

Wiring Diagrams



Generator Sets

Models:

600/900/1000/2000DSM

Controllers:

Digital 550

Digital

Microprocessor-Plus

Engine Gauge Box for Paralleling Switchgear



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.

Generator Set Identification Numbers

Record the product identification numbers from the generator set nameplate(s).

Model Designation _____

Specification Number _____

Serial Number _____

Accessory Number	Accessory Description
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Controller Identification

Record the controller description from the generator set operation manual, spec sheet, or sales invoice.

Controller Description _____

Engine Identification

Record the product identification information from the engine nameplate.

Manufacturer _____

Model Designation _____

Serial Number _____

This manual provides wiring diagrams for the 600/900/1000/2000DSM generator sets equipped with one of the following controllers:

- Digital 550
- Digital
- Microprocessor-Plus
- Engine Gauge Box for Paralleling Switchgear

At the time of print this manual applied to the model numbers and specification (spec) numbers shown in the

Wiring Diagram Cross-Reference chart. On occasion this manual may apply to specs not listed in the Wiring Diagram Cross-Reference chart.

Information in this publication represents data available at the time of print. The manufacturer of Detroit Diesel Spectrum® products reserves the right to change this publication and the products represented without notice and without any obligation or liability whatsoever.

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Service Assistance

For professional advice on generator power requirements and conscientious service, please contact your nearest Detroit Diesel Spectrum distributor.

- Consult the Yellow Pages under the heading Generators—Electric
- Visit the Detroit Diesel Spectrum website at DetroitDieselSpectrum.com
- Look at the labels and stickers on your Detroit Diesel Spectrum product or review the appropriate literature or documents included with the product
- Outside the US and Canada, call the nearest regional office

Africa, Europe, Middle East

London Regional Office
Langley, Slough, England
Phone: (44) 1753-580-771
Fax: (44) 1753-580-036

Asia Pacific

Power Systems Asia Pacific Regional Office
Singapore, Republic of Singapore
Phone: (65) 264-6422
Fax: (65) 264-6455

China

North China Regional Office, Beijing
Phone: (86) 10 6518 7950
(86) 10 6518 7951
(86) 10 6518 7952
Fax: (86) 10 6518 7955

East China Regional Office, Shanghai
Phone: (86) 21 6288 0500
Fax: (86) 21 6288 0550

India, Bangladesh, Sri Lanka

India Regional Office
Bangalore, India
Phone: (91) 80 3366208
(91) 80 3366231
Fax: (91) 80 3315972

Japan, Korea

North Asia Regional Office
Tokyo, Japan
Phone: (813) 3440-4515
Fax: (813) 3440-2727

Latin America

Latin America Regional Office
Lakeland, Florida, USA
Phone: (863) 619-7568
Fax: (863) 701-7131

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Wiring Diagrams

Use the Wiring Diagram Cross-Reference chart to determine the wiring diagram version number for a given model number and spec number. Then find that version number and the controller type on the Controller

Wiring Diagrams Reference chart to determine the wiring diagram numbers for your unit. Refer to the generator set operation manual for controller type identification, if necessary.

Wiring Diagram Cross-Reference

Generator Set Model No.	Hz	Generator Set Spec No.	Wiring Diagram Version No.
600DSM	60	GM13277-GA1S	1-1
600DSM	60	GM16981-GA1S	1-2 or 1-3
900DSM	60	PA-111201	1-1
900DSM	60	GM16982-GA1S	1-2 or 1-3
900DSM	50	PA-111202	1-1
900DSM	50	GM16982-GA2S	1-2 or 1-3
1000DSM	60	PA-111204	1-1
1000DSM	60	GM16983-GA1S	1-2 or 1-3
1000DSM	50	PA-111203	1-1
1000DSM	50	GM16983-GA2S	1-2 or 1-3
2000DSM	60	GM16647-GA1S	2-1

600-1000DSM Co600-1000DSM Controller Wiring Diagrams Reference

Controller Description	Version 1-1	Page	Version 1-2	Page	Version 1-3	Page
Digital 550 (190-600 Volt)						
Point-to-Point Wiring Diagram						
Sheet 1	—	—	GM22222A	37	GM15497A-B	20
Sheet 2	—	—	GM22222B	38	GM15497B-B	21
Schematic Diagram						
Sheet 1	—	—	ADV-6689A	12	ADV-6588A-B	6
Sheet 2	—	—	ADV-6689B	13	ADV-6588B-B	7
Accessory Connections						
Sheet 1	—	—	GM16088A-D	22	GM16088A-D	22
Sheet 2	—	—	GM16088B-D	23	GM16088B-D	23
Sheet 3	—	—	GM16759B-C	30	GM16759B-C	30
Sheet 4	—	—	GM16759C-C	31	GM16759C-C	31
Sheet 5	—	—	GM16759D-C	32	GM16759D-C	32
Digital						
Point-to-Point Wiring Diagram						
Sheet 1	GM11409A-C	14	—	—	—	—
Sheet 2	GM11409B-C	15	—	—	—	—
Schematic Diagram						
Sheet 1	ADV-6531A-C	3	—	—	—	—
Sheet 2	ADV-6531B-C	4	—	—	—	—
Accessory Connections						
Sheet 1	354246A-D	42	—	—	—	—
Sheet 2	354246B-D	43	—	—	—	—
Sheet 3	GM16758C-B	25	—	—	—	—
Sheet 4	GM16758E-B	27	—	—	—	—
Sheet 5	GM16758G-B	29	—	—	—	—
Microprocessor-Plus						
Point-to-Point Wiring Diagram						
Sheet 1	GM11411A-B	18	GM11411A-B	18	GM11411A-B	18
Sheet 2	GM11411B-B	19	GM11411B-B	19	GM11411B-B	19
Schematic Diagram						
Sheet 1	ADV-6528-B	2	ADV-6528-B	2	ADV-6528-B	2
Accessory Connections						
Sheet 1	328912A-F	39	328912A-F	39	328912A-F	39
Sheet 2	328912B-F	40	328912B-F	40	328912B-F	40
Sheet 3	328912C-F	41	328912C-F	41	328912C-F	41
Sheet 4	GM16758B-B	24	GM16758B-B	24	GM16758B-B	24
Sheet 5	GM16758D-B	26	GM16758D-B	26	GM16758D-B	26
Sheet 6	GM16758F-B	28	GM16758F-B	28	GM16758F-B	28
Engine Gauge Box for Paralleling Switchgear						
Point-to-Point Wiring Diagram						
Sheet 1	GM11410A-B	16	GM11410A-B	16	GM11410A-B	16
Sheet 2	GM11410B-B	17	GM11410B-B	17	GM11410B-B	17
Schematic Diagram						
Sheet 1	ADV-6532-B	5	ADV-6532-B	5	ADV-6532-B	5
Generator Reconnections	ADV-5875B-D	1	ADV-5875B-D	1	ADV-5875B-D	1

Note: Version 1-1 uses the Digital controller.

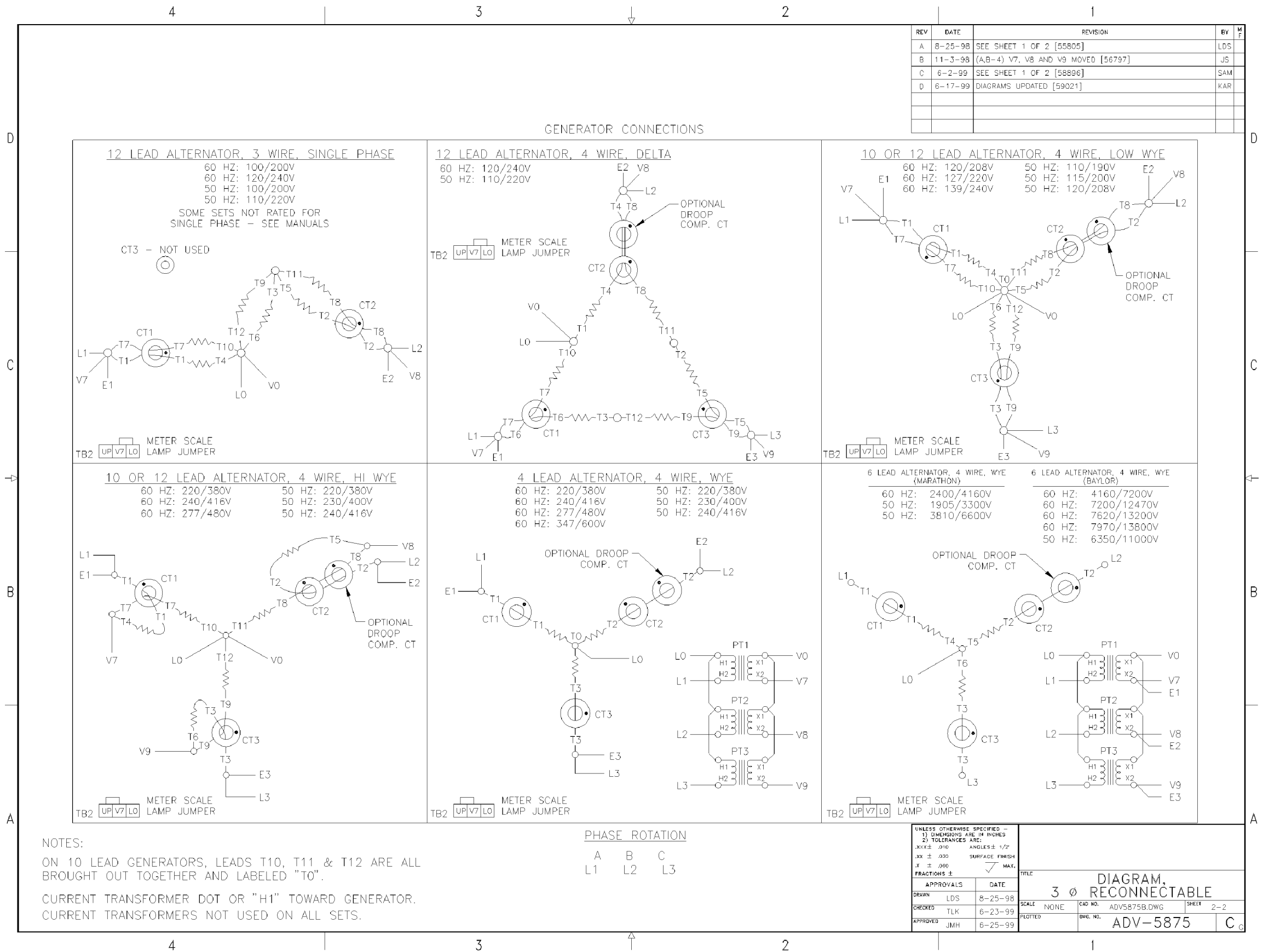
Version 1-2 uses the Digital 550 controller and Marathon DVR2000 voltage regulator.

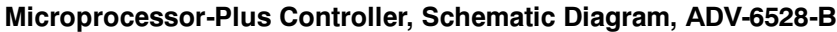
Version 1-3 uses the Digital 550 controller with integral voltage regulator.

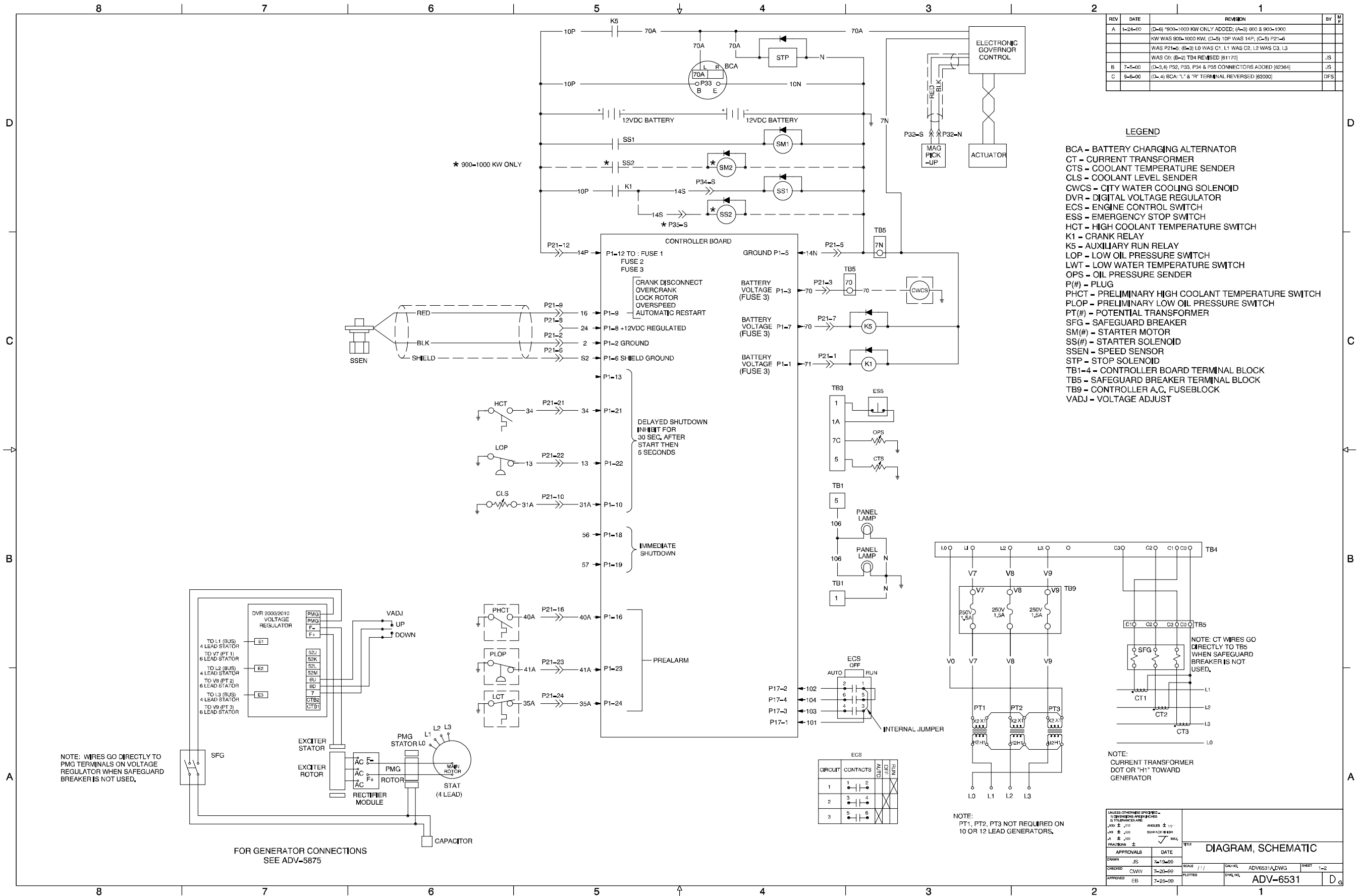
2000DSM Controller Wiring Diagrams Reference

Controller Description	Version 2-1	Page
Digital 550 (190-600 Volt)		
Point-to-Point Wiring Diagram		
Sheet 1	GM18092A-B	33
Sheet 2	GM18092B-B	34
Schematic Diagram		
Sheet 1	ADV-6615A-B	8
Sheet 2	ADV-6615B-B	9
Accessory Connections		
Sheet 1	GM16088A-D	22
Sheet 2	GM16088B-D	23
Sheet 3	GM16759B-C	30
Sheet 4	GM16759C-C	31
Sheet 5	GM16759D-C	32
Digital 550 (1905-4160 Volt)		
Point-to-Point Wiring Diagram		
Sheet 1	GM18093A	35
Sheet 2	GM18093B	36
Schematic Diagram		
Sheet 1	ADV-6616A	10
Sheet 2	ADV-6616B	11
Accessory Connections		
Sheet 1	GM16088A-D	22
Sheet 2	GM16088B-D	23
Sheet 3	GM16759B-C	30
Sheet 4	GM16759C-C	31
Sheet 5	GM16759D-C	32
Generator Reconnections	ADV-5875B-D	1

