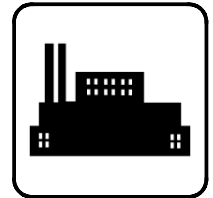


Wiring Diagrams

Industrial Generator Sets



Models:

350- 500REOZJ
350- 500REOZJB
350- 500REOZJC
350/400REOZJD

Controllers:

APM402

APM603

Decision-Maker® 3000

Decision-Maker® 550

Decision-Maker® 6000

KOHLER®

TP-6797 5/20g

This manual provides wiring diagrams for the 350-500REOZJ, 350-00REOZJB, 350-500REOZJC, and 350/400REOZJD generator set models equipped with the following controller:

- APM402
- APM603
- Decision-Maker® 3000
- Decision-Maker® 550
- Decision-Maker® 6000

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Service Assistance

For professional advice on generator set power requirements and conscientious service, please contact your nearest Kohler distributor or dealer.

- Visit the Kohler Co. website at KOHLERPower.com.
- Look at the labels and decals on your Kohler product or review the appropriate literature or documents included with the product.
- Call toll free in the US and Canada 1-800-544-2444.
- Outside the US and Canada, call the nearest regional office.

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Bangalore, India
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(91) 80 3366231
Fax: (91) 80 3315972

Japan, Korea

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

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 Wiring Diagrams Reference chart to determine the wiring diagram numbers for your unit. Refer to Controller Identification for controller type identification, if necessary. Diagrams are arranged in alphanumeric order on the following pages.

Wiring Diagram Cross-Reference Chart

| Generator Set Model | Hz | Generator Set Spec Number | Wiring Diagram Group Number |
|---------------------|----|---------------------------|-----------------------------|
| 350REOZJ | 60 | GM76156- GA1 | 1 |
| 350REOZJB | 60 | GM85455- GA4 | |
| 350REOZJC | 60 | GM111111- GA3 | |
| 350REOZJD | 60 | GM111111- GA1 | |
| 400REOZJ | 60 | GM76156- GA2 | |
| 400REOZJB | 60 | GM85455- GA5 | |
| 400REOZJC | 60 | GM111111- GA4 | |
| 400REOZJD | 60 | GM111111- GA2 | |
| 500REOZJ | 60 | GM76157- GA2 | |
| 500REOZJB | 60 | GM85455- GA3 | |
| 500REOZJC | 60 | GM111111- GA5 | |

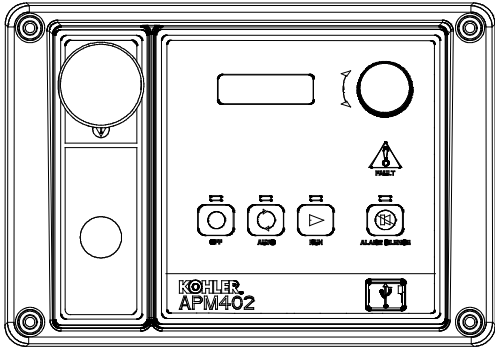
Wiring Diagram Reference Charts

350- 500REOZJ/REOZJB/REOZJC and 350- 400REOZJD

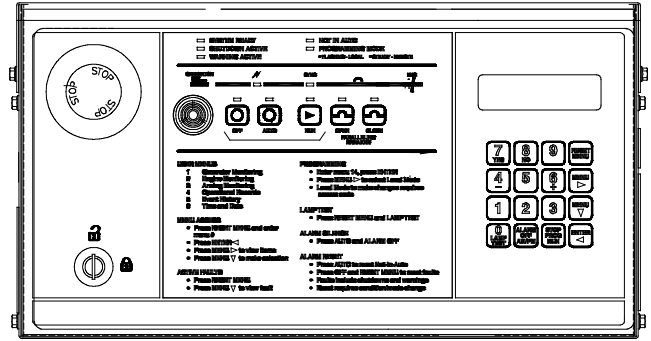
| Group 1 | |
|--|------|
| Drawing Number | Page |
| Decision-Maker® 550 Controller | |
| Point-to-Point Wiring Diagram | |
| GM77988B- 1 | 35 |
| GM77988B- 2 | 36 |
| GM94439B- 1 (Battery Charger) | 45 |
| GM94439B- 2 (Battery Charger) (Ref. on GM77988B- 2) | 46 |
| Schematic Diagram | |
| ADV- 7999C- 1 | 12 |
| ADV- 7999C- 2 | 13 |
| ADV- 8749B- 1 (Battery Charger) | 17 |
| ADV- 8749B- 2 (Battery Charger) (Ref. on ADV- 7999C- 1) | 18 |
| Accessory Connections | |
| GM78247G- 1 | 41 |
| GM78247G- 3 | 43 |
| GM78247G- 4 | 44 |
| APM402 and Decision-Maker®3000 Controller | |
| Point-to-Point Wiring Diagram | |
| GM77987F- 1 | 33 |
| GM77987F- 2 | 34 |
| GM94439B- 1 (Battery Charger) | 45 |
| GM94439B- 2 (Battery Charger) (Ref. on GM77987E- 2) | 46 |
| Schematic Diagram | |
| ADV- 8000F- 1 | 14 |
| ADV- 8749B- 1 (Battery Charger) | 19 |
| ADV- 8749B- 2 (Battery Charger) (Ref. on ADV- 8000F- 1) | 20 |
| Accessory Connections | |
| GM78246G- 1 | 39 |
| GM78246G- 2 | 40 |
| Decision-Maker® 6000 Controller | |
| Point-to-Point Wiring Diagram | |
| GM77989E- 1 | 37 |
| GM77989E- 2 | 38 |
| GM72449G- 1 | 29 |
| GM72449G- 2 | 30 |
| GM72449G- 3 | 31 |
| GM72449G- 4 | 32 |
| GM94439B- 1 (Battery Charger) | 45 |
| GM94439B- 2 (Battery Charger) (Ref. on GM77989E- 2) | 46 |

| Group 1 | |
|--|------|
| Drawing Number | Page |
| Decision-Maker® 6000 Controller (continued) | |
| Schematic Diagram | |
| ADV- 8001F- 1 | 15 |
| ADV- 8493A- 1 | 16 |
| ADV- 8493A- 2 | 17 |
| ADV- 8493A- 3 | 18 |
| ADV- 8749B- 1 (Battery Charger) | 19 |
| ADV- 8749B- 2 (Battery Charger) (Ref. on ADV- 8001F- 1) | 20 |
| Accessory Connections | |
| GM78247G- 2 | 42 |
| GM78247G- 3 | 43 |
| APM603 Controller | |
| Point-to-Point Wiring Diagram | |
| GM105806E- 1 | 47 |
| GM105806E- 2 | 48 |
| GM105806E- 3 | 49 |
| GM105806E- 4 | 50 |
| GM105806E- 5 | 51 |
| GM105806E- 6 | 52 |
| GM94439B- 1 (Battery Charger) | 45 |
| GM94439B- 2 (Battery Charger) (Ref. on GM105806E- 3) | 46 |
| Schematic Diagram | |
| ADV- 9078D- 1 | 21 |
| ADV- 9078D- 2 | 22 |
| ADV- 9078D- 3 | 23 |
| ADV- 9078D- 4 | 24 |
| ADV- 9078D- 5 | 25 |
| ADV- 9078D- 6 | 26 |
| ADV- 9078D- 7 | 27 |
| ADV- 9078D- 8 | 28 |
| Alternator Reconnections | |
| ADV- 5875AB- 4 | 7 |
| ADV- 5875AB- 6 | 8 |
| ADV- 5875AB- 7 | 9 |
| Enclosure Wiring Diagram (applies to all models) | |
| ADV- 7035C- 1 | 10 |
| ADV- 7035C- 2 | 11 |

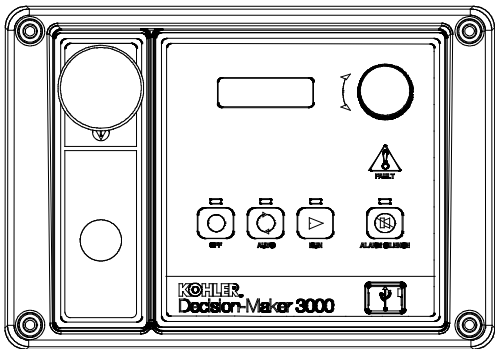
Controller Identification



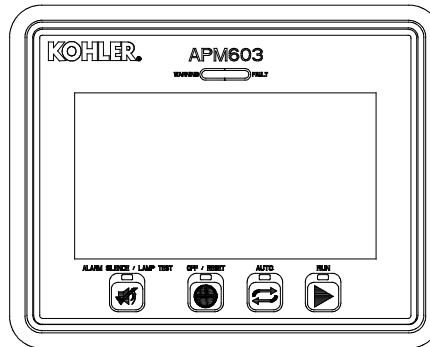
APM402 Controller



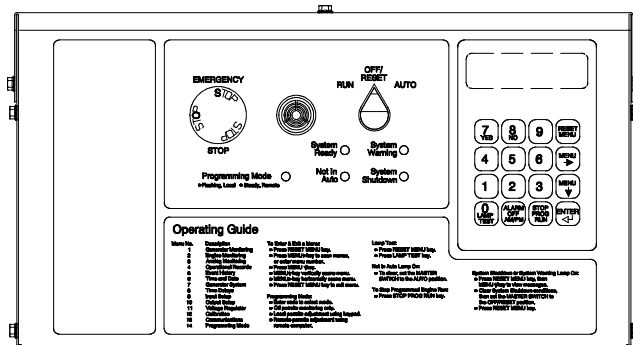
Decision-Maker® 6000 Controller



Decision-Maker® 3000 Controller

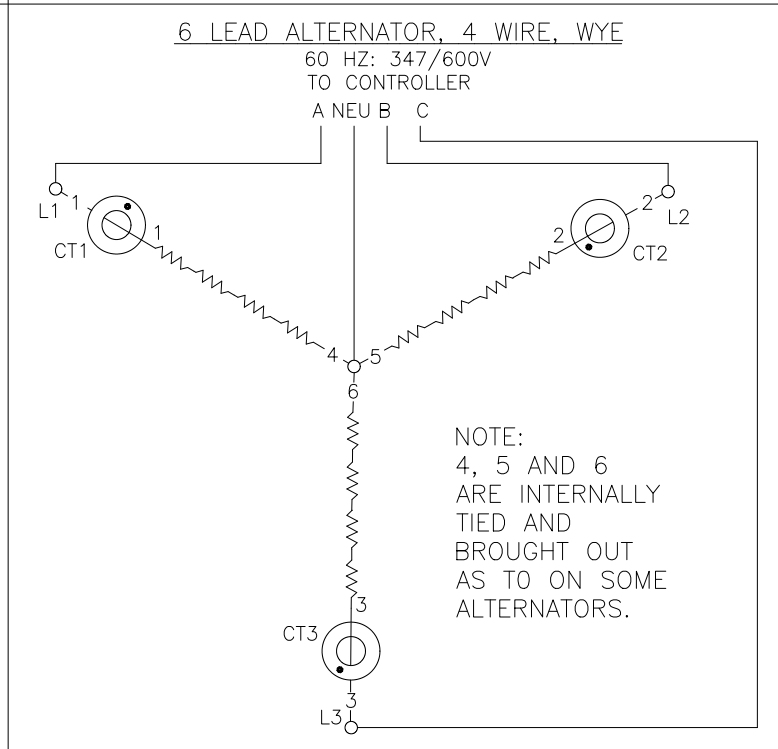
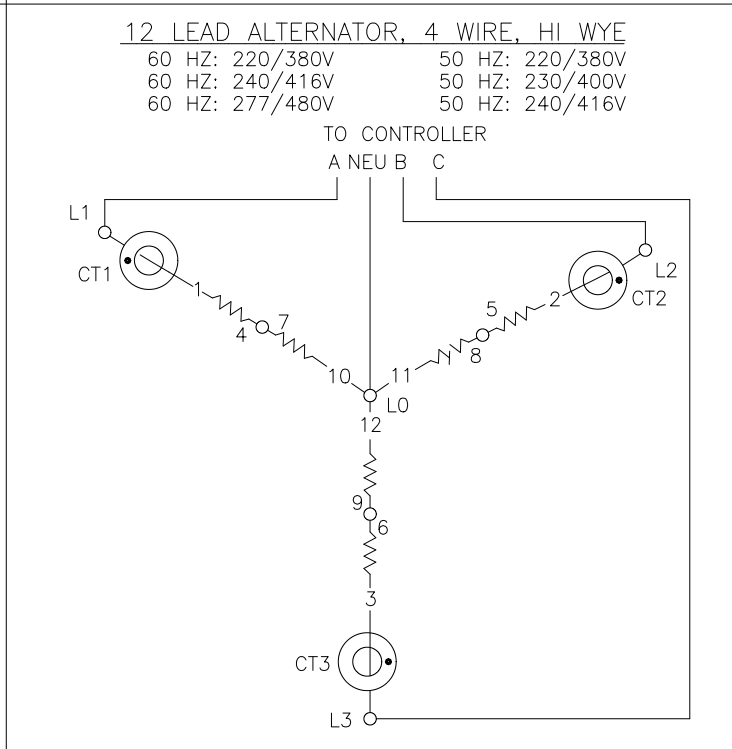
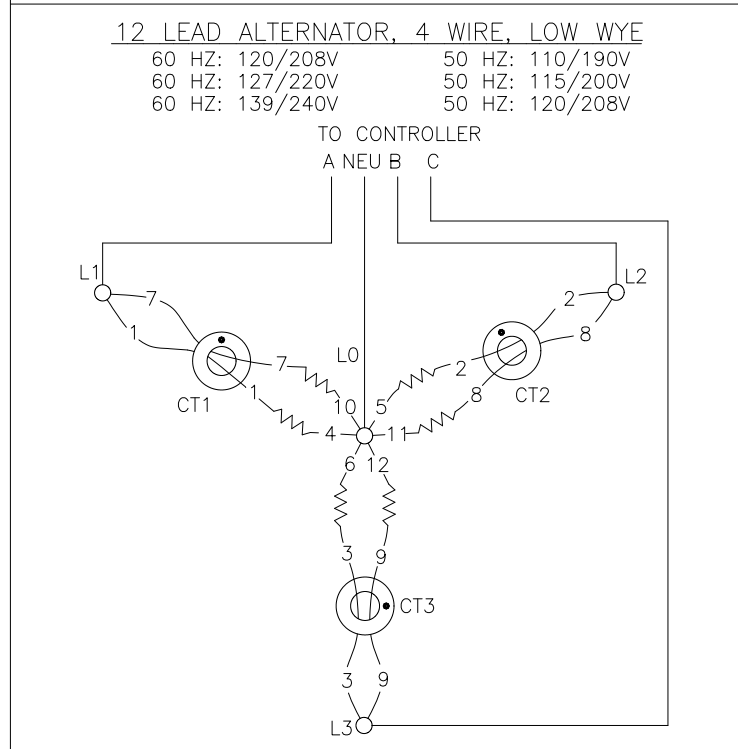
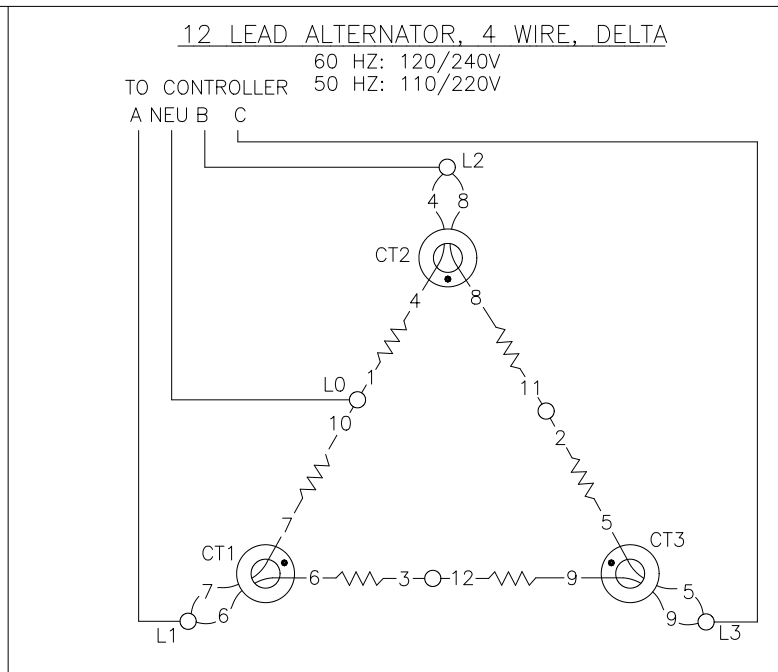
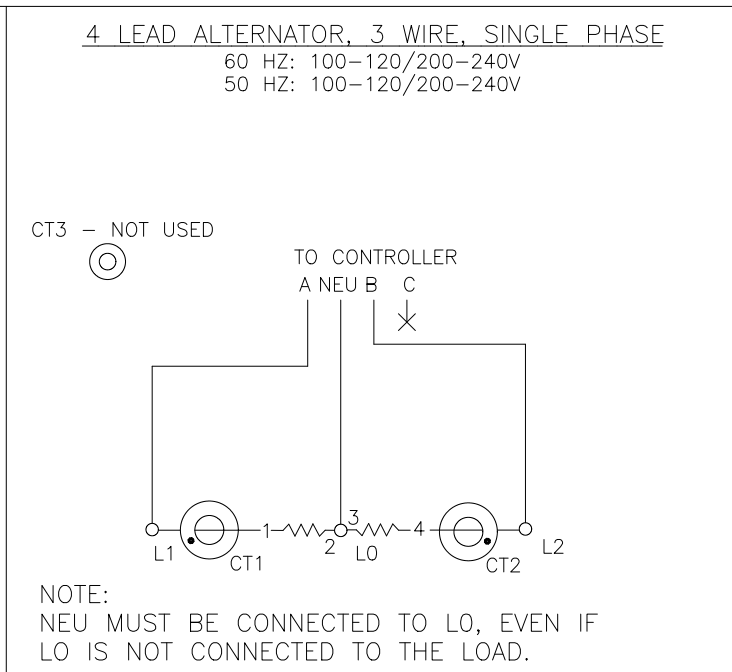
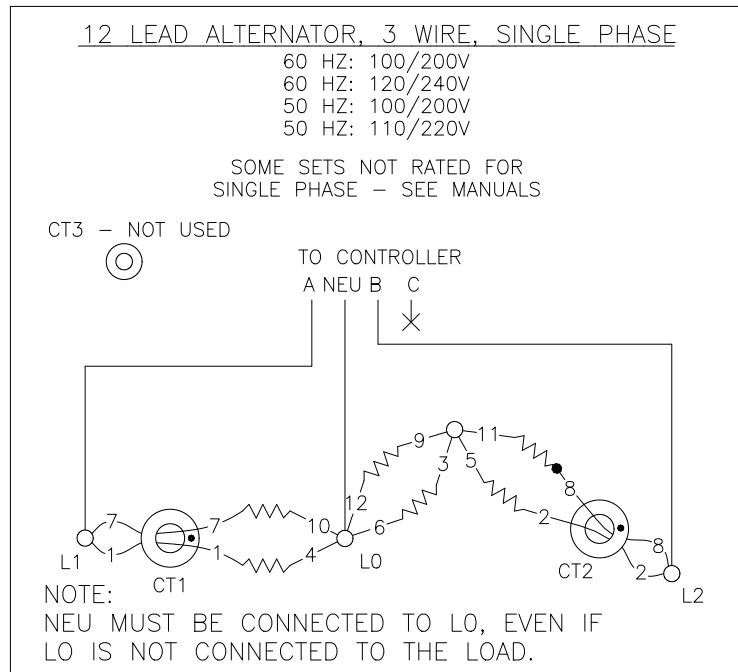


APM603 Controller



Decision-Maker® 550 Controller

| REV | DATE | REVISION | BY |
|-----|---------|---|-----|
| U | 9-14-15 | (A-8) DUAL LEADS STATOR NOTE ADDED; SEE SHEET 1, 2, 3, 4 & 5 [CT124611] | SVP |
| V | 3-27-18 | SEE SHEET 7 [CT185471] | PAR |
| W | 7-17-18 | TO CONTROLLER WAS TO DEC3500 (6 PLACES) [CT190243] | TLK |
| Y | 2-13-19 | SEE SHEET 8 [CT193706] | RVM |
| AA | 6-3-19 | SEE SHEET 8 [CT196205] | KK |
| AB | 10-4-19 | SEE SHEET 4 [CT199071] | DS |



PHASE ROTATION

| | | |
|----|----|----|
| A | B | C |
| L1 | L2 | L3 |

NOTES:
 CURRENT TRANSFORMER DOT OR "H1" TOWARD GENERATOR.
 CURRENT TRANSFORMERS NOT USED ON ALL SETS.
 SOME STATORS HAVE DUAL LEADS. ALWAYS CONNECT LEADS OF THE SAME LABEL TOGETHER.

| | | | |
|---|--|---|--|
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| APPROVALS DRAWN PRH CHECKED IF APPROVED IF | | DATE 5-27-04 5-27-04 5-27-04 | |
| TITLE DIAGRAM, ALTERNATOR CONNECTIONS | | SCALE NONE SHEET 6-8 Dwg. No. ADV-5875 | |

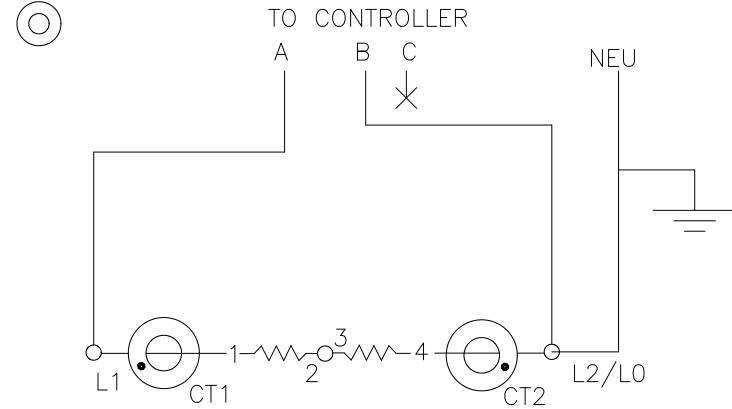
APM603 CONTROLLER
 DEC3500 CONTROLLER

| REV | DATE | REVISION | BY |
|-----|---------|---|-----|
| U | 9-14-15 | (A-8) DUAL LEADS STATOR NOTE ADDED; SEE SHEET 1, 2, 3, 4 & 5 [CT124611] | SVP |
| V | 3-27-18 | SHEET 7 ADDED [CT185471] | PAR |
| W | 7-17-18 | (C-7) TO CONTROLLER WAS TO DEC3500 [CT190243] | TLK |
| Y | 2-13-19 | SEE SHEET 8 [CT193706] | RVM |
| AA | 6-3-19 | SEE SHEET 8 [CT196205] | KK |
| AB | 10-4-19 | SEE SHEET 4 [CT199071] | DS |

4 LEAD ALTERNATOR, 2 WIRE, SINGLE PHASE

60 HZ: 200-240V
50 HZ: 200-240V

CT3 - NOT USED



NOTE:

NEU MUST BE CONNECTED TO L2/L0, EVEN IF L0 IS NOT CONNECTED TO THE LOAD.

NOTES:

CURRENT TRANSFORMER DOT OR "H1" TOWARD GENERATOR.
CURRENT TRANSFORMERS NOT USED ON ALL SETS.
SOME STATORS HAVE DUAL LEADS. ALWAYS CONNECT LEADS OF THE SAME LABEL TOGETHER.

PHASE ROTATION

A B C
L1 L2 L3

| | | | |
|--|---------|---|--------------------|
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| APPROVALS | DATE | TITLE DIAGRAM, ALTERNATOR CONNECTIONS | |
| DRAWN PRH | 5-27-04 | SCALE NONE | DWG. NO. SHEET 7-8 |
| CHECKED IF | 5-27-04 | PLOTTED | |
| APPROVED IF | 5-27-04 | DWG. NO. ADV-5875 | |

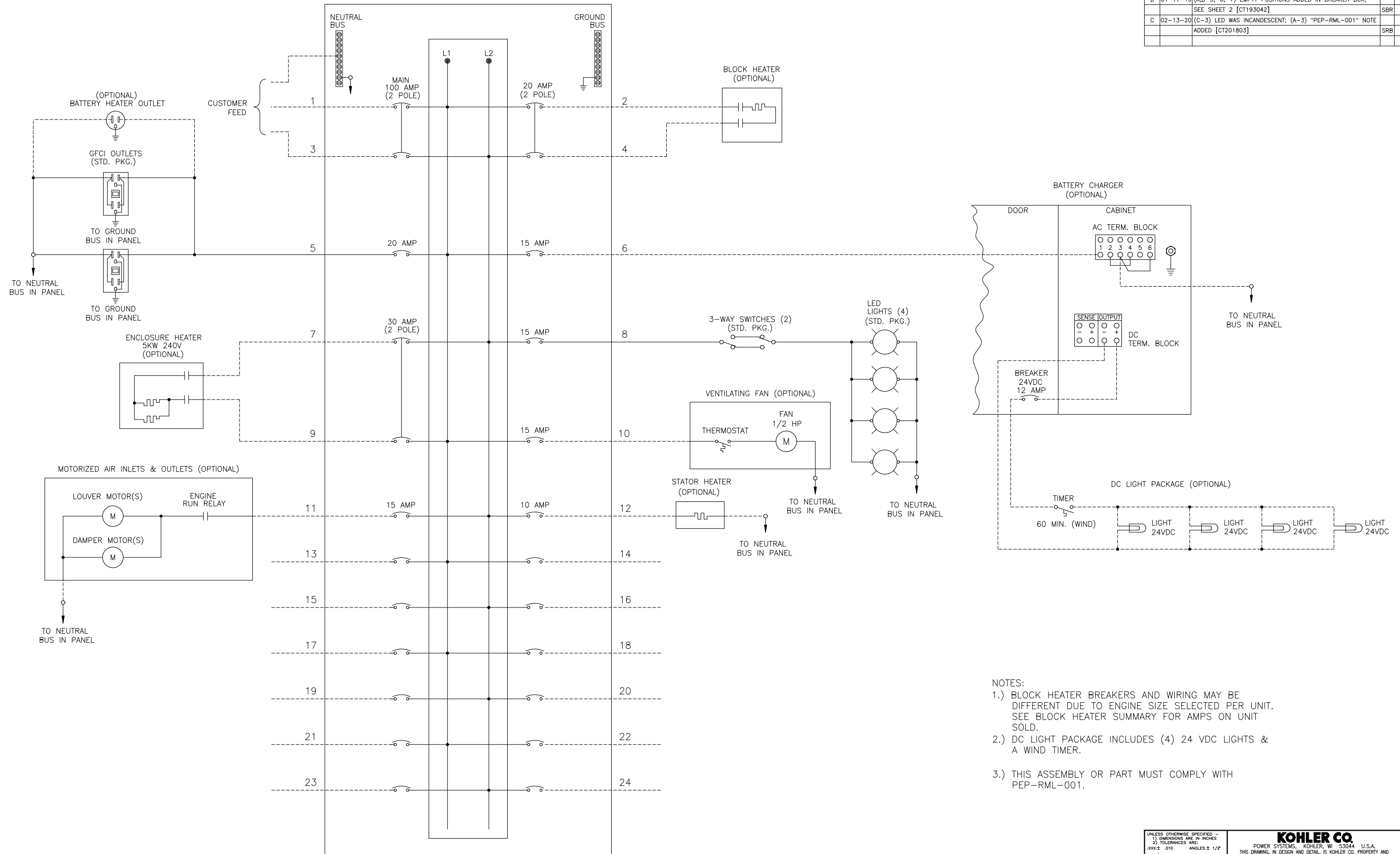
APM603 CONTROLLER
DEC3500 CONTROLLER

| REV | DATE | REVISION | BY |
|-----|----------|---|-----|
| - | 2-18-05 | NEW DRAWING [73953] | DFS |
| A | 11-10-06 | (D-8) OPTIONAL BATTERY HEATER OUTLET ADDED [79794] | SEM |
| B | 01-17-19 | (A,B-5,-6,-7) EMPTY POSITIONS ADDED IN BREAKER BOX; SEE SHEET 2 [CT193042] | SBR |
| C | 02-13-20 | (C-3) LED WAS INCANDESCENT; (A-3) "PEP-RML-001" NOTE ADDED [CT201803] | SRB |

1 PHASE 100 AMP
CIRCUIT BREAKER PANEL

D
C
B
A

D
C
B
A



- NOTES:
- 1.) BLOCK HEATER BREAKERS AND WIRING MAY BE DIFFERENT DUE TO ENGINE SIZE SELECTED PER UNIT. SEE BLOCK HEATER SUMMARY FOR AMPS ON UNIT SOLD.
 - 2.) DC LIGHT PACKAGE INCLUDES (4) 24 VDC LIGHTS & A WIND TIMER.
 - 3.) THIS ASSEMBLY OR PART MUST COMPLY WITH PEP-RML-001.

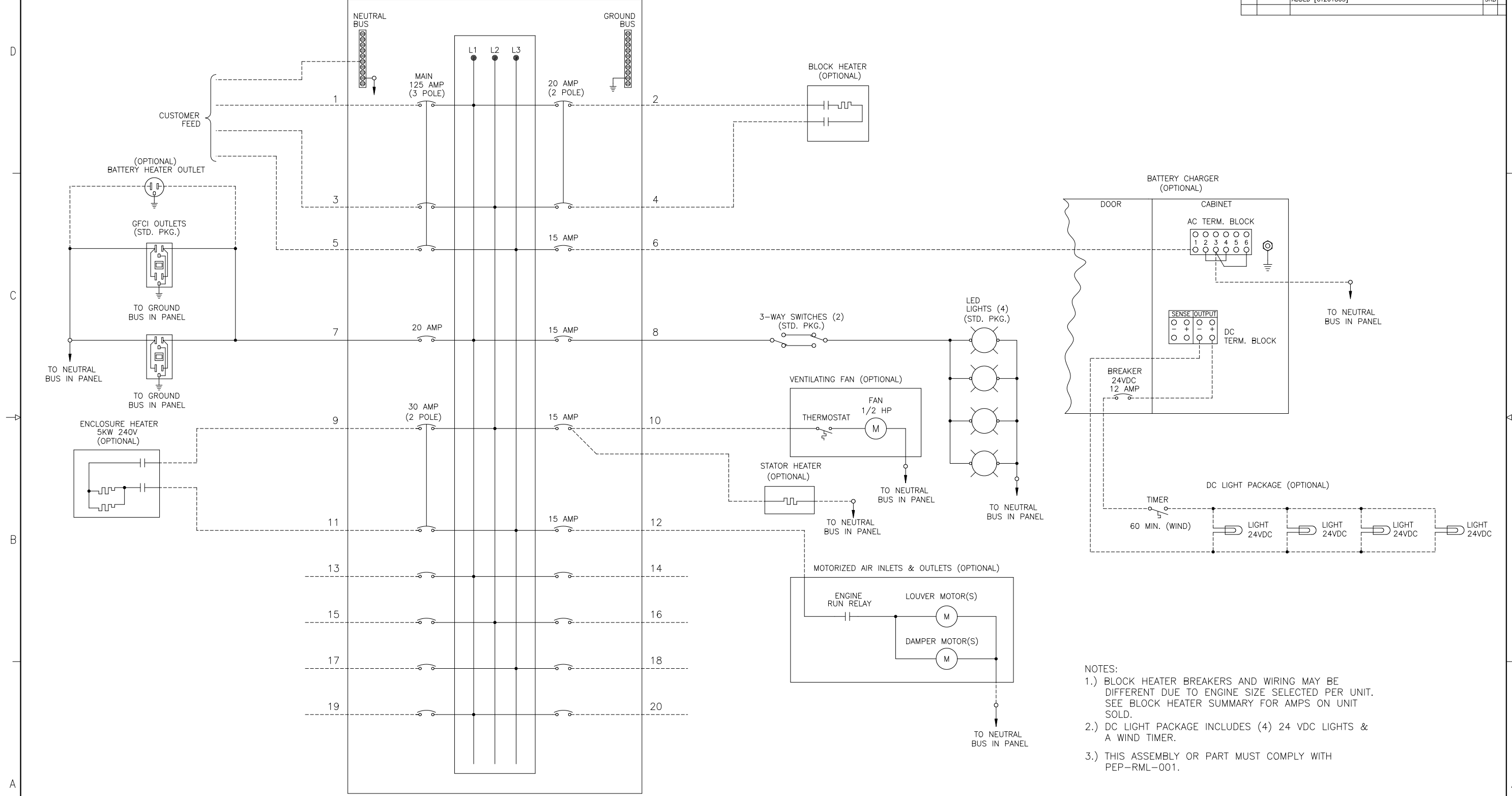
| | | | |
|--|--|---|--------------|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: XXX ± .010 ANGLES ± 1/2° .XX ± .030 SURFACE FINISH X ± .060 ✓ MAX. FRACTIONS ± | | KOHLER CO. POWER SYSTEMS, KOHLER, WI 53044 U.S.A. THIS DRAWING, IN DESIGN AND DETAIL, IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | |
| APPROVALS | | DATE | |
| DRAWN DFS | | 2-18-05 | |
| CHECKED TLK | | 2-21-05 | |
| APPROVED EB | | 2-21-05 | |
| TITLE | | SCALE | DWG. NO. |
| DIAGRAM, SCHEMATIC TPIK ELECTRICAL PANEL | | /// | ADV7035A.DWG |
| | | SHEET | 1-2 |
| | | PLOTTED | ADV-7035 |

TPIK HOUSING
ELECTRICAL ACCESSORIES
1 PHASE

D₆

| REV | DATE | REVISION | BY |
|-----|----------|---|-----|
| - | 2-18-05 | NEW DRAWING [73953] | DFS |
| A | 11-10-06 | (C-8) OPTIONAL BATTERY HEATER OUTLET ADDED [79794] | SEM |
| B | 01-17-19 | (A,B-5,-6,-7) EMPTY POSITIONS ADDED IN BREAKER BOX; SEE SHEET 1 [CT193042] | SBR |
| B | 02-13-20 | (C-3) LED WAS INCANDESCENT; (A-3) "PEP-RML-001" NOTE ADDED [CT201803] | SRB |

