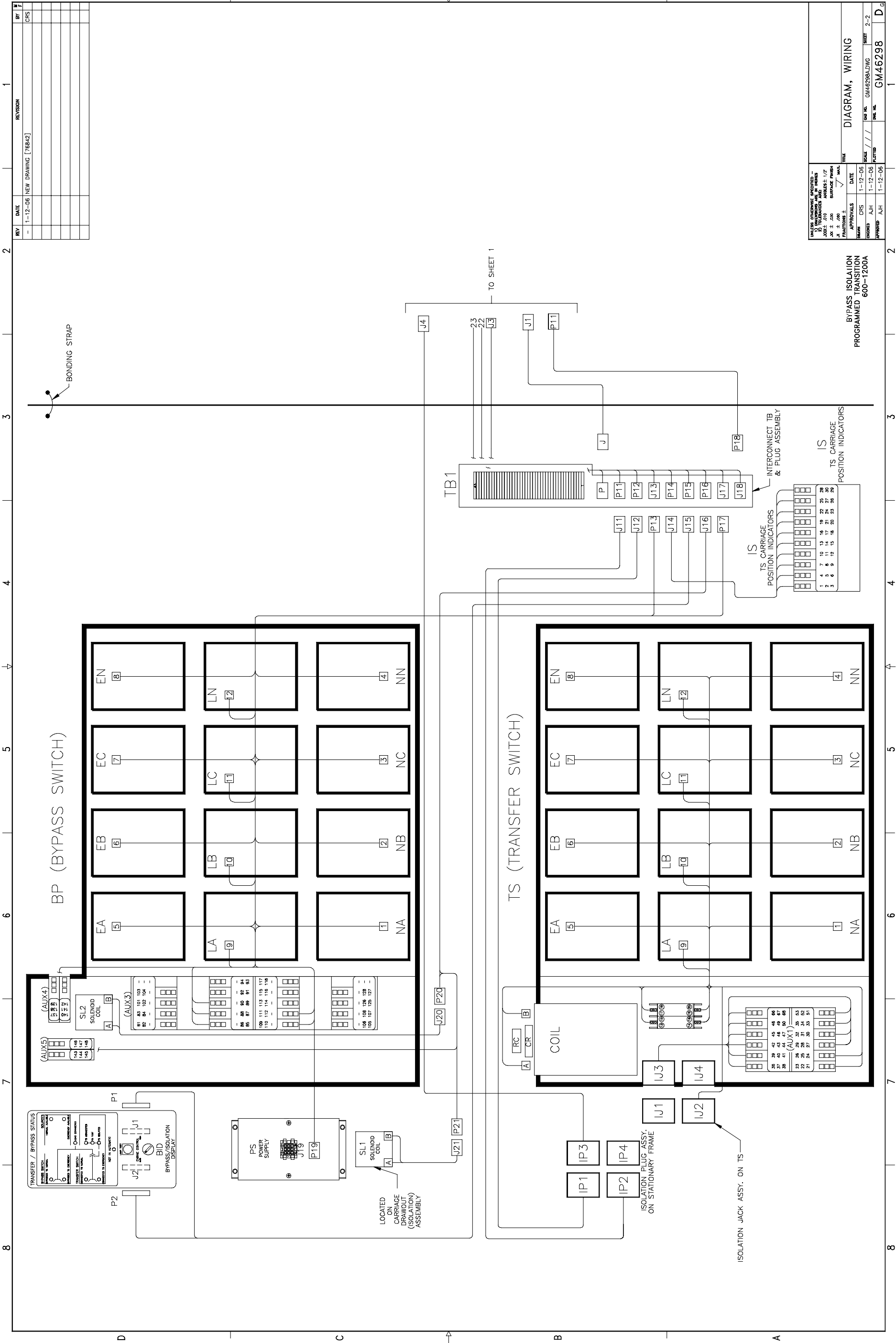
UNLESS OTHERWISE SPECIFIED - 3) DIMENSIONS ARE IN INCHES TOLERANCES FRACTIONS ± DECIMALS ± ANGLES ± SURFACE FINISH TEXT DATE APPROVALS DESIGNED CHECKED APPROVED				TITLE DIAGRAM, SCHEMATIC			
DATE	1-05-06	DESIGNED	CRS	SCALE	1-05-06	PROJECTED	2-2
APPROVED	A/JH	CHECKED	A/JH	DATE	1-05-06	PROJECTED	2-2
150-400A, 2 & 3 POLE BYPASS ISOLATION/PROGRAMMED TRANSITION				GM NO. GM46273DWG			
				GM NO. GM46273			
				D			













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