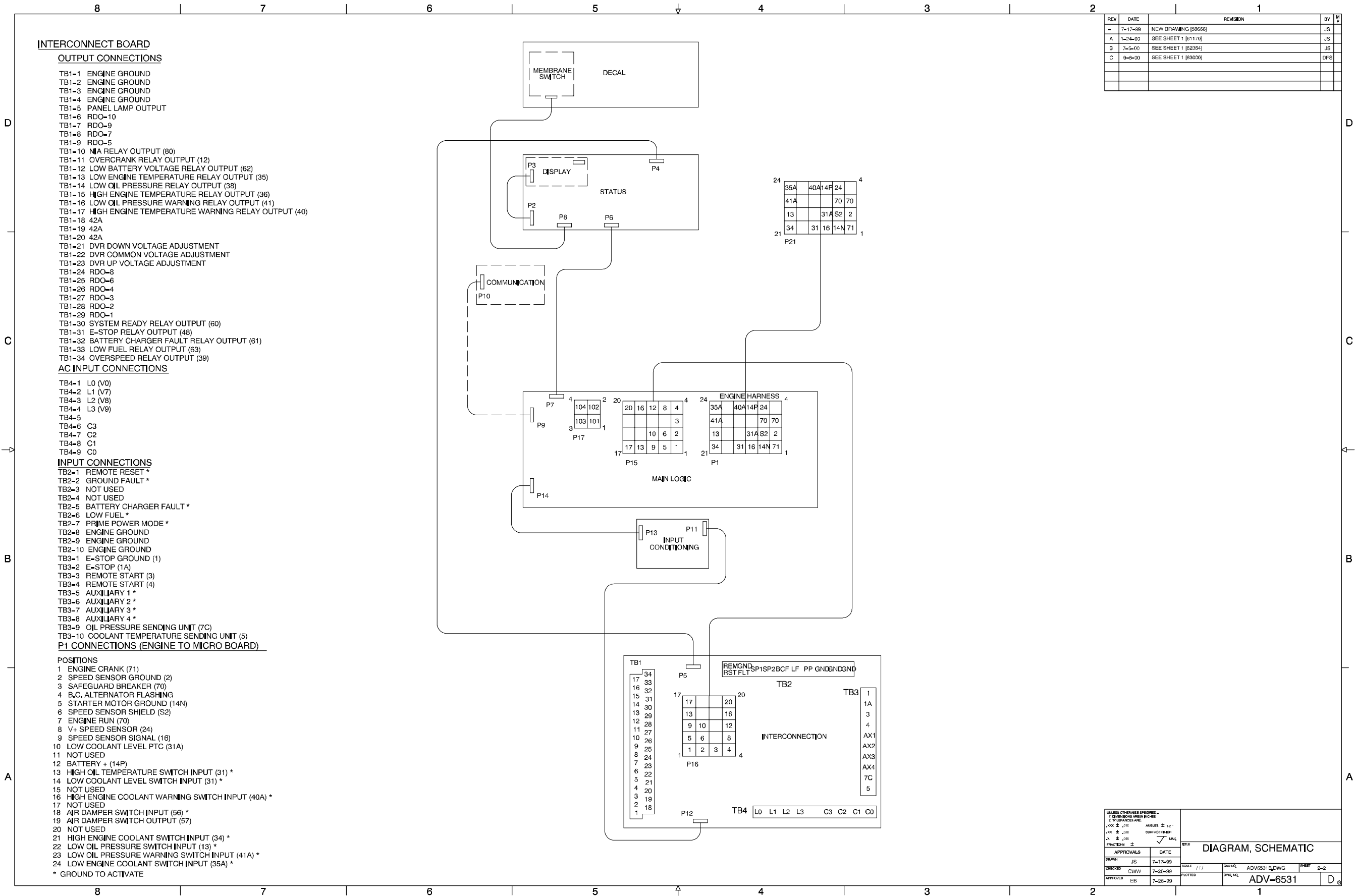
Note: Version 2-1 uses the Digital 550 controller with integral voltage regulator.



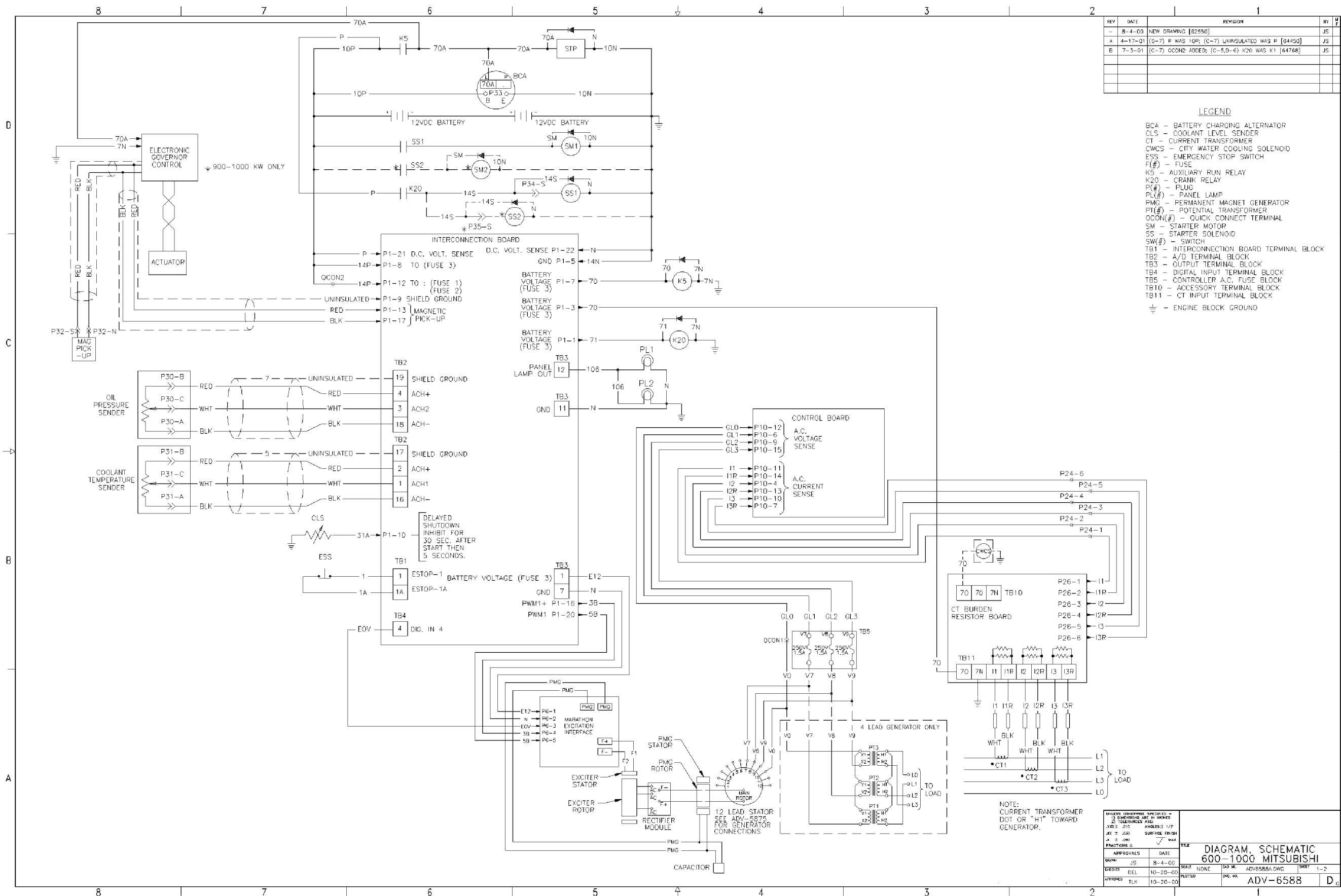




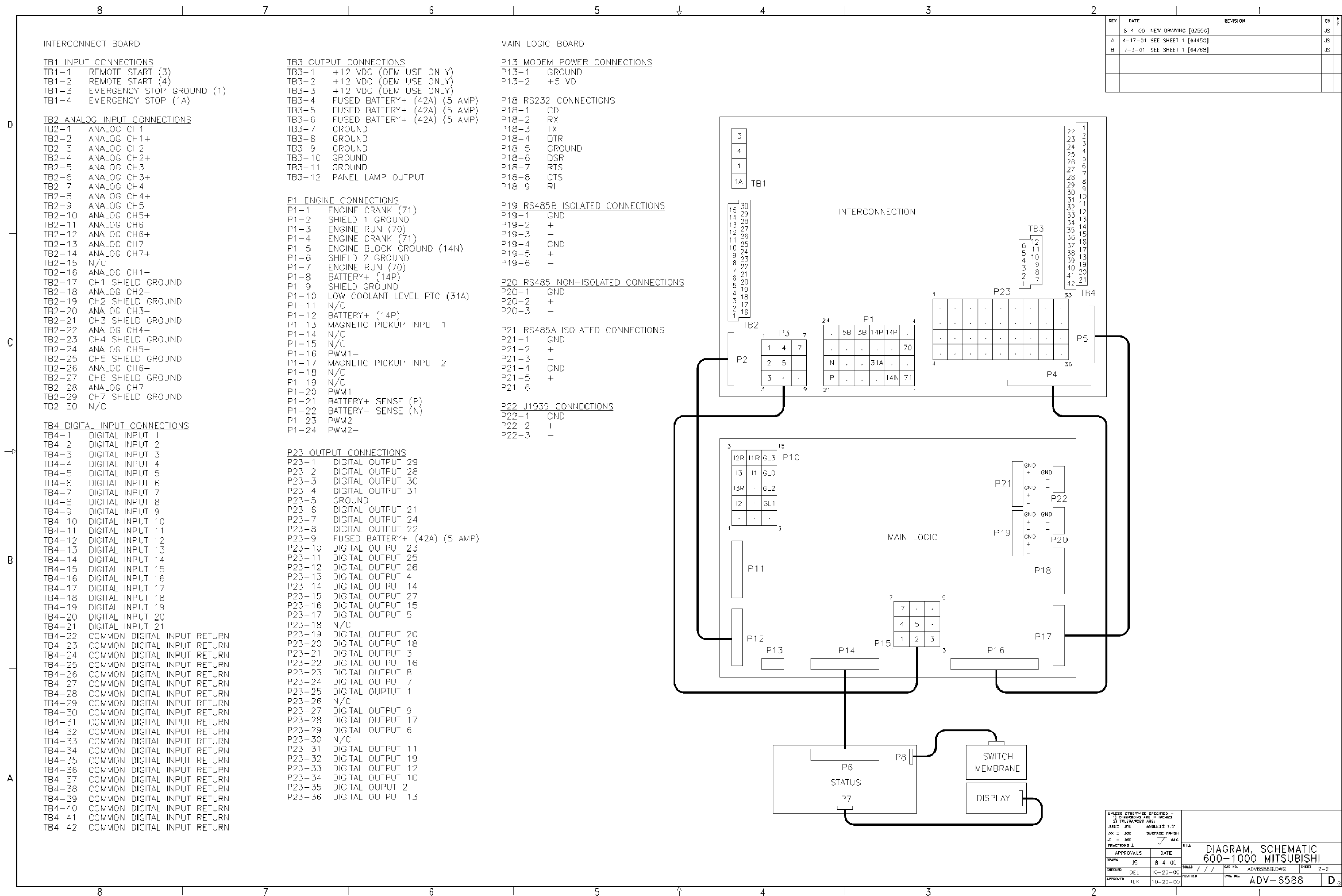
Digital Controller, Schematic Diagram, Sheet 1, ADV-6531A-C



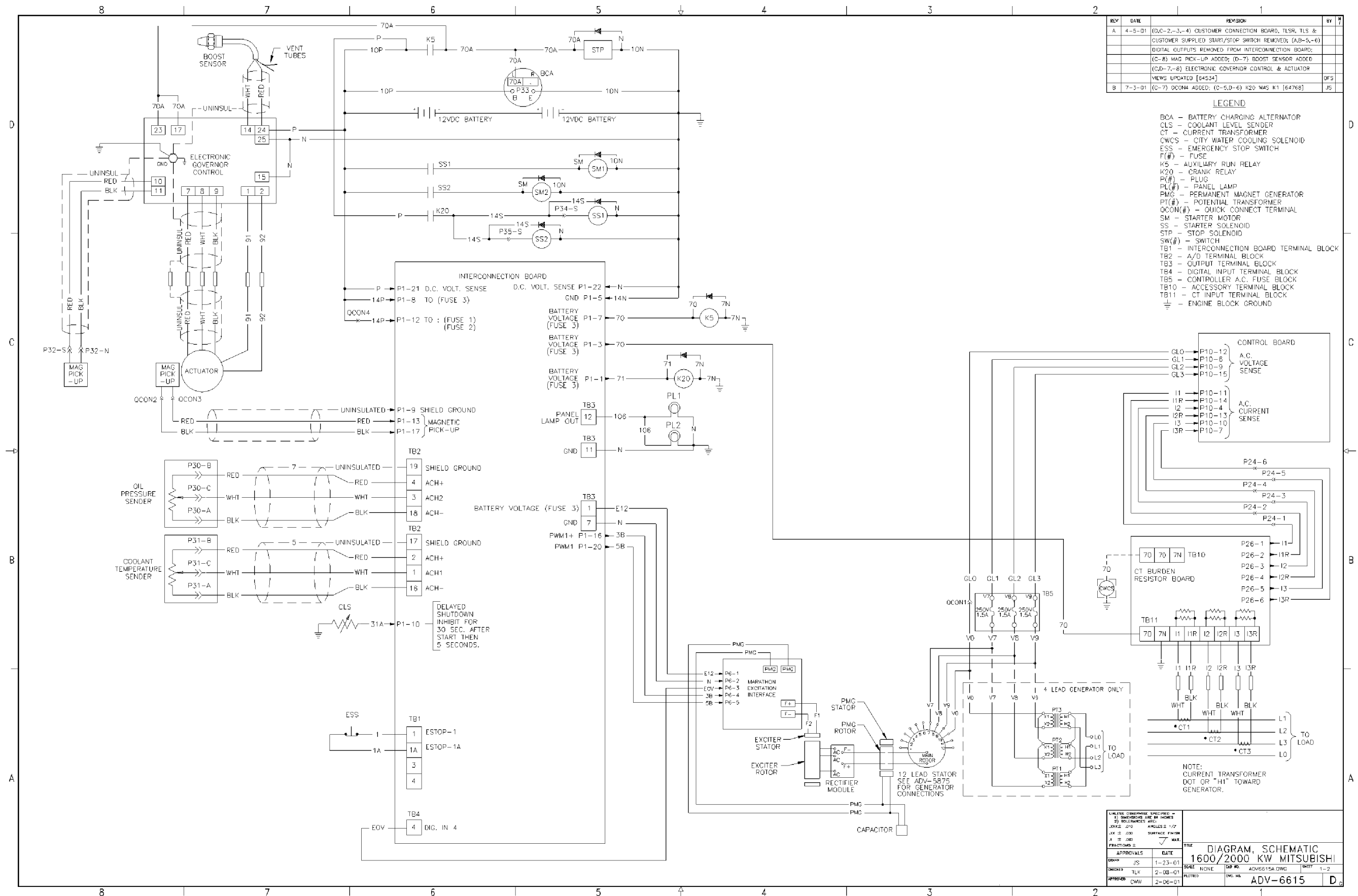




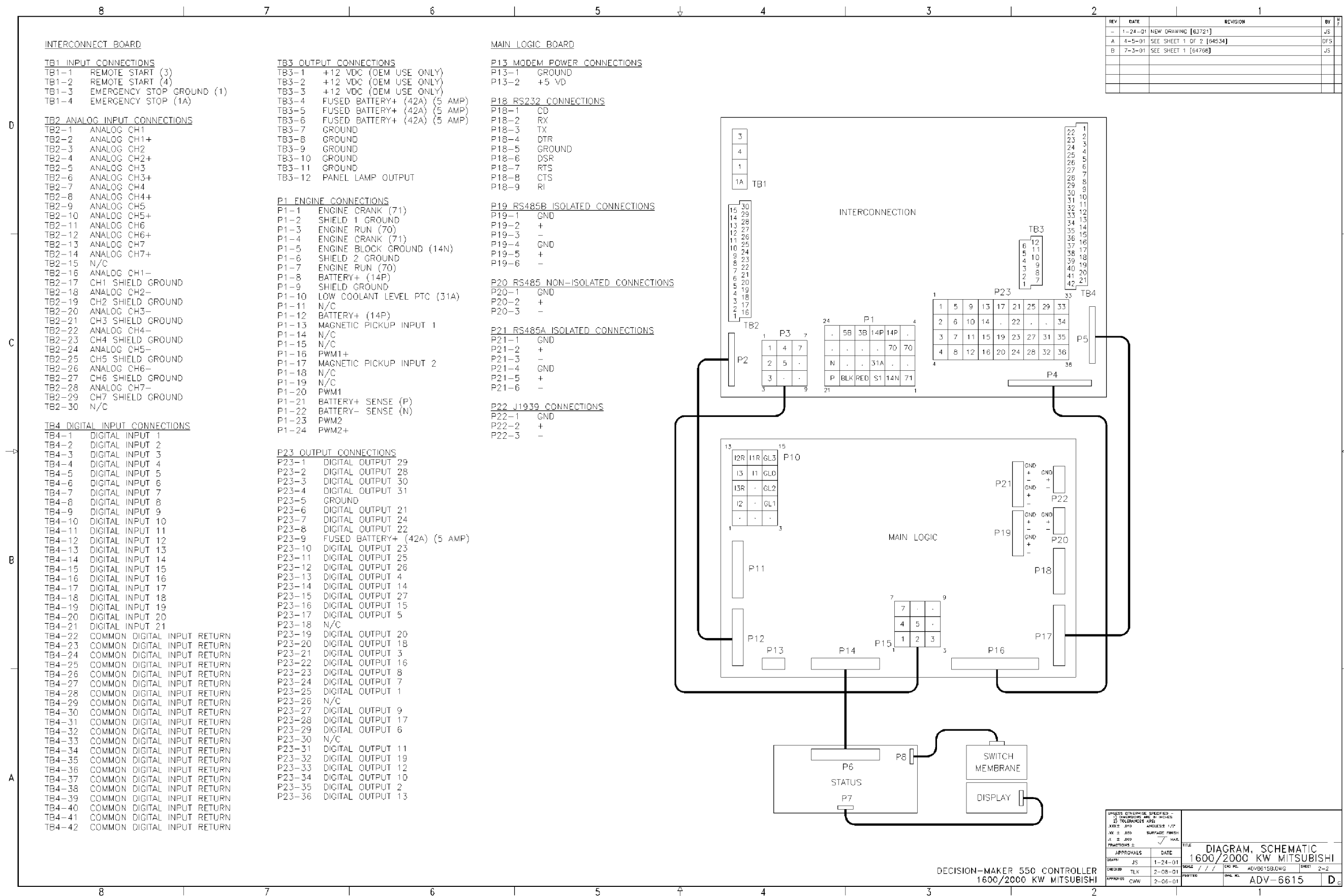
Digital 550 Controller, Schematic Diagram, Sheet 1, ADV-6588A-B