3 PHASE 125 AMP
CIRCUIT BREAKER PANEL

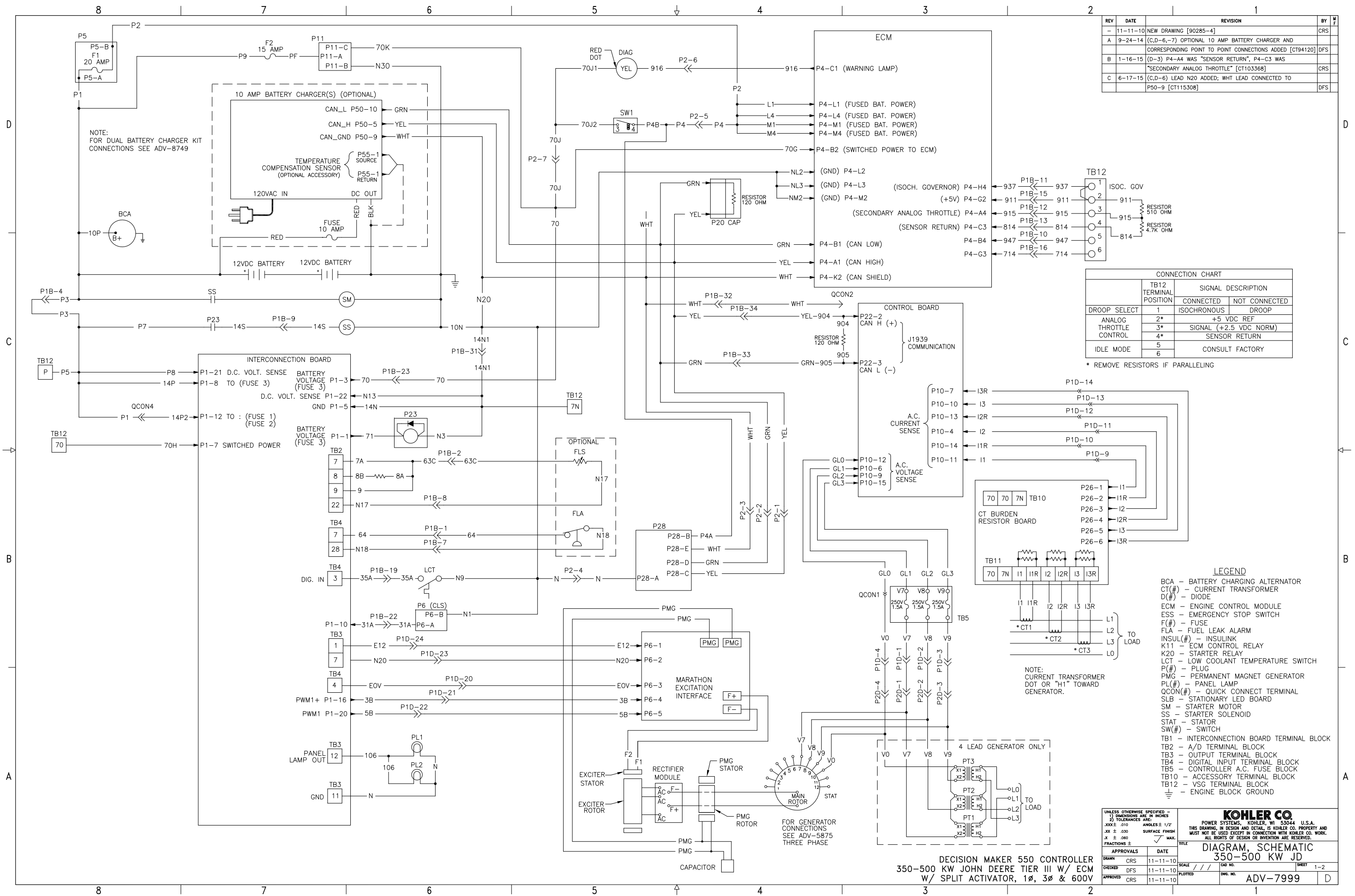


- NOTES:
- 1.) BLOCK HEATER BREAKERS AND WIRING MAY BE DIFFERENT DUE TO ENGINE SIZE SELECTED PER UNIT. SEE BLOCK HEATER SUMMARY FOR AMPS ON UNIT SOLD.
 - 2.) DC LIGHT PACKAGE INCLUDES (4) 24 VDC LIGHTS & A WIND TIMER.
 - 3.) THIS ASSEMBLY OR PART MUST COMPLY WITH PEP-RML-001.

| | | | |
|---|-----|---|-------|
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| APPROVALS | | DATE | |
| DRAWN | DFS | 2-18-05 | |
| CHECKED | TLK | 2-21-05 | |
| APPROVED | EB | 2-21-05 | |
| TITLE | | SCALE | SHEET |
| DIAGRAM, SCHEMATIC TPIK ELECTRICAL PANEL | | ADV7035B.DWG | 2-2 |
| Dwg. No. | | Dwg. No. | |
| ADV-7035 | | D.G. | |

TPIK HOUSING
ELECTRICAL ACCESSORIES
3 PHASE

| REV | DATE | REVISION | BY | WF |
|-----|----------|---|-----|----|
| - | 11-11-10 | NEW DRAWING [90285-4] | CRS | |
| A | 9-24-14 | (C,D-6,-7) OPTIONAL 10 AMP BATTERY CHARGER AND CORRESPONDING POINT TO POINT CONNECTIONS ADDED [CT94120] | DFS | |
| B | 1-16-15 | (D-3) P4-A4 WAS "SENSOR RETURN", P4-C3 WAS "SECONDARY ANALOG THROTTLE" [CT103368] | CRS | |
| C | 6-17-15 | (C,D-6) LEAD N20 ADDED; WHT LEAD CONNECTED TO P50-9 [CT115308] | DFS | |



CONNECTION CHART

| DROOP SELECT | TB12 TERMINAL POSITION | SIGNAL DESCRIPTION | |
|--------------|------------------------|------------------------|---------------|
| | | CONNECTED | NOT CONNECTED |
| | 1 | ISOCHRONOUS | DROOP |
| | 2* | +5 VDC REF | |
| | 3* | SIGNAL (+2.5 VDC NORM) | |
| | 4* | SENSOR RETURN | |
| | 5 | CONSULT FACTORY | |
| | 6 | CONSULT FACTORY | |

* REMOVE RESISTORS IF PARALLELING

LEGEND

- BCA - BATTERY CHARGING ALTERNATOR
- CT(#)- CURRENT TRANSFORMER
- D(#)- DIODE
- ECM - ENGINE CONTROL MODULE
- ESS - EMERGENCY STOP SWITCH
- F(#)- FUSE
- FLA - FUEL LEAK ALARM
- INSUL(#)- INSULINK
- K11 - ECM CONTROL RELAY
- K20 - STARTER RELAY
- LCT - LOW COOLANT TEMPERATURE SWITCH
- P(#)- PLUG
- PMG - PERMANENT MAGNET GENERATOR
- PL(#)- PANEL LAMP
- QCON(#)- QUICK CONNECT TERMINAL
- SLB - STATIONARY LED BOARD
- SM - STARTER MOTOR
- SS - STARTER SOLENOID
- STAT - STATOR
- SW(#)- SWITCH
- TB1 - INTERCONNECTION BOARD TERMINAL BLOCK
- TB2 - A/D TERMINAL BLOCK
- TB3 - OUTPUT TERMINAL BLOCK
- TB4 - DIGITAL INPUT TERMINAL BLOCK
- TB5 - CONTROLLER A.C. FUSE BLOCK
- TB10 - ACCESSORY TERMINAL BLOCK
- TB12 - VSG TERMINAL BLOCK
- ≡ - ENGINE BLOCK GROUND

UNLESS OTHERWISE SPECIFIED -
1) DIMENSIONS ARE IN INCHES
2) TOLERANCES ARE:
XXX ± .010 ANGLES ± 1/2°
XX ± .030 SURFACE FINISH
X ± .060 SURFACE FINISH

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TITLE: **DIAGRAM, SCHEMATIC**
350-500 KW JD

| APPROVALS | DATE | SCALE | SHEET |
|---------------|----------|-------------------|-------|
| DRAWN: CRS | 11-11-10 | SCALE: / / / / | 1-2 |
| CHECKED: DFS | 11-11-10 | PLOTTED | |
| APPROVED: CRS | 11-11-10 | DWG. NO. ADV-7999 | |

DECISION MAKER 550 CONTROLLER
350-500 KW JOHN DEERE TIER III W/ ECM
W/ SPLIT ACTIVATOR, 1Ø, 3Ø & 600V

| REV | DATE | REVISION | BY | APP |
|-----|----------|------------------------|-----|-----|
| - | 11-11-10 | NEW DRAWING [90285-4] | CRS | |
| A | 9-24-14 | SEE SHEET 1 [CT94120] | DFS | |
| B | 1-16-15 | SEE SHEET 1 [CT103368] | JDH | |
| | | | | |
| | | | | |

INTERCONNECT BOARD

TB1 INPUT CONNECTIONS

- TB1-1 REMOTE START (3)
- TB1-2 REMOTE START (4)
- TB1-3 EMERGENCY STOP GROUND (1)
- TB1-4 EMERGENCY STOP (1A)

TB2 ANALOG INPUT CONNECTIONS

- TB2-1 ANALOG CH1
- TB2-2 ANALOG CH1(+)
- TB2-3 ANALOG CH2
- TB2-4 ANALOG CH2(+)
- TB2-5 ANALOG CH3
- TB2-6 ANALOG CH3(+)
- TB2-7 ANALOG CH4
- TB2-8 ANALOG CH4(+)
- TB2-9 ANALOG CH5
- TB2-10 ANALOG CH5(+)
- TB2-11 ANALOG CH6
- TB2-12 ANALOG CH6(+)
- TB2-13 ANALOG CH7
- TB2-14 ANALOG CH7(+)
- TB2-15 N/C
- TB2-16 ANALOG CH1(-)
- TB2-17 ANALOG CH1 SHIELD GROUND
- TB2-18 ANALOG CH2(-)
- TB2-19 ANALOG CH2 SHIELD GROUND
- TB2-20 ANALOG CH3(-)
- TB2-21 ANALOG CH3 SHIELD GROUND
- TB2-22 ANALOG CH4(-)
- TB2-23 ANALOG CH4 SHIELD GROUND
- TB2-24 ANALOG CH5(-)
- TB2-25 ANALOG CH5 SHIELD GROUND
- TB2-26 ANALOG CH6(-)
- TB2-27 ANALOG CH6 SHIELD GROUND
- TB2-28 ANALOG CH7(-)
- TB2-29 ANALOG CH7 SHIELD GROUND
- TB2-30 N/C

TB4 DIGITAL INPUT CONNECTIONS

- TB4-1 DIGITAL INPUT 1
- TB4-2 DIGITAL INPUT 2
- TB4-3 DIGITAL INPUT 3
- TB4-4 DIGITAL INPUT 4
- TB4-5 DIGITAL INPUT 5
- TB4-6 DIGITAL INPUT 6
- TB4-7 DIGITAL INPUT 7
- TB4-8 DIGITAL INPUT 8
- TB4-9 DIGITAL INPUT 9
- TB4-10 DIGITAL INPUT 10
- TB4-11 DIGITAL INPUT 11
- TB4-12 DIGITAL INPUT 12
- TB4-13 DIGITAL INPUT 13
- TB4-14 DIGITAL INPUT 14
- TB4-15 DIGITAL INPUT 15
- TB4-16 DIGITAL INPUT 16
- TB4-17 DIGITAL INPUT 17
- TB4-18 DIGITAL INPUT 18
- TB4-19 DIGITAL INPUT 19
- TB4-20 DIGITAL INPUT 20
- TB4-21 DIGITAL INPUT 21
- TB4-22 COMMON DIGITAL INPUT RETURN
- TB4-23 COMMON DIGITAL INPUT RETURN
- TB4-24 COMMON DIGITAL INPUT RETURN
- TB4-25 COMMON DIGITAL INPUT RETURN
- TB4-26 COMMON DIGITAL INPUT RETURN
- TB4-27 COMMON DIGITAL INPUT RETURN
- TB4-28 COMMON DIGITAL INPUT RETURN
- TB4-29 COMMON DIGITAL INPUT RETURN
- TB4-30 COMMON DIGITAL INPUT RETURN
- TB4-31 COMMON DIGITAL INPUT RETURN
- TB4-32 COMMON DIGITAL INPUT RETURN
- TB4-33 COMMON DIGITAL INPUT RETURN
- TB4-34 COMMON DIGITAL INPUT RETURN
- TB4-35 COMMON DIGITAL INPUT RETURN
- TB4-36 COMMON DIGITAL INPUT RETURN
- TB4-37 COMMON DIGITAL INPUT RETURN
- TB4-38 COMMON DIGITAL INPUT RETURN
- TB4-39 COMMON DIGITAL INPUT RETURN
- TB4-40 COMMON DIGITAL INPUT RETURN
- TB4-41 COMMON DIGITAL INPUT RETURN
- TB4-42 COMMON DIGITAL INPUT RETURN

TB3 OUTPUT CONNECTIONS

- TB3-1 +12 VDC (OEM USE ONLY)
- TB3-2 +12 VDC (OEM USE ONLY)
- TB3-3 +12 VDC (OEM USE ONLY)
- TB3-4 FUSED BATTERY(+) (42A) (5 AMP)
- TB3-5 FUSED BATTERY(+) (42A) (5 AMP)
- TB3-6 FUSED BATTERY(+) (42A) (5 AMP)
- TB3-7 GROUND
- TB3-8 GROUND
- TB3-9 GROUND
- TB3-10 GROUND
- TB3-11 GROUND
- TB3-12 PANEL LAMP OUTPUT

P1 ENGINE CONNECTIONS

- P1-1 ENGINE CRANK (71)
- P1-2 SHIELD 1 GROUND
- P1-3 ENGINE RUN (70)
- P1-4 ENGINE CRANK (71)
- P1-5 ENGINE BLOCK GROUND (14N)
- P1-6 SHIELD 2 GROUND
- P1-7 ENGINE RUN (70)
- P1-8 BATTERY(+) (14P)
- P1-9 SHIELD GROUND
- P1-10 LOW COOLANT LEVEL PTC (31A)
- P1-11 N/C
- P1-12 BATTERY(+) (14P)
- P1-13 MAGNETIC PICKUP INPUT 1
- P1-14 N/C
- P1-15 N/C
- P1-16 PWM1(+)
- P1-17 MAGNETIC PICKUP INPUT 2
- P1-18 N/C
- P1-19 N/C
- P1-20 PWM1
- P1-21 BATTERY(+) SENSE (P)
- P1-22 BATTERY(-) SENSE (N)
- P1-23 PWM2
- P1-24 PWM2(+)

P23 OUTPUT CONNECTIONS

- P23-1 DIGITAL OUTPUT 29
- P23-2 DIGITAL OUTPUT 28
- P23-3 DIGITAL OUTPUT 30
- P23-4 DIGITAL OUTPUT 31
- P23-5 GROUND
- P23-6 DIGITAL OUTPUT 21
- P23-7 DIGITAL OUTPUT 24
- P23-8 DIGITAL OUTPUT 22
- P23-9 FUSED BATTERY(+) (42A) (5 AMP)
- P23-10 DIGITAL OUTPUT 23
- P23-11 DIGITAL OUTPUT 25
- P23-12 DIGITAL OUTPUT 26
- P23-13 DIGITAL OUTPUT 4
- P23-14 DIGITAL OUTPUT 14
- P23-15 DIGITAL OUTPUT 27
- P23-16 DIGITAL OUTPUT 15
- P23-17 DIGITAL OUTPUT 5
- P23-18 N/C
- P23-19 DIGITAL OUTPUT 20
- P23-20 DIGITAL OUTPUT 18
- P23-21 DIGITAL OUTPUT 3
- P23-22 DIGITAL OUTPUT 16
- P23-23 DIGITAL OUTPUT 8
- P23-24 DIGITAL OUTPUT 7
- P23-25 DIGITAL OUTPUT 1
- P23-26 N/C
- P23-27 DIGITAL OUTPUT 9
- P23-28 DIGITAL OUTPUT 17
- P23-29 DIGITAL OUTPUT 6
- P23-30 N/C
- P23-31 DIGITAL OUTPUT 11
- P23-32 DIGITAL OUTPUT 19
- P23-33 DIGITAL OUTPUT 12
- P23-34 DIGITAL OUTPUT 10
- P23-35 DIGITAL OUTPUT 2
- P23-36 DIGITAL OUTPUT 13

MAIN LOGIC BOARD

P13 MODEM POWER CONNECTIONS

- P13-1 GROUND
- P13-2 +5 VD

P18 RS232 CONNECTIONS

- P18-1 CD
- P18-2 RX
- P18-3 TX
- P18-4 DTR
- P18-5 GROUND
- P18-6 DSR
- P18-7 RTS
- P18-8 CTS
- P18-9 RI

P19 FACTORY TEST PORT

- P19-1 GND
- P19-2 +
- P19-3 -
- P19-4 GND
- P19-5 +
- P19-6 -

P20 RS485 NON-ISOLATED CONNECTIONS

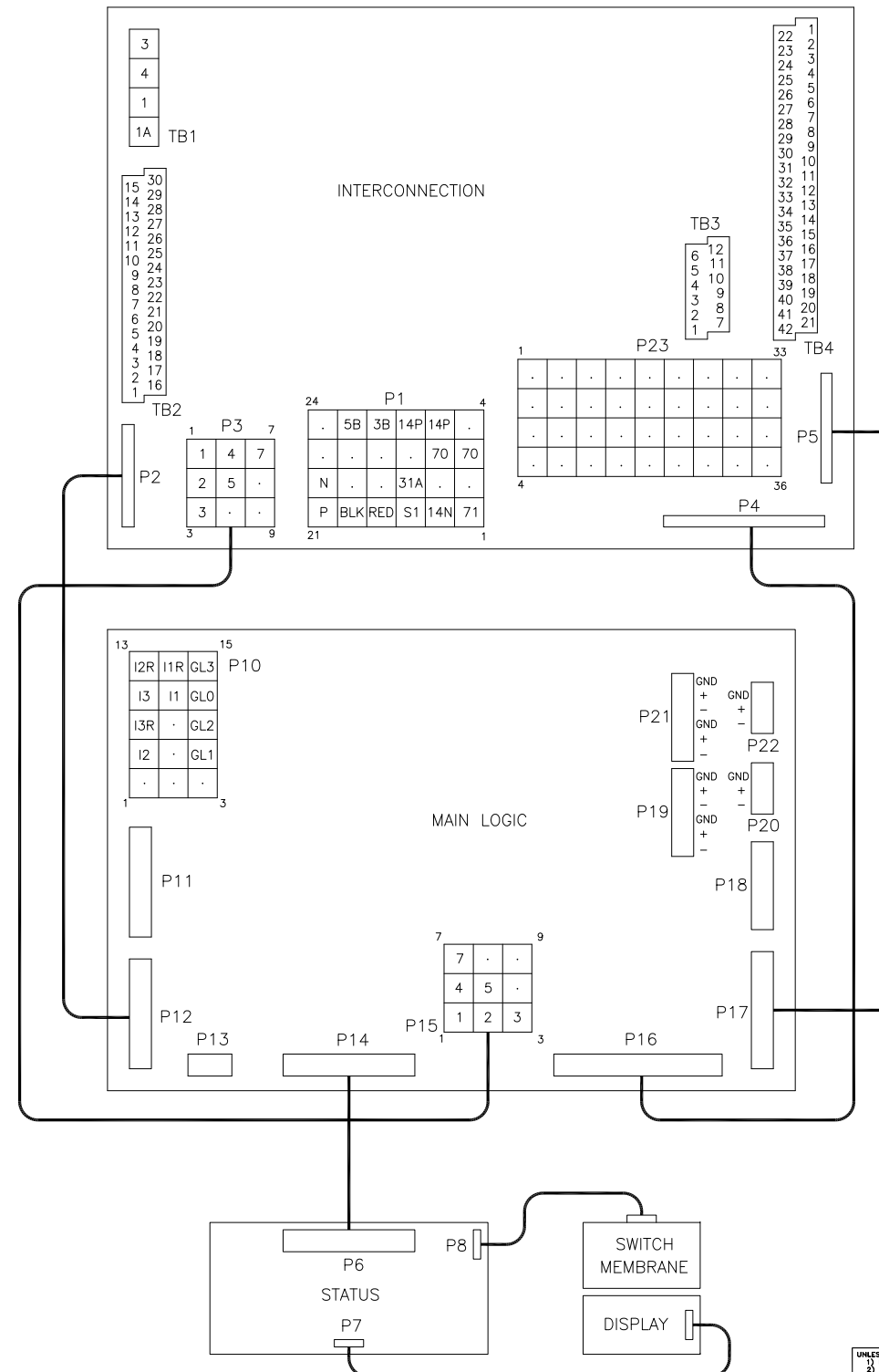
- P20-1 GND
- P20-2 +
- P20-3 -

P21 RS485A ISOLATED CONNECTIONS

- P21-1 GND
- P21-2 +
- P21-3 -
- P21-4 GND
- P21-5 +
- P21-6 -

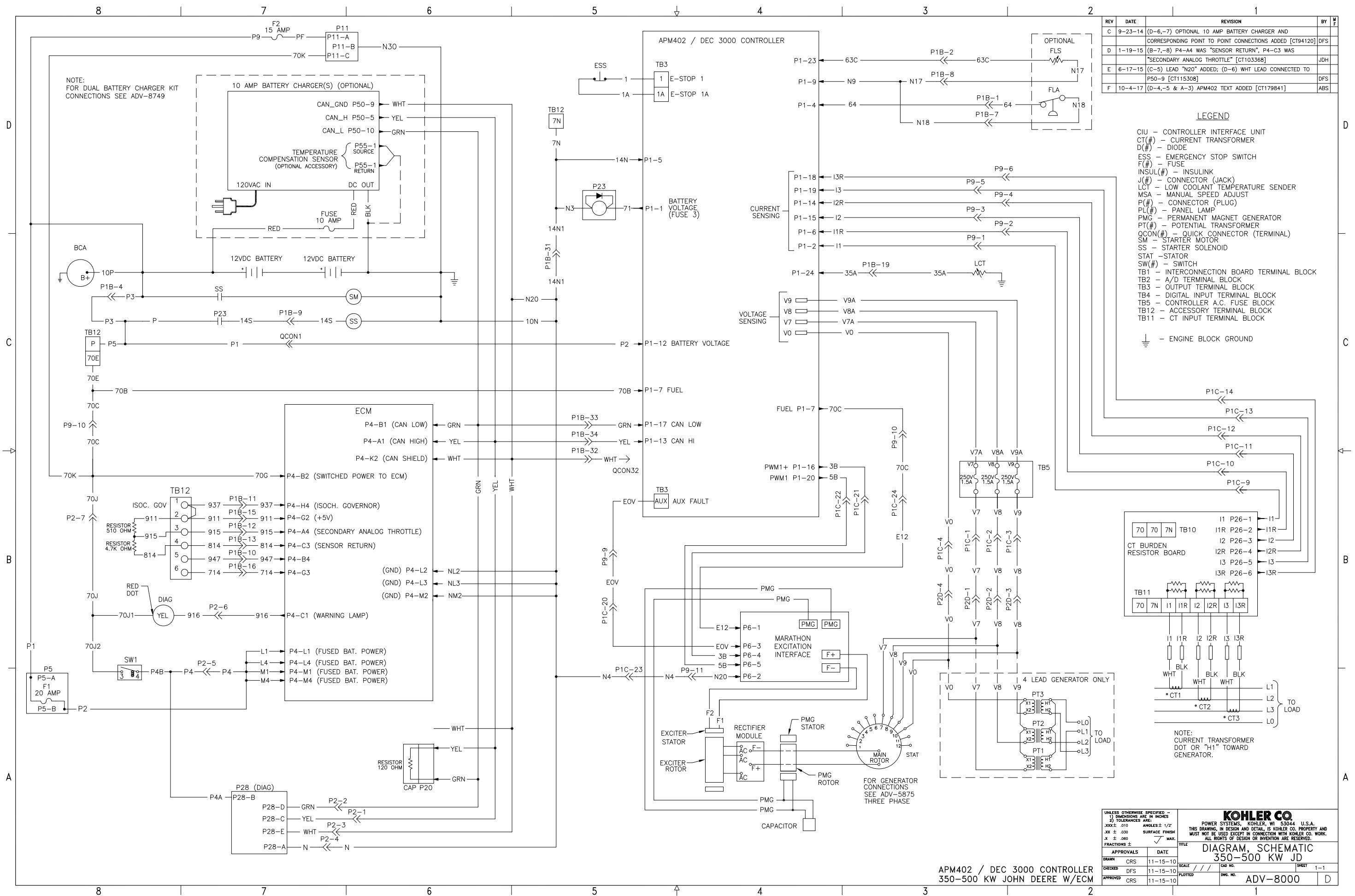
P22 J1939 CONNECTIONS

- P22-1 GND
- P22-2 +
- P22-3 -



| | | | | | |
|------------------------------|---------------|--|----------------|--------------------|-----------|
| UNLESS OTHERWISE SPECIFIED - | | 1) DIMENSIONS ARE IN INCHES | | 2) TOLERANCES ARE: | |
| XXX ± .010 | ANGLES ± 1/2° | XX ± .030 | SURFACE FINISH | ✓ | MAX. |
| X ± .060 | | | | | |
| FRACTIONS ± | | | | | |
| APPROVALS | DATE | TITLE | | | |
| DRAWN CRS | 11-11-10 | POWER SYSTEMS, KOHLER, WI 53044 U.S.A. | | | |
| CHECKED DFS | 11-11-10 | THIS DRAWING, IN DESIGN AND DETAIL, IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | | | |
| APPROVED CRS | 11-11-10 | DIAGRAM, SCHEMATIC | | | |
| | | 350-500 KW JD | | | |
| | | SCALE | /// | CAD NO. | SHEET 2-2 |
| | | PLOTTED | | DWG. NO. | ADV-7999 |

DECISION MAKER 550 CONTROLLER
350-500 KW JOHN DEERE TIER III W/ ECM
W/ SPLIT ACTIVATOR, 1Ø, 3Ø & 600V



| REV | DATE | REVISION | BY | FR |
|-----|---------|---|-----|----|
| C | 9-23-14 | (D-6,-7) OPTIONAL 10 AMP BATTERY CHARGER AND CORRESPONDING POINT TO POINT CONNECTIONS ADDED [CT94120] | DFS | |
| D | 1-19-15 | (B-7,-8) P4-A4 WAS "SENSOR RETURN", P4-C3 WAS "SECONDARY ANALOG THROTTLE" [CT103368] | JDH | |
| E | 6-17-15 | (C-5) LEAD "N20" ADDED; (D-6) WHT LEAD CONNECTED TO P50-9 [CT115308] | DFS | |
| F | 10-4-17 | (D-4,-5 & A-3) APM402 TEXT ADDED [CT179841] | ABS | |

LEGEND

- CIU - CONTROLLER INTERFACE UNIT
 - CT(#)- CURRENT TRANSFORMER
 - D(#)- DIODE
 - ESS - EMERGENCY STOP SWITCH
 - F(#)- FUSE
 - INSUL(#)- INSULINK
 - J(#)- CONNECTOR (JACK)
 - LCT - LOW COOLANT TEMPERATURE SENDER
 - MSA - MANUAL SPEED ADJUST
 - P(#)- CONNECTOR (PLUG)
 - PL(#)- PANEL LAMP
 - PMG - PERMANENT MAGNET GENERATOR
 - PT(#)- POTENTIAL TRANSFORMER
 - QCON(#)- QUICK CONNECTOR (TERMINAL)
 - SM - STARTER MOTOR
 - SS - STARTER SOLENOID
 - STAT - STATOR
 - SW(#)- SWITCH
 - TB1 - INTERCONNECTION BOARD TERMINAL BLOCK
 - TB2 - A/D TERMINAL BLOCK
 - TB3 - OUTPUT TERMINAL BLOCK
 - TB4 - DIGITAL INPUT TERMINAL BLOCK
 - TB5 - CONTROLLER A.C. FUSE BLOCK
 - TB12 - ACCESSORY TERMINAL BLOCK
 - TB11 - CT INPUT TERMINAL BLOCK
- ⏏ - ENGINE BLOCK GROUND

UNLESS OTHERWISE SPECIFIED -
 1) DIMENSIONS ARE IN INCHES
 2) TOLERANCES ARE:
 .XXX ± .010 ANGLES ± 1/2°
 .XX ± .030 SURFACE FINISH
 .X ± .060 MAX.
 FRACTIONS ±

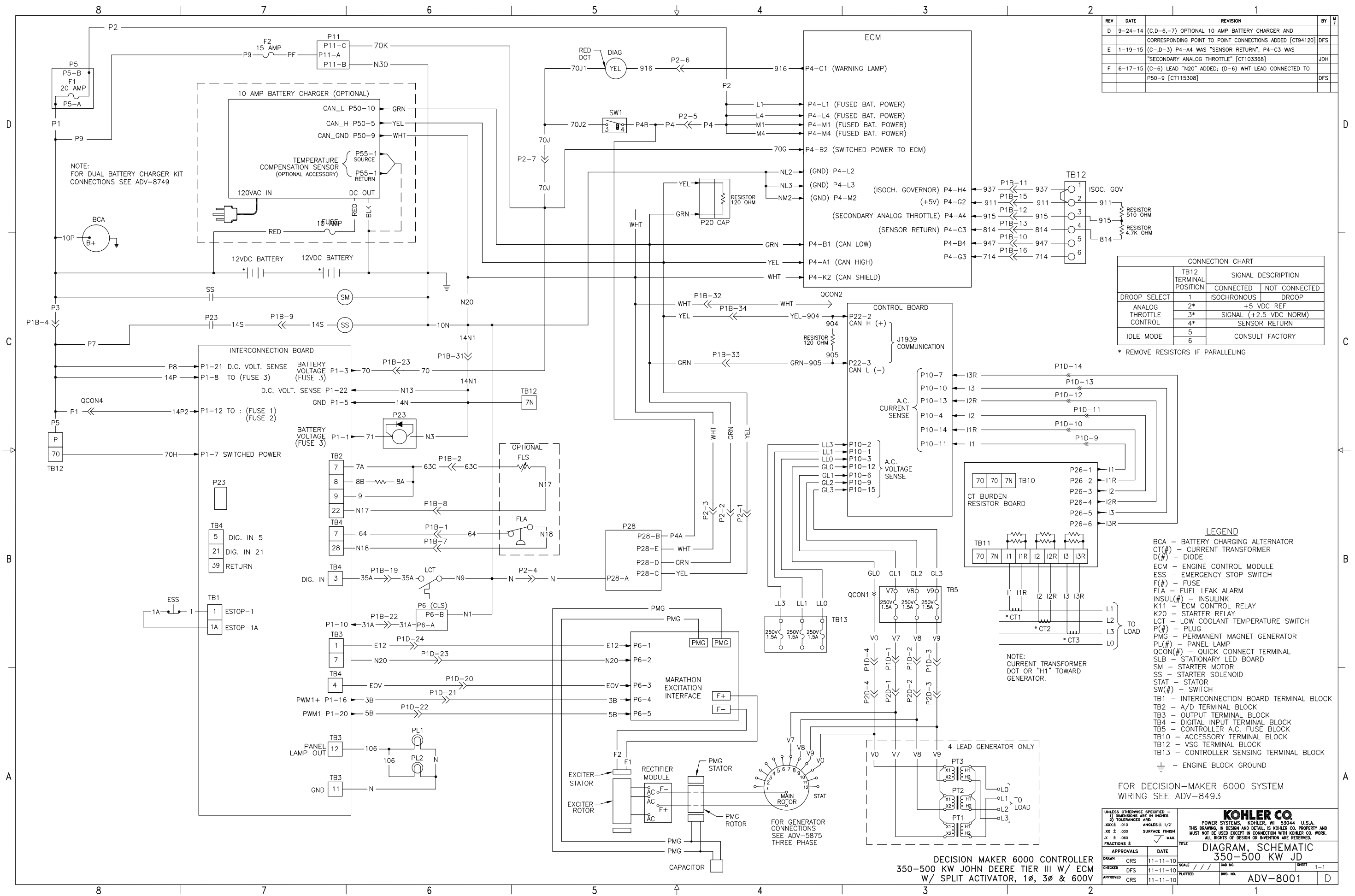
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DIAGRAM, SCHEMATIC
350-500 KW JD

| | | |
|--------------|----------|-------------------|
| APPROVALS | DATE | TITLE |
| DRAWN CRS | 11-15-10 | SCALE |
| CHECKED DFS | 11-15-10 | PLOTTED |
| APPROVED CRS | 11-15-10 | DWG. NO. ADV-8000 |

APM402 / DEC 3000 CONTROLLER
 350-500 KW JOHN DEERE W/ECM

| REV | DATE | REVISION | BY | WF |
|-----|---------|---|-----|----|
| D | 9-24-14 | (C,D-6,-7) OPTIONAL 10 AMP BATTERY CHARGER AND CORRESPONDING POINT TO POINT CONNECTIONS ADDED [CT94120] | DFS | |
| E | 1-19-15 | (C,-D-3) P4-A4 WAS "SENSOR RETURN", P4-C3 WAS "SECONDARY ANALOG THROTTLE" [CT103368] | JDH | |
| F | 6-17-15 | (C-6) LEAD "N20" ADDED; (D-6) WHT LEAD CONNECTED TO P50-9 [CT115308] | DFS | |



CONNECTION CHART

| DROOP SELECT | TB12 TERMINAL POSITION | SIGNAL DESCRIPTION | |
|--------------|------------------------|------------------------|---------------|
| | | CONNECTED | NOT CONNECTED |
| | 1 | ISOCHRONOUS | DROOP |
| | 2* | +5 VDC REF | |
| | 3* | SIGNAL (+2.5 VDC NORM) | |
| | 4* | SENSOR RETURN | |
| | 5 | CONSULT FACTORY | |
| | 6 | CONSULT FACTORY | |

* REMOVE RESISTORS IF PARALLELING

- LEGEND
- BCA - BATTERY CHARGING ALTERNATOR
 - CT(#)- CURRENT TRANSFORMER
 - D(#)- DIODE
 - ECM - ENGINE CONTROL MODULE
 - ESS - EMERGENCY STOP SWITCH
 - F(#)- FUSE
 - FLA - FUEL LEAK ALARM
 - INSUL(#)- INSULINK
 - K11 - ECM CONTROL RELAY
 - K20 - STARTER RELAY
 - LCT - LOW COOLANT TEMPERATURE SWITCH
 - P(#)- PLUG
 - PMG - PERMANENT MAGNET GENERATOR
 - PL(#)- PANEL LAMP
 - QCON(#)- QUICK CONNECT TERMINAL
 - SLB - STATIONARY LED BOARD
 - SM - STARTER MOTOR
 - SS - STARTER SOLENOID
 - STAT - STATOR
 - SW(#)- SWITCH
 - TB1 - INTERCONNECTION BOARD TERMINAL BLOCK
 - TB2 - A/D TERMINAL BLOCK
 - TB3 - OUTPUT TERMINAL BLOCK
 - TB4 - DIGITAL INPUT TERMINAL BLOCK
 - TB5 - CONTROLLER A.C. FUSE BLOCK
 - TB10 - ACCESSORY TERMINAL BLOCK
 - TB12 - VSG TERMINAL BLOCK
 - TB13 - CONTROLLER SENSING TERMINAL BLOCK
 - ⏏ - ENGINE BLOCK GROUND