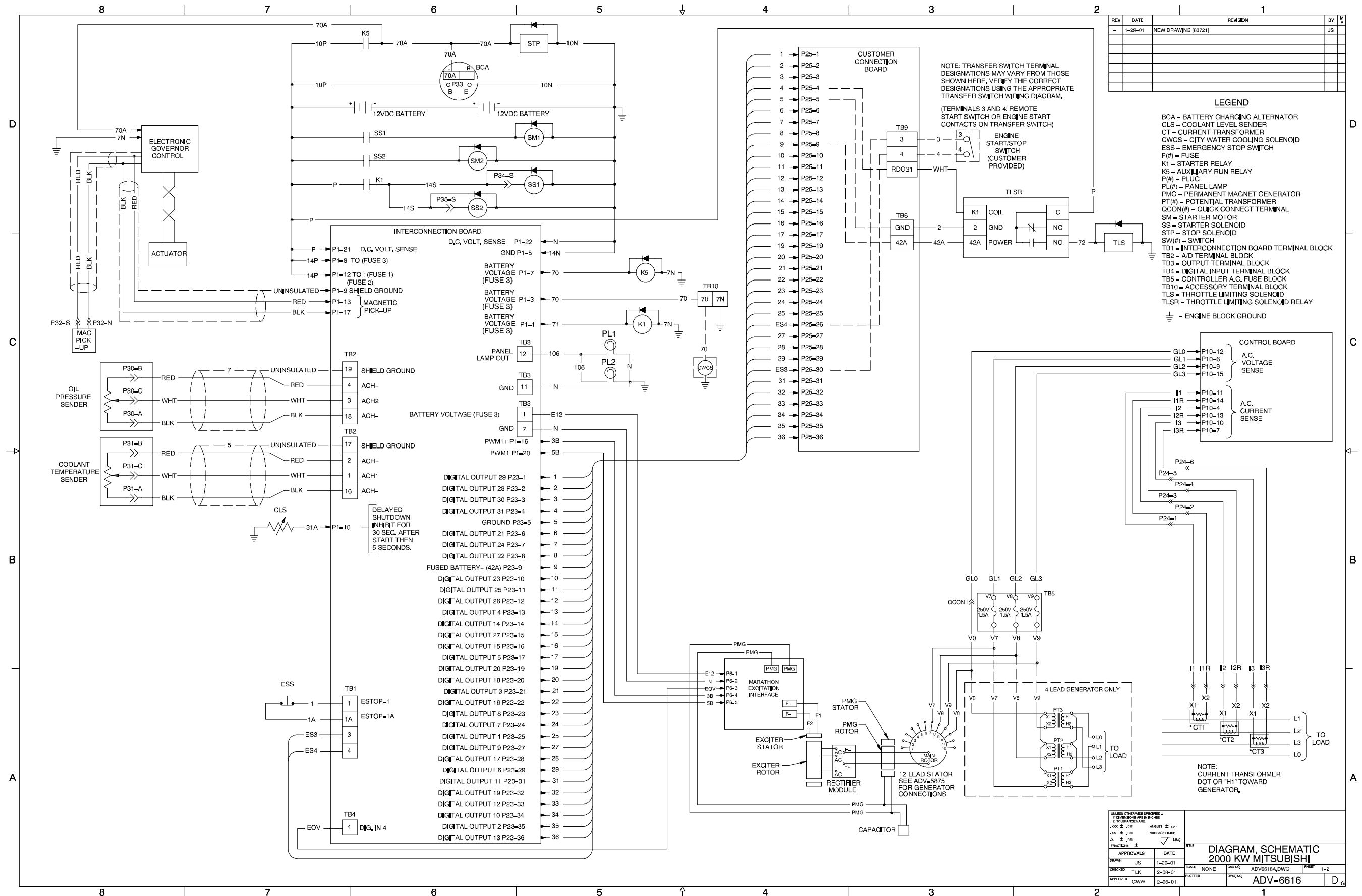
Digital 550 Controller, Schematic Diagram, Sheet 2, ADV-6588B-B



Digital 550 Controller, Schematic Diagram, Sheet 1, ADV-6615A-B

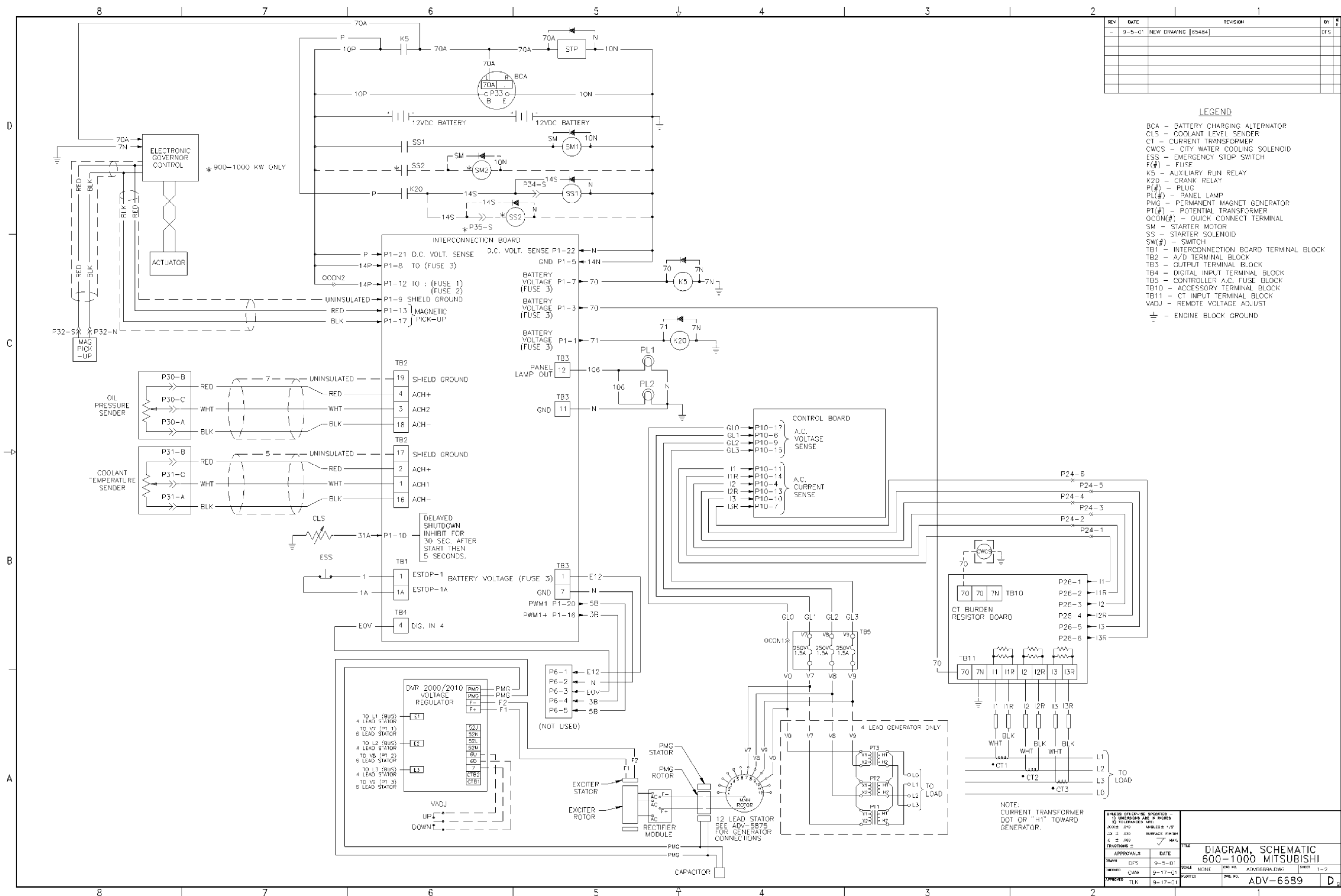


Digital 550 Controller, Schematic Diagram, Sheet 2, ADV-6615B-B

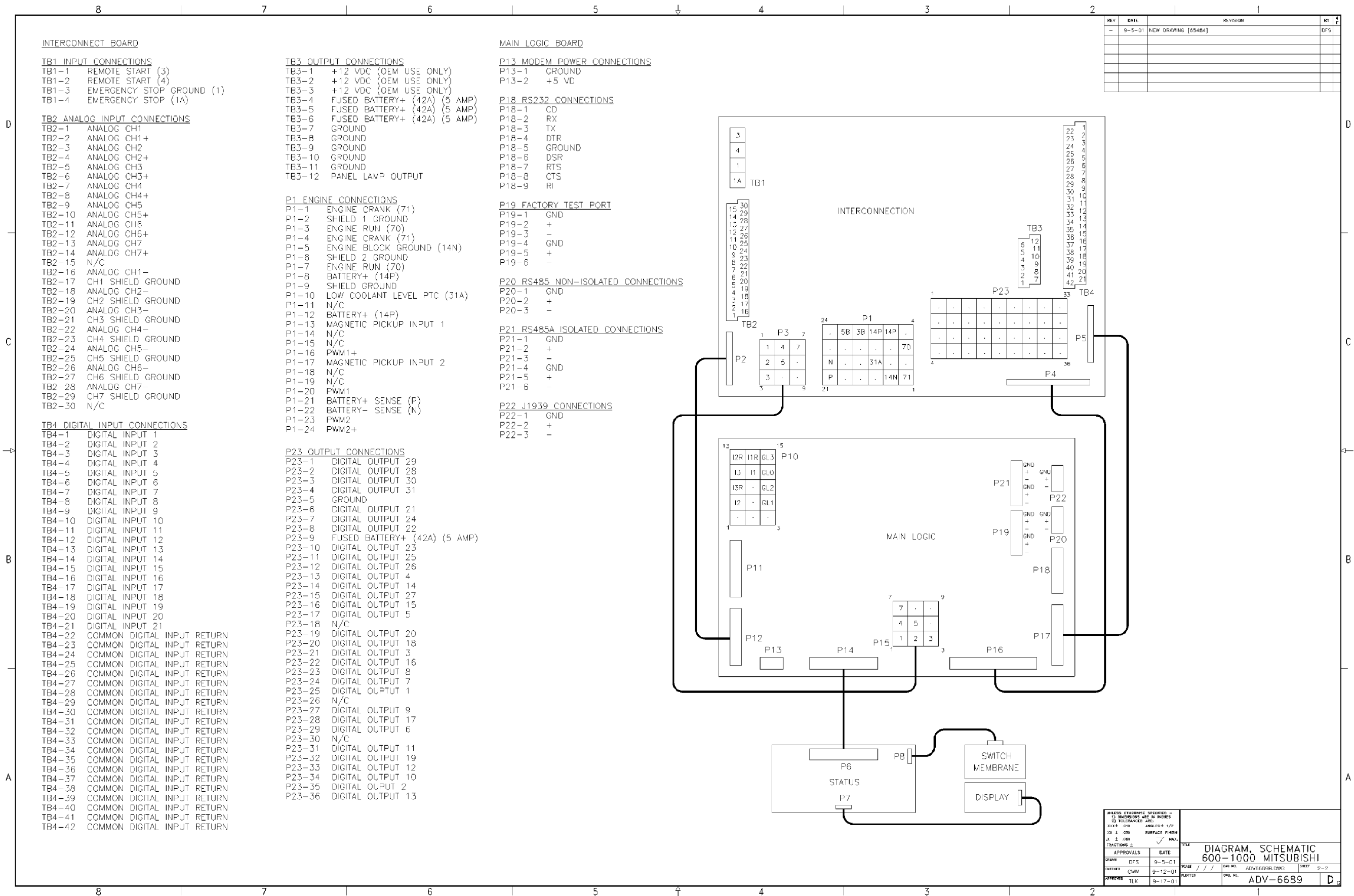


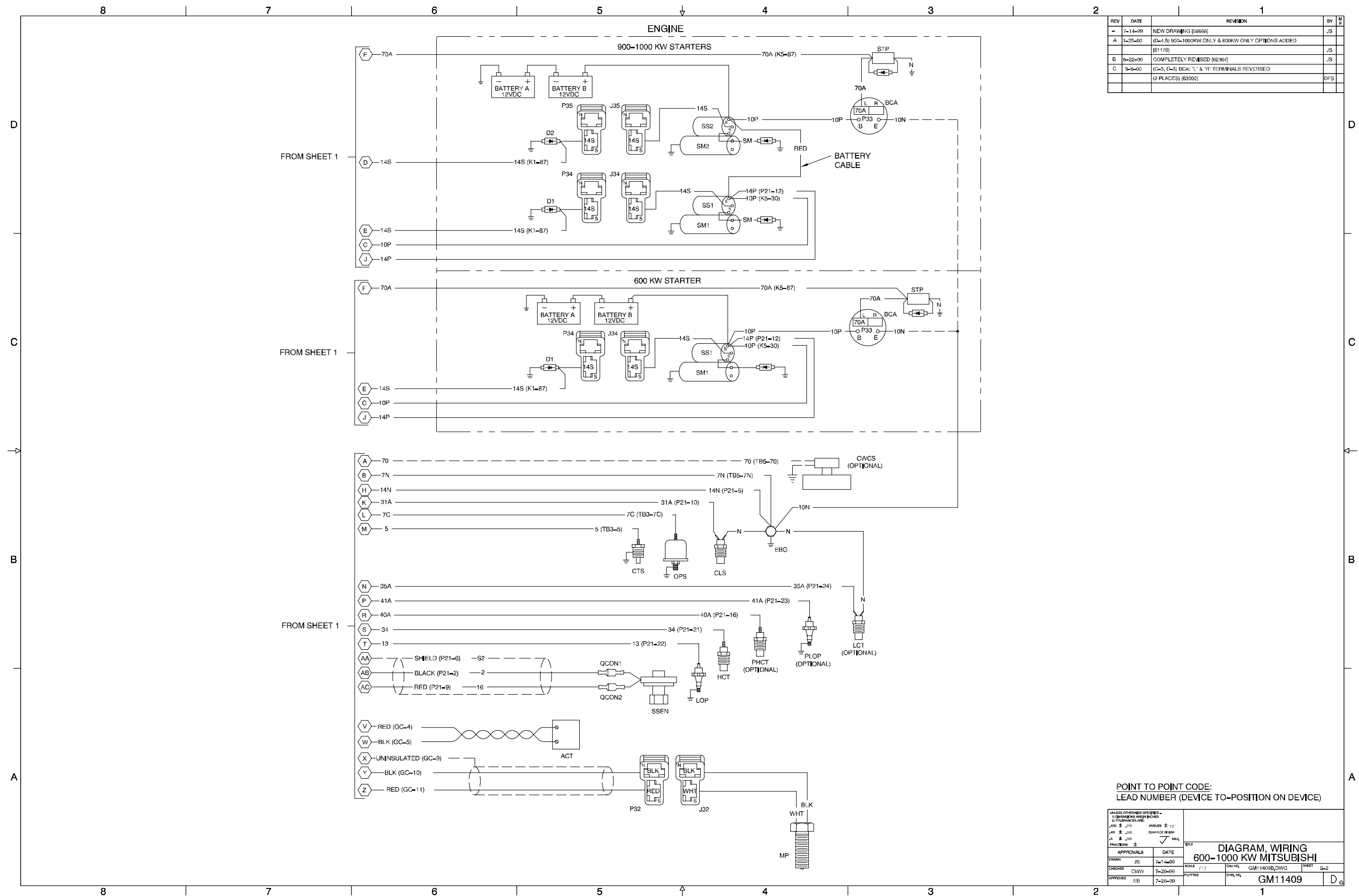
Digital 550 Controller, Schematic Diagram, Sheet 1, ADV-6616A

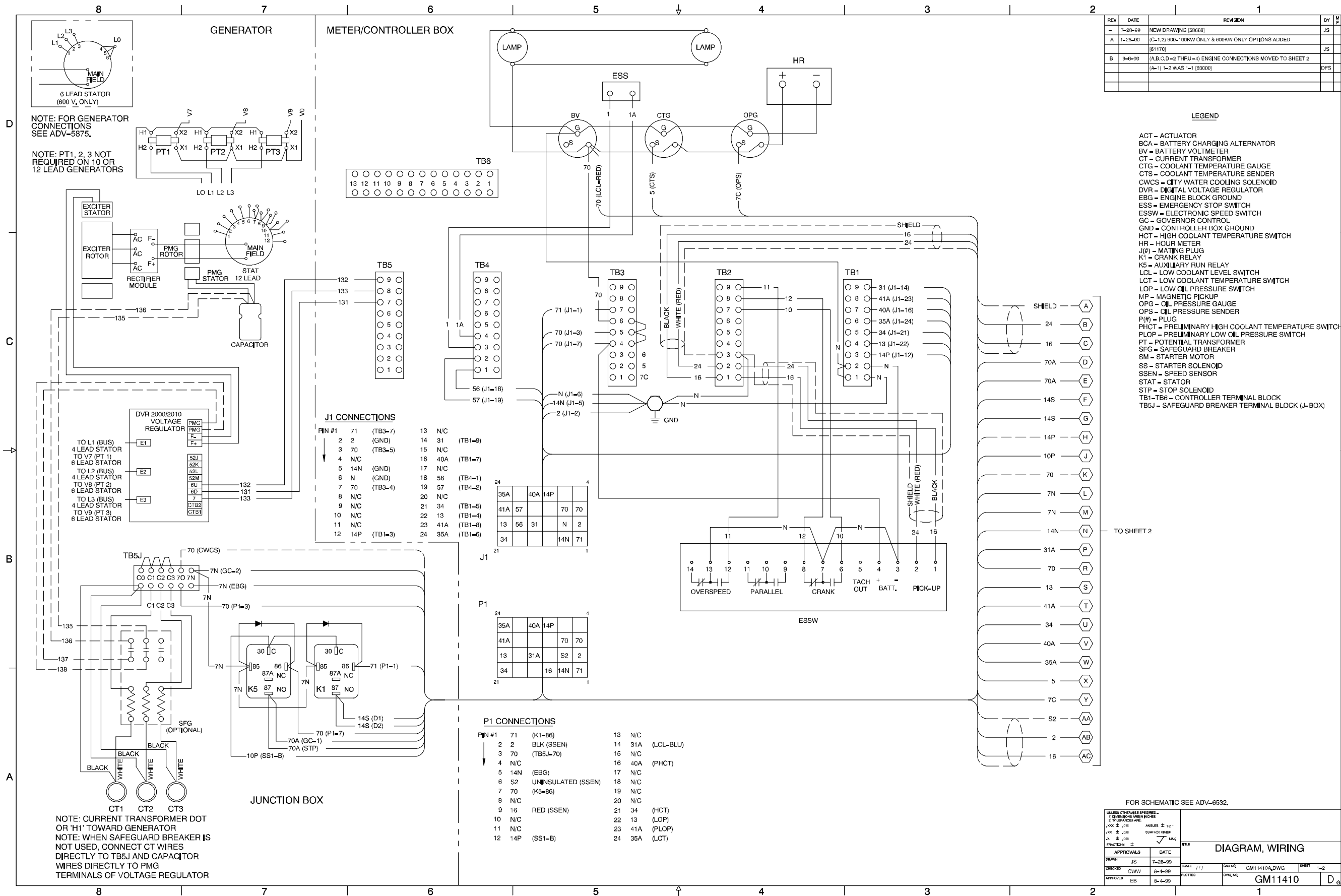




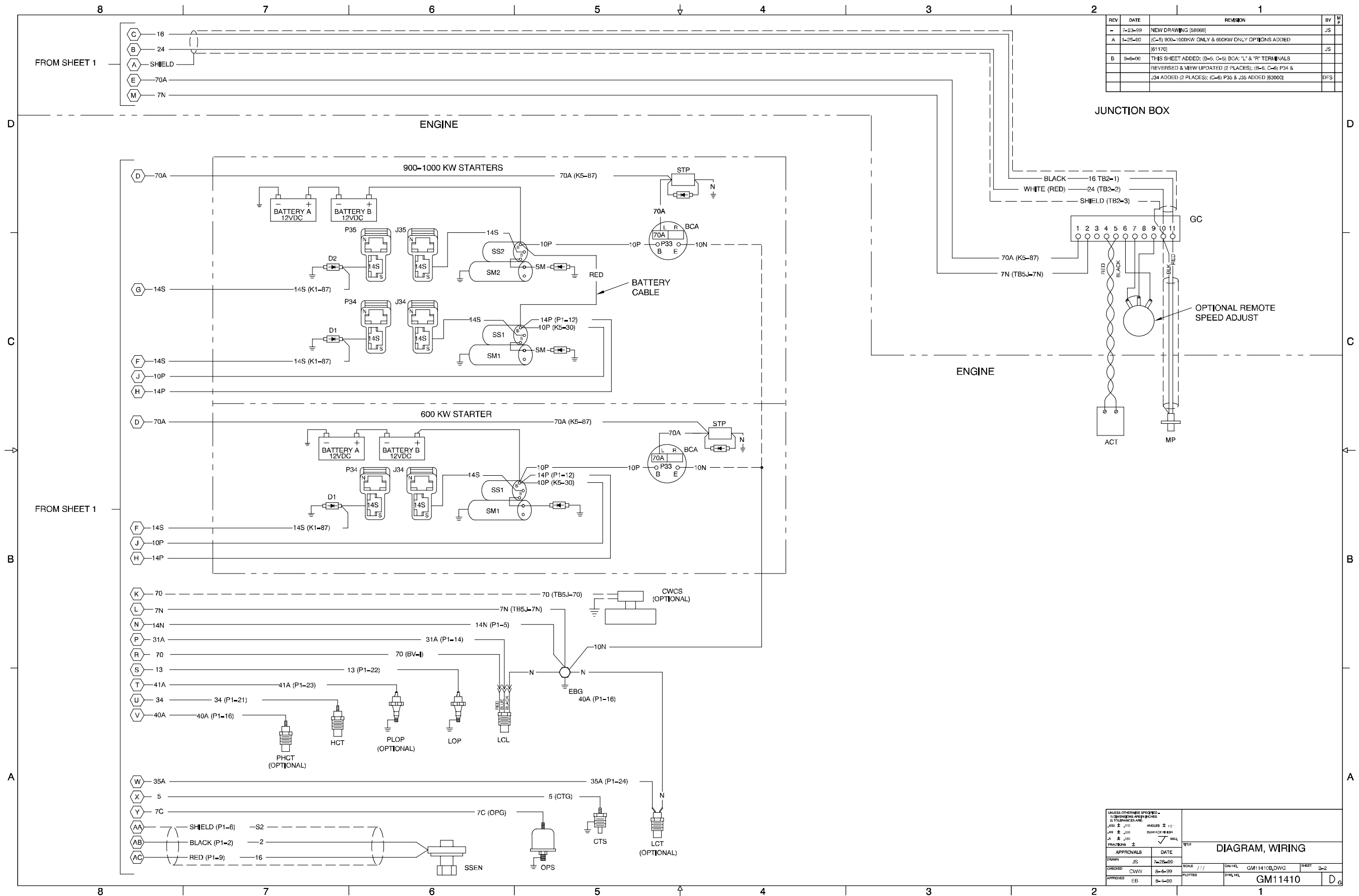
Digital 550 Controller, Schematic Diagram, Sheet 1, ADV-6689A



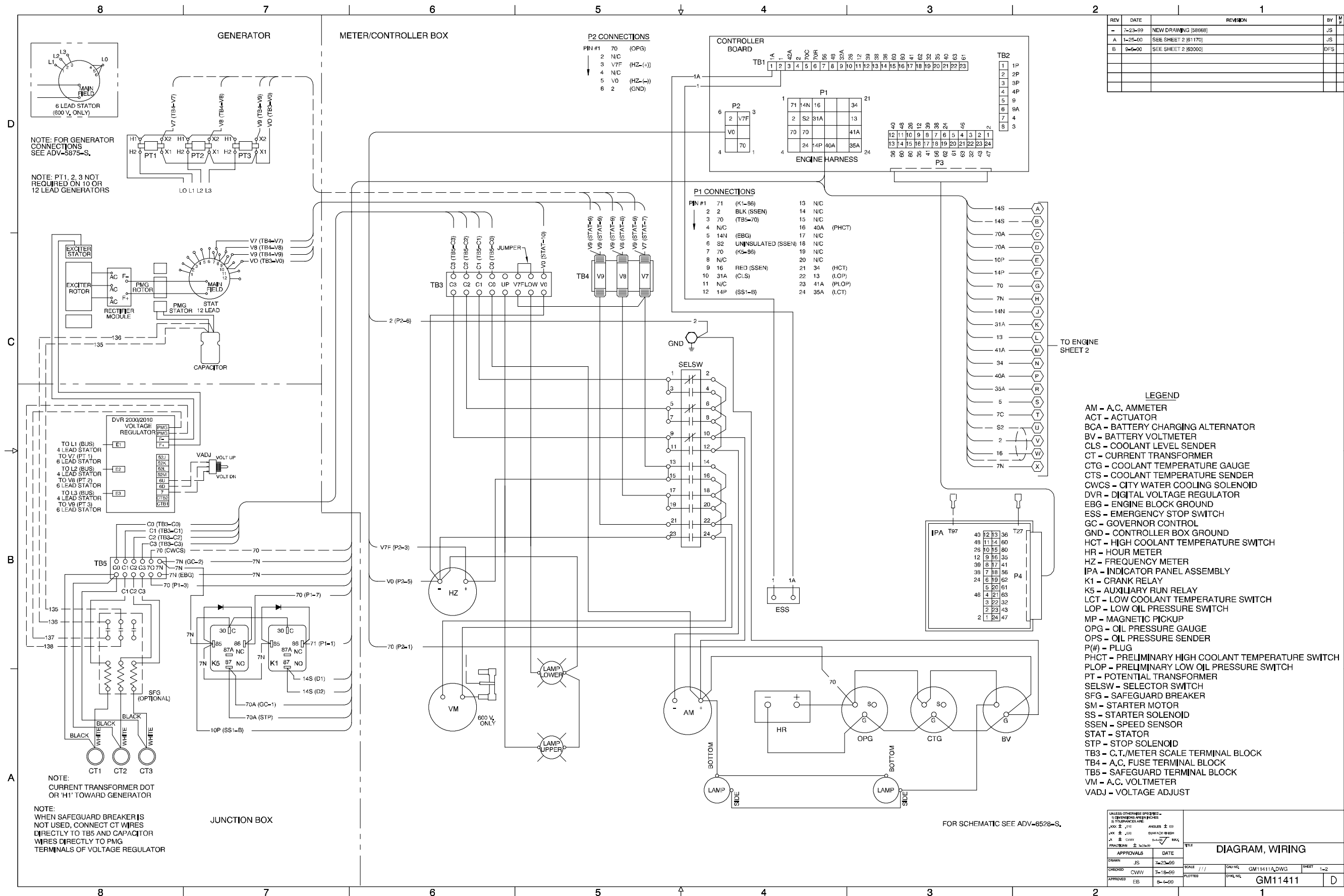




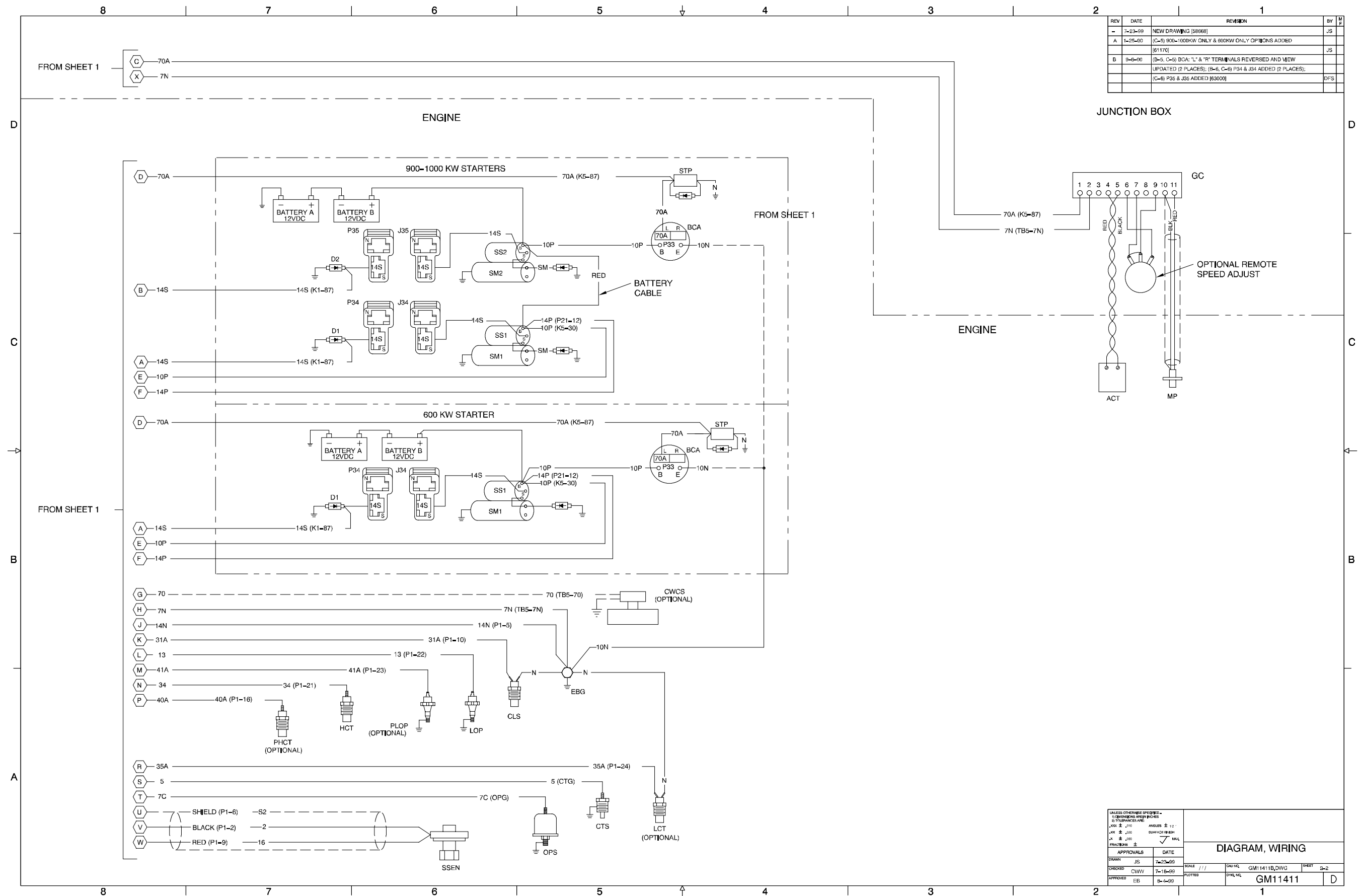
Engine Gauge Box for Paralleling Switchgear, Point-to-Point Wiring Diagram, Sheet 1, GM11410A-B

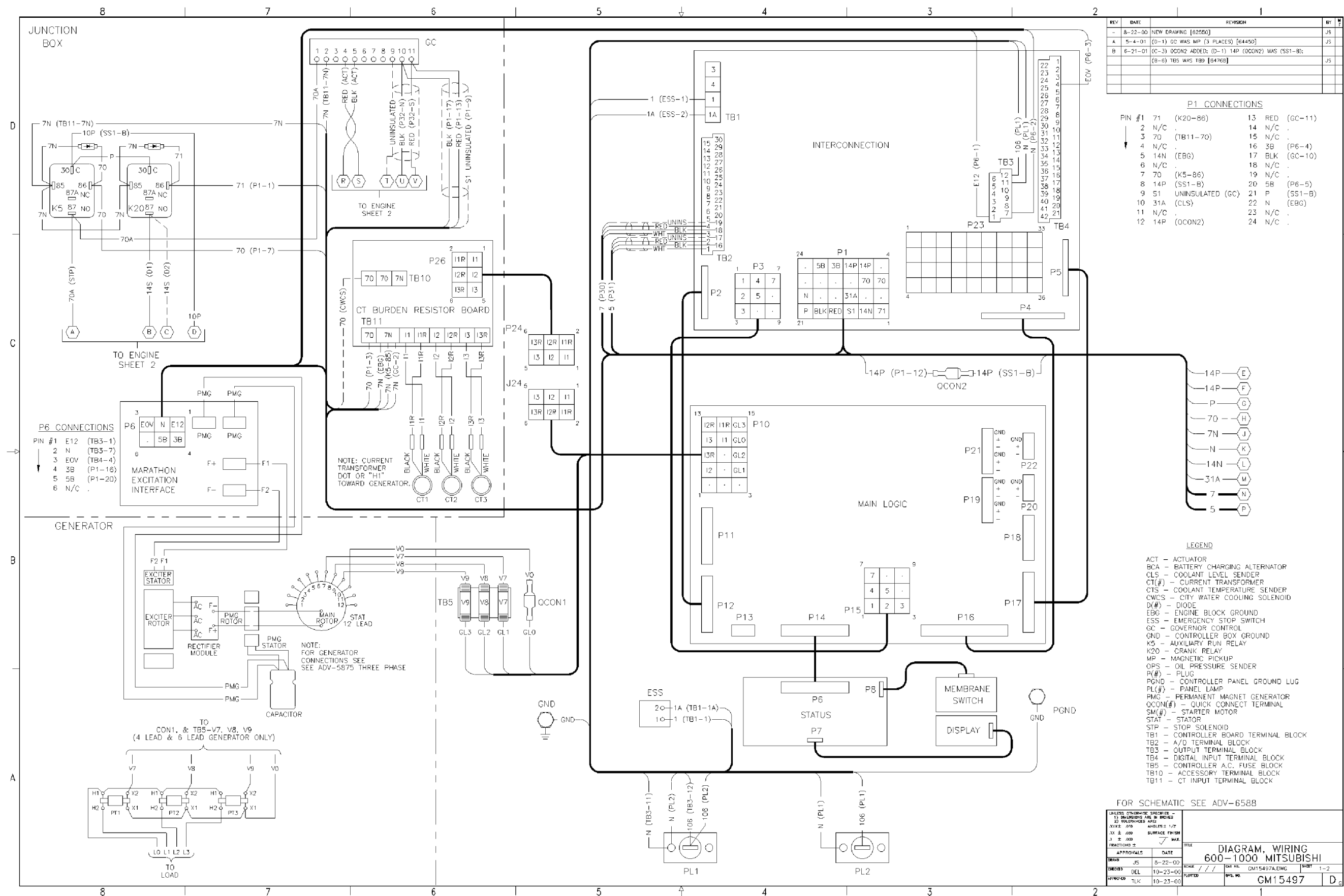


Engine Gauge Box for Paralleling Switchgear, Point-to-Point Wiring Diagram, Sheet 2, GM11410B-B