FOR DECISION-MAKER 6000 SYSTEM
WIRING SEE ADV-8493

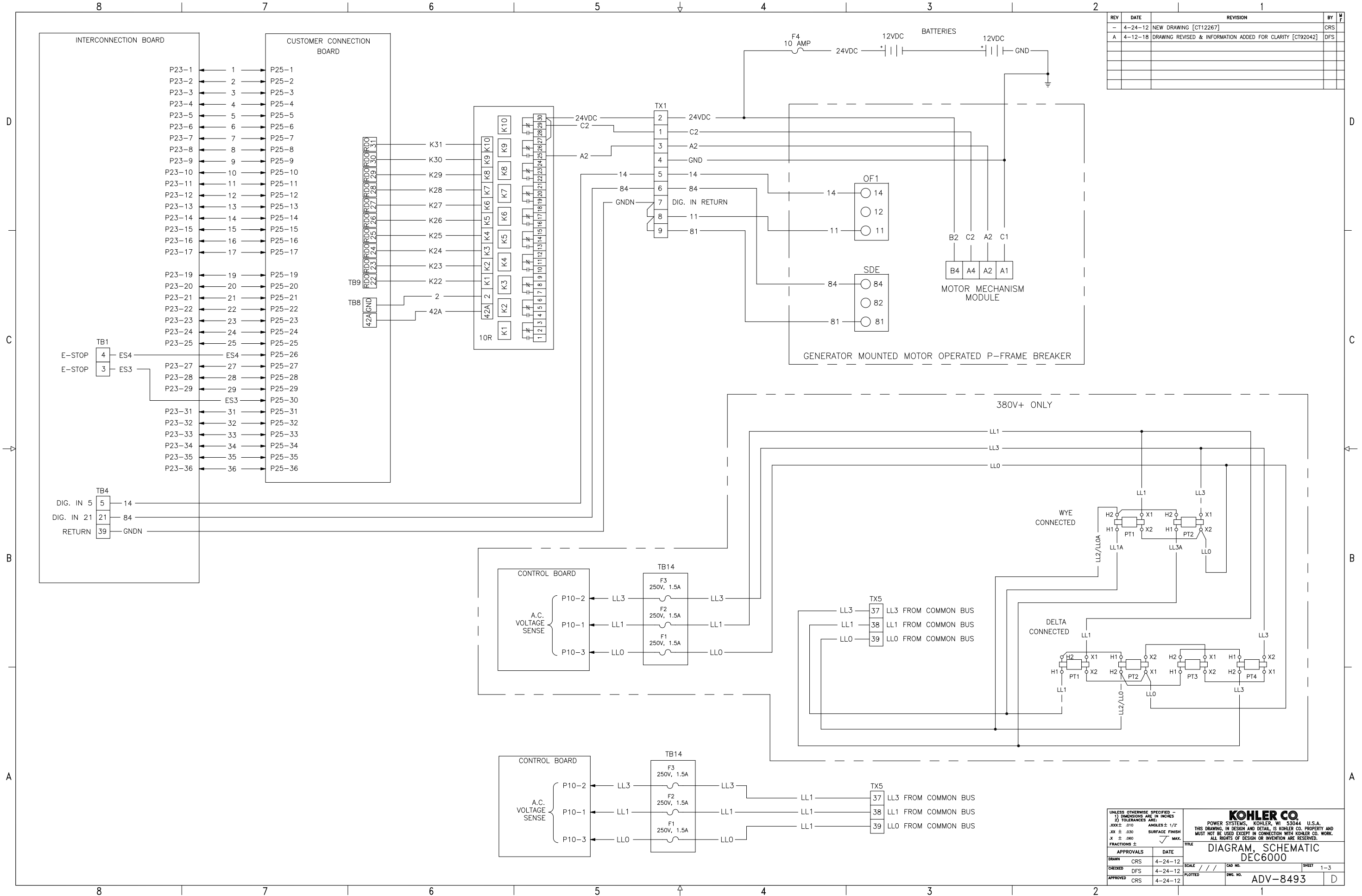
| UNLESS OTHERWISE SPECIFIED - | | TOLERANCES ARE IN INCHES | |
|------------------------------|----------------|--------------------------|--|
| .XX ± .010 | ANGLES ± 1/2 | MAX. | |
| .XX ± .030 | SURFACE FINISH | | |
| .X ± .060 | FRACTIONS ± | | |

| APPROVALS | DATE | SCALE | SHEET |
|--------------|----------|----------|-------|
| DRAWN CRS | 11-11-10 | SCALE | 1-1 |
| CHECKED DFS | 11-11-10 | PLOTTED | |
| APPROVED CRS | 11-11-10 | DWG. NO. | |

TITLE: **DIAGRAM, SCHEMATIC**
350-500 KW JD
ADV-8001

DECISION MAKER 6000 CONTROLLER
350-500 KW JOHN DEERE TIER III W/ ECM
W/ SPLIT ACTIVATOR, 1φ, 3φ & 600V

| REV | DATE | REVISION | BY | WF |
|-----|---------|---|-----|----|
| - | 4-24-12 | NEW DRAWING [CT12267] | CRS | |
| A | 4-12-18 | DRAWING REVISED & INFORMATION ADDED FOR CLARITY [CT92042] | DFS | |
| | | | | |
| | | | | |
| | | | | |



UNLESS OTHERWISE SPECIFIED -
 1) DIMENSIONS ARE IN INCHES
 2) TOLERANCES ARE:
 .XXX ± .010 ANGLES ± 1/2°
 .XX ± .030 SURFACE FINISH
 .X ± .060 MAX.
 FRACTIONS ±

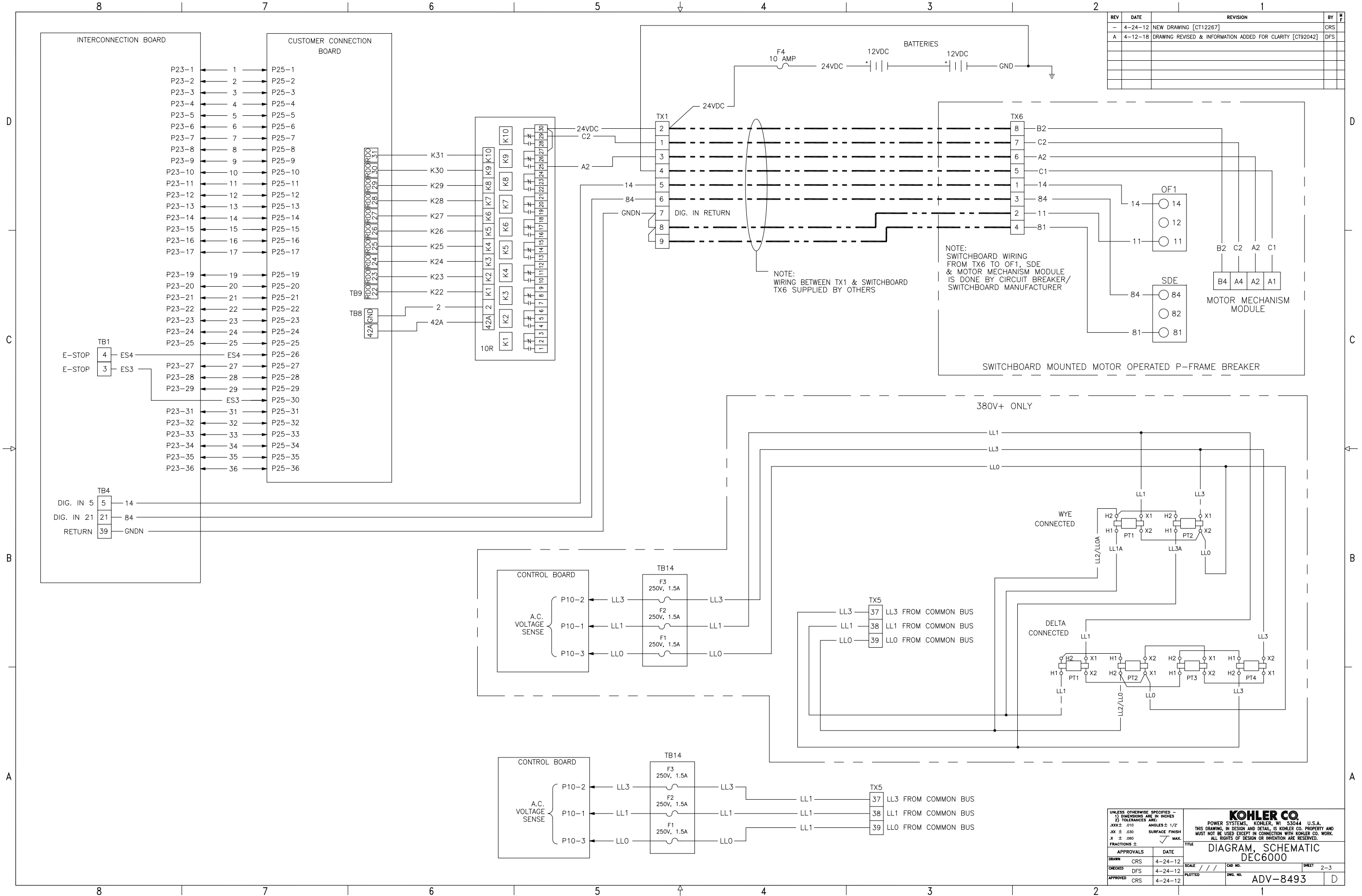
| APPROVALS | DATE | TITLE |
|-----------|---------|-------------------------------|
| CRS | 4-24-12 | DIAGRAM, SCHEMATIC DEC6000 |
| DFS | 4-24-12 | |
| CRS | 4-24-12 | |

SCALE: / / / / / PLOTTED: / / / / /

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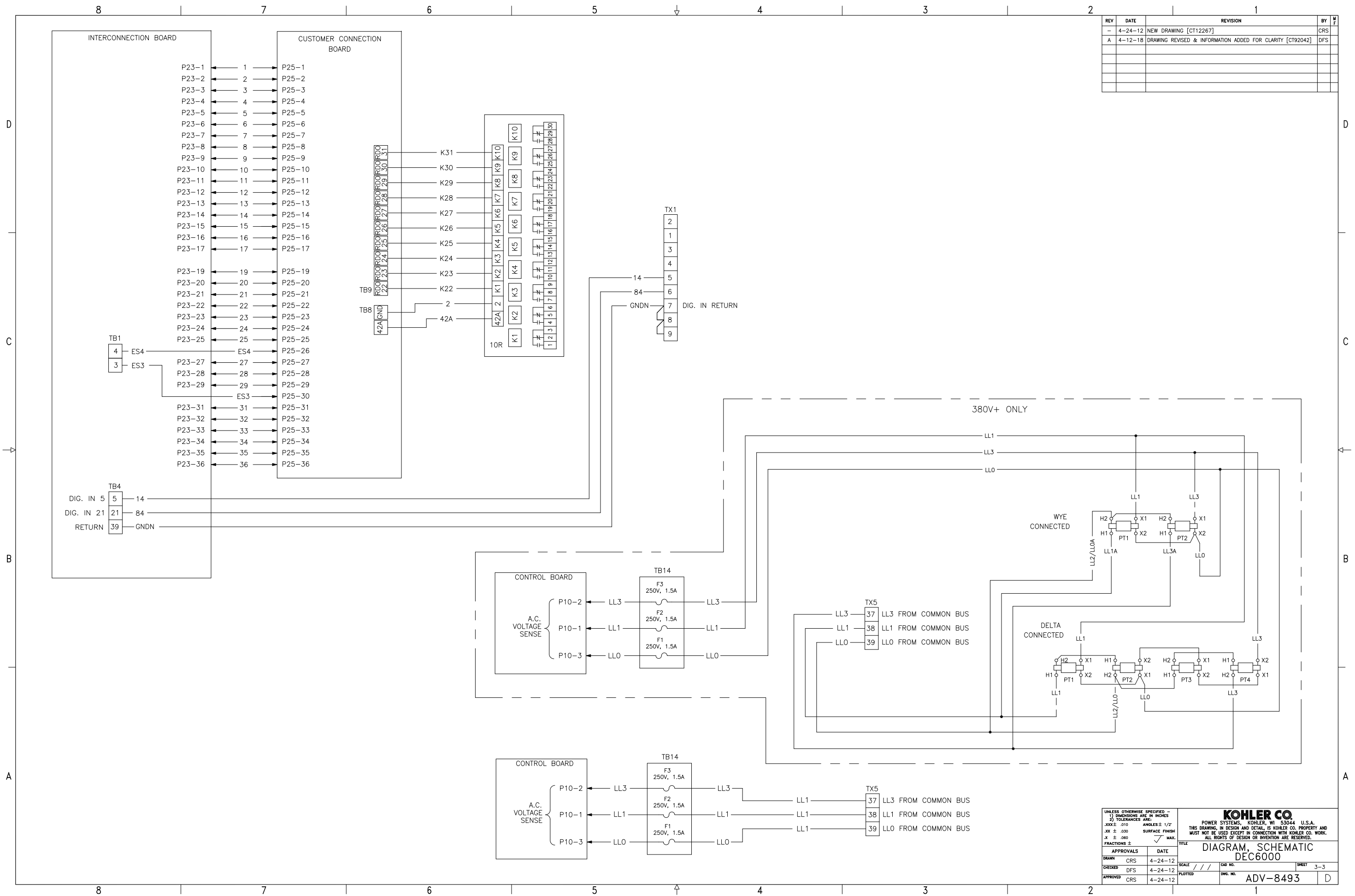
DWG. NO. ADV-8493 SHEET 1-3

| REV | DATE | REVISION | BY | MF |
|-----|---------|---|-----|----|
| - | 4-24-12 | NEW DRAWING [CT12267] | CRS | |
| A | 4-12-18 | DRAWING REVISED & INFORMATION ADDED FOR CLARITY [CT92042] | DFS | |
| | | | | |
| | | | | |
| | | | | |



| | | | |
|---|--|---|--|
| <small>UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: .XXX ± .010 ANGLES ± 1/2° .XX ± .030 SURFACE FINISH .X ± .060 MAX. FRACTIONS ±</small> | | KOHLER CO. POWER SYSTEMS, KOHLER, WI 53044 U.S.A. THIS DRAWING, IN DESIGN AND DETAIL, IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | |
| APPROVALS DRAWN CRS 4-24-12 CHECKED DFS 4-24-12 APPROVED CRS 4-24-12 | | TITLE DIAGRAM, SCHEMATIC DEC6000 | |
| SCALE PLOTTED | | SHEET 2-3 DWG. NO. ADV-8493 | |

| REV | DATE | REVISION | BY | WF |
|-----|---------|---|-----|----|
| - | 4-24-12 | NEW DRAWING [CT12267] | CRS | |
| A | 4-12-18 | DRAWING REVISED & INFORMATION ADDED FOR CLARITY [CT92042] | DFS | |
| | | | | |
| | | | | |



| APPROVALS | | DATE | SCALE | CAD NO. | SHEET |
|-----------|-----|---------|---------|---------|-------|
| DRAWN | CRS | 4-24-12 | /// | | 3-3 |
| CHECKED | DFS | 4-24-12 | PLOTTED | | |
| APPROVED | CRS | 4-24-12 | | | |

UNLESS OTHERWISE SPECIFIED -
 1) DIMENSIONS ARE IN INCHES
 2) TOLERANCES ARE:
 .XXX ± .010 ANGLES ± 1/2°
 .XX ± .030 SURFACE FINISH
 .X ± .060 ✓ MAX.
 FRACTIONS ±

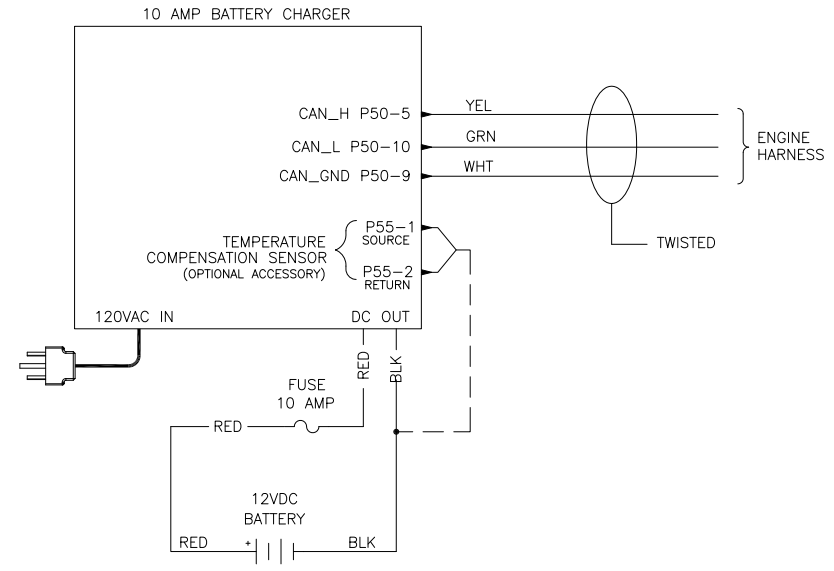
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DIAGRAM, SCHEMATIC
DEC6000

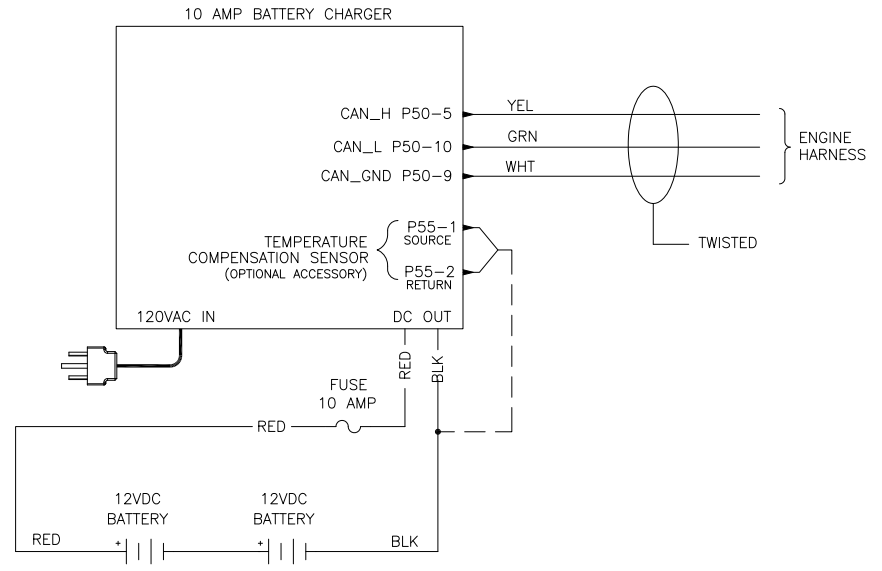
DWG. NO. **ADV-8493**

8 7 6 5 4 3 2 1

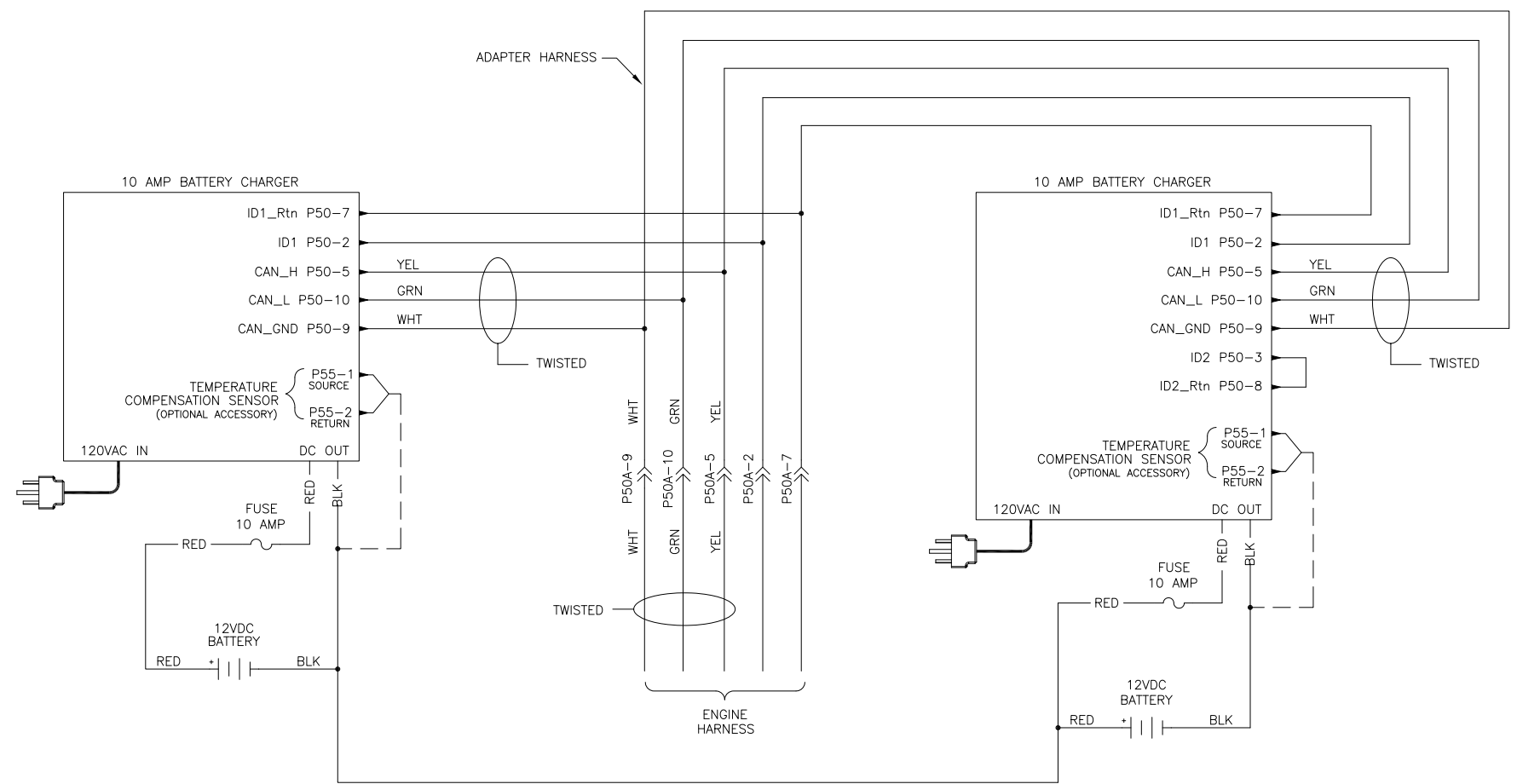
| REV | DATE | REVISION | BY | APP |
|-----|----------|---|-----|-----|
| - | 10-20-14 | NEW DRAWING [CT96697] | DFS | |
| A | 8-21-15 | (B-4, -6 & D-4, -6) WHT LEAD CONNECTED TO P50*-9 (4 PLACES) & SEE SHEET 2 [CT120205] | DFS | |
| B | 3-24-17 | (B-7) ID1_Rtn P50-7 WAS P50B-ID2C, ID1 P50-2 WAS P50B-ID1C, (B) REMOVED & P55-2 WAS P55-1; (D-7-4) P50-ID2 & P50-ID1 REMOVED (2 PLACES); (B-4) ID1_Rtn P50-7 WAS P50-ID2A, ID1 P50-2 WAS P50-ID1A, ID2 P50-3 WAS 3, ID2_Rtn P50-8 WAS 8; [CT172520] | BTW | |



1 CHARGER - 1 BATTERY (12V SYSTEM)
[SINGLE BATTERY BANK]



1 CHARGER - 2 BATTERY (24V SYSTEM)
[SINGLE BATTERY BANK]



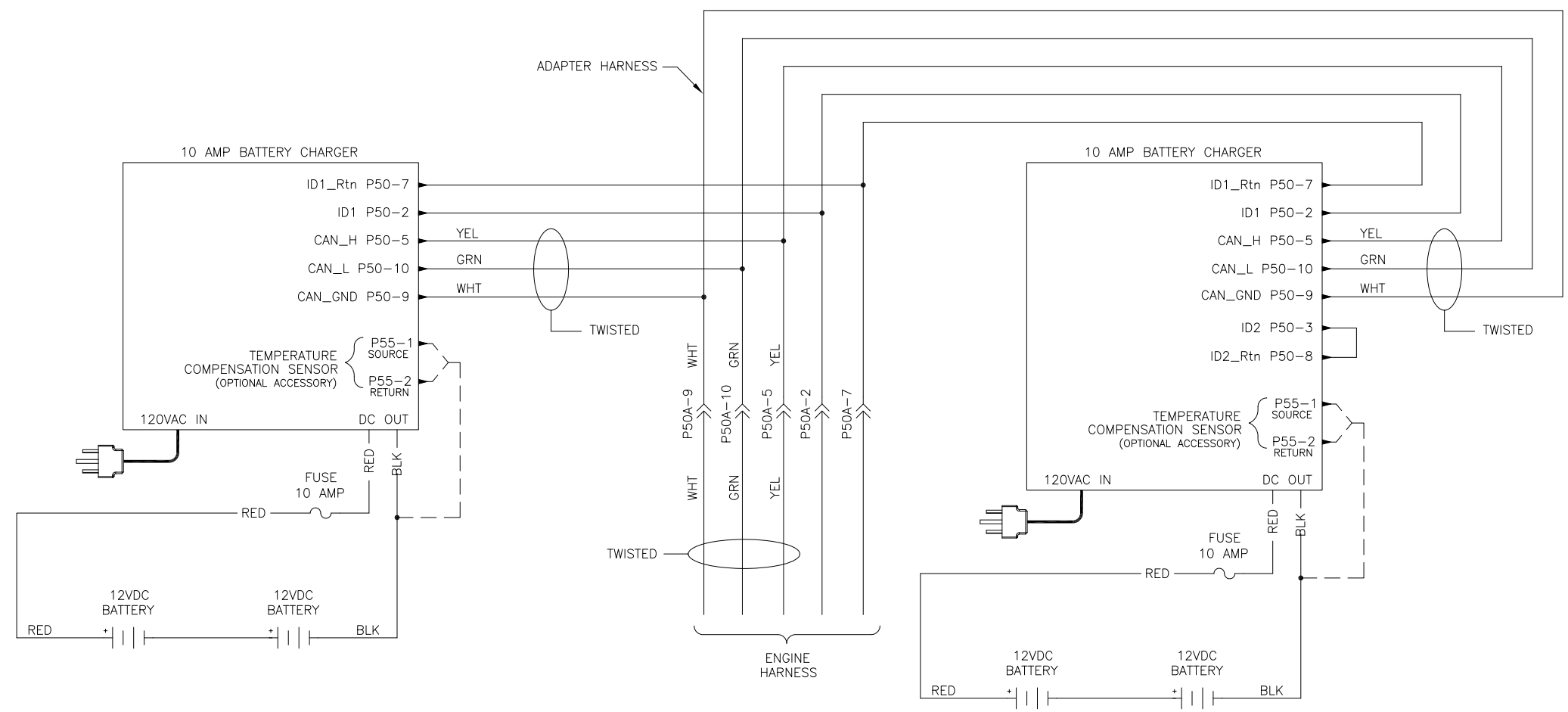
2 CHARGERS - WITH 1 CHARGER FOR EACH 12VDC BATTERY (24VDC SYSTEM)
[SINGLE BATTERY BANK]

10 AMP INDUSTRIAL BATTERY CHARGER

| APPROVALS | | DATE | TITLE | |
|-----------|-----|---------|------------------------|----------|
| DRWN | DFS | 10-3-14 | 10 AMP BATTERY CHARGER | |
| CHEK | HCC | 10-3-14 | SCALE | NONE |
| APPR | HCC | 10-3-14 | PLOTTED | |
| | | | CAD NO. | |
| | | | DWG. NO. | ADV-8749 |
| | | | SHEET | 1-2 |

8 7 6 5 4 3 2 1

| REV | DATE | REVISION | BY |
|-----|----------|--|-----|
| - | 10-20-14 | NEW DRAWING [CT96697] | DFS |
| A | 8-21-15 | (C-4,-6) WHT LEAD CONNECTED TO P50*-9 (2 PLACES) & SEE SHEET 1 [CT120205] | DFS |
| B | 3-24-17 | (C-6) ID1_Rtn P50-7 WAS P50B-ID2C, ID1 P50-2 WAS P50B-ID1C, B REMOVED (3 PLACES);(C-3) ID1_Rtn P50-7 WAS P50-ID2A, ID1 P50-2 WAS P50C-ID1A, C REMOVED (3 PLACES) | |
| | | ID2 P50-3 & ID2_Rtn P50-8 ADDED; [CT172520] | BTW |



2 CHARGERS - WITH 1 CHARGER FOR EACH SET OF 24VDC BATTERIES (24VDC SYSTEM)
[DUAL BATTERY BANKS - TWO STARTERS]

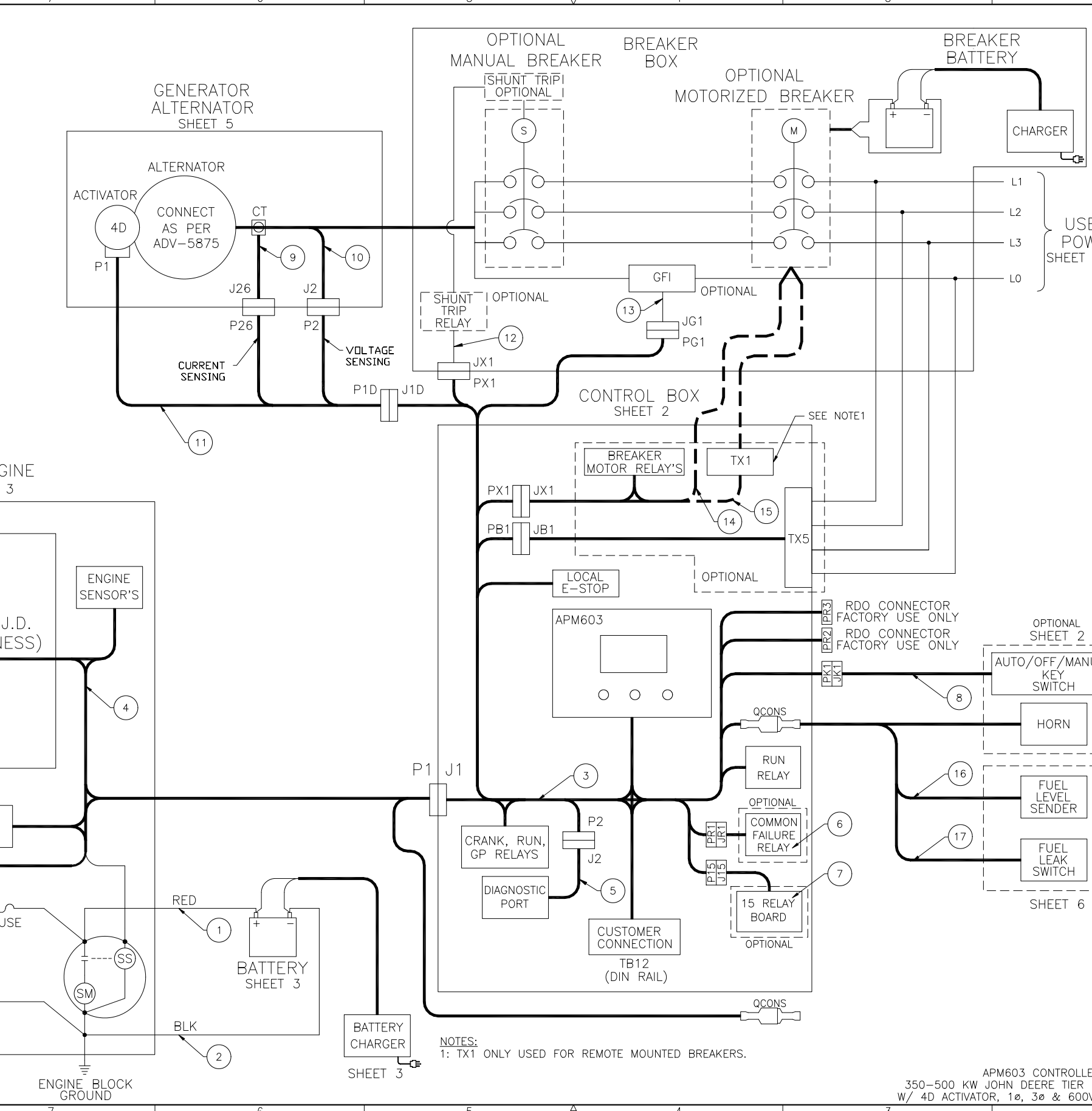
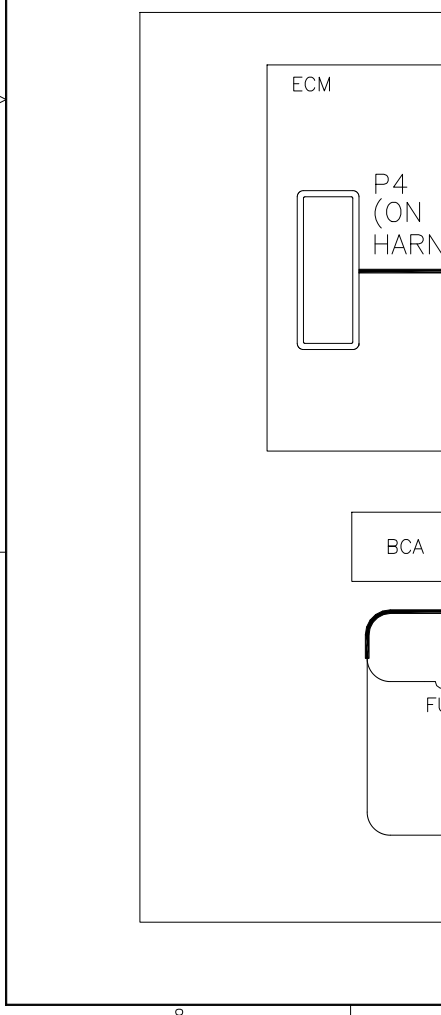
| | | | |
|---|---------|---|-------------------|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: XXX ± .010 ANGLES ± 1/2° XX ± .030 SURFACE FINISH X ± .060 ✓ MAX. FRACTIONS ± | | KOHLER CO. POWER SYSTEMS, KOHLER, WI 53044 U.S.A. THIS DRAWING, IN DESIGN AND DETAIL, IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | |
| APPROVALS | DATE | TITLE | |
| DRAWN DFS | 10-3-14 | DIAGRAM, SCHEMATIC | |
| CHECKED HCC | 10-3-14 | 10 AMP BATTERY CHARGER | |
| APPROVED HCC | 10-3-14 | SCALE NONE | SHEET 2-2 |
| | | PLOTTED | DWG. NO. ADV-8749 |

10 AMP INDUSTRIAL BATTERY CHARGER

| REV | DATE | REVISION | BY |
|-----|----------|---|-----|
| - | 5-11-18 | NEW DRAWING [CT190243] | TLK |
| A | 10-11-18 | SEE SHEET 2 [CT191090] | TLK |
| B | 2-05-19 | SEE SHEETS 7 & 8 [CT193517] | SMH |
| C | 3-18-19 | (A-1,-2) UPDATED TB12 CHART FOR VOLTAGE AND SPEED BIAS; SEE SHEET 2 [CT194009] | SMH |
| D | 5-13-19 | (A,B,C-1) TB12-42 THRU 44 ADDED, MOVED VOLTAGE AND SPEED BIAS ON TB12, SEE SHEET 2 [CT195741] | TEV |

| REV | DATE | REVISION | BY |
|-----|----------|----------------------------------|-----|
| 1 | XXXXXX | BATTERY CABLE POSITIVE | - |
| 2 | XXXXXX | BATTERY CABLE NEGATIVE | - |
| 3 | GM105805 | 350-400KW CONTROL BOX HARNESS | - |
| 4 | GM77970 | ENGINE HARNESS | - |
| 5 | GM77977 | ENGINE DIAGNOSTIC HARNESS | - |
| 6 | GM105367 | COMMON FAILURE RELAY | X X |
| 7 | GM105366 | 15 RELAY DRY CONTACT | X X |
| 8 | GM105663 | RUN/OFF/AUTO KEYSWITCH | X X |
| 9 | GM11501 | CURRENT SENSE HARNESS | - |
| 10 | GM105377 | VOLTAGE SENSE HARNESS | - |
| 11 | GM105845 | 4D ACTIVATOR/CURRENT/VOLT SENSE | - |
| 12 | GM105378 | SHUNT TRIP RELAY HARNESS | X X |
| 13 | GM105379 | GROUND FAULT HARNESS | X X |
| 14 | GM105380 | LOCAL MOTORIZED BREAKER HARNESS | X - |
| 15 | GM105382 | REMOTE MOTORIZED BREAKER HARNESS | X X |
| 16 | XXXXXX | FUEL LEVEL SENDER HARNESS | - |
| 17 | XXXXXX | FUEL LEAK ALARM HARNESS | - |

LEGEND
 BCA - BATTERY CHARGING ALTERNATOR
 BTCS - BATTERY TEMP COMPENSATION SENSOR
 CLS - COOLANT LEVEL SENDER
 CT(#)- CURRENT TRANSFORMER
 CTS - COOLANT TEMPERATURE SENDER
 DIAG - DIAGNOSTIC LAMP
 ECM - ENGINE CONTROL MODULE
 ESS - EMERGENCY STOP SWITCH
 FLA - FUEL LEAK ALARM
 FLS - FUEL LEVEL SENDER
 LCT - LOW COOLANT TEMPERATURE SWITCH
 P(#)- PLUG
 QCON(#)- QUICK CONNECT
 SM - STARTER MOTOR
 SS - STARTER SOLENOID
 STAT - STATOR
 SW(#)- SWITCH
 TB(#)- TERMINAL BLOCK
 W(#)- WIRE WELD



| FUNCTION | POS | SIGNAL DESCRIPTION |
|-------------------------|-----|----------------------------------|
| REMOTE E-STOP | 1 | REMOTE EMERGENCY STOP |
| | 2 | |
| REMOTE START | 3 | REMOTE START SIGNAL |
| | 4 | |
| CUSTOMER INTERFACE | 5 | FUSED BATTERY POWER |
| | 6 | BATT VOLTS WHEN RUNNING |
| | 7 | BATTERY NEGATIVE |
| CUSTOMER INTERFACE | 8 | A (-) ISOLATED |
| | 9 | B (+) RS-485 #2 (PGEN) |
| | 10 | SHIELD |
| LOW FUEL | 11 | LOW FUEL LEVEL SWITCH |
| RES IN RETURN | 12 | LOW FUEL LEVEL SWITCH RETURN |
| BAT CHR G FLT | 13 | BATTERY CHARGER FAULT |
| RES IN RETURN | 14 | BATTERY CHARGER FAULT RETURN |
| AUX WARNING | 15 | AUXILIARY WARNING |
| RES IN RETURN | 16 | AUXILIARY WARNING RETURN |
| AUX FAULT | 17 | AUXILIARY FAULT |
| RES IN RETURN | 18 | AUXILIARY FAULT RETURN |
| CUSTOMER INTERFACE | 19 | A (-) ISOLATED |
| | 20 | B (+) RS-485 #3 (MODBUS/PGEN) |
| | 21 | SHIELD |
| CUSTOMER INTERFACE | 22 | A (-) NON-ISOLATED |
| | 23 | B (+) RS-485 #4 (MODBUS RSA) |
| | 24 | SHIELD |
| RUN RELAY | 25 | COMMON CONTACT |
| | 26 | NORMALLY OPEN CONTACT |
| | 27 | NORMALLY CLOSED CONTACT |
| SPEED BIAS | 28 | SPEED BIAS (+) |
| | 29 | SPEED BIAS (-) |
| | 30 | SHIELD |
| VOLTAGE BIAS | 31 | VOLTAGE BIAS (+) |
| | 32 | VOLTAGE BIAS (-) |
| SPARE | 33 | SHIELD |
| SPARE | 34 | SPARE |
| SPARE | 35 | SPARE |
| DROOP SELECT | 36 | ISOCHRONOUS DROOP JP2 IN JP2 OUT |
| ANALOG THROTTLE CONTROL | 37* | +5 VDC REF |
| | 38* | SIGNAL (+2.5 VDC NORM) |
| | 39* | SENSOR RETURN |
| IDLE MODE | 40 | CONSULT FACTORY |
| SPARE | 41 | SPARE |
| SPARE | 42 | SPARE |
| SPARE | 43 | SPARE |
| SPARE | 44 | SPARE |



| FUNCTION | POS | SIGNAL DESCRIPTION |
|-------------------------|-----|----------------------------------|
| REMOTE E-STOP | 1 | REMOTE EMERGENCY STOP |
| | 2 | |
| REMOTE START | 3 | REMOTE START SIGNAL |
| | 4 | |
| CUSTOMER INTERFACE | 5 | FUSED BATTERY POWER |
| | 6 | BATT VOLTS WHEN RUNNING |
| | 7 | BATTERY NEGATIVE |
| CUSTOMER INTERFACE | 8 | A (-) ISOLATED |
| | 9 | B (+) RS-485 #2 (PGEN) |
| | 10 | SHIELD |
| LOW FUEL | 11 | LOW FUEL LEVEL SWITCH |
| RES IN RETURN | 12 | LOW FUEL LEVEL SWITCH RETURN |
| BAT CHR G FLT | 13 | BATTERY CHARGER FAULT |
| RES IN RETURN | 14 | BATTERY CHARGER FAULT RETURN |
| AUX WARNING | 15 | AUXILIARY WARNING |
| RES IN RETURN | 16 | AUXILIARY WARNING RETURN |
| AUX FAULT | 17 | AUXILIARY FAULT |
| RES IN RETURN | 18 | AUXILIARY FAULT RETURN |
| CUSTOMER INTERFACE | 19 | A (-) ISOLATED |
| | 20 | B (+) RS-485 #3 (MODBUS/PGEN) |
| | 21 | SHIELD |
| CUSTOMER INTERFACE | 22 | A (-) NON-ISOLATED |
| | 23 | B (+) RS-485 #4 (MODBUS RSA) |
| | 24 | SHIELD |
| RUN RELAY | 25 | COMMON CONTACT |
| | 26 | NORMALLY OPEN CONTACT |
| | 27 | NORMALLY CLOSED CONTACT |
| SPEED BIAS | 28 | SPEED BIAS (+) |
| | 29 | SPEED BIAS (-) |
| | 30 | SHIELD |
| VOLTAGE BIAS | 31 | VOLTAGE BIAS (+) |
| | 32 | VOLTAGE BIAS (-) |
| SPARE | 33 | SHIELD |
| SPARE | 34 | SPARE |
| SPARE | 35 | SPARE |
| DROOP SELECT | 36 | ISOCHRONOUS DROOP JP2 IN JP2 OUT |
| ANALOG THROTTLE CONTROL | 37* | +5 VDC REF |
| | 38* | SIGNAL (+2.5 VDC NORM) |
| | 39* | SENSOR RETURN |
| IDLE MODE | 40 | CONSULT FACTORY |
| SPARE | 41 | SPARE |
| SPARE | 42 | SPARE |
| SPARE | 43 | SPARE |
| SPARE | 44 | SPARE |

* REMOVE RESISTORS IF PARALLELING

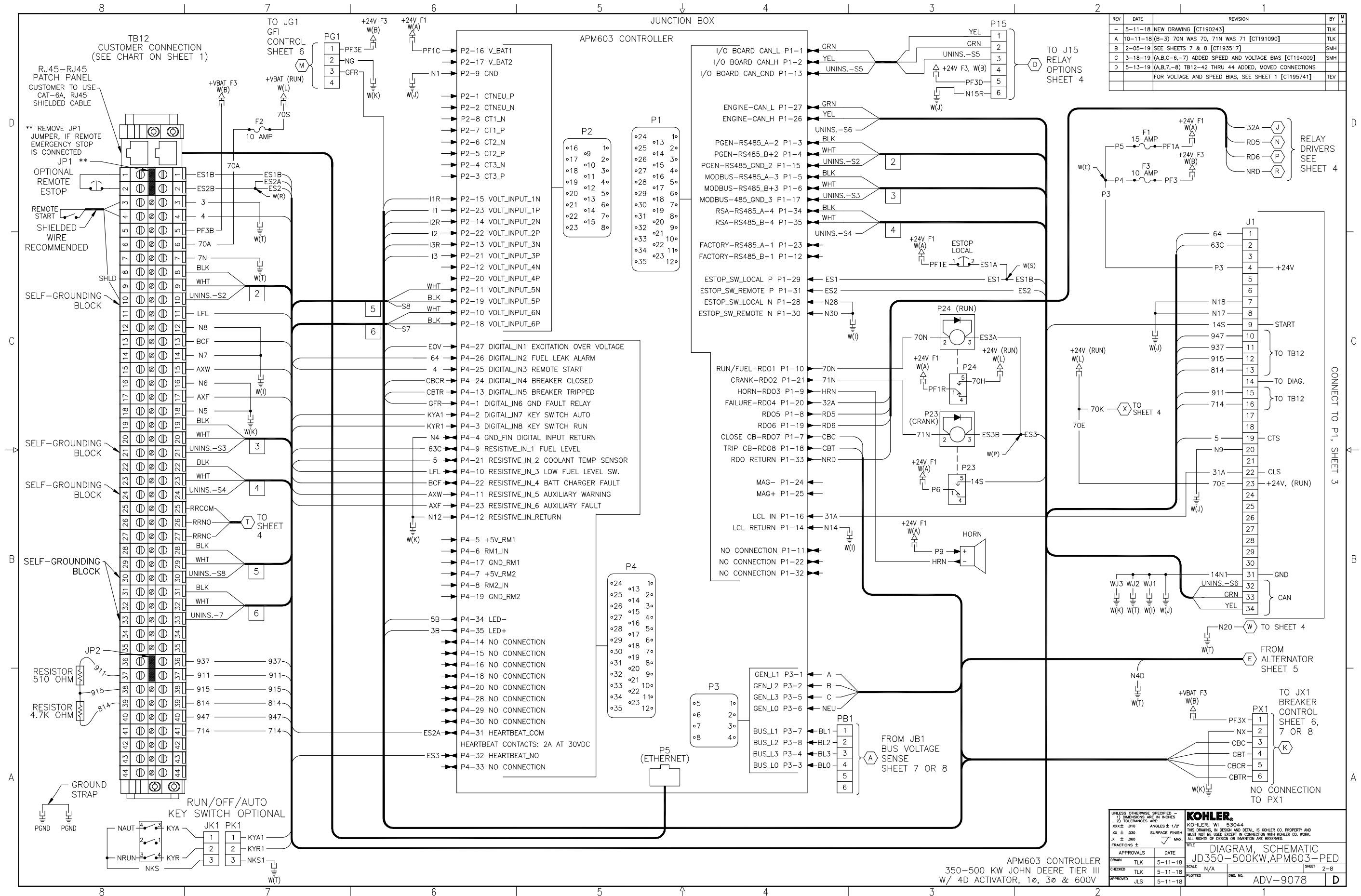
UNLESS OTHERWISE SPECIFIED -
 1) DIMENSIONS ARE IN INCHES
 2) TOLERANCES ARE:
 .XXX ± .010 ANGLES ± 1/2°
 .XX ± .030 SURFACE FINISH
 .X ± .060 MAX

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TITLE: DIAGRAM, SCHEMATIC
 JD350-500KW, APM603-PED
 SCALE: N/A SHEET: 1-8
 DRAWN: TLK 5-11-18
 CHECKED: TLK 5-11-18
 APPROVED: JLS 5-11-18

APM603 CONTROLLER
 350-500 KW JOHN DEERE TIER III
 W/ 4D ACTIVATOR, 1ø, 3ø & 600V
 Dwg. No. ADV-9078

NOTES:
 1: TX1 ONLY USED FOR REMOTE MOUNTED BREAKERS.



| REV | DATE | REVISION | BY |
|-----|----------|--|-----|
| - | 5-11-18 | NEW DRAWING [CT190243] | TLK |
| A | 10-11-18 | (B-3) 70N WAS 70, 71N WAS 71 [CT191090] | TLK |
| B | 2-05-19 | SEE SHEETS 7 & 8 [CT193517] | SMH |
| C | 3-18-19 | (A,B,C-6,-7) ADDED SPEED AND VOLTAGE BIAS [CT194009] | SMH |
| D | 5-13-19 | (A,B,7,-8) TB12-42 THRU 44 ADDED, MOVED CONNECTIONS FOR VOLTAGE AND SPEED BIAS, SEE SHEET 1 [CT195741] | TEV |

| APPROVALS | | DATE |
|-----------|-----|---------|
| DRAWN | TLK | 5-11-18 |
| CHECKED | TLK | 5-11-18 |
| APPROVED | JLS | 5-11-18 |

UNLESS OTHERWISE SPECIFIED -
1) DIMENSIONS ARE IN INCHES
2) TOLERANCES ARE:
.xxx ± .010 ANGLES ± 1/2°
.xx ± .030 SURFACE FINISH
.x ± .060 MAX.
FRACTIONS ±

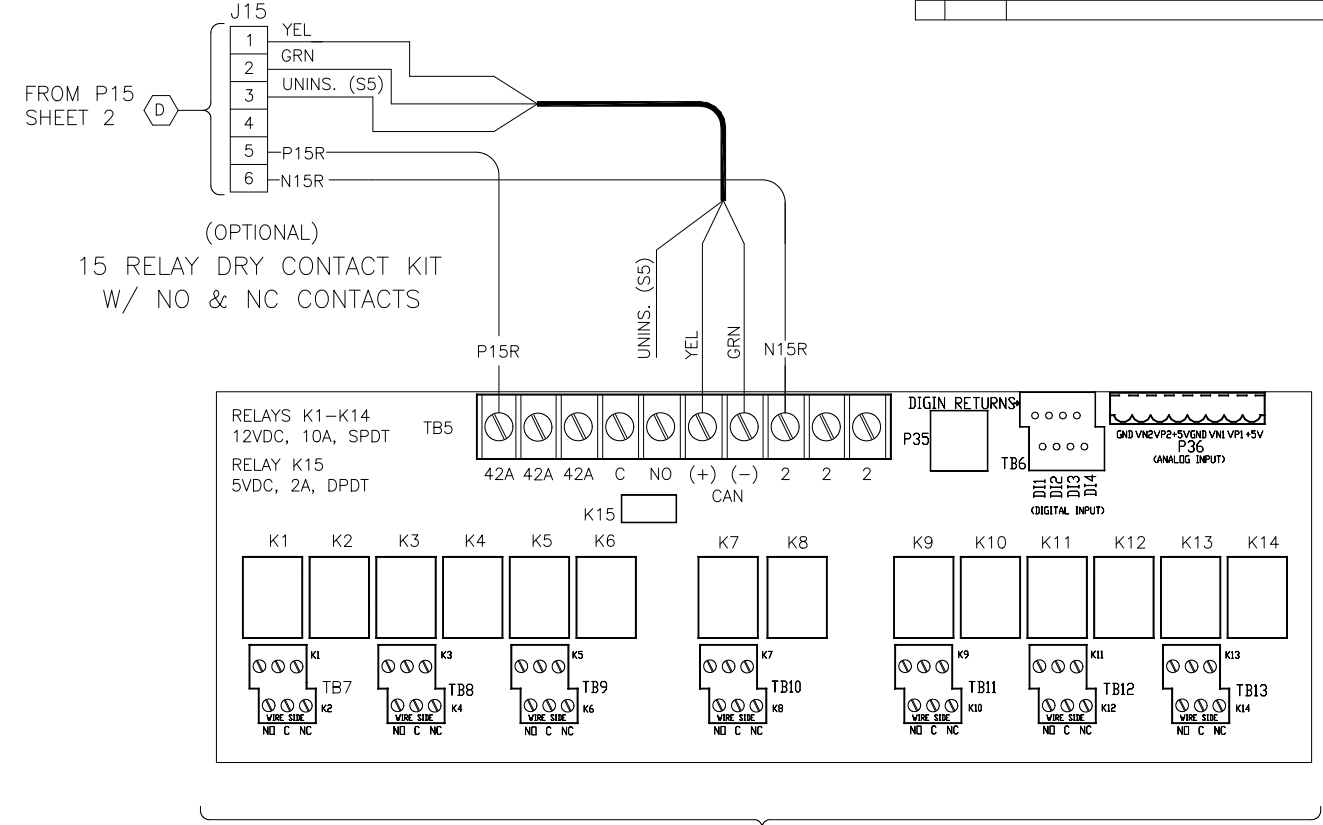
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ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

TITLE: **DIAGRAM, SCHEMATIC**
JD350-500KW,APM603-PED
SCALE: N/A
SHEET: 2-8

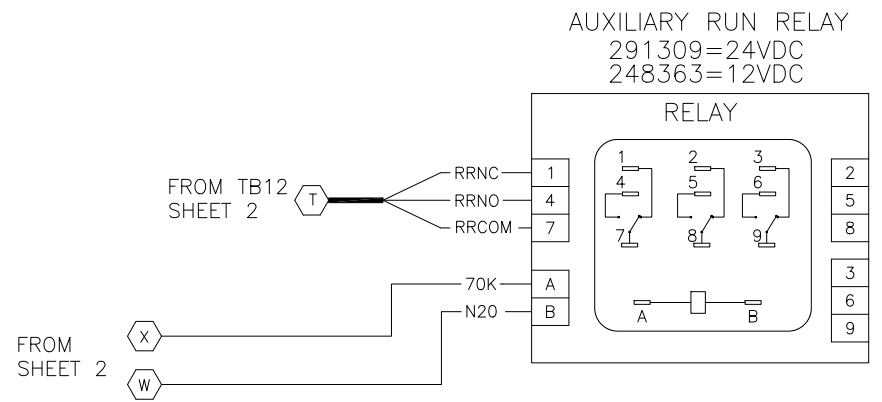
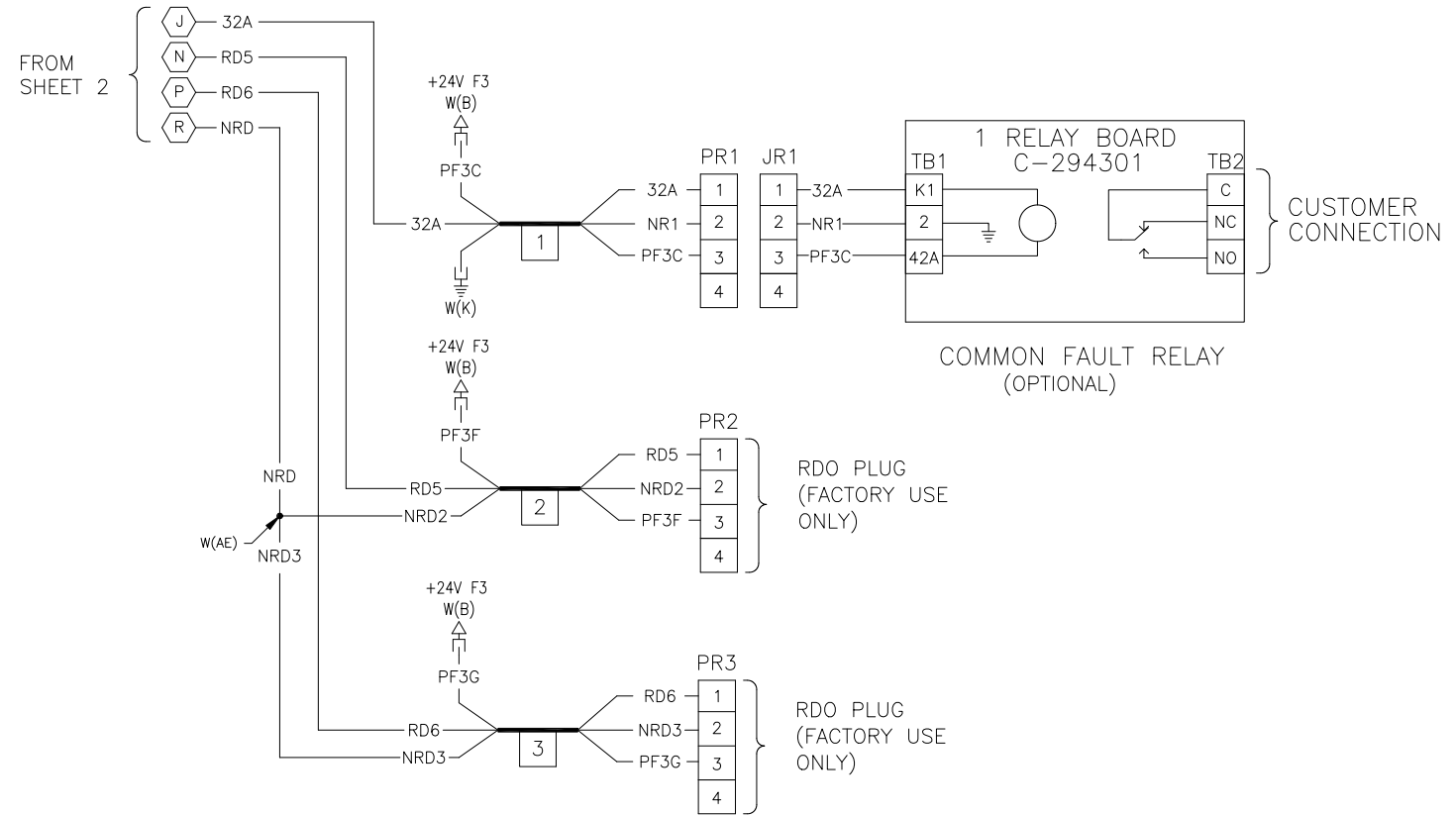
ADV-9078

| REV | DATE | REVISION | BY |
|-----|----------|-----------------------------|-----|
| - | 5-11-18 | NEW DRAWING [CT190243] | TLK |
| A | 10-11-18 | SEE SHEET 2 [CT191090] | TLK |
| B | 2-05-19 | SEE SHEETS 7 & 8 [CT193517] | SMH |
| C | 3-18-19 | SEE SHEETS 1& 2 [CT194009] | SMH |
| D | 5-13-19 | SEE SHEETS 1 & 2 [CT195741] | TEV |

JUNCTION BOX



CUSTOMER CONNECTIONS



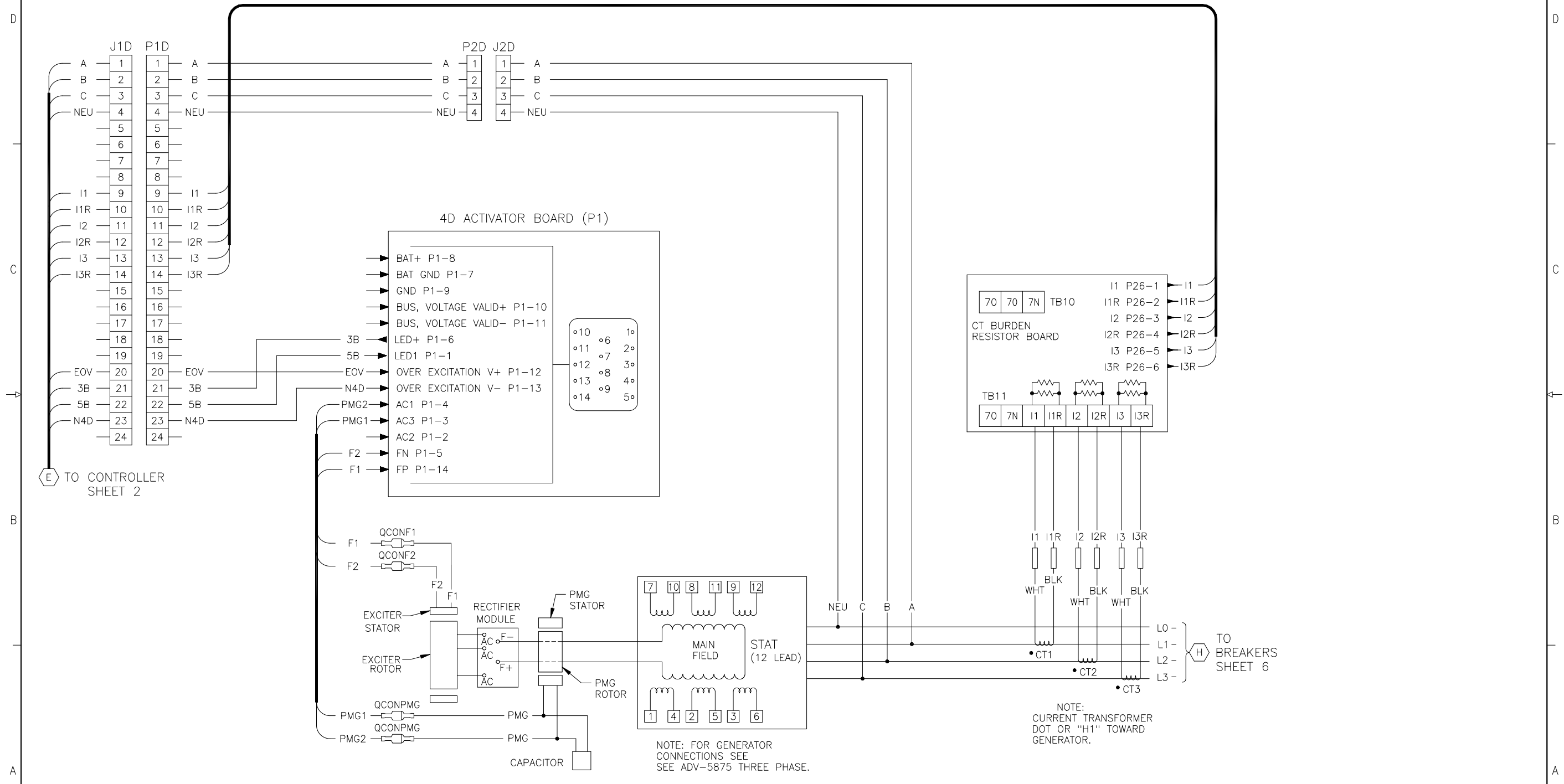
| APPROVALS | DATE |
|--------------|---------|
| DRAWN TLK | 5-11-18 |
| CHECKED TLK | 5-11-18 |
| APPROVED JLS | 5-11-18 |

| | |
|------------------------------|--|
| UNLESS OTHERWISE SPECIFIED - | KOHLER |
| 1) DIMENSIONS ARE IN INCHES | KOHLER, WI 53044 |
| 2) TOLERANCES ARE: | THIS DRAWING IN DESIGN AND DETAIL IS KOHLER CO. PROPERTY AND |
| .XXX ± .010 | MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. |
| .XX ± .030 | ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. |
| .X ± .060 | |
| FRACTIONS ± | |
| APPROVALS | DATE |
| DRAWN TLK | 5-11-18 |
| CHECKED TLK | 5-11-18 |
| APPROVED JLS | 5-11-18 |
| TITLE | |
| DIAGRAM, SCHEMATIC | |
| JD350-500KW,APM603-PED | |
| SCALE | N/A |
| PLOTTED | |
| DWG. NO. | ADV-9078 |
| SHEET | 4-8 |
| | D |

APM603 CONTROLLER
350-500 KW JOHN DEERE TIER III
W/ 4D ACTIVATOR, 1ø, 3ø & 600V

ALTERNATOR

| REV | DATE | REVISION | BY |
|-----|----------|-----------------------------|-----|
| - | 5-11-18 | NEW DRAWING [CT190243] | TLK |
| A | 10-11-18 | SEE SHEET 2 [CT191090] | TLK |
| B | 2-05-19 | SEE SHEETS 7 & 8 [CT193517] | SMH |
| C | 3-18-19 | SEE SHEETS 1& 2 [CT194009] | SMH |
| D | 5-13-19 | SEE SHEETS 1 & 2 [CT195741] | TEV |



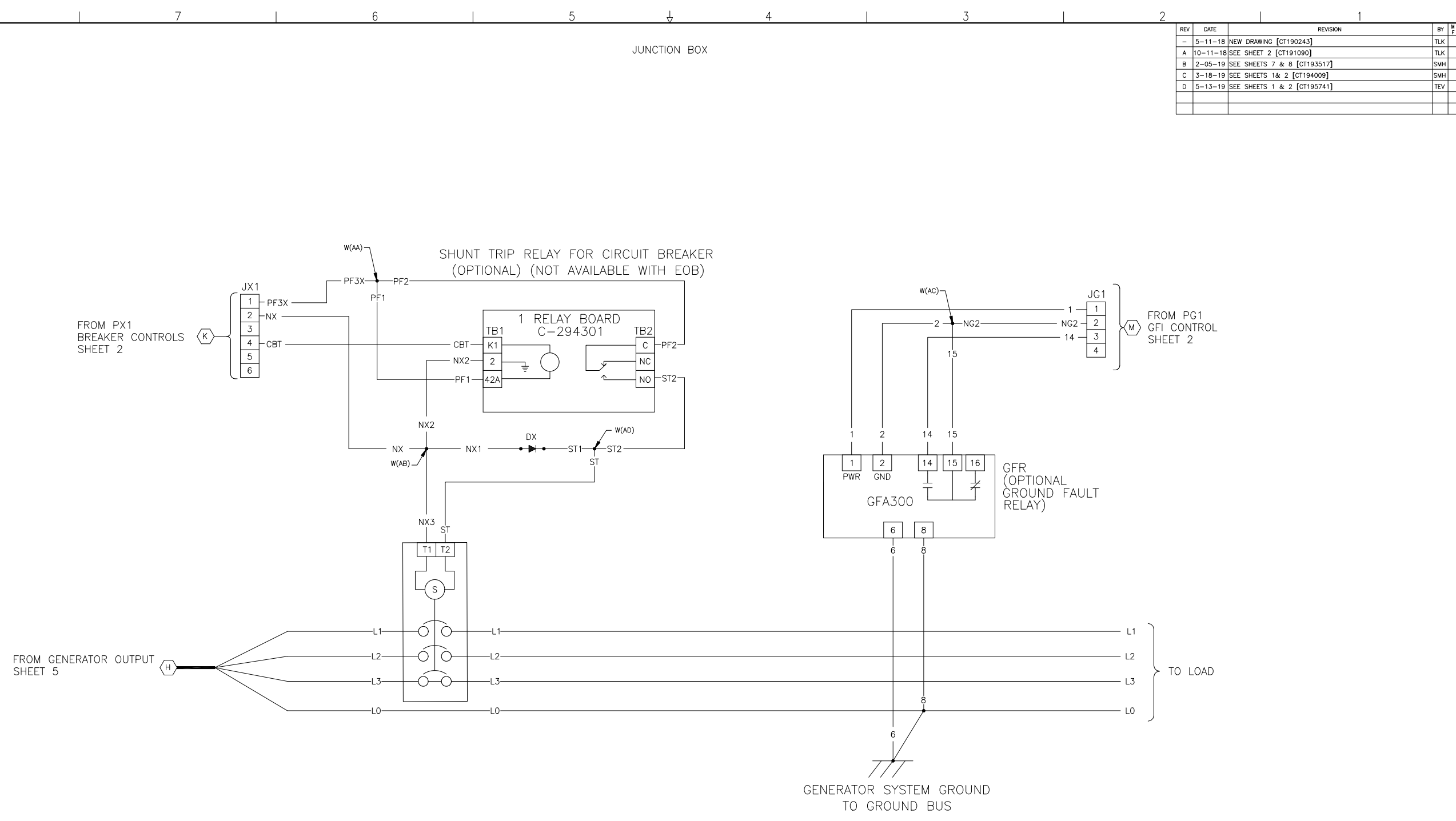
NOTE: FOR GENERATOR CONNECTIONS SEE ADV-5875 THREE PHASE.