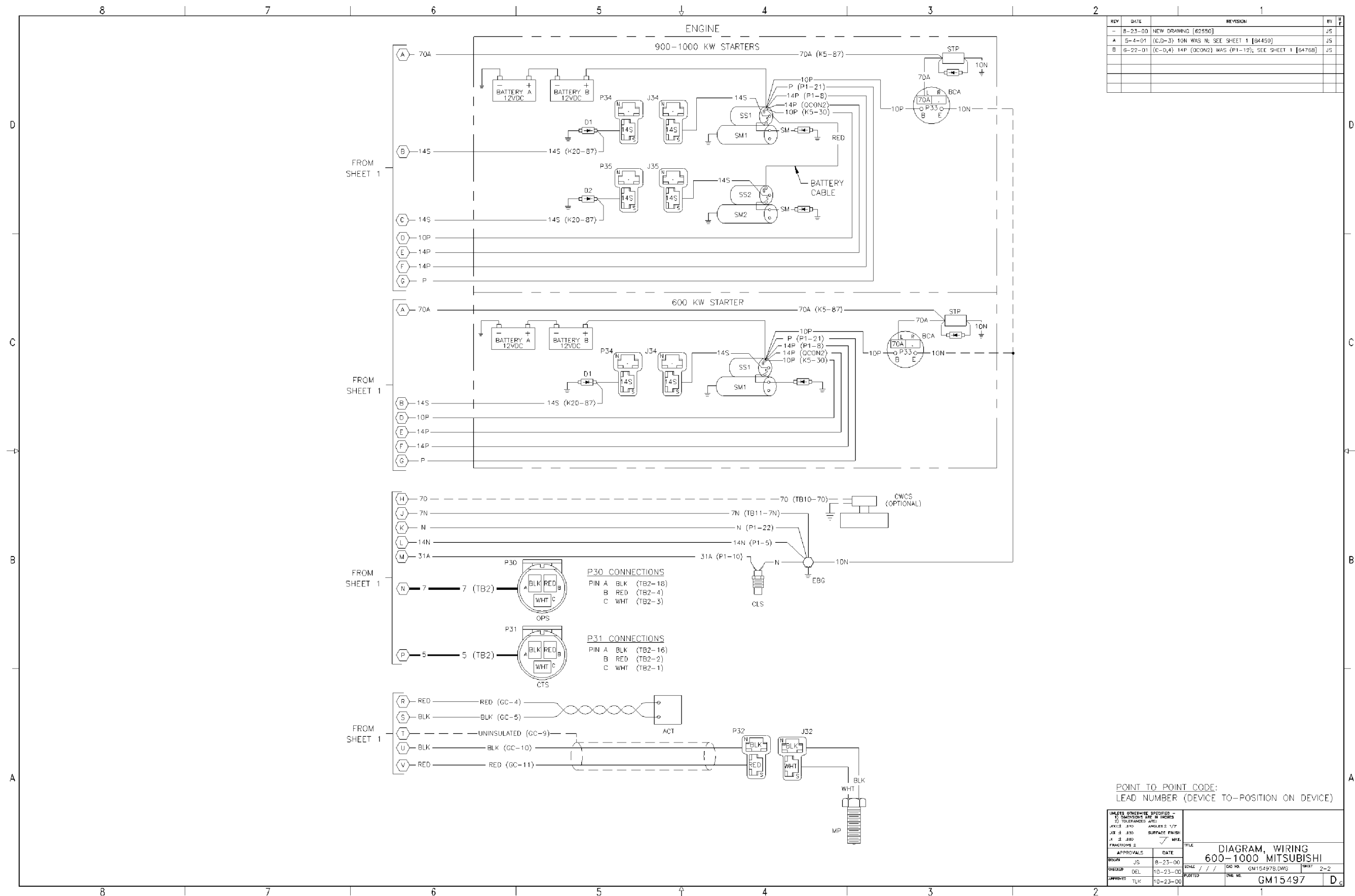


Microprocessor-Plus Controller, Point-to-Point Wiring Diagram, Sheet 1, GM11411A-B