NOTE: CURRENT TRANSFORMER DOT OR "H1" TOWARD GENERATOR.

| UNLESS OTHERWISE SPECIFIED - | | KOHLER | |
|------------------------------|--------------------|--|----------|
| 1) DIMENSIONS ARE IN INCHES | 2) TOLERANCES ARE: | KOHLER, WI 53044 | |
| .xxx ± .010 | ANGLES 1/2° | THIS DRAWING IN DESIGN AND DETAIL IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | |
| .xx ± .030 | SURFACE FINISH | TITLE | |
| .x ± .060 | MAX. | DIAGRAM, SCHEMATIC | |
| FRACTIONS ± | | JD350-500KW, APM603-PED | |
| APPROVALS | DATE | SCALE | SHEET |
| DRAWN TLK | 5-11-18 | N/A | 5-8 |
| CHECKED TLK | 5-11-18 | | |
| APPROVED JLS | 5-11-18 | PLOTTED | |
| | | DWG. NO. | ADV-9078 |
| | | | D |

ALTERNATOR SIDE
APM603 CONTROLLER
350-500 KW JOHN DEERE TIER III
W/ 4D ACTIVATOR, 1ø, 3ø & 600V

| REV | DATE | REVISION | BY |
|-----|----------|-----------------------------|-----|
| - | 5-11-18 | NEW DRAWING [CT190243] | TLK |
| A | 10-11-18 | SEE SHEET 2 [CT191090] | TLK |
| B | 2-05-19 | SEE SHEETS 7 & 8 [CT193517] | SMH |
| C | 3-18-19 | SEE SHEETS 1& 2 [CT194009] | SMH |
| D | 5-13-19 | SEE SHEETS 1 & 2 [CT195741] | TEV |



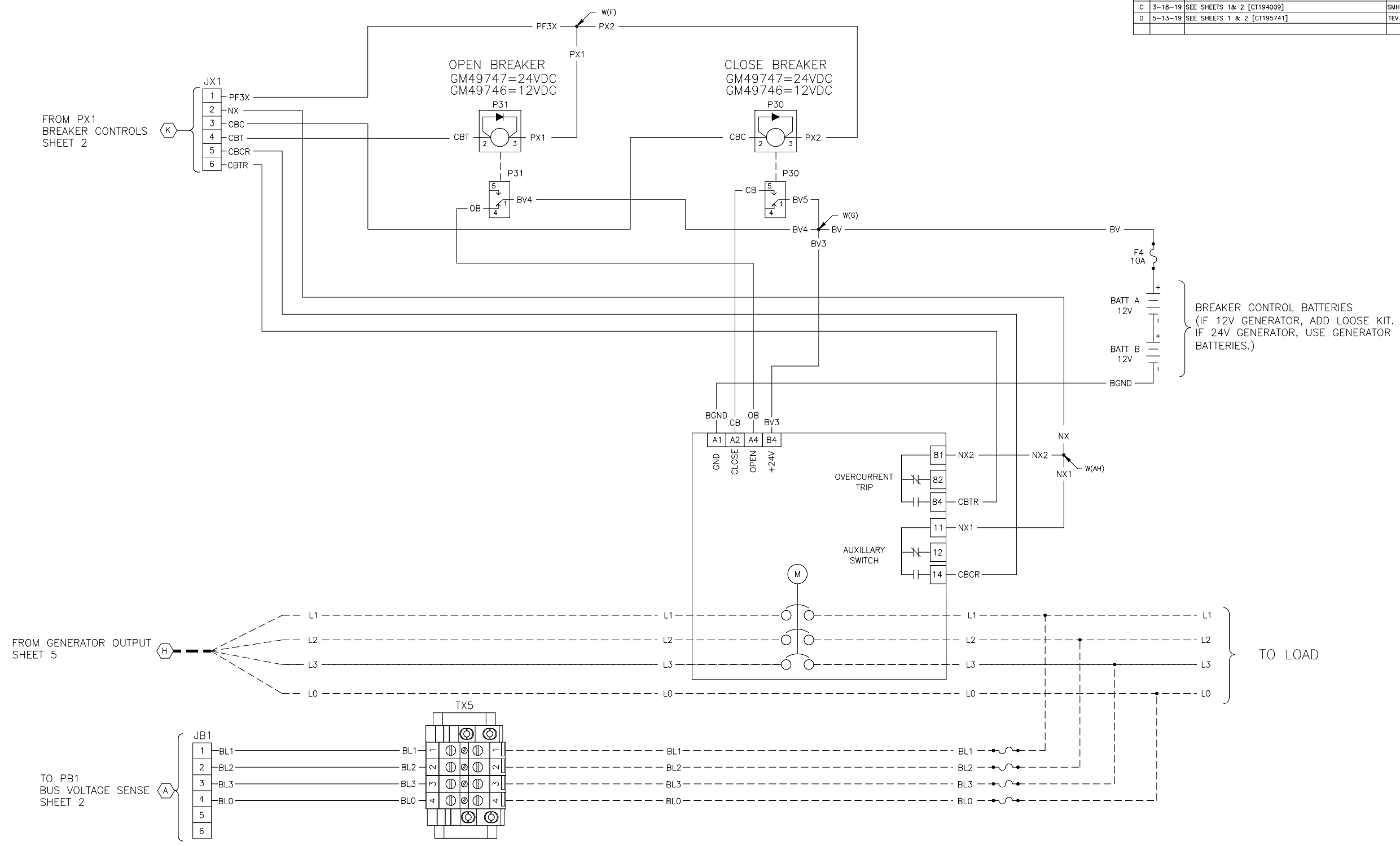
| APPROVALS | DATE |
|--------------|---------|
| DRAWN TLK | 5-11-18 |
| CHECKED TLK | 5-11-18 |
| APPROVED JLS | 5-11-18 |

| UNLESS OTHERWISE SPECIFIED - | 1) DIMENSIONS ARE IN INCHES | 2) TOLERANCES ARE: |
|------------------------------|-----------------------------|--------------------|
| .xxx ± .010 | ANGLES ± 1/2° | |
| .xx ± .030 | SURFACE FINISH | MAX. |
| .x ± .060 | | |
| FRACTIONS ± | | |

| KOHLER | |
|--|--------------------|
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| TITLE | DIAGRAM, SCHEMATIC |
| SCALE | N/A |
| PLOTTED | |
| DWG. NO. | ADV-9078 |
| SHEET | 6-8 |
| | D |

SHUNT TRIP OPTION
 APM603 CONTROLLER
 350-500 KW JOHN DEERE TIER III
 W/ 4D ACTIVATOR, 1ø, 3ø & 600V

| REV | DATE | REVISION | BY |
|-----|----------|--|-----|
| - | 5-11-18 | NEW DRAWING [CT190243] | TLK |
| A | 10-11-18 | SEE SHEET 2 [CT191090] | TLK |
| B | 2-05-19 | (C,D-5) WIRE OB IS MOVED TO 4 FROM 5 OF P31; SEE SHEET 8; [CT193517] | SMH |
| C | 3-18-19 | SEE SHEETS 1 & 2 [CT194009] | SMH |
| D | 5-13-19 | SEE SHEETS 1 & 2 [CT195741] | TEV |

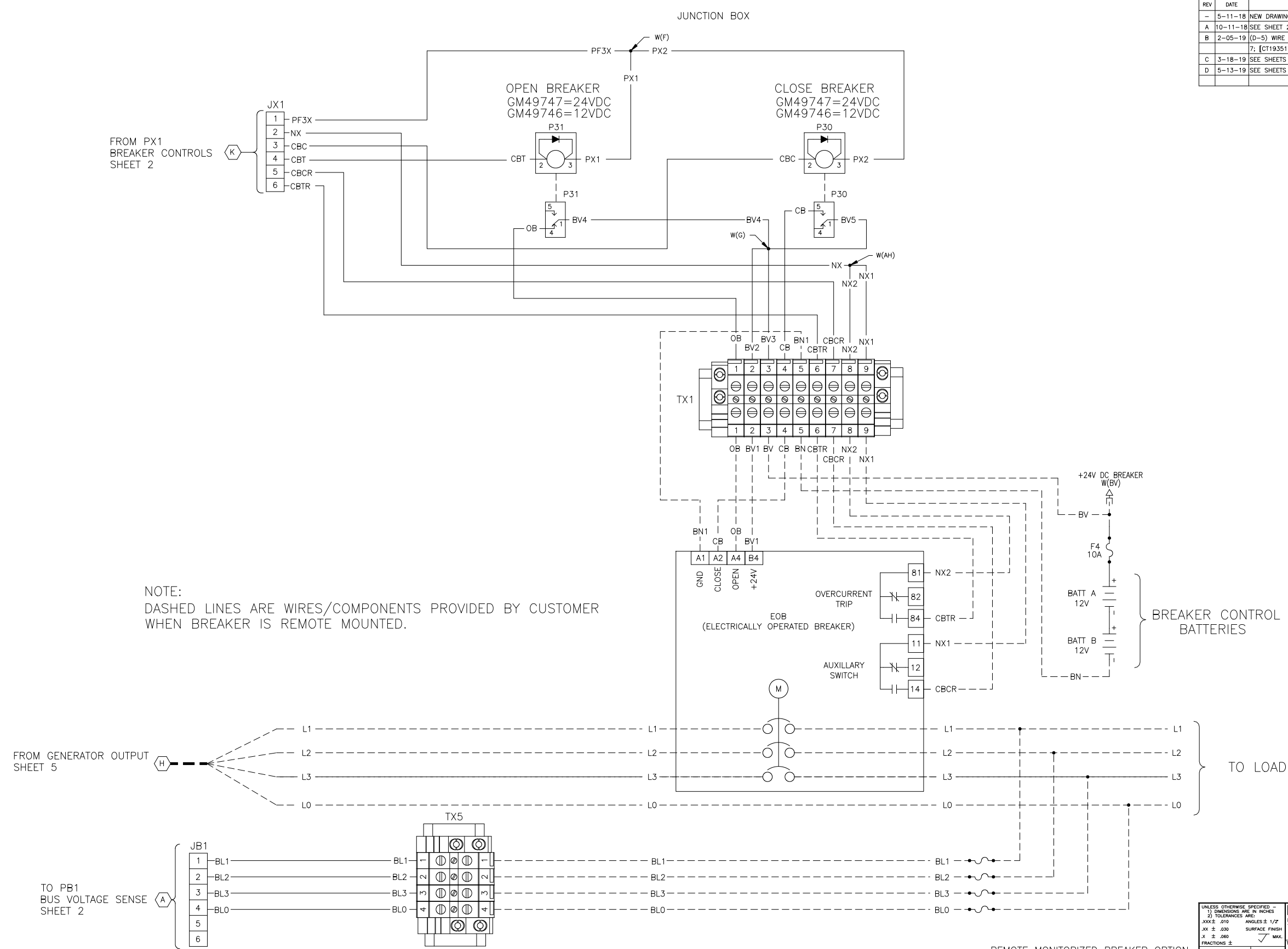


| APPROVALS | DATE |
|--------------|---------|
| DRAWN TLK | 5-11-18 |
| CHECKED TLK | 5-11-18 |
| APPROVED JLS | 5-11-18 |

| | |
|----------------------------------|--|
| UNLESS OTHERWISE SPECIFIED - | KOHLER |
| 1) DIMENSIONS ARE IN INCHES | KOHLER, WI 53044 |
| 2) TOLERANCES ARE: | THIS DRAWING IN DESIGN AND DETAIL IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. |
| .XXX ± .010 | ANGLES ± 1/2° |
| .XX ± .030 | SURFACE FINISH |
| .X ± .060 | MAX. |
| FRACTIONS ± | |
| TITLE: DIAGRAM, SCHEMATIC | |
| JD350-500KW,APM603-PED | |
| SCALE: N/A | SHEET: 7-8 |
| PLOTTED: | DWG. NO. ADV-9078 |
| | D |

LOCAL MOTORIZED BREAKER OPTION
 APM603 CONTROLLER
 350-500 KW JOHN DEERE TIER III
 W/ 4D ACTIVATOR, 1ø, 3ø & 600V

| REV | DATE | REVISION | BY |
|-----|----------|--|-----|
| - | 5-11-18 | NEW DRAWING [CT190243] | TLK |
| A | 10-11-18 | SEE SHEET 2 [CT191090] | TLK |
| B | 2-05-19 | (D-5) WIRE OB IS MOVED TO 4 FROM 5 OF P31; SEE SHEET 7; [CT193517] | SMH |
| C | 3-18-19 | SEE SHEETS 1 & 2 [CT194009] | SMH |
| D | 5-13-19 | SEE SHEETS 1 & 2 [CT195741] | TEV |



NOTE:
DASHED LINES ARE WIRES/COMPONENTS PROVIDED BY CUSTOMER
WHEN BREAKER IS REMOTE MOUNTED.

FROM GENERATOR OUTPUT
SHEET 5

TO PB1
BUS VOLTAGE SENSE
SHEET 2

BREAKER CONTROL
BATTERIES

TO LOAD

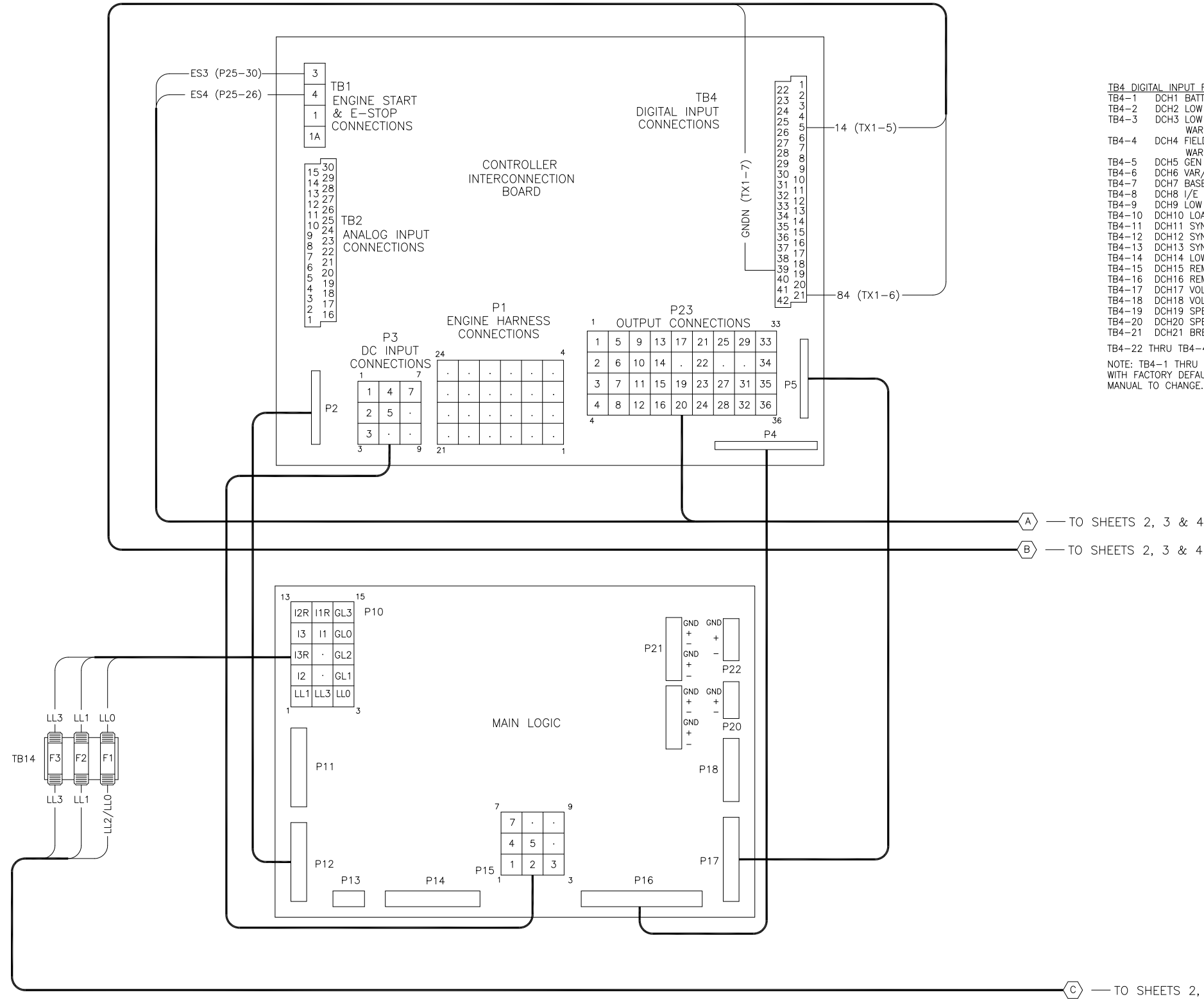
REMOTE MONITORED BREAKER OPTION
APM603 CONTROLLER
350-500 KW JOHN DEERE TIER III
W/ 4D ACTIVATOR, 1ø, 3ø & 600V

| APPROVALS | | DATE |
|-----------|-----|---------|
| DRAWN | TLK | 5-11-18 |
| CHECKED | TLK | 5-11-18 |
| APPROVED | JLS | 5-11-18 |

| | |
|---|---|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: .xxx ± .010 ANGLES ± 1/2° .xx ± .030 SURFACE FINISH .x ± .060 MAX. | KOHLER KOHLER, WI 53044 THIS DRAWING IN DESIGN AND DETAIL IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. |
| TITLE | DIAGRAM, SCHEMATIC |
| SCALE | N/A |
| SHEET | 8-8 |
| DWG. NO. | ADV-9078 |

CONTROLLER

| REV | DATE | REVISION | BY | MF |
|-----|----------|--|-----|----|
| D | 5-15-14 | (D-1,-2) TB4 DIGITAL INPUT FACTORY SETTINGS: TB4-9 DCH9 LOW FUEL SHUTDOWN (GM & DOOSAN ONLY) WAS (GM ONLY) [CT79954] | DFS | |
| E | 1-5-16 | SEE SHEETS 2 & 3 [CT135475] | DFS | |
| F | 10-28-16 | (C,D-4) TX1-7 WAS TX5-28, TX1-5 WAS TX1-8, TX1-6 WAS TX1-9 [CT161666] | TEV | |
| G | 12-6-17 | (C,D-1,-2) TB4 DIGITAL INPUT FACTORY SETTINGS CHART REVISED TO MATCH TP-6750 & SEE SHEETS 2, 3 & 4 [CT182133] | DFS | |



- TB4 DIGITAL INPUT FACTORY SETTINGS**
- TB4-1 DCH1 BATTERY CHARGER FAULT
 - TB4-2 DCH2 LOW FUEL
 - TB4-3 DCH3 LOW COOLANT TEMP (ECM MODELS) or WARNING DEFAULT (NON-ECM MODELS)
 - TB4-4 DCH4 FIELD OVER VOLTAGE (4M, 5M, 7M, 10M ALT.) or WARNING DEFAULT (NON-4M, 5M, 7M, 10M ALT MODELS)
 - TB4-5 DCH5 GEN BREAKER CLOSED (PARALLELING APPLICATIONS)
 - TB4-6 DCH6 VAR/PF MODE
 - TB4-7 DCH7 BASELOAD MODE
 - TB4-8 DCH8 I/E MODE
 - TB4-9 DCH9 LOW FUEL SHUTDOWN (GM & DOOSAN ONLY)
 - TB4-10 DCH10 LOAD ENABLE
 - TB4-11 DCH11 SYNC AUTO (PARALLELING APPLICATIONS)
 - TB4-12 DCH12 SYNC PERMISSIVE (PARALLELING APPLICATIONS)
 - TB4-13 DCH13 SYNC CHECK TEST
 - TB4-14 DCH14 LOW COOLANT LEVEL
 - TB4-15 DCH15 REMOTE SHUTDOWN
 - TB4-16 DCH16 REMOTE RESET
 - TB4-17 DCH17 VOLTAGE LOWER
 - TB4-18 DCH18 VOLTAGE RAISE
 - TB4-19 DCH19 SPEED LOWER
 - TB4-20 DCH20 SPEED RAISE
 - TB4-21 DCH21 BREAKER TRIPPED
- TB4-22 THRU TB4-42 ARE COMMON DIGITAL INPUT RETURNS
- NOTE: TB4-1 THRU TB4-21 ARE CUSTOMER DEFINABLE WITH FACTORY DEFAULTS LISTED. SEE CONTROLLER OPERATION MANUAL TO CHANGE.

A — TO SHEETS 2, 3 & 4

B — TO SHEETS 2, 3 & 4

C — TO SHEETS 2, 3, 4 & 5

UNLESS OTHERWISE SPECIFIED -
 1) DIMENSIONS ARE IN INCHES
 2) TOLERANCES ARE:
 .XXX ± .010 ANGLES ± 1/2°
 .XX ± .030 SURFACE FINISH
 .X ± .060 MAX.
 FRACTIONS ±

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TITLE: **DIAGRAM, WIRING ACCESSORY DEC6000**

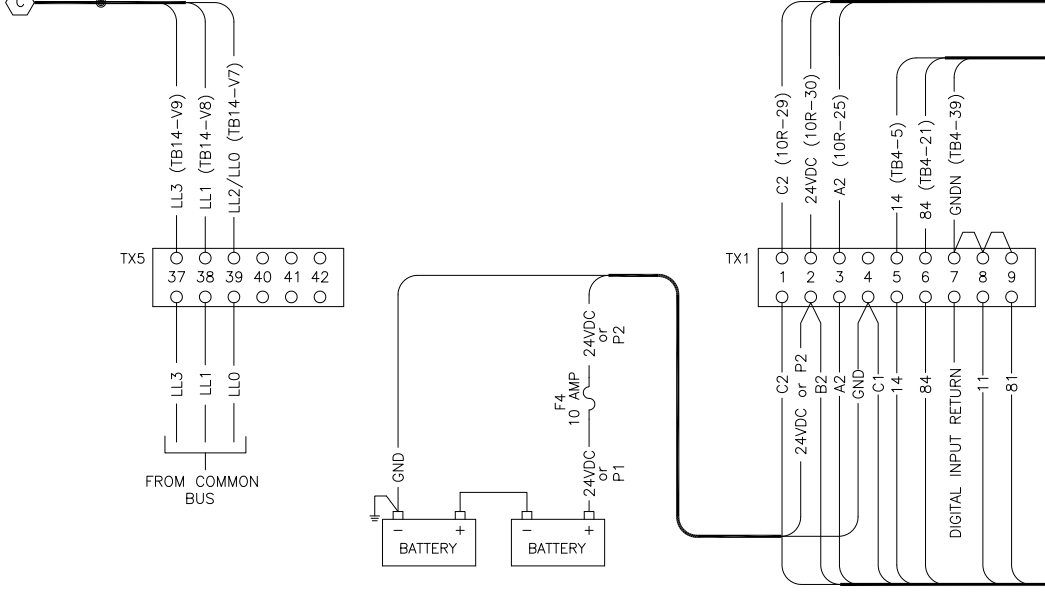
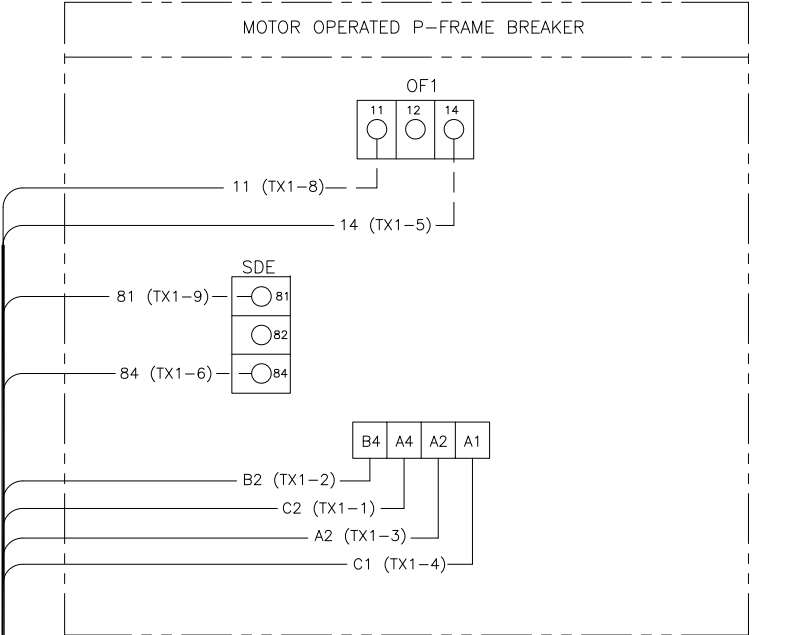
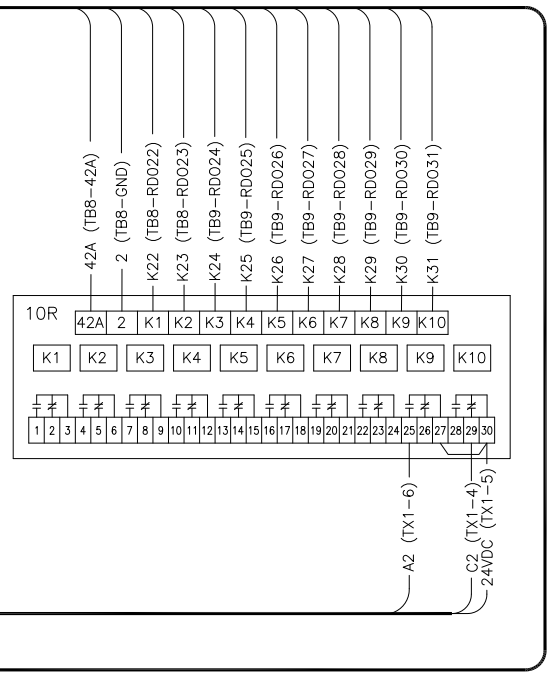
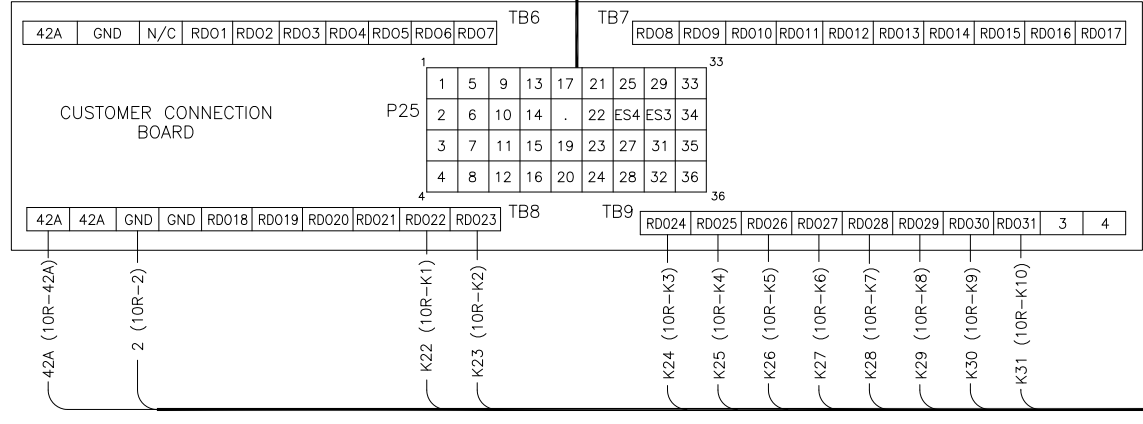
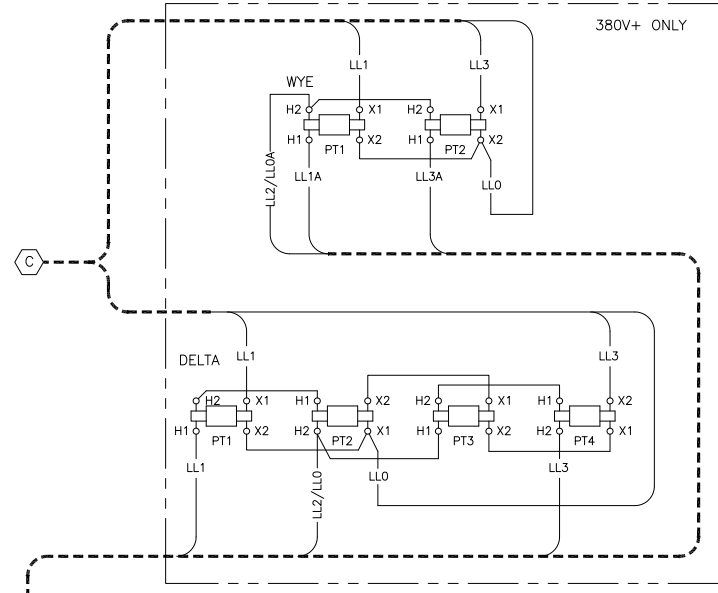
| | | | | |
|--------------|----------|---------|----------|-------|
| APPROVALS | DATE | SCALE | CAD NO. | SHEET |
| DRAWN CRS | 10-14-09 | /// | | 1-4 |
| CHECKED DFS | 10-14-09 | PLOTTED | DWG. NO. | |
| APPROVED CRS | 10-14-09 | | GM72449 | |

| REV | DATE | REVISION | BY | WF |
|-----|----------|--|-----|----|
| D | 5-15-14 | SEE SHEET 1 [CT79954] | DFS | |
| E | 1-5-16 | (A-6,-7) or P1 & or P2 ADDED TO HARNESS [CT135475] | DFS | |
| F | 10-28-16 | SEE SHEET 1 [CT161666] | TEV | |
| G | 12-6-17 | (C,D-5,-6) RELAY DRIVER OUTPUT (RDO) STANDARD FACTORY SETTINGS CHART REVISED TO MATCH TP-6750 & SEE SHEETS 1, 3 & 4 [CT182133] | DFS | |

RELAY DRIVER OUTPUT (RDO) STANDARD FACTORY SETTINGS

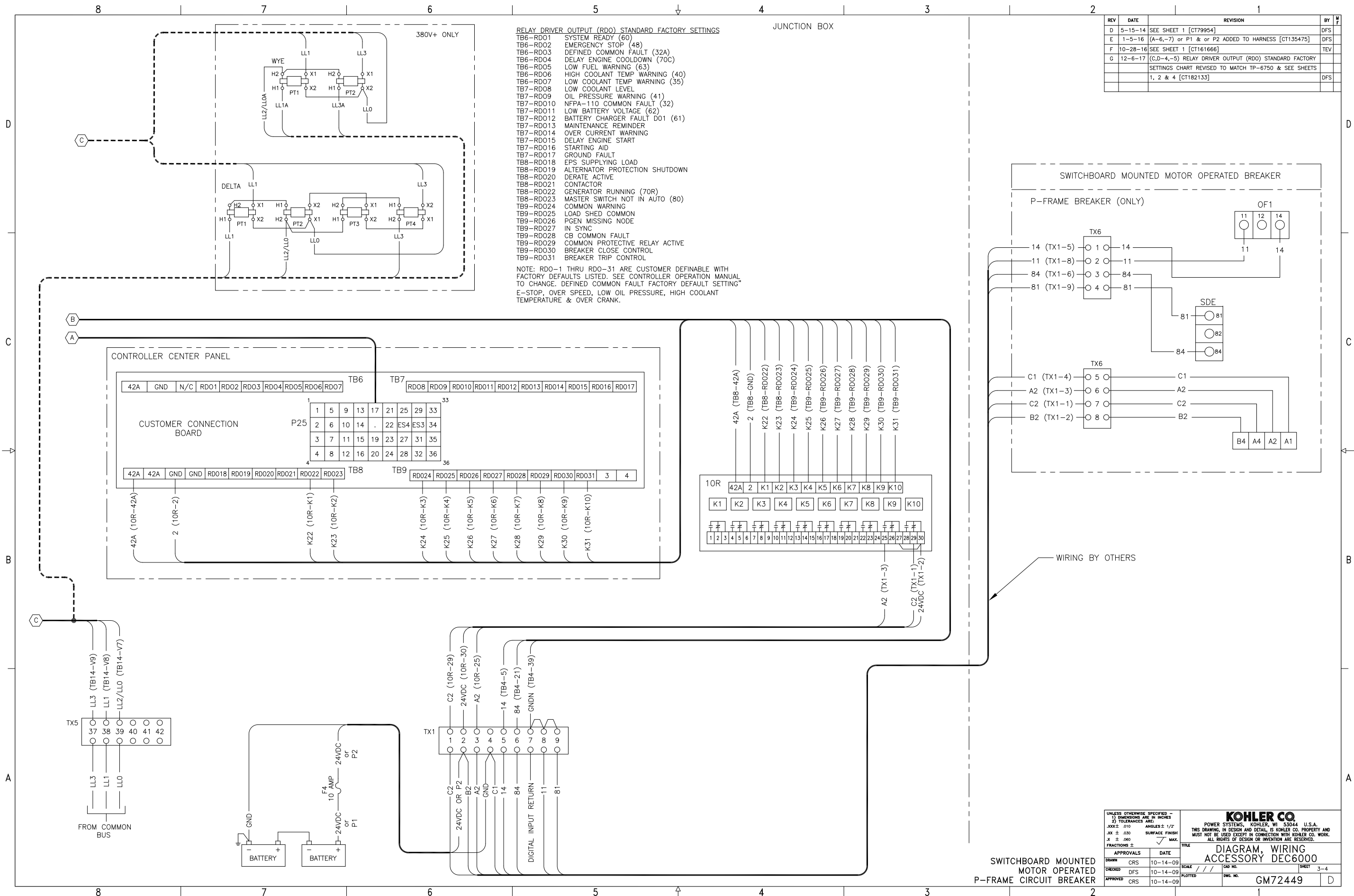
- TB6-RD01 SYSTEM READY (60)
- TB6-RD02 EMERGENCY STOP (48)
- TB6-RD03 DEFINED COMMON FAULT (32A)
- TB6-RD04 DELAY ENGINE COOLDOWN (70C)
- TB6-RD05 LOW FUEL WARNING (63)
- TB6-RD06 HIGH COOLANT TEMP WARNING (40)
- TB6-RD07 LOW COOLANT TEMP WARNING (35)
- TB7-RD08 LOW COOLANT LEVEL
- TB7-RD09 OIL PRESSURE WARNING (41)
- TB7-RD010 NFPA-110 COMMON FAULT (32)
- TB7-RD011 LOW BATTERY VOLTAGE (62)
- TB7-RD012 BATTERY CHARGER FAULT DO1 (61)
- TB7-RD013 MAINTENANCE REMINDER
- TB7-RD014 OVER CURRENT WARNING
- TB7-RD015 DELAY ENGINE START
- TB7-RD016 STARTING AID
- TB7-RD017 GROUND FAULT
- TB8-RD018 EPS SUPPLYING LOAD
- TB8-RD019 ALTERNATOR PROTECTION SHUTDOWN
- TB8-RD020 DERATE ACTIVE
- TB8-RD021 CONTACTOR
- TB8-RD022 GENERATOR RUNNING (70R)
- TB8-RD023 MASTER SWITCH NOT IN AUTO (80)
- TB9-RD024 COMMON WARNING
- TB9-RD025 LOAD SHED COMMON
- TB9-RD026 PGEN MISSING NODE
- TB9-RD027 IN SYNC
- TB9-RD028 CB COMMON FAULT
- TB9-RD029 COMMON PROTECTIVE RELAY ACTIVE
- TB9-RD030 BREAKER CLOSE CONTROL
- TB9-RD031 BREAKER TRIP CONTROL

NOTE: RDO-1 THRU RDO-31 ARE CUSTOMER DEFINABLE WITH FACTORY DEFAULTS LISTED. SEE CONTROLLER OPERATION MANUAL TO CHANGE. DEFINED COMMON FAULT FACTORY DEFAULT SETTING: E-STOP, OVER SPEED, LOW OIL PRESSURE, HIGH COOLANT TEMPERATURE & OVER CRANK.