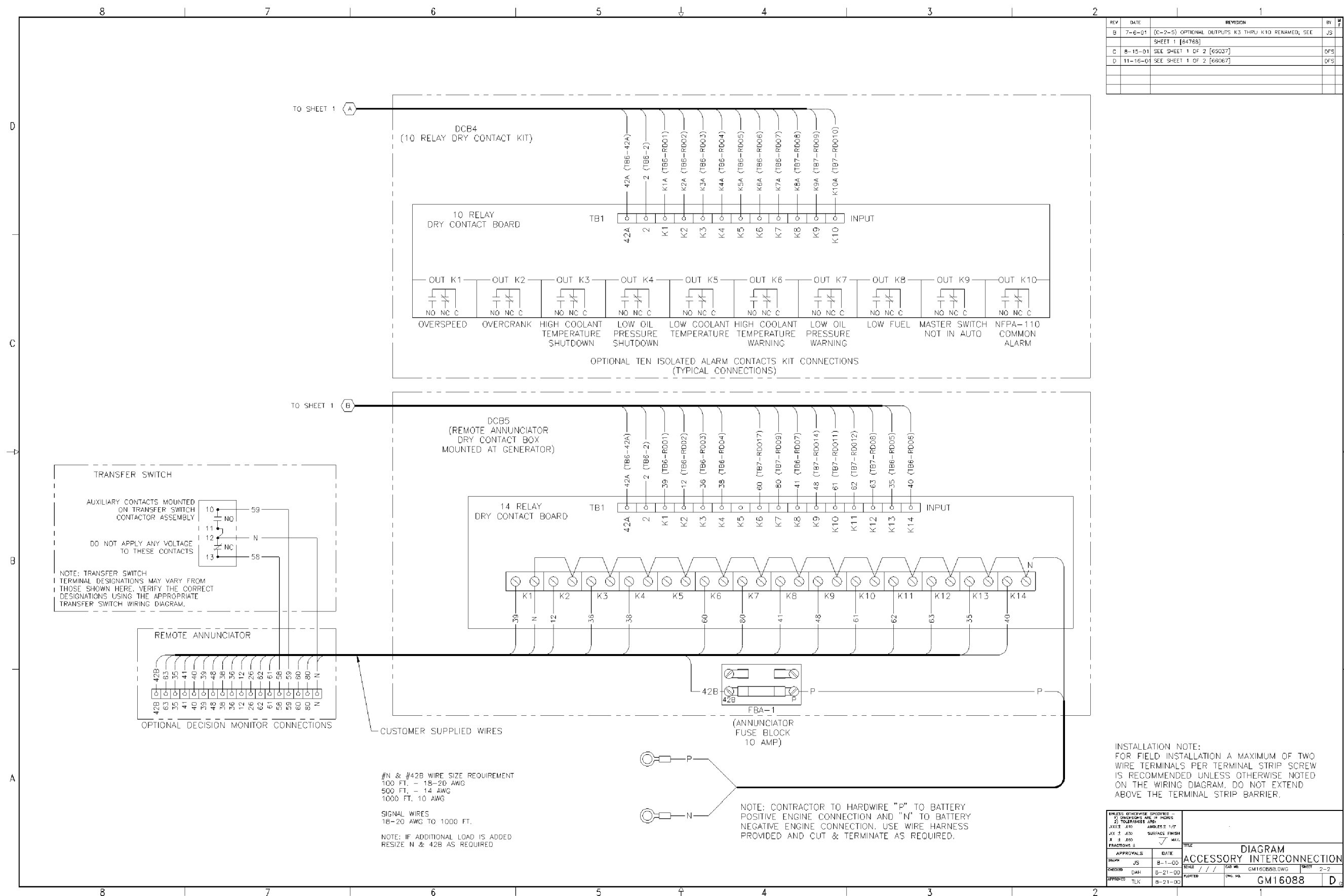


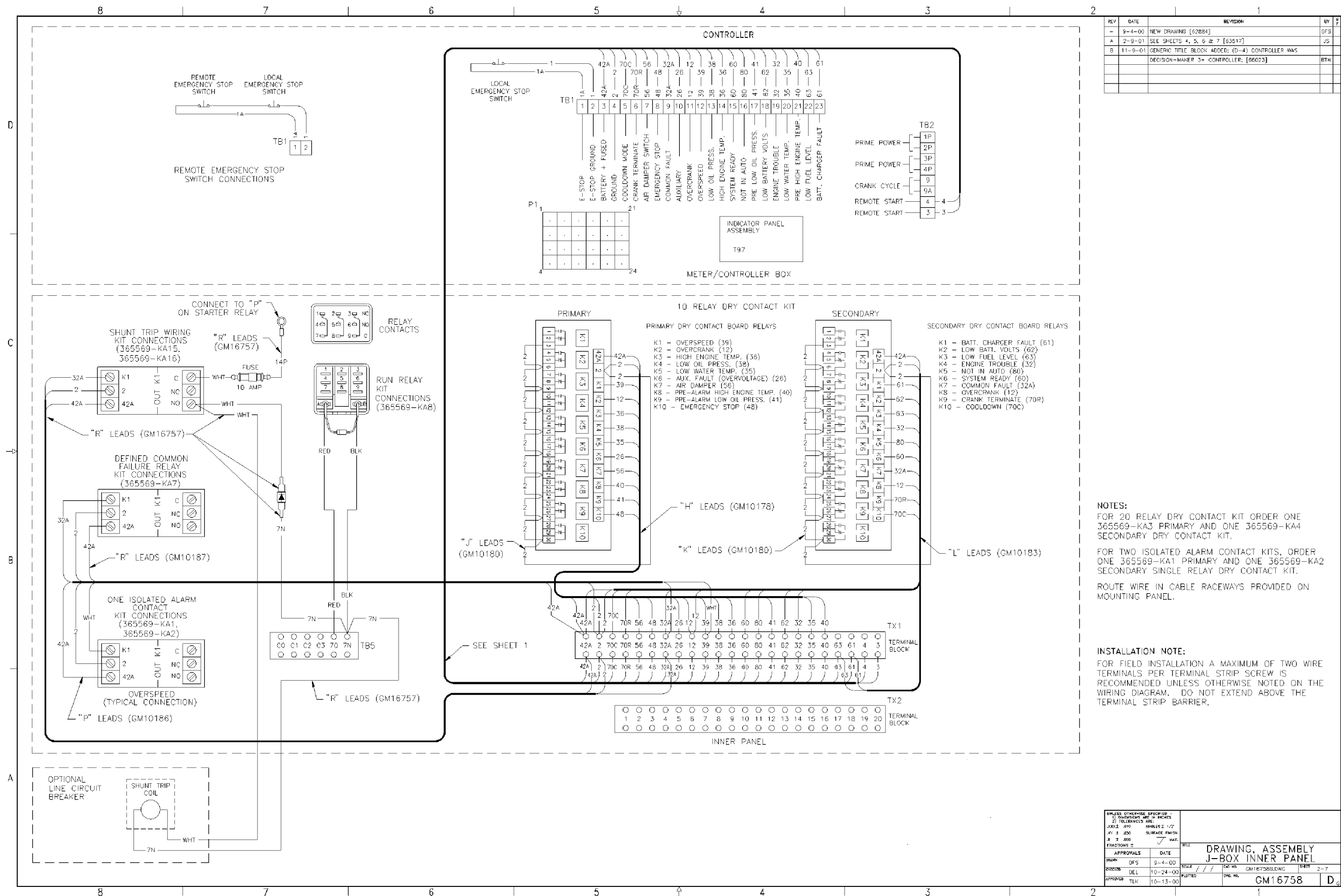


Digital 550 Controller, Point-to-Point Wiring Diagram, Sheet 1, GM15497A-B

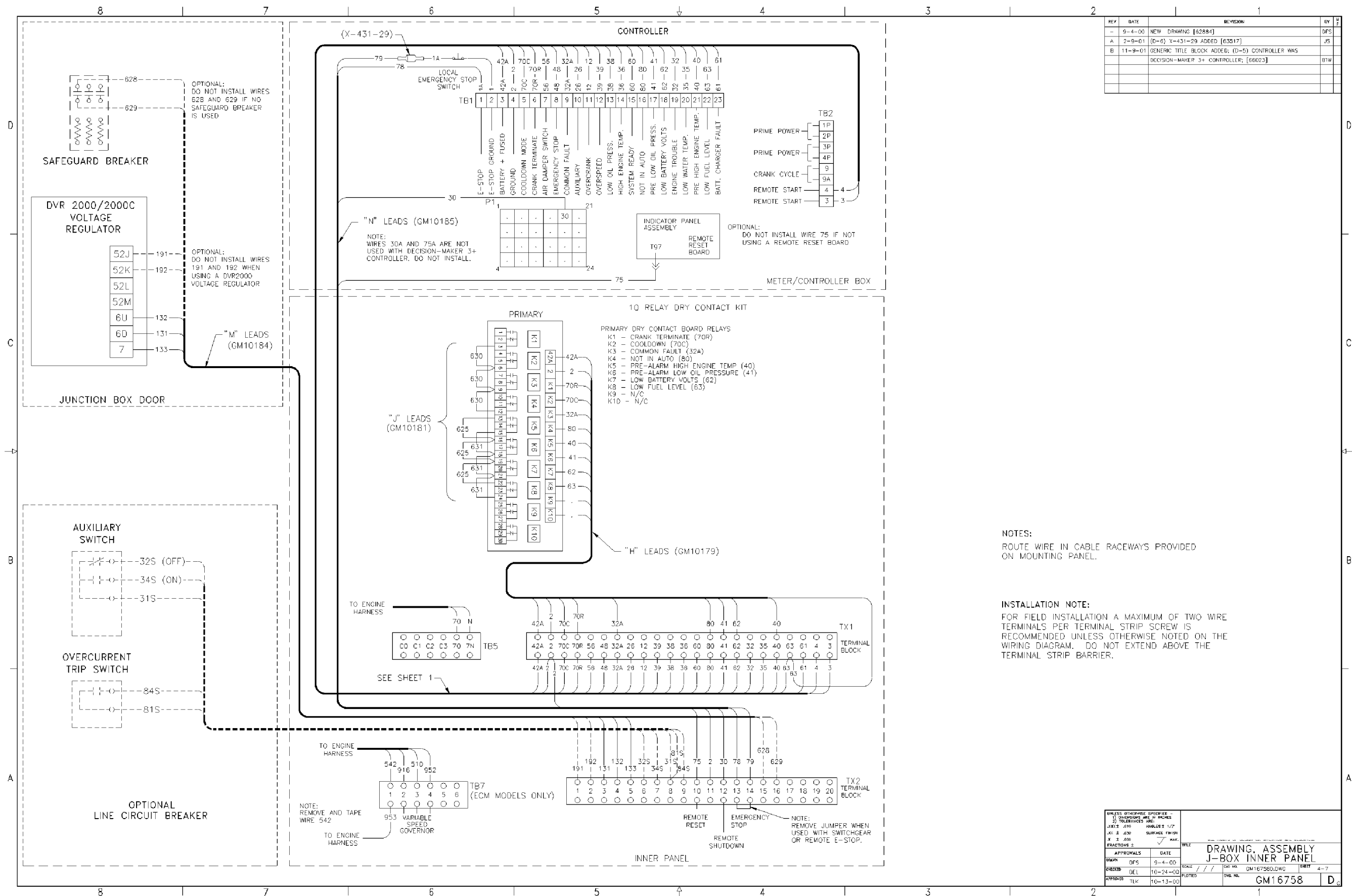


Digital 550 Controller, Point-to-Point Wiring Diagram, Sheet 2, GM15497B-B

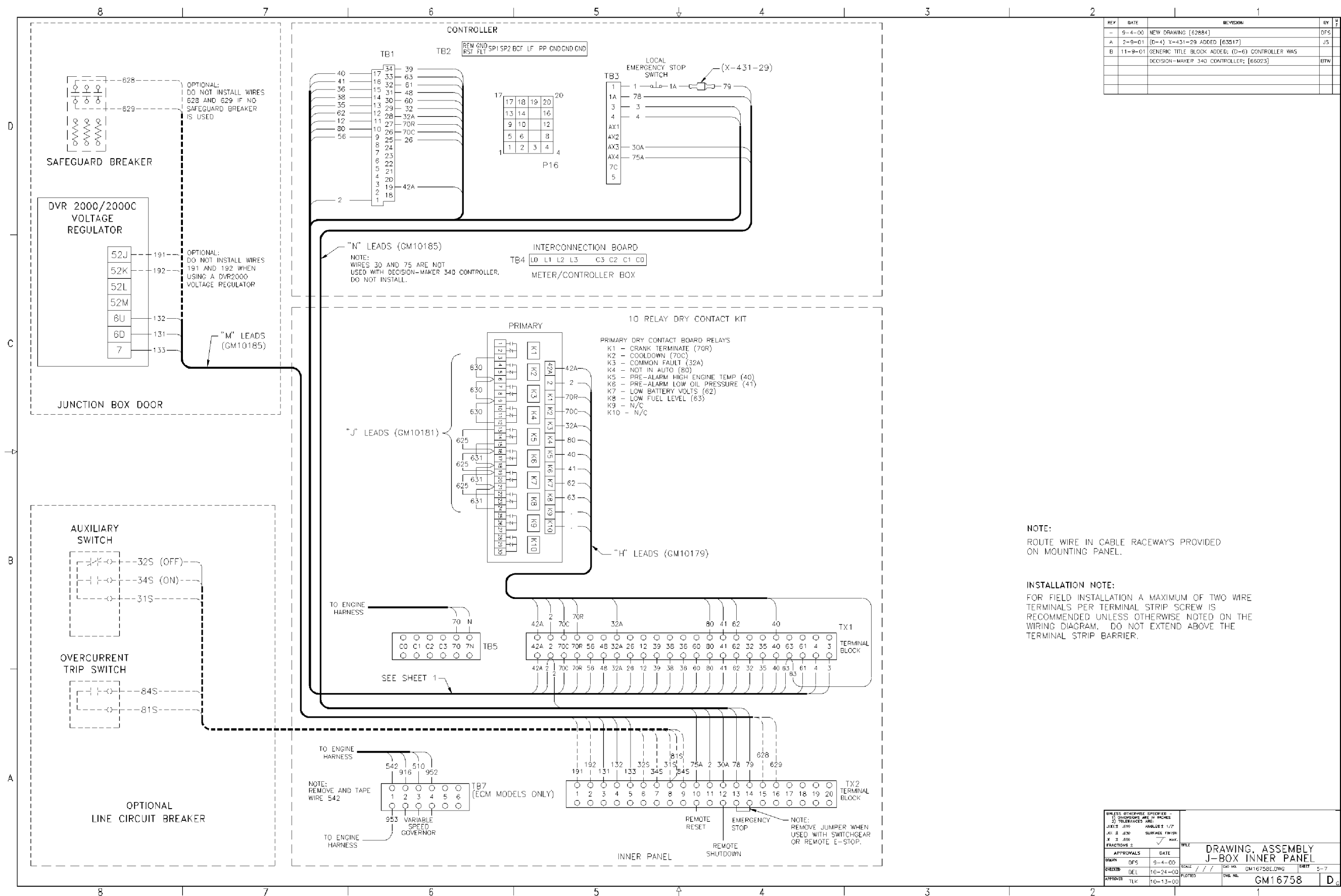




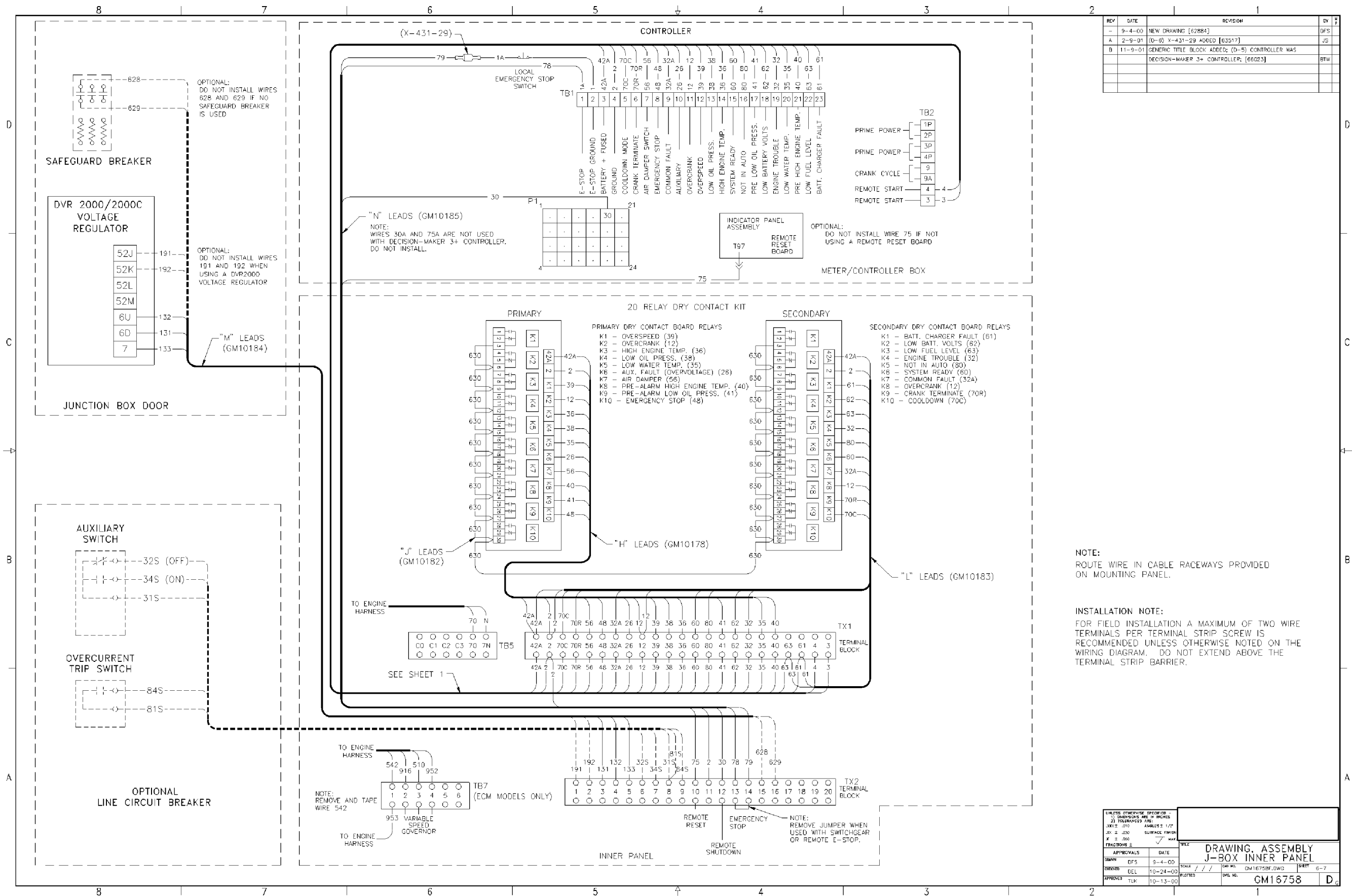
Microprocessor-Plus Controller, Accessory Connections, Sheet 4, GM16758B-B



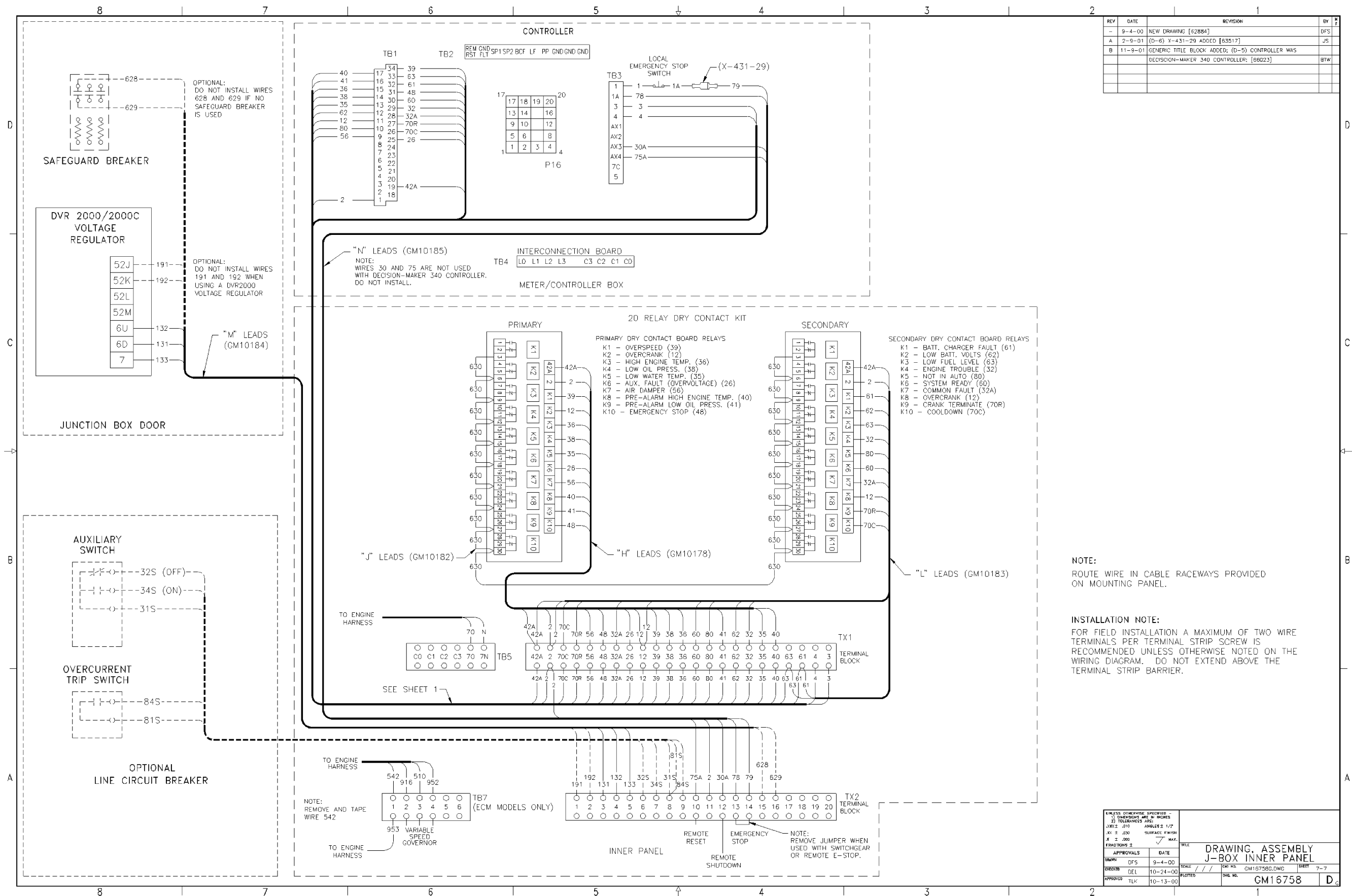
Microprocessor-Plus Controller, Accessory Connections, Sheet 5, GM16758D-B



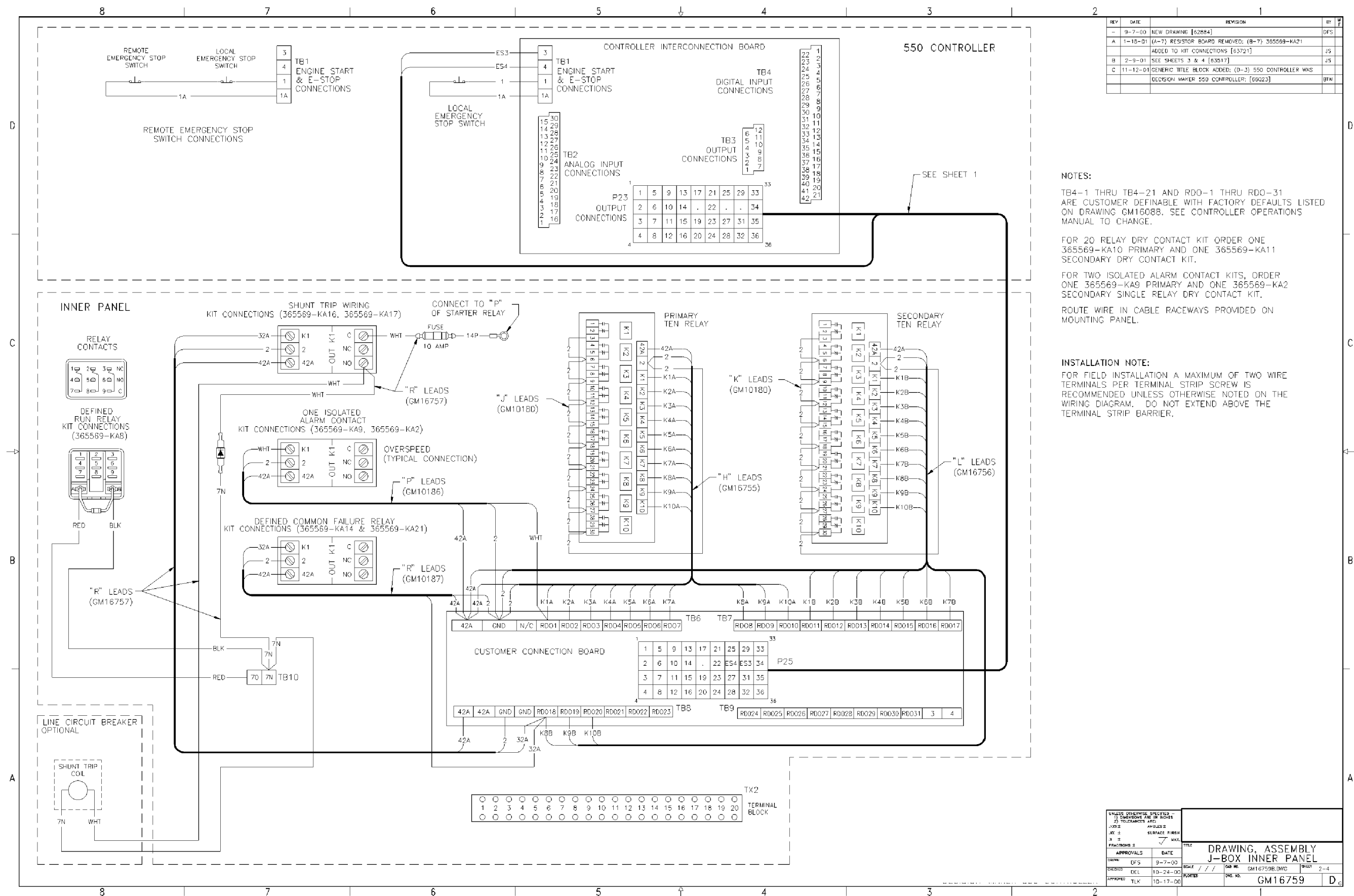
Digital Controller, Accessory Connections, Sheet 4, GM16758E-B



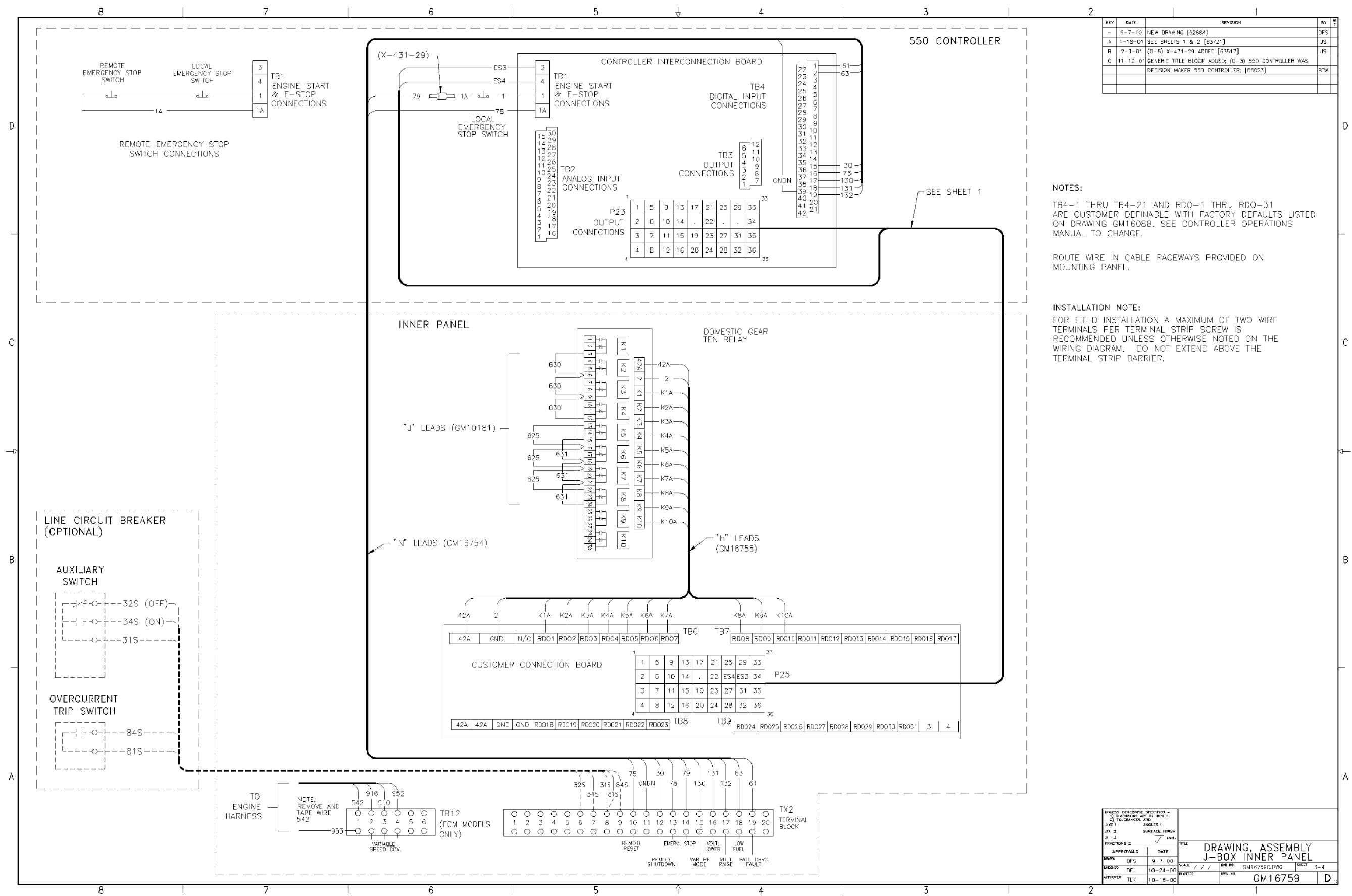
Microprocessor-Plus Controller, Accessory Connections, Sheet 6, GM16758F-B



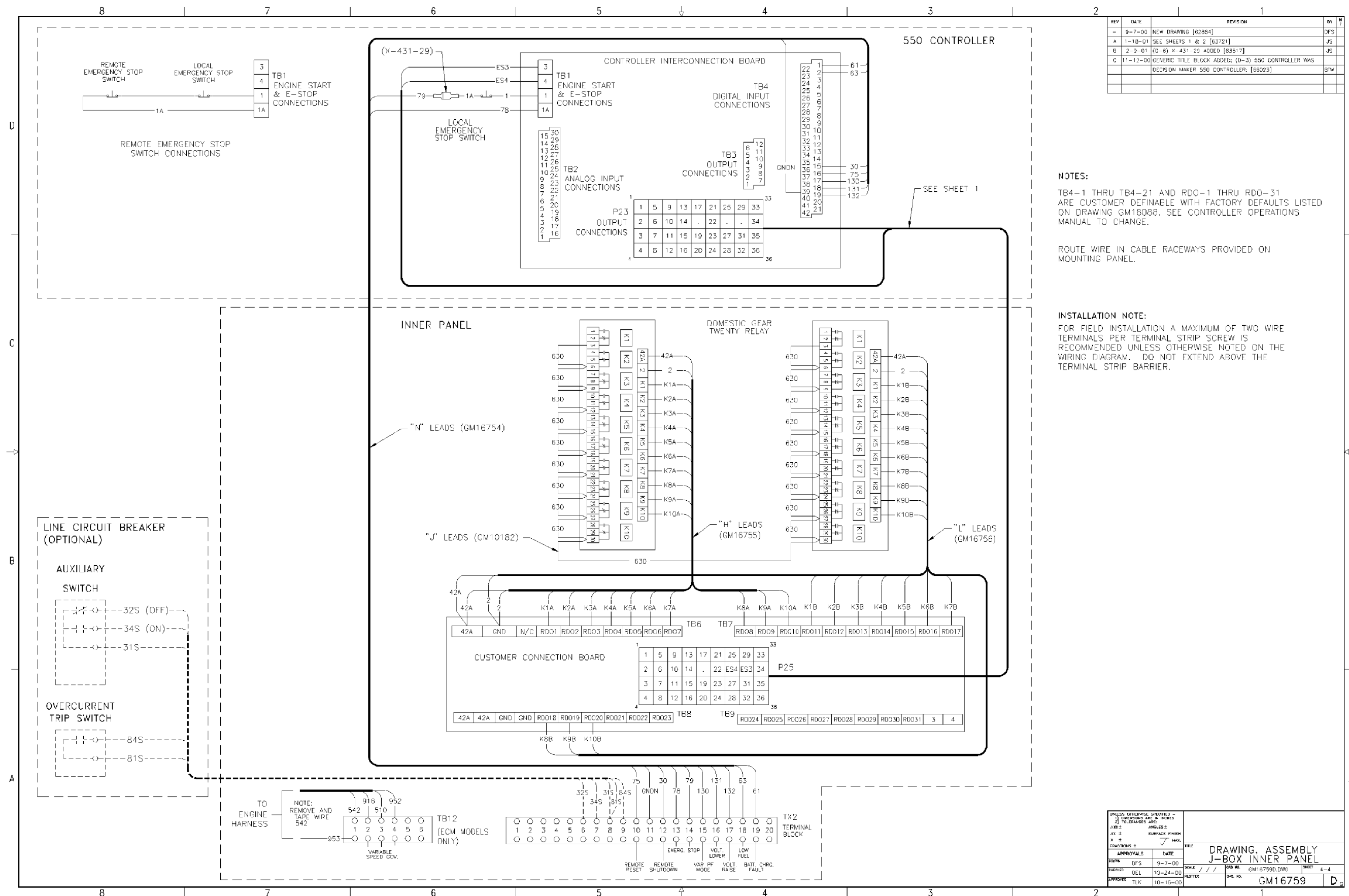
Digital Controller, Accessory Connections, Sheet 5, GM16758G-B



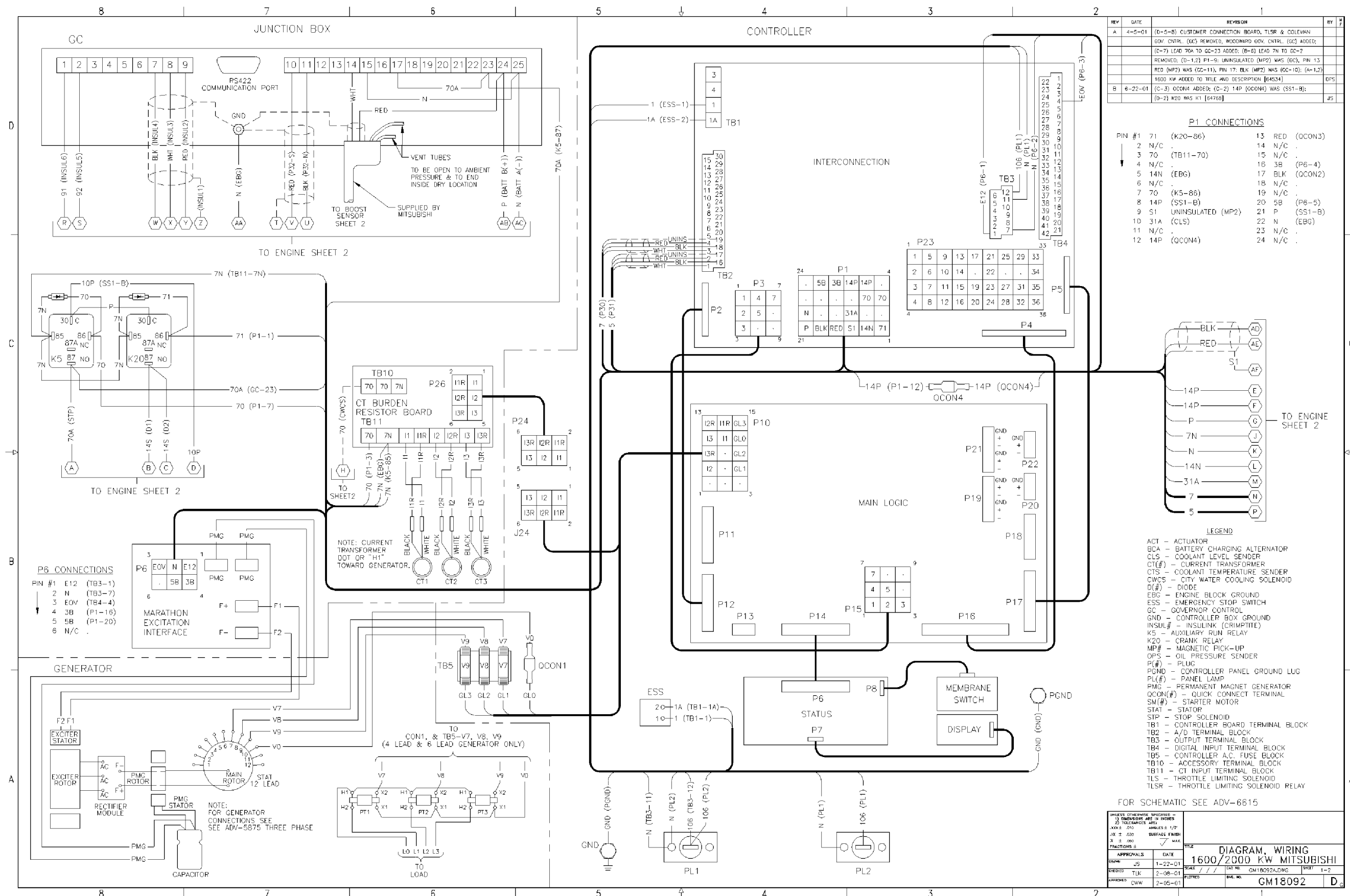
Digital 550 Controller, Accessory Connections, Sheet 3, GM16759B-C