| | | | | | | | | | | | |
|------------------------------|-----|--------------------------|--|----------------|-----|---------------|------|----------------|---------|-------|--|
| UNLESS OTHERWISE SPECIFIED - | | DIMENSIONS ARE IN INCHES | | TOLERANCES ARE | | ANGLES ± 1/2° | | SURFACE FINISH | | TITLE | |
| .XXX ± .010 | | .XX ± .030 | | X ± .060 | | ✓ | MAX. | | | | |
| APPROVALS | | DATE | | SCALE | | SHEET | | DWG. NO. | | D | |
| DRAWN | CRS | 10-14-09 | | SCALE | /// | SHEET | 2-4 | DWG. NO. | GM72449 | | |
| CHECKED | DFS | 10-14-09 | | PLOTTED | | | | | | | |
| APPROVED | CRS | 10-14-09 | | | | | | | | | |

GENSET MOUNTED
MOTOR OPERATED
P-FRAME CIRCUIT BREAKER



| REV | DATE | REVISION | BY | # |
|-----|----------|--|-----|---|
| D | 5-15-14 | SEE SHEET 1 [CT79954] | DFS | |
| E | 1-5-16 | (A-6,-7) or P1 & or P2 ADDED TO HARNESS [CT135475] | DFS | |
| F | 10-28-16 | SEE SHEET 1 [CT161666] | TEV | |
| G | 12-6-17 | (C,D-4,-5) RELAY DRIVER OUTPUT (RDO) STANDARD FACTORY SETTINGS CHART REVISED TO MATCH TP-6750 & SEE SHEETS 1, 2 & 4 [CT182133] | DFS | |

| | | | |
|---|--|---|--|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: XXX.X ± .010 ANGLES ± 1/2° XX ± .030 SURFACE FINISH X ± .060 ✓ MAX. FRACTIONS ± | | KOHLER CO. POWER SYSTEMS, KOHLER, WI 53044 U.S.A. THIS DRAWING, IN DESIGN AND DETAIL, IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | |
| APPROVALS DRAWN CRS CHECKED DFS APPROVED CRS | | DATE 10-14-09 10-14-09 10-14-09 | |
| TITLE DIAGRAM, WIRING ACCESSORY DEC6000 | | SCALE PLOTTED CAP. NO. GM72449 | |
| | | SHEET 3-4 D | |

SWITCHBOARD MOUNTED
MOTOR OPERATED
P-FRAME CIRCUIT BREAKER

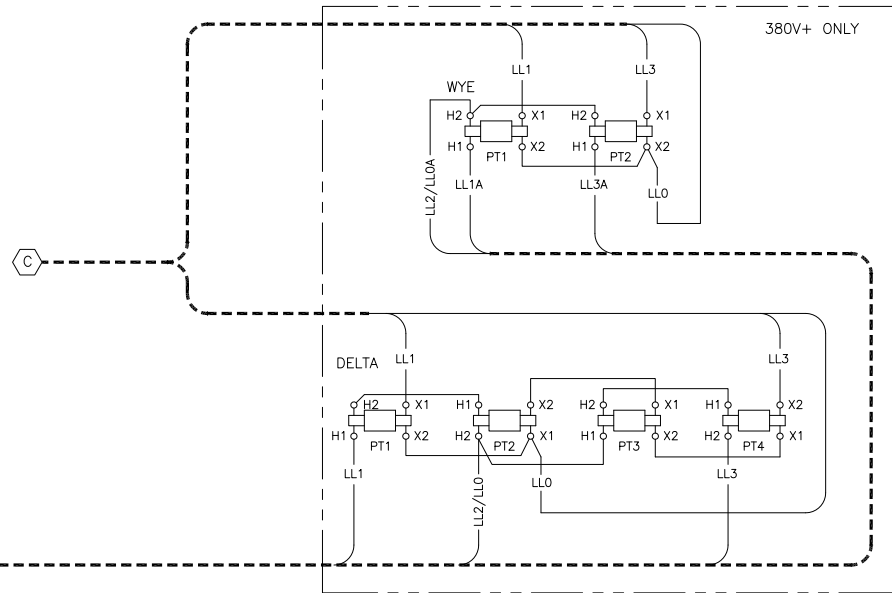
WIRING BY OTHERS

| REV | DATE | REVISION | BY |
|-----|----------|---|-----|
| D | 5-15-14 | SEE SHEET 1 [CT79954] | DFS |
| E | 1-5-16 | SEE SHEETS 2 & 3 [CT135475] | DFS |
| F | 10-28-16 | SEE SHEET 1 [CT161666] | TEV |
| G | 12-6-17 | (C,D-5,-6) RELAY DRIVER OUTPUT (RDO) STANDARD FACTORY SETTINGS CHART REVISED TO MATCH TP-6750 & SEE SHEETS 1, 2, & 3 [CT182133] | DFS |

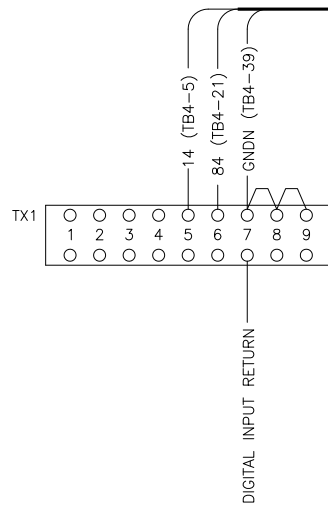
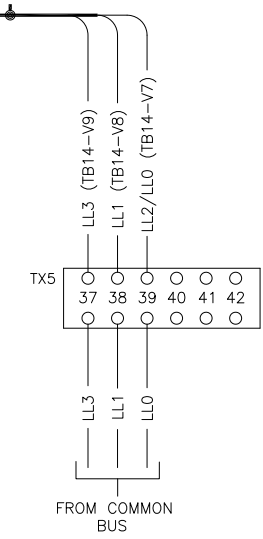
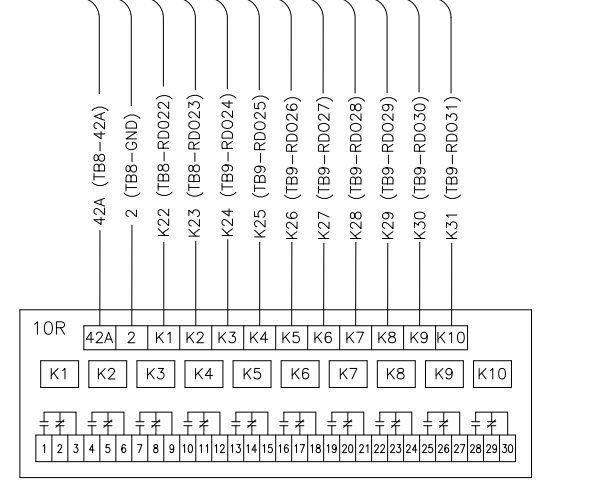
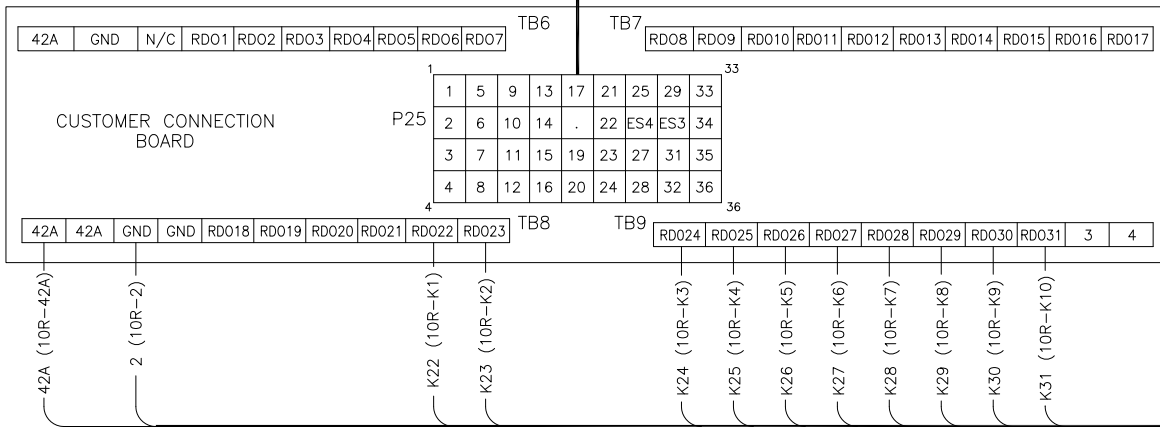
RELAY DRIVER OUTPUT (RDO) STANDARD FACTORY SETTINGS

- TB6-RDO1 SYSTEM READY (60)
- TB6-RDO2 EMERGENCY STOP (48)
- TB6-RDO3 DEFINED COMMON FAULT (32A)
- TB6-RDO4 DELAY ENGINE COOLDOWN (70C)
- TB6-RDO5 LOW FUEL WARNING (63)
- TB6-RDO6 HIGH COOLANT TEMP WARNING (40)
- TB6-RDO7 LOW COOLANT TEMP WARNING (35)
- TB7-RDO8 LOW COOLANT LEVEL
- TB7-RDO9 OIL PRESSURE WARNING (41)
- TB7-RDO10 NFPA-110 COMMON FAULT (32)
- TB7-RDO11 LOW BATTERY VOLTAGE (62)
- TB7-RDO12 BATTERY CHARGER FAULT D01 (61)
- TB7-RDO13 MAINTENANCE REMINDER
- TB7-RDO14 OVER CURRENT WARNING
- TB7-RDO15 DELAY ENGINE START
- TB7-RDO16 STARTING AID
- TB7-RDO17 GROUND FAULT
- TB8-RDO18 EPS SUPPLYING LOAD
- TB8-RDO19 ALTERNATOR PROTECTION SHUTDOWN
- TB8-RDO20 DERATE ACTIVE
- TB8-RDO21 CONTACTOR
- TB8-RDO22 GENERATOR RUNNING (70R)
- TB8-RDO23 MASTER SWITCH NOT IN AUTO (80)
- TB9-RDO24 COMMON WARNING
- TB9-RDO25 LOAD SHED COMMON
- TB9-RDO26 PGEN MISSING NODE
- TB9-RDO27 IN SYNC
- TB9-RDO28 CB COMMON FAULT
- TB9-RDO29 COMMON PROTECTIVE RELAY ACTIVE
- TB9-RDO30 BREAKER CLOSE CONTROL
- TB9-RDO31 BREAKER TRIP CONTROL

NOTE: RDO-1 THRU RDO-31 ARE CUSTOMER DEFINABLE WITH FACTORY DEFAULTS LISTED. SEE CONTROLLER OPERATION MANUAL TO CHANGE. DEFINED COMMON FAULT FACTORY DEFAULT SETTING: E-STOP, OVER SPEED, LOW OIL PRESSURE, HIGH COOLANT TEMPERATURE & OVER CRANK.



CONTROLLER CENTER PANEL



UNLESS OTHERWISE SPECIFIED -
 1) DIMENSIONS ARE IN INCHES
 2) TOLERANCES ARE:
 .XXX ± .010 ANGLES ± 1/2°
 .XX ± .030 SURFACE FINISH
 .X ± .060 ✓ MAX.
 FRACTIONS ±

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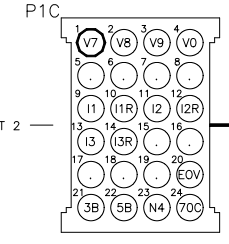
TITLE: **DIAGRAM, WIRING ACCESSORY DEC6000**

| | | | |
|--------------|----------|----------|---------|
| APPROVALS | DATE | SCALE | SHEET |
| DRAWN CRS | 10-14-09 | /// | 4-4 |
| CHECKED DFS | 10-14-09 | PLOTTED | |
| APPROVED CRS | 10-14-09 | DWG. NO. | GM72449 |

| REV | DATE | REVISION | BY |
|-----|---------|---|-----|
| D | 6-17-15 | SEE SHEET 2 [CT116330] | DFS |
| E | 9-27-17 | [D-5 & A-3] APM402 TEXT ADDED; SEE SHEET 2 [CT179572] | ABS |
| F | 3-26-19 | SEE SHEET 2 [CT194643] | SBR |

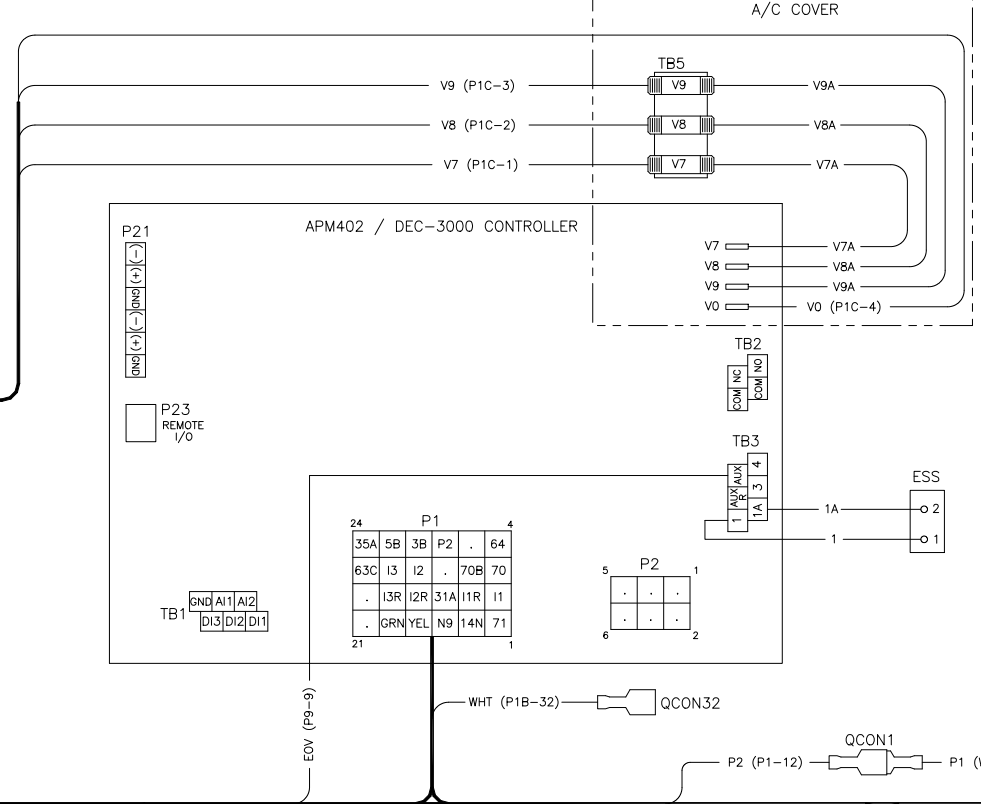
P1C CONNECTIONS

| PIN # | WIRE | TERMINAL |
|-------|------|-----------|
| 1 | V7 | (TB5-V7) |
| 2 | V8 | (TB5-V8) |
| 3 | V9 | (TB5-V9) |
| 4 | V0 | (CONT-V0) |
| 5 | N/C | . |
| 6 | N/C | . |
| 7 | N/C | . |
| 8 | N/C | . |
| 9 | I1 | (P8-1) |
| 10 | I1R | (P8-2) |
| 11 | I2 | (P8-3) |
| 12 | I2R | (P8-4) |
| 13 | I3 | (P8-5) |
| 14 | I3R | (P8-6) |
| 15 | N/C | . |
| 16 | N/C | . |
| 17 | N/C | . |
| 18 | N/C | . |
| 19 | N/C | . |
| 20 | EOV | (P8-9) |
| 21 | 3B | (P8-7) |
| 22 | 5B | (P8-8) |
| 23 | N4 | (P8-11) |
| 24 | 70C | (P8-10) |



TO P1D SHEET 2

CONTROLLER COMPARTMENT



P1 CONNECTIONS

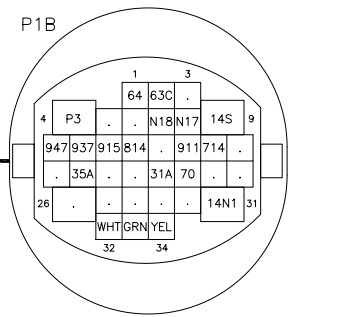
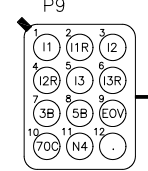
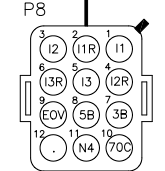
| PIN # | WIRE | TERMINAL |
|-------|------------|----------|
| 1 | I1 | (P23-3) |
| 2 | I1 | (P9-1) |
| 3 | 70 | (P1B-23) |
| 4 | 64 | (P1B-1) |
| 5 | 14N | (W2) |
| 6 | I1R | (P9-2) |
| 7 | 70B | (W1) |
| 8 | N/C | . |
| 9 | N9 | (W4) |
| 10 | 31A | (P1B-22) |
| 11 | N/C | . |
| 12 | P2 | (QCON1) |
| 13 | YEL YELLOW | (P1B-34) |
| 14 | I2R | (P9-4) |
| 15 | I2 | (P9-3) |
| 16 | 3B | (P9-7) |
| 17 | GRN GREEN | (P1B-33) |
| 18 | I3R | (P9-6) |
| 19 | I3 | (P9-5) |
| 20 | 5B | (P9-8) |
| 21 | N/C | . |
| 22 | N/C | . |
| 23 | 63C | (P1B-2) |
| 24 | 35A | (P1B-19) |

P9 CONNECTIONS

| PIN # | WIRE | TERMINAL |
|-------|------|-----------|
| 1 | I1 | (P1-2) |
| 2 | I1R | (P1-6) |
| 3 | I2 | (P1-15) |
| 4 | I2R | (P1-14) |
| 5 | I3 | (P1-19) |
| 6 | I3R | (P1-18) |
| 7 | 3B | (P1-16) |
| 8 | 5B | (P1-20) |
| 9 | EOV | (TB3-AUX) |
| 10 | 70C | (W1) |
| 11 | N4 | (W2) |
| 12 | N/C | . |

P8 CONNECTIONS

| PIN # | WIRE | TERMINAL |
|-------|------|----------|
| 1 | I1 | (P1C-9) |
| 2 | I1R | (P1C-10) |
| 3 | I2 | (P1C-11) |
| 4 | I2R | (P1C-12) |
| 5 | I3 | (P1C-13) |
| 6 | I3R | (P1C-14) |
| 7 | 3B | (P1C-21) |
| 8 | 5B | (P1C-22) |
| 9 | EOV | (P1C-20) |
| 10 | 70C | (P1C-24) |
| 11 | N4 | (P1C-23) |
| 12 | N/C | . |

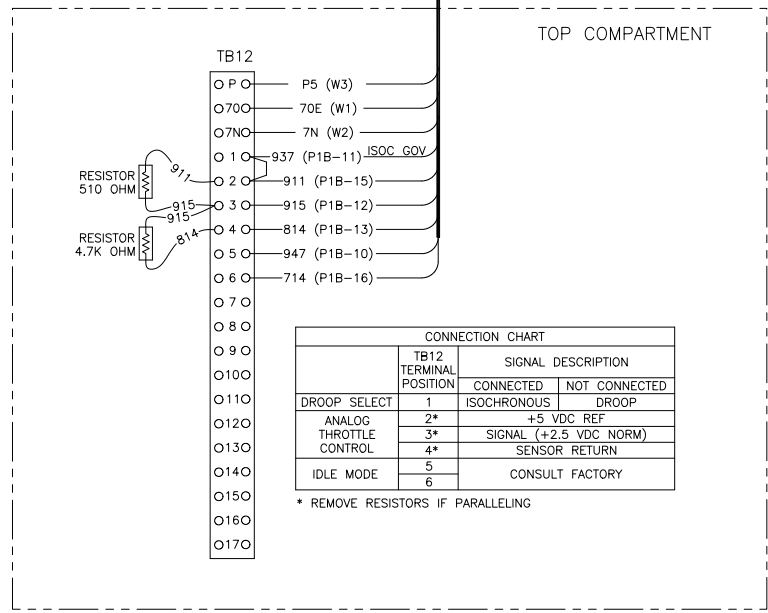


P1B CONNECTIONS

| PIN # | WIRE | TERMINAL |
|-------|------|----------|
| 1 | 64 | (P1-4) |
| 2 | 63C | (P1-23) |
| 3 | N/C | . |
| 4 | P3 | (W3) |
| 5 | N/C | . |
| 6 | N/C | . |
| 7 | N18 | (W4) |
| 8 | N17 | (W4) |
| 9 | 14S | (P23-5) |
| 10 | 947 | (TB12-5) |
| 11 | 937 | (TB12-1) |
| 12 | 915 | (TB12-3) |
| 13 | 814 | (TB12-4) |
| 14 | N/C | . |
| 15 | 911 | (TB12-2) |
| 16 | 714 | (TB12-6) |
| 17 | N/C | . |
| 18 | N/C | . |
| 19 | 35A | (P1-24) |
| 20 | N/C | . |
| 21 | N/C | . |
| 22 | 31A | (P1-10) |
| 23 | 70 | (P1-3) |
| 24 | N/C | . |
| 25 | N/C | . |
| 26 | N/C | . |
| 27 | N/C | . |
| 28 | N/C | . |
| 29 | N/C | . |
| 30 | N/C | . |
| 31 | 14N1 | (W2) |
| 32 | WHT | (QCON32) |
| 33 | GRN | (P1-17) |
| 34 | YEL | (P1-13) |

LEGEND

- BCA - BATTERY CHARGING ALTERNATOR
- CLS - COOLANT LEVEL SENDER
- CT(#)- CURRENT TRANSFORMER
- D(#)- DIODE
- EBC - ENGINE BLOCK GROUND
- ECM - ENGINE CONTROL MODULE
- ESS - EMERGENCY STOP SWITCH
- GND - CONTROLLER BOX GROUND
- IB - INTERFACE BOARD
- K20 - STARTER RELAY
- LCT - LOW COOLANT TEMPERATURE SWITCH
- OPS - OIL PRESSURE SENSOR
- P(#)- CONNECTOR
- PGND - CONTROLLER PANEL GROUND
- PL(#)- PANEL LAMP
- QCON(#)- QUICK CONNECT
- SM - STARTER MOTOR
- SS - STARTER SOLENOID
- STAT - STATOR
- SW(#)- SWITCH
- TB1 - INTERCONNECTION BOARD TERMINAL BLOCK
- TB2 - A/D TERMINAL BLOCK
- TB3 - OUTPUT TERMINAL BLOCK
- TB4 - DIGITAL INPUT TERMINAL
- TB5 - CONTROLLER A.C. FUSE BLOCK
- TB10 - ACCESSORY TERMINAL BLOCK
- TB12 - VSG TERMINAL BLOCK



| CONNECTION CHART | | | |
|-------------------------|--------------------|------------------------|--|
| TB12 TERMINAL POSITION | SIGNAL DESCRIPTION | | |
| | CONNECTED | NOT CONNECTED | |
| DROOP SELECT | 1 | ISOCHRONOUS DROOP | |
| ANALOG THROTTLE CONTROL | 2* | +5 VDC REF | |
| | 3* | SIGNAL (+2.5 VDC NORM) | |
| IDLE MODE | 4* | SENSOR RETURN | |
| | 5 | CONSULT FACTORY | |
| | 6 | | |

* REMOVE RESISTORS IF PARALLELING

P23 CONNECTIONS

| PIN # | WIRE | TERMINAL |
|-------|------|----------|
| 1 | P | (W2) |
| 2 | N3 | (W2) |
| 3 | 71 | (P1-1) |
| 4 | N/C | . |
| 5 | 14S | (P1B-9) |

FOR SCHEMATIC SEE ADV-8000

APM402 / DEC-3000 CONTROLLER
350-500 KW JOHN DEERE TIER III W/ECM
W/SPLIT ACTIVATOR, 1ø, 3ø & 600V

UNLESS OTHERWISE SPECIFIED -
1) DIMENSIONS ARE IN INCHES
2) TOLERANCES ARE:
XXX ± .010 ANGLES ± 1/2°
XX ± .030 SURFACE FINISH
X ± .060 MAX.
FRACTIONS ±

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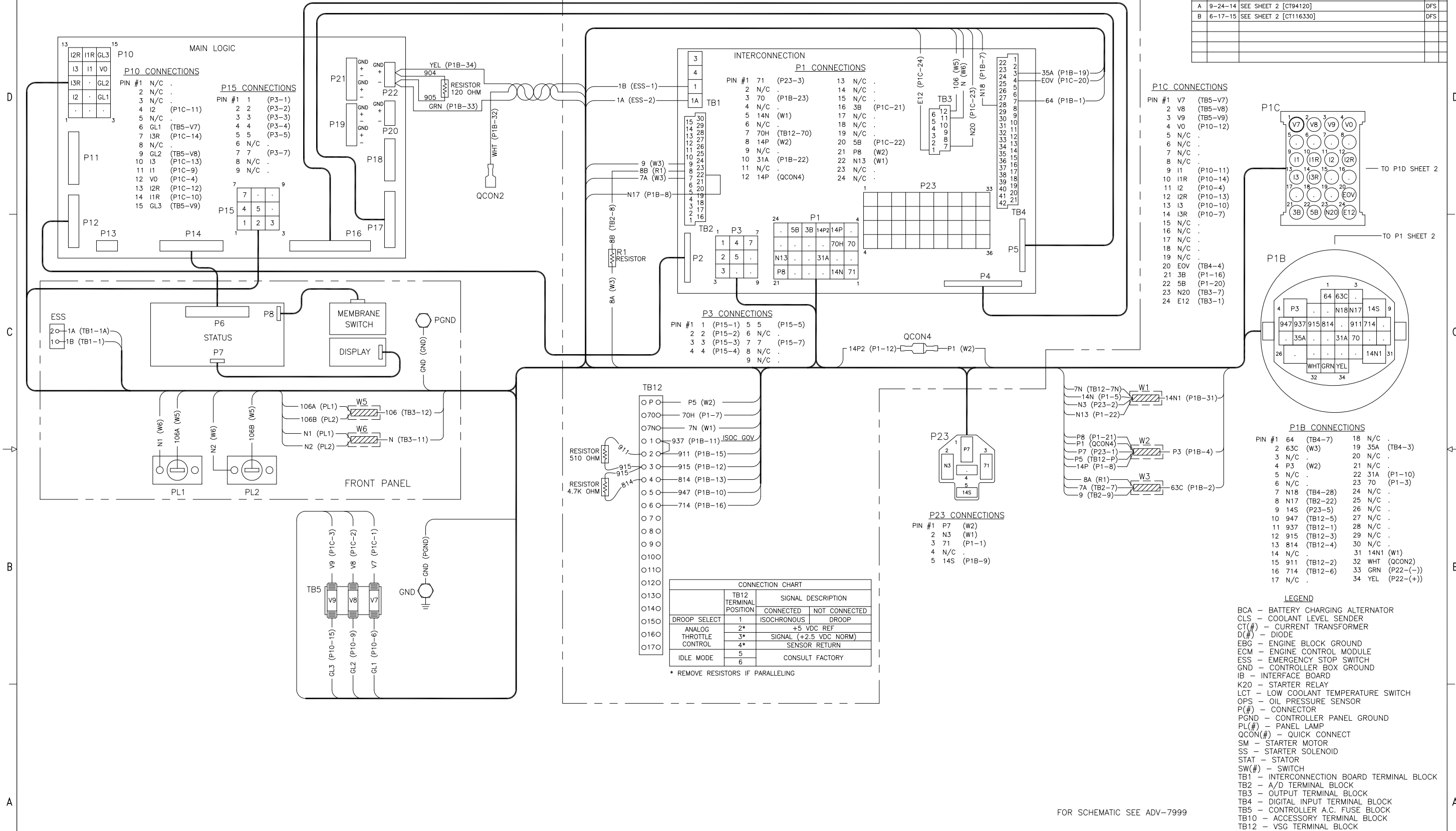
TITLE: **DIAGRAM, WIRING**
350-500 JD TIER III

| | | | | |
|-----------|---------|-------|----------|-------|
| APPROVALS | DATE | SCALE | DWG. NO. | SHEET |
| DRN: CRS | 9-13-10 | /// | GM77987 | 1-2 |
| CHEK: DFS | 9-13-10 | | | |
| APPR: CRS | 9-13-10 | | | |

CONTROLLER COMPARTMENT

TOP COMPARTMENT (CUSTOMER CONNECTIONS)

| REV | DATE | REVISION | BY |
|-----|---------|------------------------|-----|
| - | 9-13-10 | NEW DRAWING [90285-4] | CRS |
| A | 9-24-14 | SEE SHEET 2 [CT94120] | DFS |
| B | 6-17-15 | SEE SHEET 2 [CT116330] | DFS |

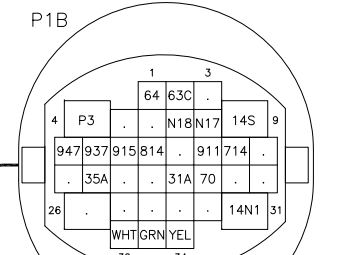
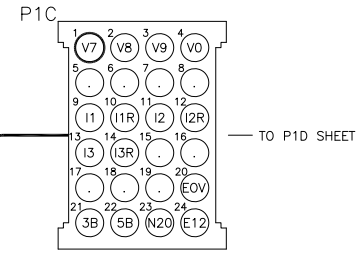


| TB12 TERMINAL POSITION | SIGNAL DESCRIPTION | |
|------------------------|------------------------|---------------|
| | CONNECTED | NOT CONNECTED |
| 1 | ISOCHRONOUS | DROOP |
| 2* | +5 VDC REF | |
| 3* | SIGNAL (+2.5 VDC NORM) | |
| 4* | SENSOR RETURN | |
| 5 | CONSULT FACTORY | |
| 6 | | |

* REMOVE RESISTORS IF PARALLELING

P1C CONNECTIONS

| PIN #1 | CONNECTION |
|--------|--------------|
| 1 | V7 (TB5-V7) |
| 2 | V8 (TB5-V8) |
| 3 | V9 (TB5-V9) |
| 4 | V0 (P10-12) |
| 5 | N/C |
| 6 | N/C |
| 7 | N/C |
| 8 | N/C |
| 9 | I1 (P10-11) |
| 10 | I1R (P10-14) |
| 11 | I2 (P10-4) |
| 12 | I2R (P10-13) |
| 13 | I3 (P10-10) |
| 14 | I3R (P10-7) |
| 15 | N/C |
| 16 | N/C |
| 17 | N/C |
| 18 | N/C |
| 19 | N/C |
| 20 | EOV (TB4-4) |
| 21 | 3B (P1-16) |
| 22 | 5B (P1-20) |
| 23 | N20 (TB3-7) |
| 24 | E12 (TB3-1) |



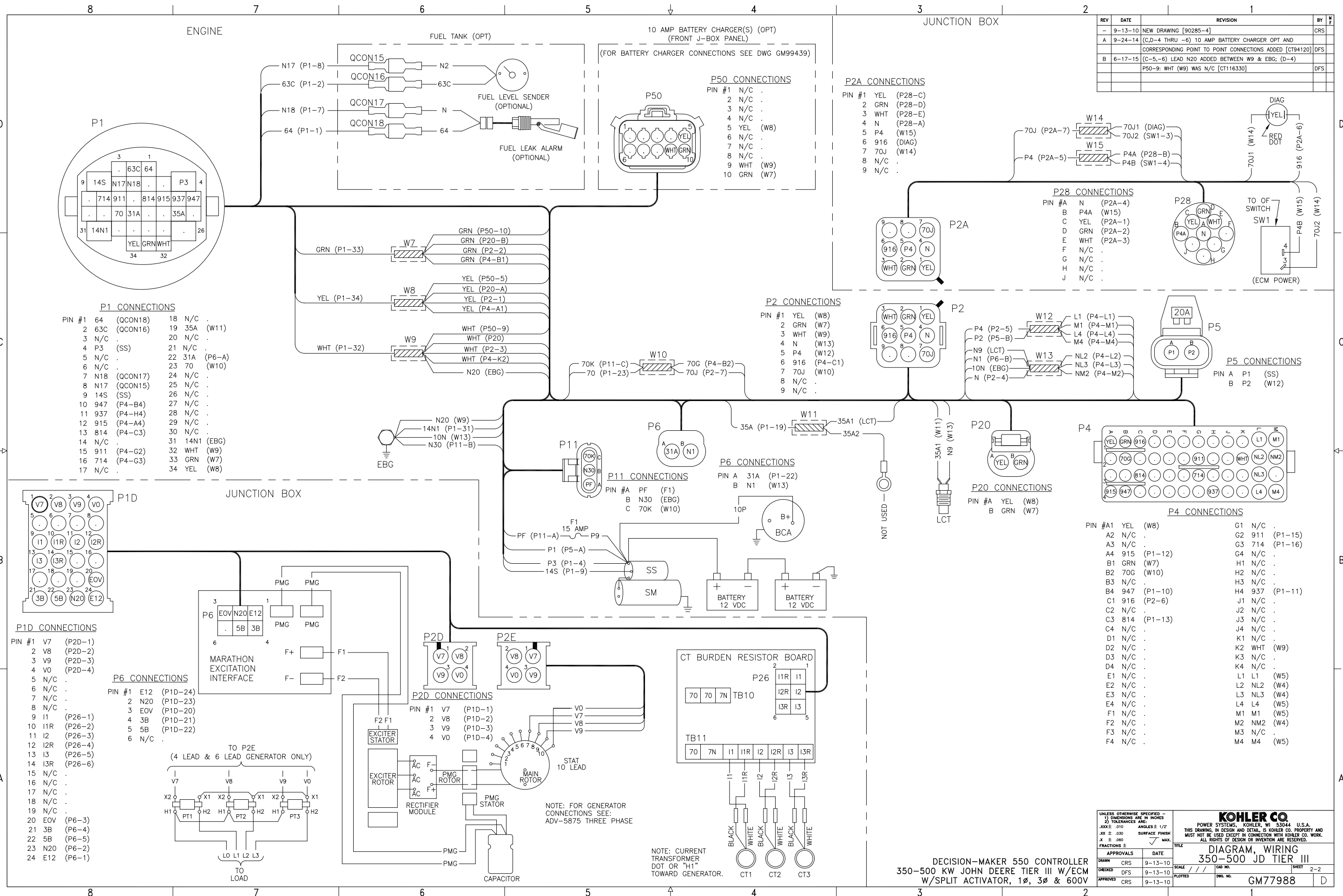
P1B CONNECTIONS

| PIN #1 | CONNECTION | CONNECTION |
|--------|--------------|------------------|
| 1 | 64 (TB4-7) | 18 N/C |
| 2 | 63C (W3) | 19 35A (TB4-3) |
| 3 | N/C | 20 N/C |
| 4 | P3 (W2) | 21 N/C |
| 5 | N/C | 22 31A (P1-10) |
| 6 | N/C | 23 70 (P1-3) |
| 7 | N18 (TB4-28) | 24 N/C |
| 8 | N17 (TB2-22) | 25 N/C |
| 9 | 14S (P23-5) | 26 N/C |
| 10 | 947 (TB12-5) | 27 N/C |
| 11 | 937 (TB12-1) | 28 N/C |
| 12 | 915 (TB12-3) | 29 N/C |
| 13 | 814 (TB12-4) | 30 N/C |
| 14 | N/C | 31 14N1 (W1) |
| 15 | 911 (TB12-2) | 32 WHT (QCON2) |
| 16 | 714 (TB12-6) | 33 GRN (P22-(-)) |
| 17 | N/C | 34 YEL (P22-(+)) |

- LEGEND
- BCA - BATTERY CHARGING ALTERNATOR
 - CLS - COOLANT LEVEL SENDER
 - CT(#)- CURRENT TRANSFORMER
 - D(#)- DIODE
 - EBG - ENGINE BLOCK GROUND
 - ECM - ENGINE CONTROL MODULE
 - ESS - EMERGENCY STOP SWITCH
 - GND - CONTROLLER BOX GROUND
 - IB - INTERFACE BOARD
 - K20 - STARTER RELAY
 - LCT - LOW COOLANT TEMPERATURE SWITCH
 - OPS - OIL PRESSURE SENSOR
 - P(#)- CONNECTOR
 - PGND - CONTROLLER PANEL GROUND
 - PL(#)- PANEL LAMP
 - QCON(#)- QUICK CONNECT
 - SM - STARTER MOTOR
 - SS - STARTER SOLENOID
 - STAT - STATOR
 - SW(#)- SWITCH
 - TB1 - INTERCONNECTION BOARD TERMINAL BLOCK
 - TB2 - A/D TERMINAL BLOCK
 - TB3 - OUTPUT TERMINAL BLOCK
 - TB4 - DIGITAL INPUT TERMINAL BLOCK
 - TB5 - CONTROLLER A.C. FUSE BLOCK
 - TB10 - ACCESSORY TERMINAL BLOCK
 - TB12 - VSG TERMINAL BLOCK

FOR SCHEMATIC SEE ADV-7999

| | | | |
|---|-----|---|-------|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: XXX ± .010 ANGLES ± 1/2° XXX ± .030 SURFACE FINISH X ± .060 FRACTIONS ± | | KOHLER CO. POWER SYSTEMS, KOHLER, WI 53044 U.S.A. THIS DRAWING, IN DESIGN AND DETAIL, IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | |
| APPROVALS | | DATE | |
| DRWN | CRS | 9-13-10 | |
| CHECKED | DFS | 9-13-10 | |
| APPROVED | CRS | 9-13-10 | |
| TITLE | | SCALE | SHEET |
| DECISION-MAKER 550 CONTROLLER | | 1/1 | 1-2 |
| 350-500 KW JOHN DEERE TIER III W/ECM | | PLOTTED | |
| W/SPLIT ACTIVATOR, 1ø, 3ø & 600V | | DWG. NO. | |
| | | GM77988 | D |



| REV | DATE | REVISION | BY |
|-----|---------|---|-----|
| - | 9-13-10 | NEW DRAWING [90285-4] | CRS |
| A | 9-24-14 | (C,D-4 THRU -6) 10 AMP BATTERY CHARGER OPT AND CORRESPONDING POINT TO POINT CONNECTIONS ADDED [CT94120] | DFS |
| B | 6-17-15 | (C-5,-6) LEAD N20 ADDED BETWEEN W9 & EBG; (D-4) P50-9: WHT (W9) WAS N/C [CT116330] | DFS |

| APPROVALS | | DATE | SCALE | CAD NO. | SHEET |
|-----------|-----|---------|-------|---------|-------|
| DRN | CRS | 9-13-10 | /// | | 2-2 |
| CHKD | DFS | 9-13-10 | | | |
| APPRD | CRS | 9-13-10 | | | |

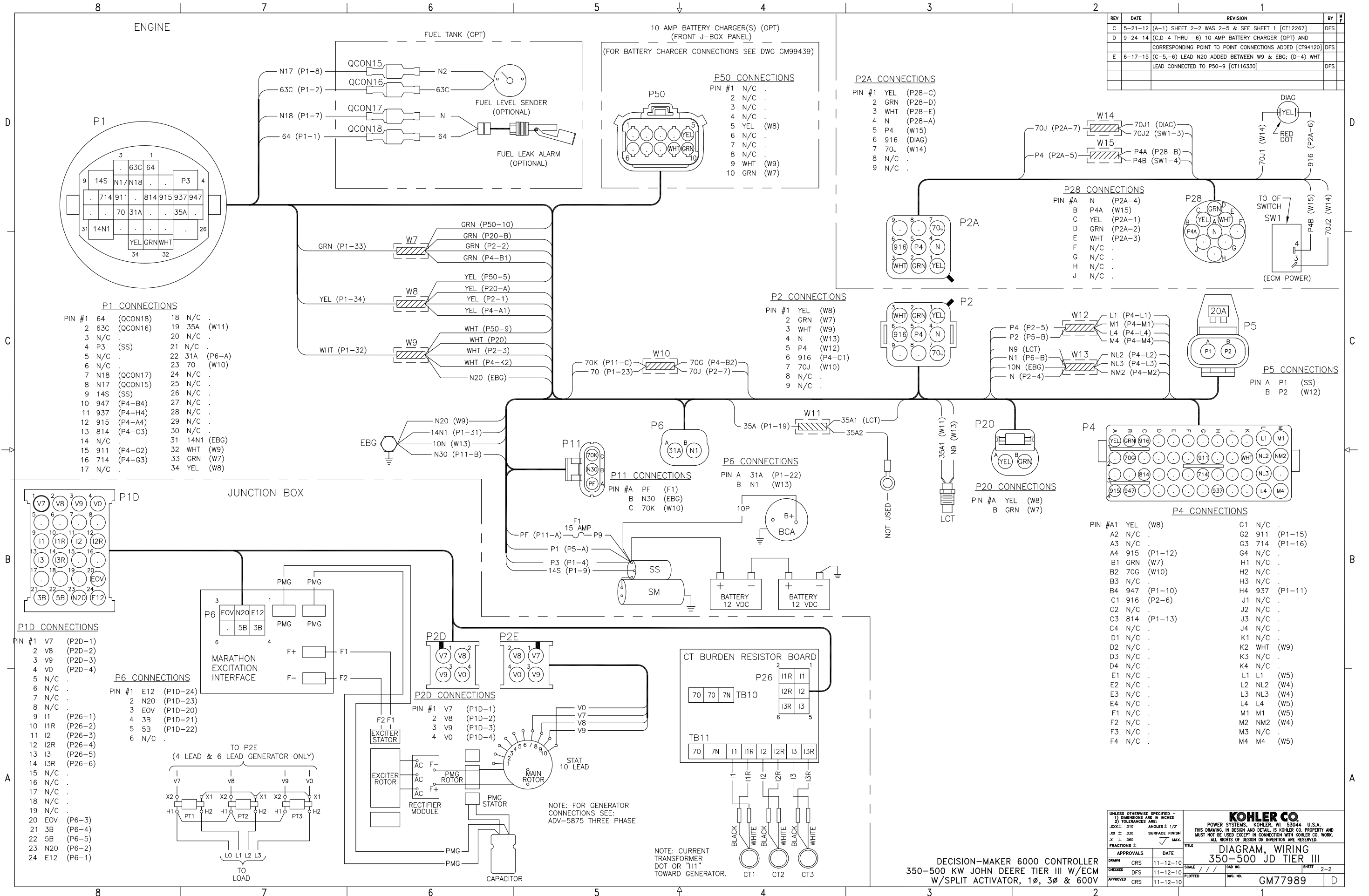
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2) TOLERANCES ARE:
XXX ± .010 ANGLES ± 1/2°
XX ± .030 SURFACE FINISH
X ± .060 ✓ MAX.
FRACTIONS ±

KOHLER CO.
POWER SYSTEMS, KOHLER, WI 53044 U.S.A.
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TITLE: **DIAGRAM, WIRING**
350-500 JD TIER III

ENC. NO. **GM77988**

| REV | DATE | REVISION | BY |
|-----|---------|---|-----|
| C | 5-21-12 | (A-1) SHEET 2-2 WAS 2-5 & SEE SHEET 1 [CT12267] | DFS |
| D | 9-24-14 | (C,D-4 THRU -6) 10 AMP BATTERY CHARGER (OPT) AND CORRESPONDING POINT TO POINT CONNECTIONS ADDED [CT94120] | DFS |
| E | 6-17-15 | (C-5,-6) LEAD N20 ADDED BETWEEN W9 & EBG; (D-4) WHT LEAD CONNECTED TO P50-9 [CT116330] | DFS |



P1 CONNECTIONS

| PIN # | Terminal | Color | Terminal | Color |
|-------|----------|----------|----------|------------|
| 1 | 64 | (QCON18) | 18 | N/C |
| 2 | 63C | (QCON16) | 19 | 35A (W11) |
| 3 | N/C | | 20 | N/C |
| 4 | P3 | (SS) | 21 | N/C |
| 5 | N/C | | 22 | 31A (P6-A) |
| 6 | N/C | | 23 | 70 (W10) |
| 7 | N18 | (QCON17) | 24 | N/C |
| 8 | N17 | (QCON15) | 25 | N/C |
| 9 | 14S | (SS) | 26 | N/C |
| 10 | 947 | (P4-B4) | 27 | N/C |
| 11 | 937 | (P4-H4) | 28 | N/C |
| 12 | 915 | (P4-A4) | 29 | N/C |
| 13 | 814 | (P4-C3) | 30 | N/C |
| 14 | N/C | | 31 | 14N1 (EBG) |
| 15 | 911 | (P4-G2) | 32 | WHT (W9) |
| 16 | 714 | (P4-G3) | 33 | GRN (W7) |
| 17 | N/C | | 34 | YEL (W8) |

P50 CONNECTIONS

| PIN # | Color | Terminal |
|-------|----------|----------|
| 1 | N/C | |
| 2 | N/C | |
| 3 | N/C | |
| 4 | N/C | |
| 5 | YEL (W8) | |
| 6 | N/C | |
| 7 | N/C | |
| 8 | N/C | |
| 9 | WHT (W9) | |
| 10 | GRN (W7) | |

P2A CONNECTIONS

| PIN # | Color | Terminal |
|-------|-------|----------|
| 1 | YEL | (P28-C) |
| 2 | GRN | (P28-D) |
| 3 | WHT | (P28-E) |
| 4 | N | (P28-A) |
| 5 | P4 | (W15) |
| 6 | 916 | (DIAG) |
| 7 | 70J | (W14) |
| 8 | N/C | |
| 9 | N/C | |

P28 CONNECTIONS

| PIN # | Color | Terminal |
|-------|-------|----------|
| A | N | (P2A-4) |
| B | P4A | (W15) |
| C | YEL | (P2A-1) |
| D | GRN | (P2A-2) |
| E | WHT | (P2A-3) |
| F | N/C | |
| G | N/C | |
| H | N/C | |
| J | N/C | |

P2 CONNECTIONS

| PIN # | Color | Terminal |
|-------|-------|----------|
| 1 | YEL | (W8) |
| 2 | GRN | (W7) |
| 3 | WHT | (W9) |
| 4 | N | (W13) |
| 5 | P4 | (W12) |
| 6 | 916 | (P4-C1) |
| 7 | 70J | (W10) |
| 8 | N/C | |
| 9 | N/C | |

P5 CONNECTIONS

| PIN | Terminal |
|-----|----------|
| A | P1 (SS) |
| B | P2 (W12) |

P4 CONNECTIONS

| PIN # | Color | Terminal |
|-------|-------------|----------|
| A1 | YEL (W8) | |
| A2 | N/C | |
| A3 | N/C | |
| A4 | 915 (P1-12) | |
| B1 | GRN (W7) | |
| B2 | 70G (W10) | |
| B3 | N/C | |
| B4 | 947 (P1-10) | |
| C1 | 916 (P2-6) | |
| C2 | N/C | |
| C3 | 814 (P1-13) | |
| C4 | N/C | |
| D1 | N/C | |
| D2 | N/C | |
| D3 | N/C | |
| D4 | N/C | |
| E1 | N/C | |
| E2 | N/C | |
| E3 | N/C | |
| E4 | N/C | |
| F1 | N/C | |
| F2 | N/C | |
| F3 | N/C | |
| F4 | N/C | |
| G1 | N/C | |
| G2 | 911 (P1-15) | |
| G3 | 714 (P1-16) | |
| G4 | N/C | |
| H1 | N/C | |
| H2 | N/C | |
| H3 | N/C | |
| H4 | 937 (P1-11) | |
| J1 | N/C | |
| J2 | N/C | |
| J3 | N/C | |
| J4 | N/C | |
| K1 | N/C | |
| K2 | WHT (W9) | |
| K3 | N/C | |
| K4 | N/C | |
| L1 | L1 (W5) | |
| L2 | NL2 (W4) | |
| L3 | NL3 (W4) | |
| L4 | L4 (W5) | |
| M1 | M1 (W5) | |
| M2 | NM2 (W4) | |
| M3 | N/C | |
| M4 | M4 (W5) | |

P1D CONNECTIONS

| PIN # | Terminal | Color | Terminal | Color |
|-------|----------|---------|----------|-------|
| 1 | V7 | (P2D-1) | | |
| 2 | V8 | (P2D-2) | | |
| 3 | V9 | (P2D-3) | | |
| 4 | V0 | (P2D-4) | | |
| 5 | N/C | | | |
| 6 | N/C | | | |
| 7 | N/C | | | |
| 8 | N/C | | | |
| 9 | I1 | (P26-1) | | |
| 10 | I1R | (P26-2) | | |
| 11 | I2 | (P26-3) | | |
| 12 | I2R | (P26-4) | | |
| 13 | I3 | (P26-5) | | |
| 14 | I3R | (P26-6) | | |
| 15 | N/C | | | |
| 16 | N/C | | | |
| 17 | N/C | | | |
| 18 | N/C | | | |
| 19 | N/C | | | |
| 20 | EOV | (P6-3) | | |
| 21 | 3B | (P6-4) | | |
| 22 | 5B | (P6-5) | | |
| 23 | N20 | (P6-2) | | |
| 24 | E12 | (P6-1) | | |

P6 CONNECTIONS

| PIN # | Terminal | Color | Terminal | Color |
|-------|----------|----------|----------|-------|
| 1 | E12 | (P1D-24) | | |
| 2 | N20 | (P1D-23) | | |
| 3 | EOV | (P1D-20) | | |
| 4 | 3B | (P1D-21) | | |
| 5 | 5B | (P1D-22) | | |
| 6 | N/C | | | |

P2D CONNECTIONS

| PIN # | Terminal | Color | Terminal | Color |
|-------|----------|---------|----------|-------|
| 1 | V7 | (P1D-1) | | |
| 2 | V8 | (P1D-2) | | |
| 3 | V9 | (P1D-3) | | |
| 4 | V0 | (P1D-4) | | |

NOTE: FOR GENERATOR CONNECTIONS SEE: ADV-5875 THREE PHASE

NOTE: CURRENT TRANSFORMER DOT OR "H1" TOWARD GENERATOR.

UNLESS OTHERWISE SPECIFIED -
 1) DIMENSIONS ARE IN INCHES
 2) TOLERANCES ARE:
 .XXX ± .010 ANGLES ± 1/2°
 .XX ± .030 SURFACE FINISH
 .X ± .060 ✓ MAX.
 FRACTIONS ±

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TITLE: **DIAGRAM, WIRING**
350-500 JD TIER III

| | | | | |
|------------|----------|---------|----------|-------|
| APPROVALS | DATE | SCALE | CAD NO. | SHEET |
| DRN: CRS | 11-12-10 | /// | | 2-2 |
| CHKD: DFS | 11-12-10 | PLOTTED | ENG. NO. | |
| APPRV: CRS | 11-12-10 | | | |

DECISION-MAKER 6000 CONTROLLER
 350-500 KW JOHN DEERE TIER III W/ECM
 W/SPLIT ACTIVATOR, 1Ø, 3Ø & 600V

GM77989

| REV | DATE | REVISION | BY | WF |
|-----|----------|---|----|-----|
| F | 04-26-18 | (D-2,-3) COMMENT "NOT AVAILABLE AS A STANDALONE KIT", "OPTIONAL, INCLUDED IN SHUNT TRIP KIT" ARE ADDED, SEE SHEET 2 [CT186997] | | SBR |
| G | 2-6-19 | (A,B-6,-7,-8) ADDED GROUND FAULT RELAY INPUT; TB1-D11 LOW FUEL PRESSURE WAS EXCITATION OVER VOLTAGE (4M,5M,7M) (A,B-1,-2,-3) ADDED NOTE 5 AND 6 IN INSTALLATION NOTES [CT193515] | | SBR |

LEGEND
P(#) - PLUG
QCON(#) - QUICK CONNECT
TB(#) - TERMINAL BLOCK
W(#) - SONIC WELD

P29 2 AMP RELAY OUTPUT (2.1) CONNECTIONS
P29-NC 2.1 RELAY NORMALLY CLOSED
P29-COM 2.1 RELAY COMMON
P29-NO 2.1 RELAY NORMALLY OPEN

P30 2 AMP RELAY OUTPUT (2.2) CONNECTIONS
P30-NC 2.2 RELAY NORMALLY CLOSED
P30-COM 2.2 RELAY COMMON
P30-NO 2.2 RELAY NORMALLY OPEN

P31 2 AMP RELAY OUTPUT (2.3) CONNECTIONS
P31-NC 2.3 RELAY NORMALLY CLOSED
P31-COM 2.3 RELAY COMMON
P31-NO 2.3 RELAY NORMALLY OPEN

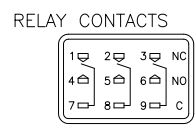
P32 10 AMP RELAY OUTPUT (2.4 & 2.5) CONNECTIONS
P32-NO 2.4 RELAY NORMALLY OPEN
P32-COM 2.4 RELAY COMMON
P32-NC 2.4 RELAY NORMALLY CLOSED
P32-NO 2.5 RELAY NORMALLY OPEN
P32-COM 2.5 RELAY COMMON
P32-NC 2.5 RELAY NORMALLY CLOSED

P27 CAN TERMINATOR CONNECTIONS
PLACE THE P27 JUMPER ON THE "IN" PINS

P28 SINGLE-ENDED (0-5V) ANALOG INPUT CONNECTIONS
P28-GND AGND ANALOG RETURN
P28-VN2 NO CONNECTION
P28-VP2 ACH2 SIGNAL
P28-+5V SUPPLY (0.05 AMP MAX)
P28-GND AGND ANALOG RETURN
P28-VN1 NO CONNECTION
P28-VP1 ACH1 SIGNAL
P28-+5V SUPPLY (0.05 AMP MAX)

P28 DIFFERENTIAL (+/-3V) ANALOG INPUT CONNECTIONS
P28-GND AGND ANALOG REFERENCE
P28-VN2 ACH2 NEGATIVE DIFFERENTIAL SIGNAL
P28-VP2 ACH2 POSITIVE DIFFERENTIAL SIGNAL
P28-+5V SUPPLY (0.05 AMP MAX)
P28-GND AGND ANALOG RETURN
P28-VN1 ACH1 NEGATIVE DIFFERENTIAL SIGNAL
P28-VP1 ACH1 POSITIVE DIFFERENTIAL SIGNAL
P28-+5V SUPPLY (0.05 AMP MAX)

NOTE: CONTACT AUTHORIZED DISTRIBUTOR TO DEFINE P28 A/D INPUTS.

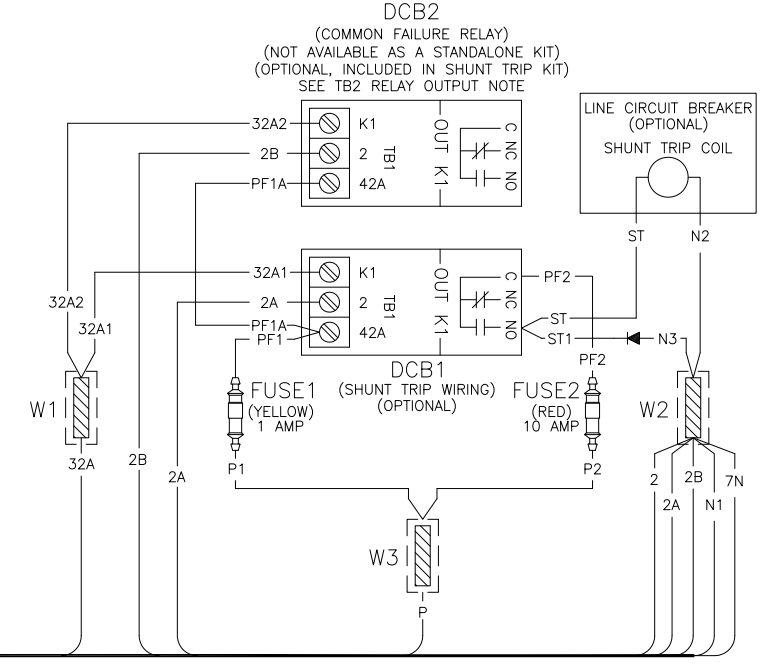


TB10-8 (70):
BATTERY VOLTAGE PRESENT ONLY WHEN GENERATOR IS OPERATING

TB2 NOTE:
IF SHUNT TRIP OR FAILURE RELAY IS NOT USED, DISCONNECT & TAPE LEADS 2 & 32A.

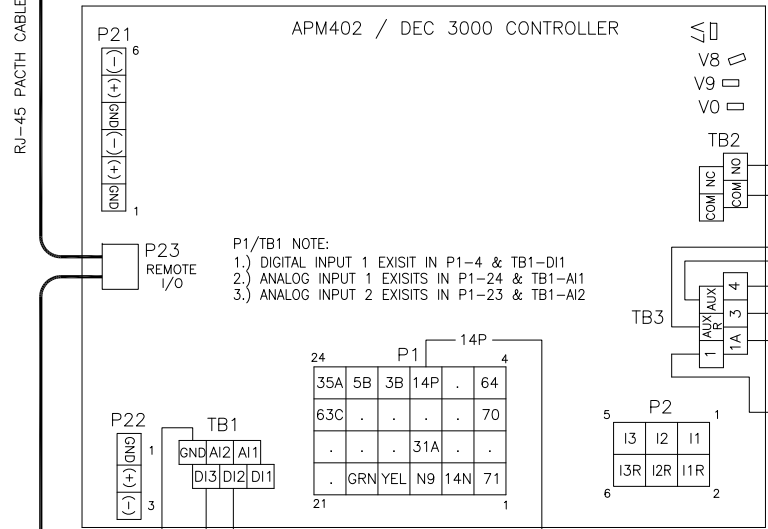
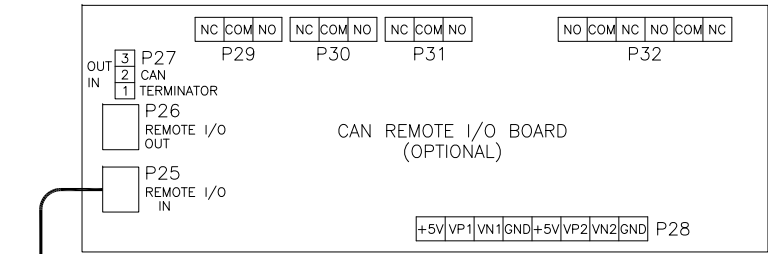
TB3 NOTE:
NOTE: TRANSFER SWITCH TERMINAL DESIGNATIONS MAY VARY FROM THOSE SHOWN HERE. VERIFY THE CORRECT DESIGNATIONS USING THE APPROPRIATE TRANSFER SWITCH WIRING DIAGRAM.

(TERMINALS 3 AND 4: REMOTE START SWITCH OR ENGINE START CONTACTS ON TRANSFER SWITCH)

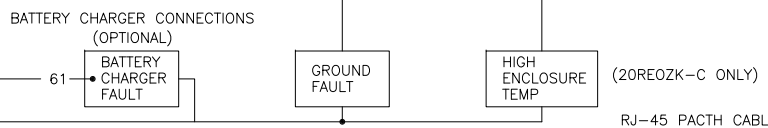
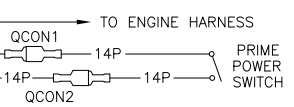
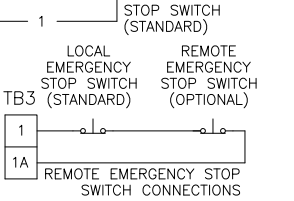
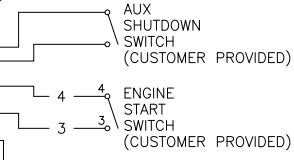
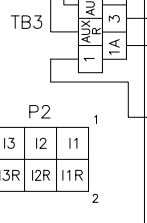
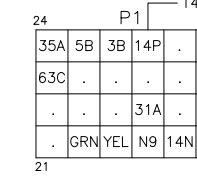


INSTALLATION NOTES:

- FOR FIELD INSTALLATION A MAXIMUM OF TWO WIRE TERMINALS PER TERMINAL STRIP SCREW IS RECOMMENDED UNLESS OTHERWISE NOTED ON THE WIRING DIAGRAM. DO NOT EXTEND ABOVE THE TERMINAL STRIP BARRIER.
- GENERATOR SETS WITH FUEL TANKS HAVE THE FUEL IN BASIN SWITCH TIED TO DIGITAL INPUT 1 (TB1-D11) VIA P1-4 AND FUEL LEVEL SENDER TIED TO ANALOG INPUT 2 (TB1-A12) VIA P1-23
- COOLANT LEVEL SENSOR ON ALL GENSSETS IS TIED TO ANALOG INPUT 1 (TB1-A12) VIA P1-24.
- 40-60 REOZK MODELS HAVE COLD START IGNITION RELAY TIED TO DIGITAL INPUT 2 (TB1-D12)
- GROUND FAULT WARNING : CONNECT TO REMOTE I/O BOARD ON 20REOZK-C.
- KEYSWITCH AVAILABLE ON SELECT MODELS ONLY.



P1/TB1 NOTE:
1.) DIGITAL INPUT 1 EXISTS IN P1-4 & TB1-D11
2.) ANALOG INPUT 1 EXISTS IN P1-24 & TB1-A11
3.) ANALOG INPUT 2 EXISTS IN P1-23 & TB1-A12



P21 RS485 NON-ISOLATED CONNECTIONS
P21-1 GND
P21-2 +
P21-3 -
P21-4 GND
P21-5 +
P21-6 -

TB1 ANALOG/DIGITAL INPUT FACTORY SETTINGS
TB1-D11 DCH1 LOW FUEL PRESSURE
TB1-D12 DCH2 AUX WARNING
TB1-D13 DCH3 BATTERY CHARGER FAULT WARNING
TB1-A11 ACH1 NO FUNCTION
TB1-A12 ACH2 NO FUNCTION
TB1-GND A/DGND ANALOG/DIGITAL RETURN

TB2 RELAY OUTPUT
TB2-COM (RELAY COMMON) COMMON FAULT
TB2-COM (RELAY COMMON) COMMON FAULT
TB2-NO (RELAY NORMALLY OPEN) COMMON FAULT
TB2-NC (RELAY NORMALLY CLOSED) COMMON FAULT

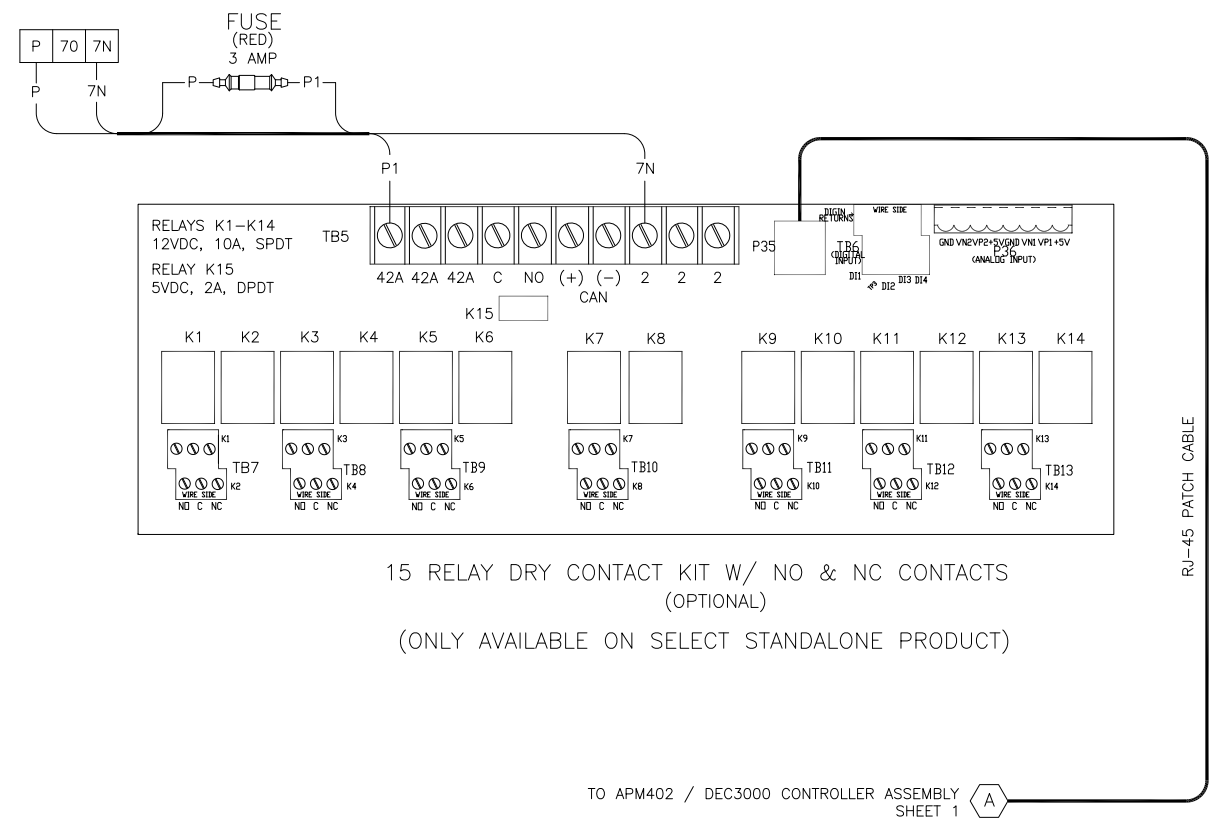
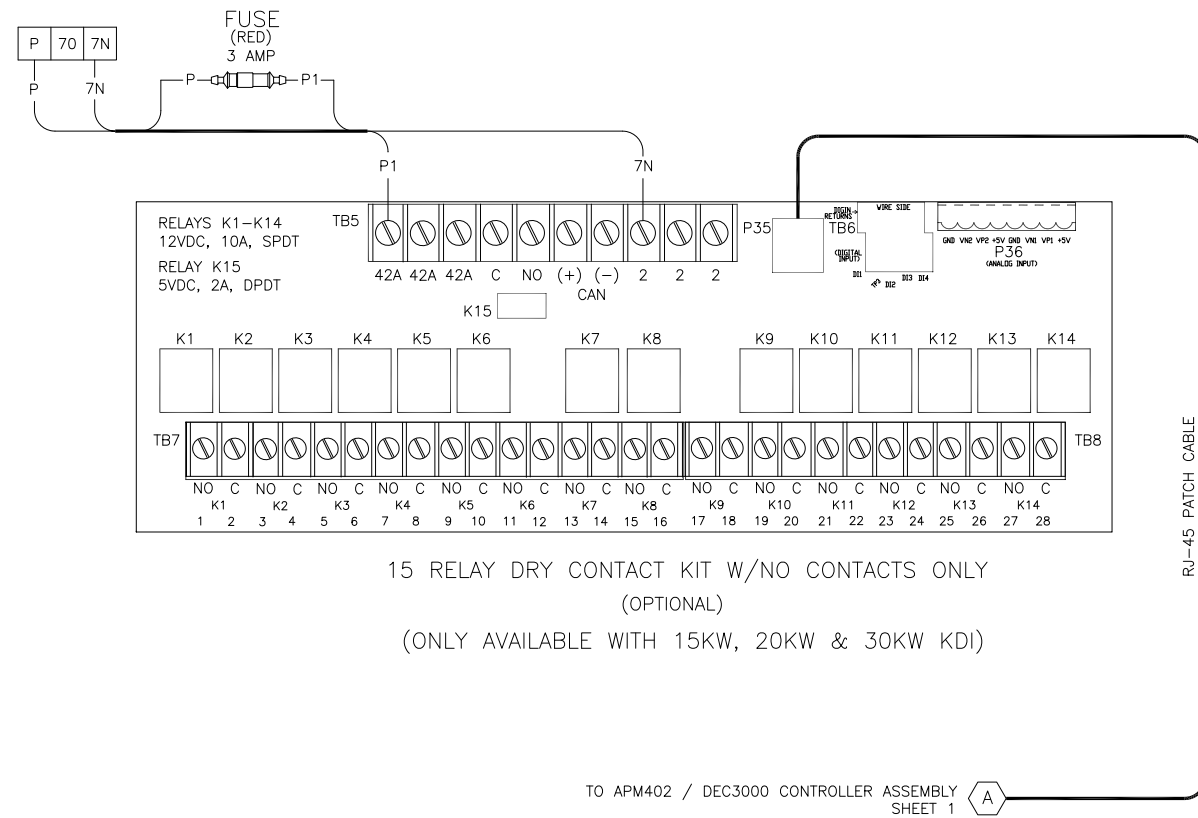
NOTE: TB2 RELAY OUTPUT MAY BE REDEFINED - FACTORY DEFAULT LISTED. CONTACT AUTHORIZED DISTRIBUTOR FOR DETAILS. CUSTOMER TO CONNECT TO TB2 UNLESS SHUNT TRIP IS USED. IF SHUNT TRIP IS USED, CUSTOMER TO CONNECT TO DCB2 FOR COMMON FAULT.