Digital 550 Controller, Accessory Connections, Sheet 4, GM16759C-C

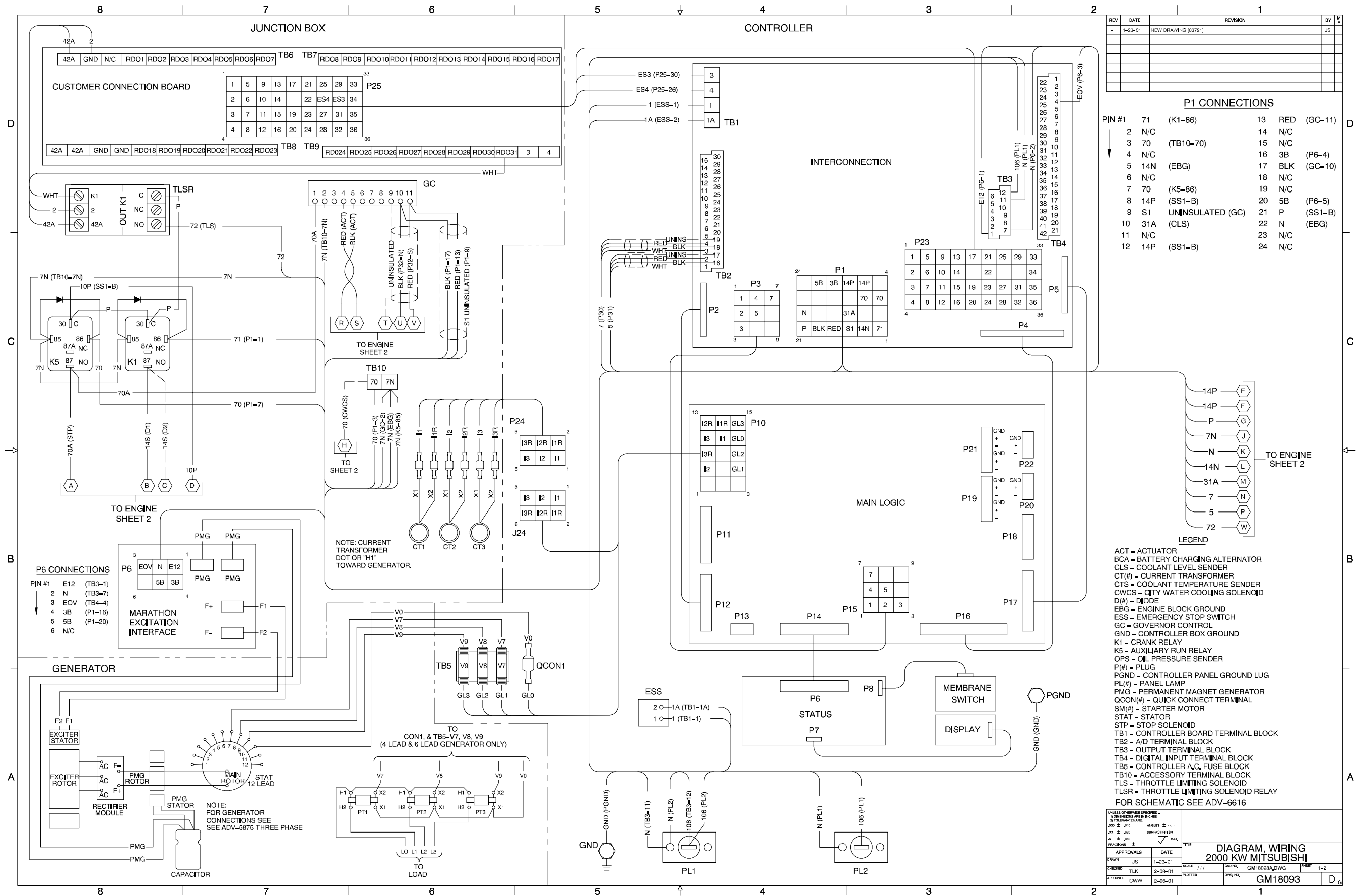


Digital 550 Controller, Accessory Connections, Sheet 5, GM16759D-C

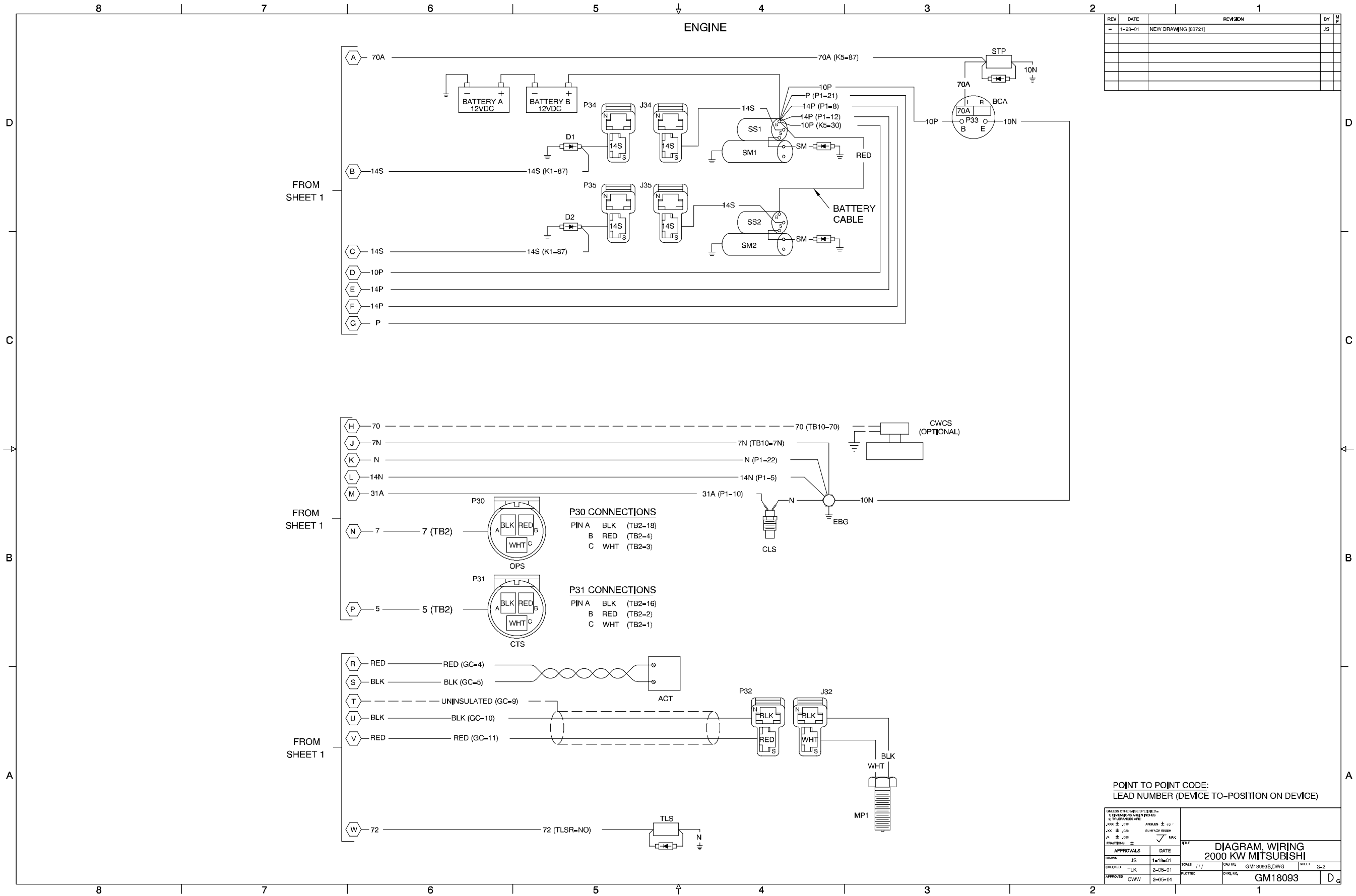


Digital 550 Controller, Point-to-Point Wiring Diagram, Sheet 1, GM18092A-B

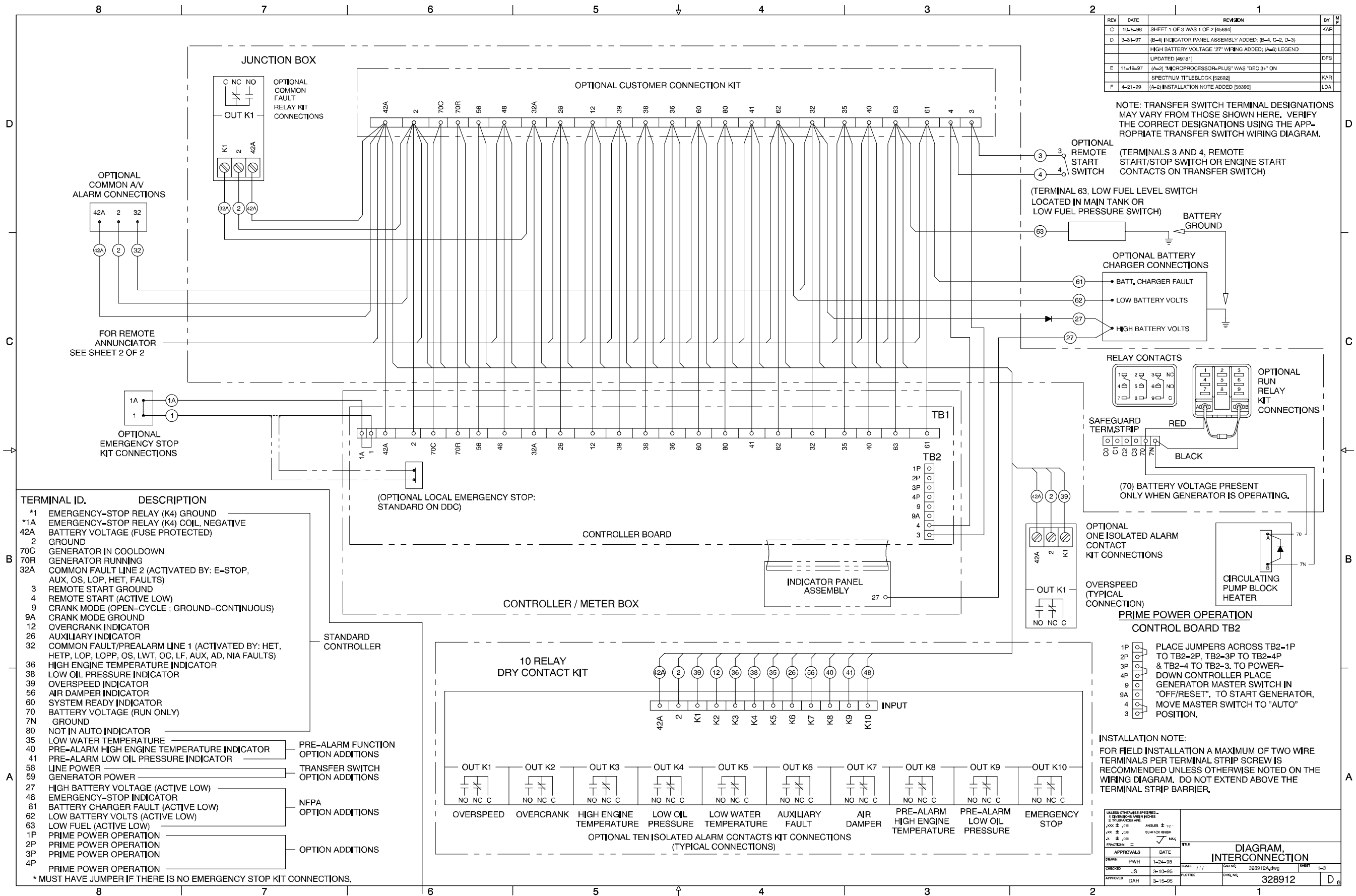




Digital 550 Controller, Point-to-Point Wiring Diagram, Sheet 1, GM18093A

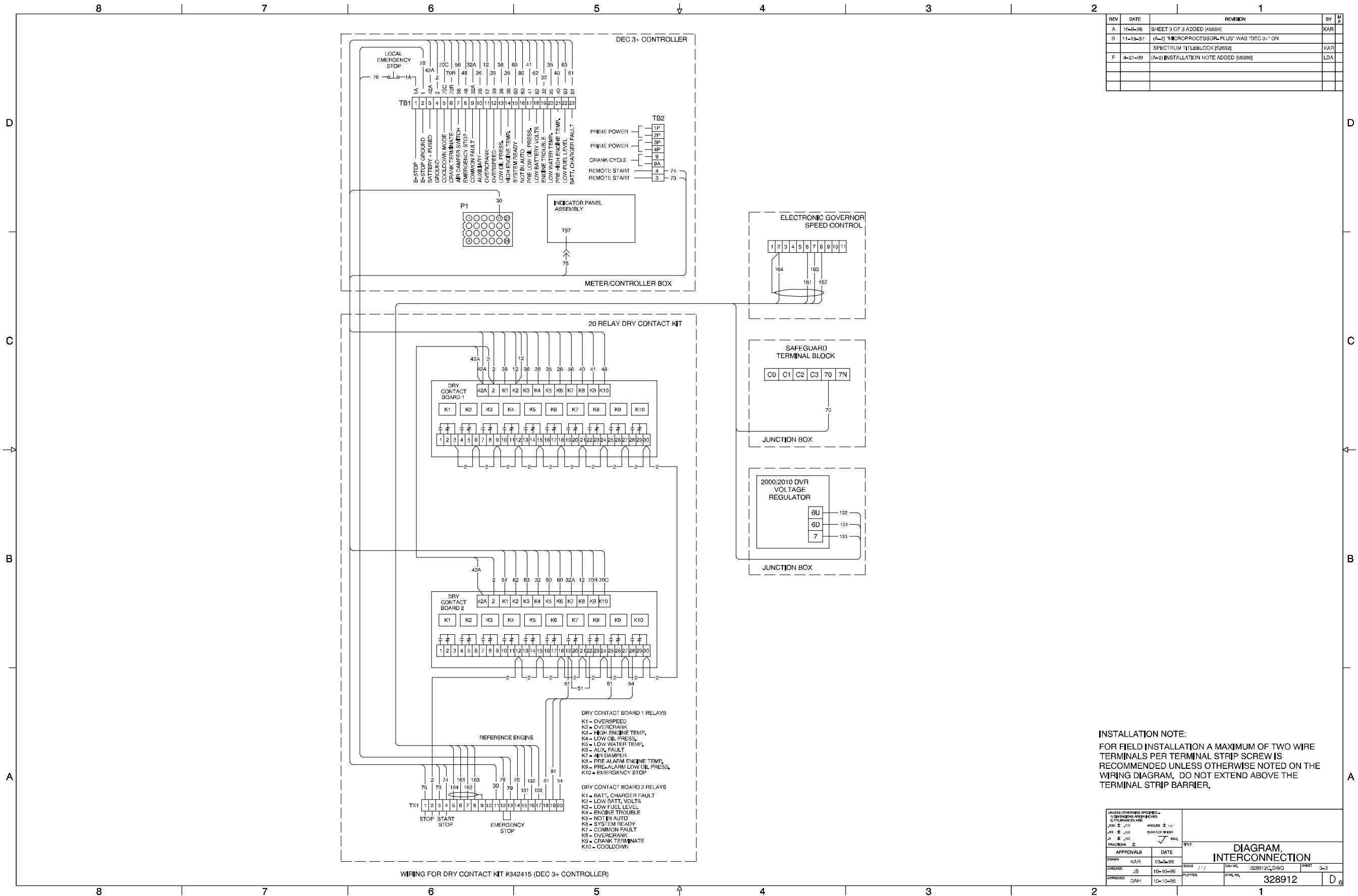


Digital 550 Controller, Point-to-Point Wiring Diagram, Sheet 2, GM18093B

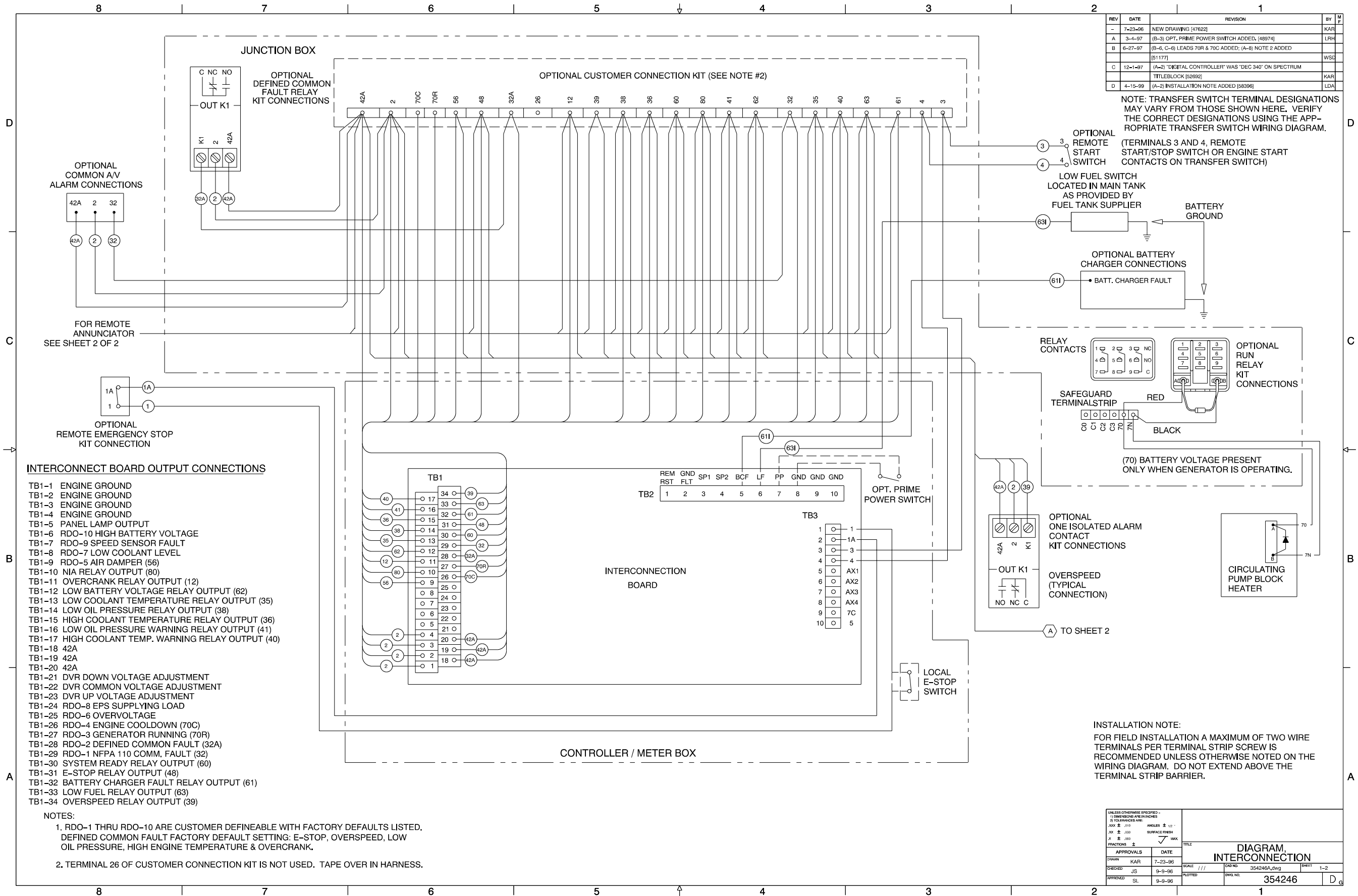


Microprocessor-Plus Controller, Accessory Connections, Sheet 1, 328912A-F

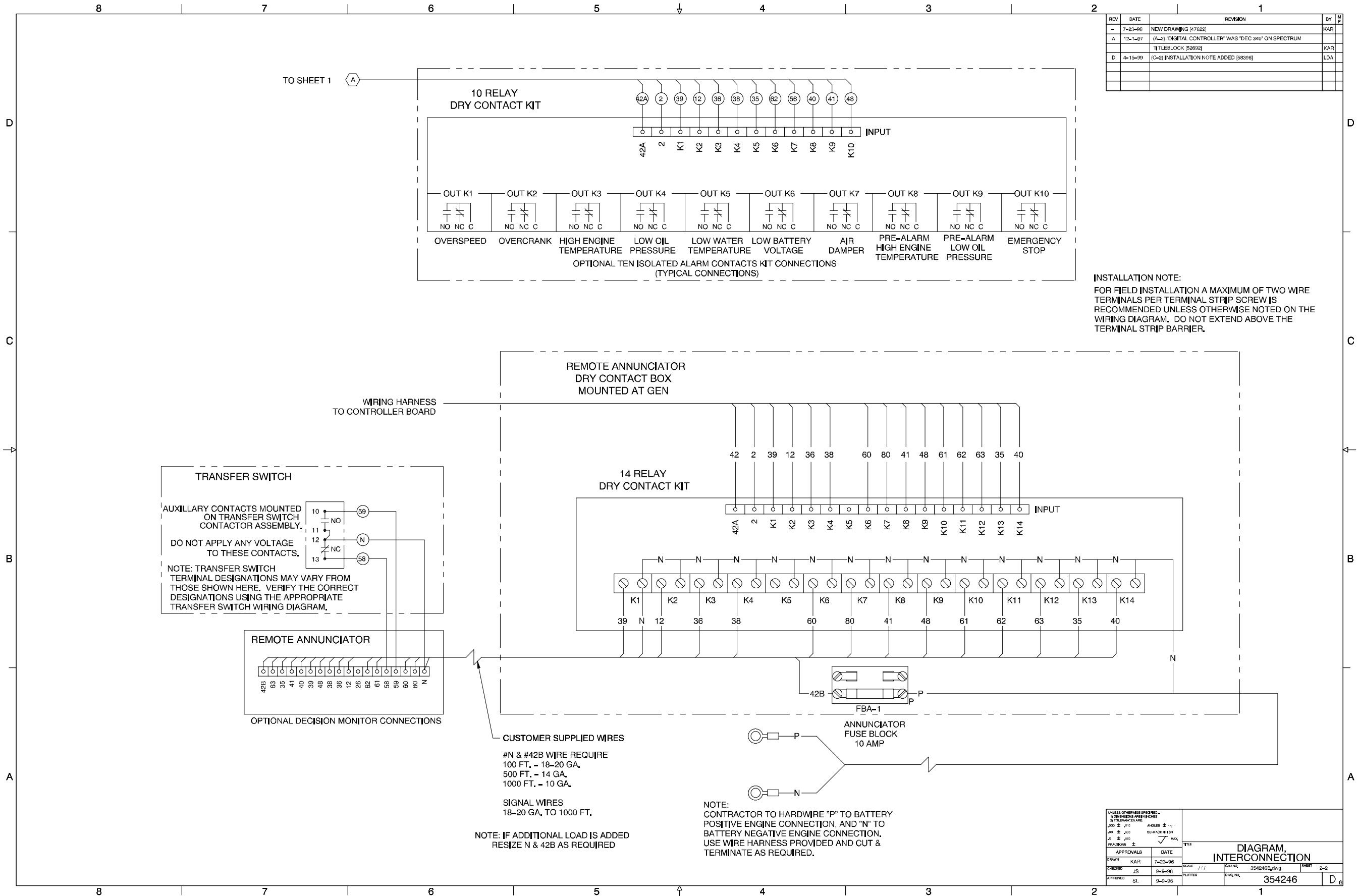




Microprocessor-Plus Controller, Accessory Connections, Sheet 3, 328912C-F



Digital Controller, Accessory Connections, Sheet 1, 354246A-D



Digital Controller, Accessory Connections, Sheet 2, 354246B-D



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