NOTE: TB1 A/D INPUTS MAY BE REDEFINED - FACTORY DEFAULTS LISTED. CONTACT AUTHORIZED DISTRIBUTOR FOR DETAILS.

| | | | |
|--|---------|--|-------|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: .XXX ± .010 ANGLES ± 1/2° .XX ± .030 SURFACE FINISH .X ± .060 | | KOHLER CO. POWER SYSTEMS, KOHLER, WI 53044 U.S.A. THIS DRAWING, IN WHOLE AND DETAIL, IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | |
| APPROVALS | DATE | SCALE | SHEET |
| DRAWN CRS | 9-16-10 | GM78246 | 1-2 |
| CHECKED DFS | 9-16-10 | | |
| APPROVED CRS | 9-16-10 | | |

APM402 / DEC 3000 ACCESSORIES

| REV | DATE | REVISION | BY |
|-----|----------|---|-----|
| F | 04-26-18 | (8-6,-2) COMMENT "APM402 / DEC 3000 ACCESSORIES" IS ADDED | SBR |
| | | SEE SHEET 1 [CT186997] | SBR |
| G | 2-6-19 | SEE SHEET 1 [CT193515] | SBR |
| | | | |
| | | | |



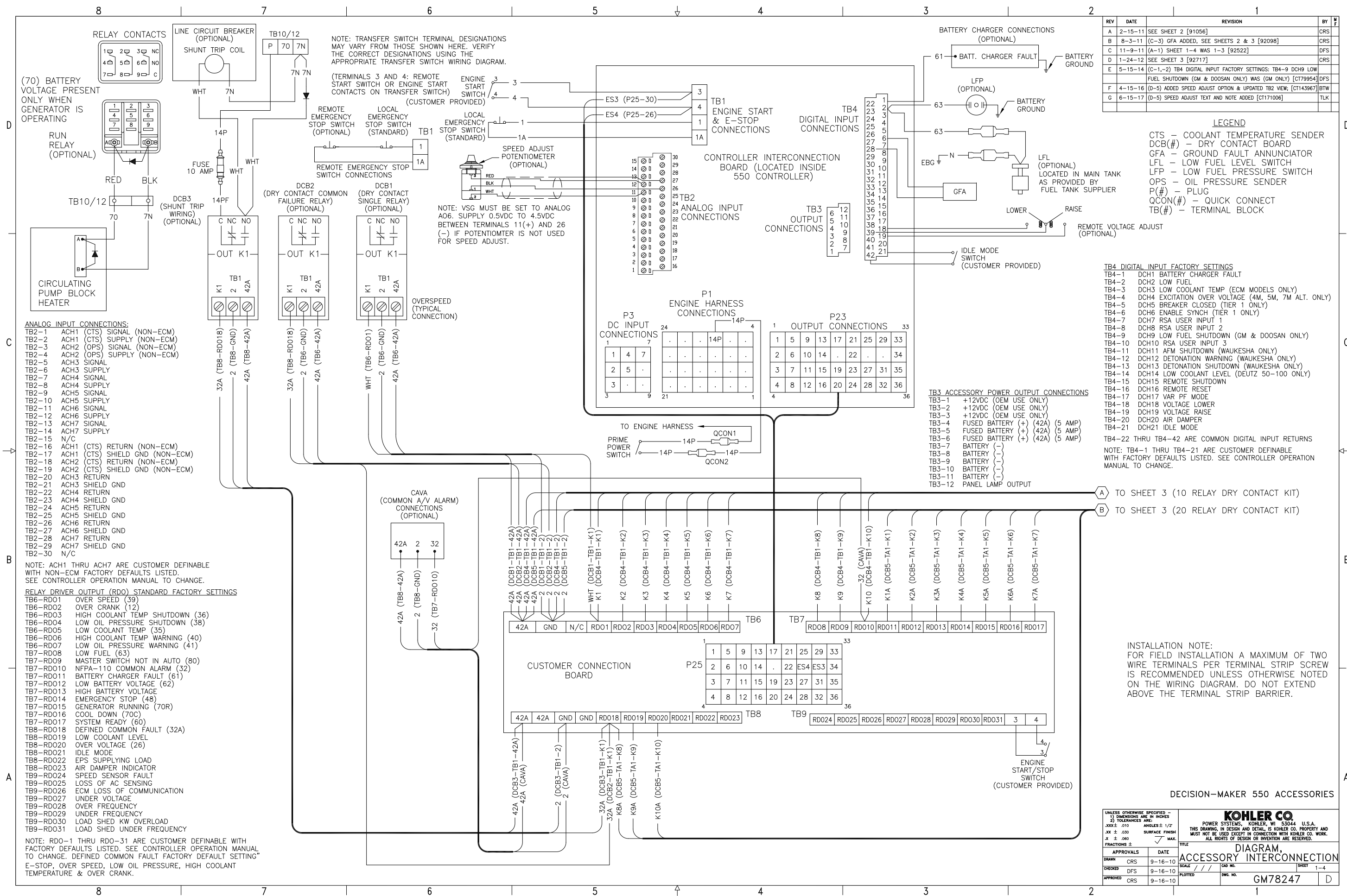
| APPROVALS | | DATE | SCALE | | CAD NO. | SHEET |
|-----------|-----|---------|-------|--|---------|-------|
| DRWN | DFS | 9-18-15 | /// | | | 2-2 |
| CHEK | CRS | 9-18-15 | | | | |
| APPR | DFS | 9-18-15 | | | | |

APM402 / DEC 3000 ACCESSORIES

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TITLE: **DIAGRAM, DEC3000/APM402 ACCY INTERCONNECTION**

DWG. NO.: **GM78246**



| REV | DATE | REVISION | BY |
|-----|---------|--|-----|
| A | 2-15-11 | SEE SHEET 2 [91056] | CRS |
| B | 8-3-11 | (C-3) GFA ADDED, SEE SHEETS 2 & 3 [92098] | CRS |
| C | 11-9-11 | (A-1) SHEET 1-4 WAS 1-3 [92522] | DFS |
| D | 1-24-12 | SEE SHEET 3 [92717] | CRS |
| E | 5-15-14 | (C-1,-2) TB4 DIGITAL INPUT FACTORY SETTINGS: TB4-9 DCH9 LOW FUEL SHUTDOWN (GM & DOOSAN ONLY) WAS (GM ONLY) [CT79954] | DFS |
| F | 4-15-16 | (D-5) ADDED SPEED ADJUST OPTION & UPDATED TB2 VIEW; [CT143967] | BTW |
| G | 6-15-17 | (D-5) SPEED ADJUST TEXT AND NOTE ADDED [CT171006] | TLK |

LEGEND

CTS - COOLANT TEMPERATURE SENDER
 DCB(##) - DRY CONTACT BOARD
 GFA - GROUND FAULT ANNUNCIATOR
 LFL - LOW FUEL LEVEL SWITCH
 LFP - LOW FUEL PRESSURE SWITCH
 OPS - OIL PRESSURE SENDER
 P(##) - PLUG
 QCON(##) - QUICK CONNECT
 TB(##) - TERMINAL BLOCK

TB4 DIGITAL INPUT FACTORY SETTINGS

| | |
|--------|---|
| TB4-1 | DCH1 BATTERY CHARGER FAULT |
| TB4-2 | DCH2 LOW FUEL |
| TB4-3 | DCH3 LOW COOLANT TEMP (ECM MODELS ONLY) |
| TB4-4 | DCH4 EXCITATION OVER VOLTAGE (4M, 5M, 7M ALT. ONLY) |
| TB4-5 | DCH5 BREAKER CLOSED (TIER 1 ONLY) |
| TB4-6 | DCH6 ENABLE SYNCH (TIER 1 ONLY) |
| TB4-7 | DCH7 RSA USER INPUT 1 |
| TB4-8 | DCH8 RSA USER INPUT 2 |
| TB4-9 | DCH9 LOW FUEL SHUTDOWN (GM & DOOSAN ONLY) |
| TB4-10 | DCH10 RSA USER INPUT 3 |
| TB4-11 | DCH11 AFM SHUTDOWN (WAUKESHA ONLY) |
| TB4-12 | DCH12 DETONATION WARNING (WAUKESHA ONLY) |
| TB4-13 | DCH13 DETONATION SHUTDOWN (WAUKESHA ONLY) |
| TB4-14 | DCH14 LOW COOLANT LEVEL (DEUTZ 50-100 ONLY) |
| TB4-15 | DCH15 REMOTE SHUTDOWN |
| TB4-16 | DCH16 REMOTE RESET |
| TB4-17 | DCH17 VAR PF MODE |
| TB4-18 | DCH18 VOLTAGE LOWER |
| TB4-19 | DCH19 VOLTAGE RAISE |
| TB4-20 | DCH20 AIR DAMPER |
| TB4-21 | DCH21 IDLE MODE |

NOTE: TB4-1 THRU TB4-21 ARE CUSTOMER DEFINABLE WITH FACTORY DEFAULTS LISTED. SEE CONTROLLER OPERATION MANUAL TO CHANGE.

TO SHEET 3 (10 RELAY DRY CONTACT KIT)

TO SHEET 3 (20 RELAY DRY CONTACT KIT)

INSTALLATION NOTE:
 FOR FIELD INSTALLATION A MAXIMUM OF TWO WIRE TERMINALS PER TERMINAL STRIP SCREW IS RECOMMENDED UNLESS OTHERWISE NOTED ON THE WIRING DIAGRAM. DO NOT EXTEND ABOVE THE TERMINAL STRIP BARRIER.

UNLESS OTHERWISE SPECIFIED -

1) DIMENSIONS ARE IN INCHES
 2) TOLERANCES ARE:
 .002 ± .010 ANGLES ± 1/2°
 .002 ± .030 SURFACE FINISH
 .X ± .060 MAX.

APPROVALS

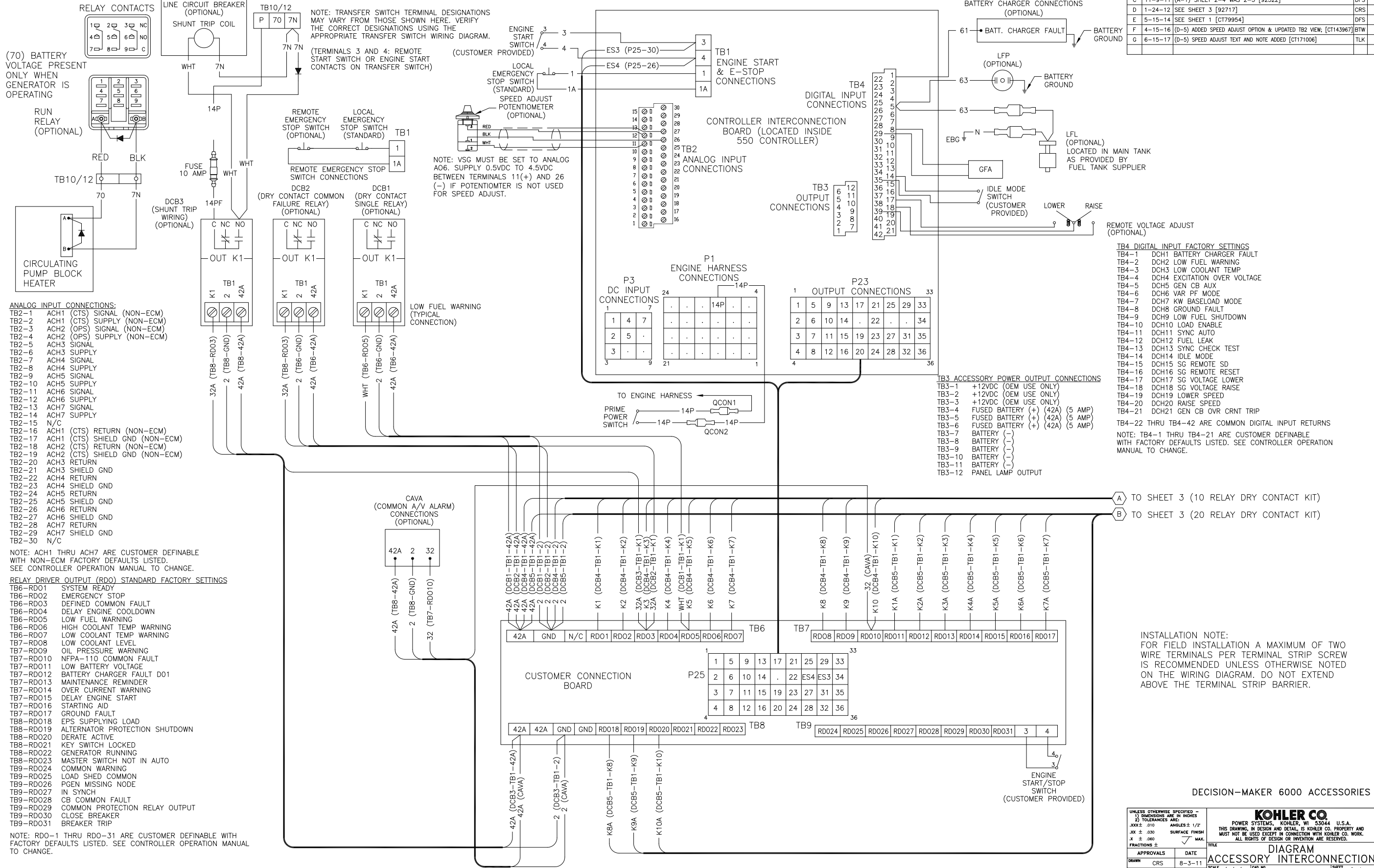
| APPROVALS | DATE |
|-----------|---------|
| CRS | 9-16-10 |
| DFS | 9-16-10 |
| CRS | 9-16-10 |

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DIAGRAM, ACCESSORY INTERCONNECTION

SCALE: / / / CAP NO. SHEET 1-4
 PLOTTED: DWG. NO. GM78247

| REV | DATE | REVISION | BY | MF |
|-----|---------|--|-----|----|
| B | 8-1-11 | THIS SHEET ADDED, SEE SHEETS 1 & 3 [92098] | CRS | |
| C | 11-9-11 | (A-1) SHEET 2-4 WAS 2-3 [92522] | DFS | |
| D | 1-24-12 | SEE SHEET 3 [92717] | CRS | |
| E | 5-15-14 | SEE SHEET 1 [CT79954] | DFS | |
| F | 4-15-16 | (D-5) ADDED SPEED ADJUST OPTION & UPDATED TB2 VIEW: [CT143967] | BTW | |
| G | 6-15-17 | (D-5) SPEED ADJUST TEXT AND NOTE ADDED [CT171006] | TLK | |



TB4 DIGITAL INPUT FACTORY SETTINGS

| | |
|--------|------------------------------|
| TB4-1 | DCH1 BATTERY CHARGER FAULT |
| TB4-2 | DCH2 LOW FUEL WARNING |
| TB4-3 | DCH3 LOW COOLANT TEMP |
| TB4-4 | DCH4 EXCITATION OVER VOLTAGE |
| TB4-5 | DCH5 GEN CB AUX |
| TB4-6 | DCH6 VAR PF MODE |
| TB4-7 | DCH7 KW BASELOAD MODE |
| TB4-8 | DCH8 GROUND FAULT |
| TB4-9 | DCH9 LOW FUEL SHUTDOWN |
| TB4-10 | DCH10 LOAD ENABLE |
| TB4-11 | DCH11 SYNC AUTO |
| TB4-12 | DCH12 FUEL LEAK |
| TB4-13 | DCH13 SYNC CHECK TEST |
| TB4-14 | DCH14 IDLE MODE |
| TB4-15 | DCH15 SG REMOTE SD |
| TB4-16 | DCH16 SG REMOTE RESET |
| TB4-17 | DCH17 SG VOLTAGE LOWER |
| TB4-18 | DCH18 SG VOLTAGE RAISE |
| TB4-19 | DCH19 LOWER SPEED |
| TB4-20 | DCH20 RAISE SPEED |
| TB4-21 | DCH21 GEN CB OVR CRNT TRIP |

TB4-22 THRU TB4-42 ARE COMMON DIGITAL INPUT RETURNS
NOTE: TB4-1 THRU TB4-21 ARE CUSTOMER DEFINABLE WITH FACTORY DEFAULTS LISTED. SEE CONTROLLER OPERATION MANUAL TO CHANGE.

- ANALOG INPUT CONNECTIONS:**
- TB2-1 ACH1 (CTS) SIGNAL (NON-ECM)
 - TB2-2 ACH1 (CTS) SUPPLY (NON-ECM)
 - TB2-3 ACH2 (OPS) SIGNAL (NON-ECM)
 - TB2-4 ACH2 (OPS) SUPPLY (NON-ECM)
 - TB2-5 ACH3 SIGNAL
 - TB2-6 ACH3 SUPPLY
 - TB2-7 ACH4 SIGNAL
 - TB2-8 ACH4 SUPPLY
 - TB2-9 ACH5 SIGNAL
 - TB2-10 ACH5 SUPPLY
 - TB2-11 ACH6 SIGNAL
 - TB2-12 ACH6 SUPPLY
 - TB2-13 ACH7 SIGNAL
 - TB2-14 ACH7 SUPPLY
 - TB2-15 N/C
 - TB2-16 ACH1 (CTS) RETURN (NON-ECM)
 - TB2-17 ACH1 (CTS) SHIELD GND (NON-ECM)
 - TB2-18 ACH2 (CTS) RETURN (NON-ECM)
 - TB2-19 ACH2 (CTS) SHIELD GND (NON-ECM)
 - TB2-20 ACH3 RETURN
 - TB2-21 ACH3 SHIELD GND
 - TB2-22 ACH4 RETURN
 - TB2-23 ACH4 SHIELD GND
 - TB2-24 ACH5 RETURN
 - TB2-25 ACH5 SHIELD GND
 - TB2-26 ACH6 RETURN
 - TB2-27 ACH6 SHIELD GND
 - TB2-28 ACH7 RETURN
 - TB2-29 ACH7 SHIELD GND
 - TB2-30 N/C

- RELAY DRIVER OUTPUT (RDO) STANDARD FACTORY SETTINGS**
- TB6-RD01 SYSTEM READY
 - TB6-RD02 EMERGENCY STOP
 - TB6-RD03 DEFINED COMMON FAULT
 - TB6-RD04 DELAY ENGINE COOLDOWN
 - TB6-RD05 LOW FUEL WARNING
 - TB6-RD06 HIGH COOLANT TEMP WARNING
 - TB6-RD07 LOW COOLANT TEMP WARNING
 - TB7-RD08 LOW COOLANT LEVEL
 - TB7-RD09 OIL PRESSURE WARNING
 - TB7-RD010 NFPA-110 COMMON FAULT
 - TB7-RD011 LOW BATTERY VOLTAGE
 - TB7-RD012 BATTERY CHARGER FAULT D01
 - TB7-RD013 MAINTENANCE REMINDER
 - TB7-RD014 OVER CURRENT WARNING
 - TB7-RD015 DELAY ENGINE START
 - TB7-RD016 STARTING AID
 - TB7-RD017 GROUND FAULT
 - TB8-RD018 EPS SUPPLYING LOAD
 - TB8-RD019 ALTERNATOR PROTECTION SHUTDOWN
 - TB8-RD020 DERATE ACTIVE
 - TB8-RD021 KEY SWITCH LOCKED
 - TB8-RD022 GENERATOR RUNNING
 - TB8-RD023 MASTER SWITCH NOT IN AUTO
 - TB9-RD024 COMMON WARNING
 - TB9-RD025 LOAD SHED COMMON
 - TB9-RD026 POEN MISSING NODE
 - TB9-RD027 IN SYNC
 - TB9-RD028 CB COMMON FAULT
 - TB9-RD029 COMMON PROTECTION RELAY OUTPUT
 - TB9-RD030 CLOSE BREAKER
 - TB9-RD031 BREAKER TRIP

NOTE: RDO-1 THRU RDO-31 ARE CUSTOMER DEFINABLE WITH FACTORY DEFAULTS LISTED. SEE CONTROLLER OPERATION MANUAL TO CHANGE.

A TO SHEET 3 (10 RELAY DRY CONTACT KIT)
B TO SHEET 3 (20 RELAY DRY CONTACT KIT)

INSTALLATION NOTE:
FOR FIELD INSTALLATION A MAXIMUM OF TWO WIRE TERMINALS PER TERMINAL STRIP SCREW IS RECOMMENDED UNLESS OTHERWISE NOTED ON THE WIRING DIAGRAM. DO NOT EXTEND ABOVE THE TERMINAL STRIP BARRIER.

UNLESS OTHERWISE SPECIFIED -
1) DIMENSIONS ARE IN INCHES
2) TOLERANCES ARE:
XXX ± .010 ANGLES ± 1/2°
XX ± .030 SURFACE FINISH
X ± .060

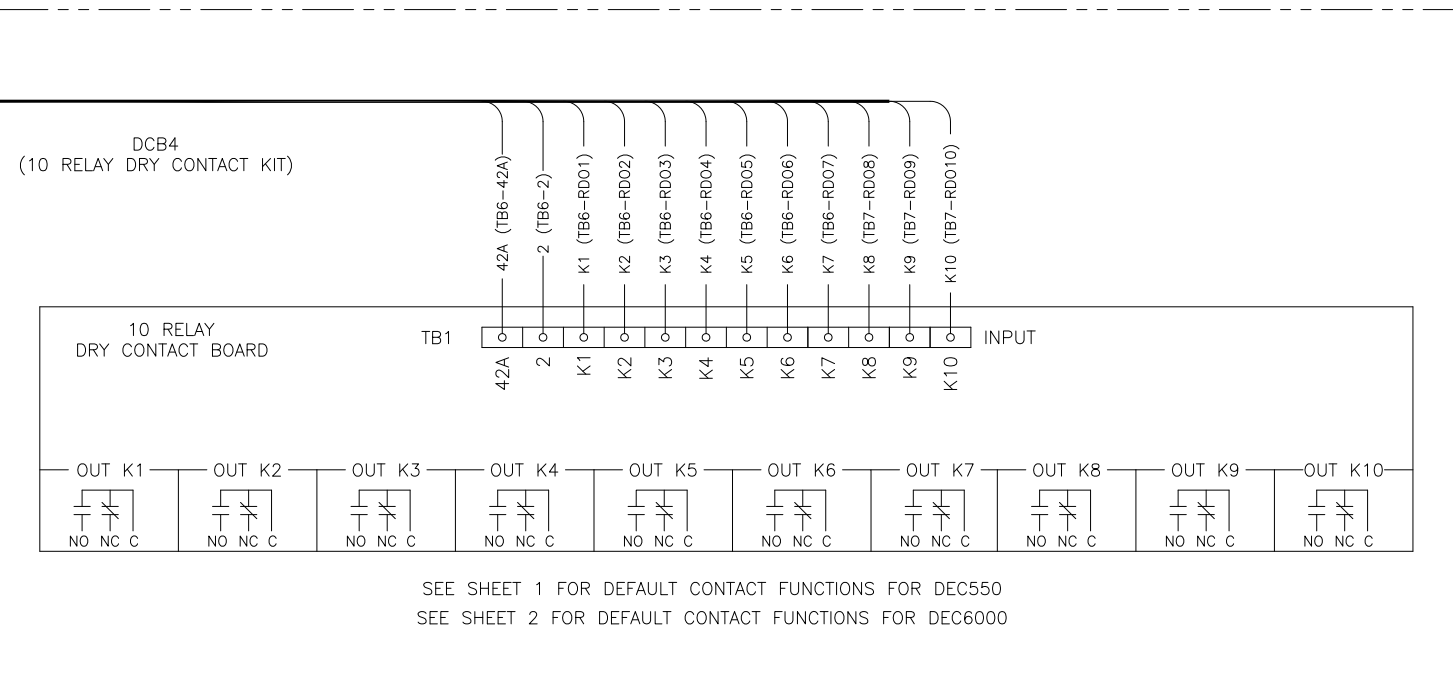
KOHLER CO.
POWER SYSTEMS, KOHLER, WI 53044 U.S.A.
THIS DRAWING, IN DESIGN AND DETAIL, IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

TITLE: **DIAGRAM ACCESSORY INTERCONNECTION**

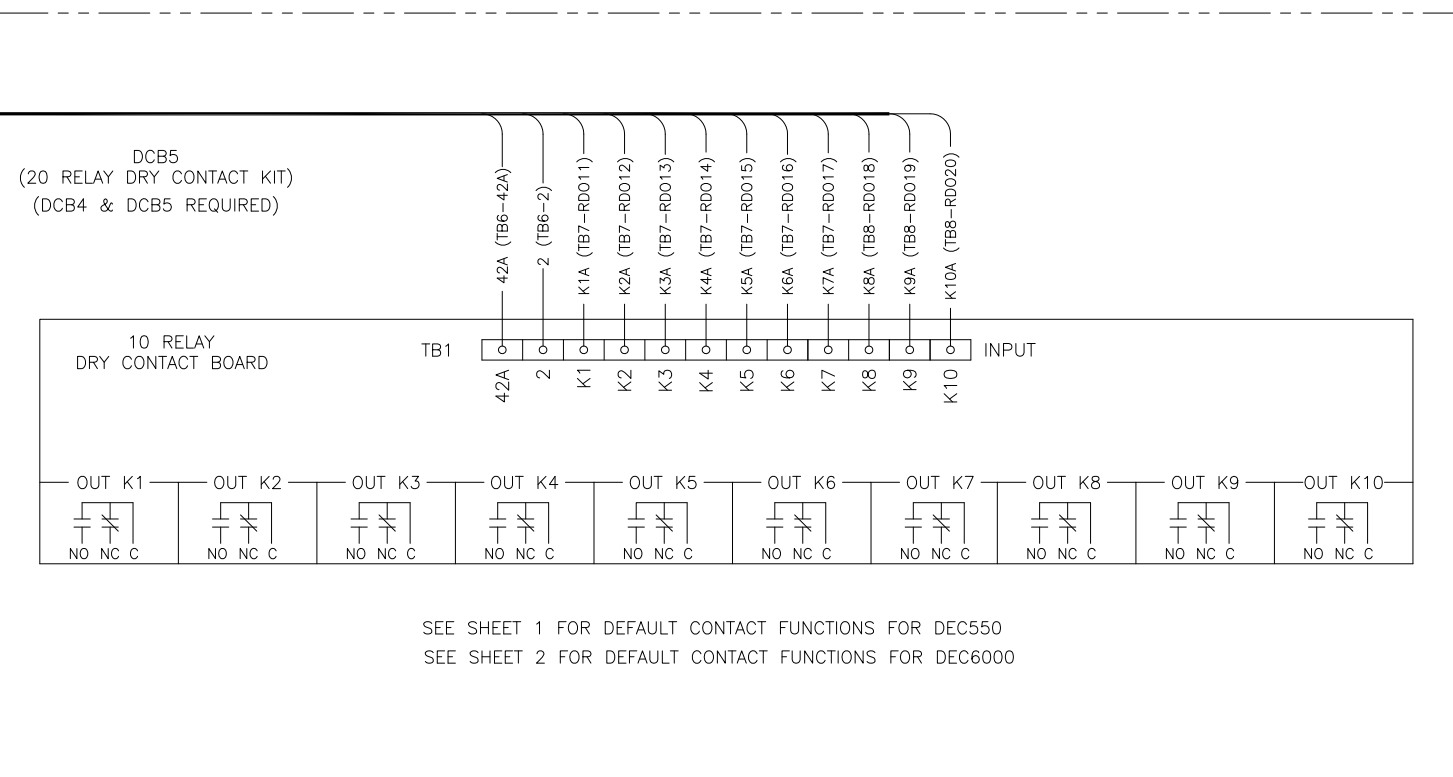
| | | | | |
|-----------|--------|---------|----------|-------|
| APPROVALS | DATE | SCALE | DWG. NO. | SHEET |
| CRS | 8-3-11 | /// | GM78247 | 2-4 |
| CHECKED | DFS | PLOTTED | | |
| APPROVED | CRS | | | |

| REV | DATE | REVISION | BY | WF |
|-----|---------|--|-----|----|
| B | 8-3-11 | SHEET 1 AND SHEET 2 CONTACT FUNCTION NOTES ADDED. | | |
| | | SEE SHEETS 1 & 2 [92098] | CRS | |
| C | 11-9-11 | (A-1) SHEET 3-4 WAS 3-3 [92522] | DFS | |
| D | 1-24-12 | (B-5) K1A-K10A LEADS AND LABELS UPDATED TO MATCH HARNESS [92717] | CRS | |
| E | 5-15-14 | SEE SHEET 1 [CT79954] | DFS | |
| F | 4-15-16 | SEE SHEETS 1 & 2 [CT143967] | BTW | |
| G | 6-15-17 | SEE SHEETS 1 & 2 [CT171006] | TLK | |

TO SHEET 1 (DEC 550)
TO SHEET 2 (DEC 6000)



TO SHEET 1 (DEC 550)
TO SHEET 2 (DEC 6000)



INSTALLATION NOTE:
FOR FIELD INSTALLATION A MAXIMUM OF TWO WIRE TERMINALS PER TERMINAL STRIP SCREW IS RECOMMENDED UNLESS OTHERWISE NOTED ON THE WIRING DIAGRAM. DO NOT EXTEND ABOVE THE TERMINAL STRIP BARRIER.

DECISION-MAKER 550 & 6000 ACCESSORIES

| | | | |
|---|------|---|----------|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: XXX ± .010 ANGLES ± 1/2° XX ± .030 SURFACE FINISH X ± .060 | | KOHLER CO. POWER SYSTEMS, KOHLER, WI 53044 U.S.A. THIS DRAWING, IN DESIGN AND DETAIL, IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | |
| APPROVALS | | TITLE | |
| APPROVED | DATE | DIAGRAM | |
| DRAWN | DATE | ACCESSORY INTERCONNECTION | |
| CHECKED | DATE | SCALE | SHEET |
| APPROVED | DATE | PLOTTED | DWG. NO. |
| | | | GM78247 |

8

7

6

5

4

3

2

1

| REV | DATE | REVISION | BY |
|-----|---------|-----------------------------|-----|
| C | 11-9-11 | THIS SHEET ADDED [92522] | DFS |
| D | 1-24-12 | SEE SHEET 3 [92717] | CRS |
| E | 5-15-14 | SEE SHEET 1 [C179954] | DFS |
| F | 4-15-16 | SEE SHEETS 1 & 2 [CT143967] | BTW |
| G | 6-15-17 | SEE SHEETS 1 & 2 [CT171006] | TLK |
| | | | |
| | | | |
| | | | |

D

D

C

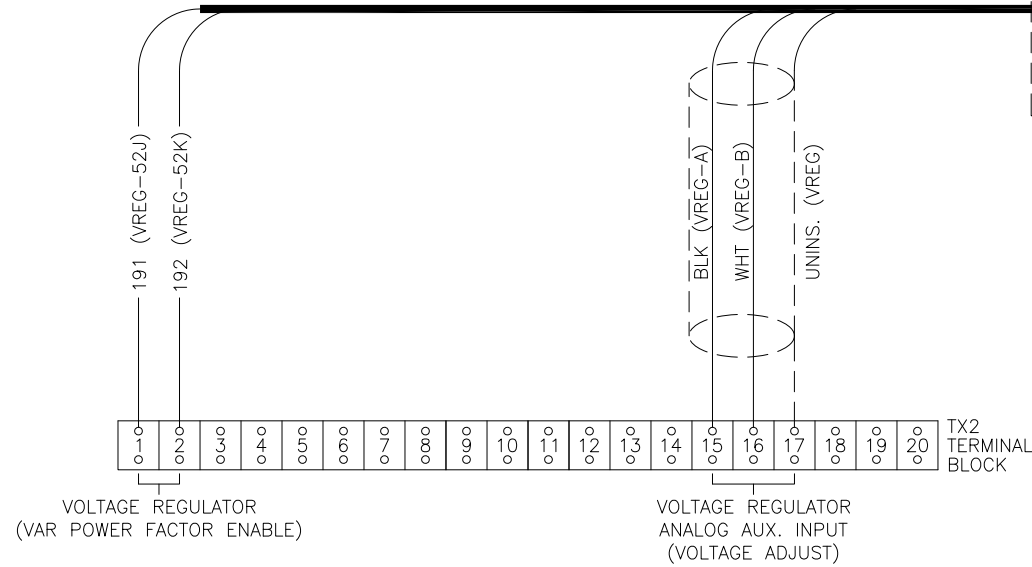
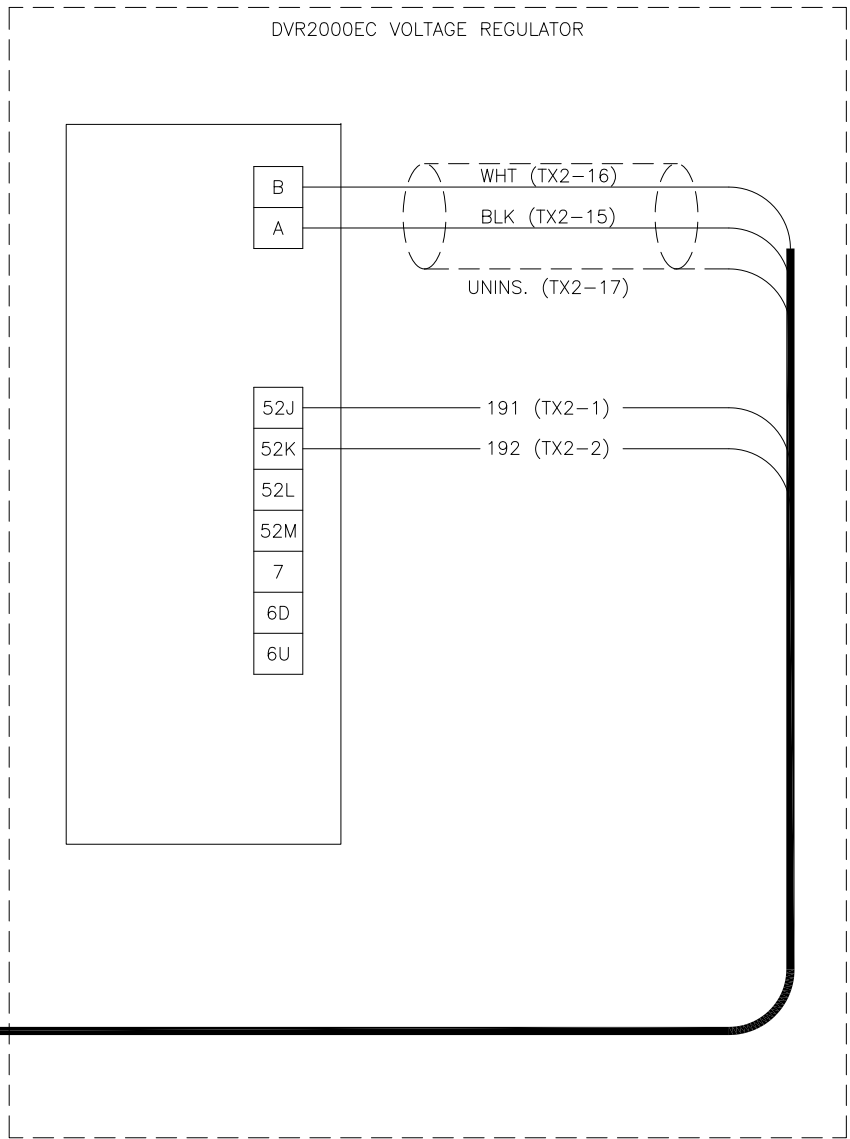
C

B

B

A

A



DECISION-MAKER 550 (ONLY) ACCESSORY

| | | | |
|---|-----|---|--|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: XXX ± .010 ANGLES ± 1/2° XX ± .030 SURFACE FINISH X ± .060 MAX. FRACTIONS ± | | KOHLER CO. POWER SYSTEMS, KOHLER, WI 53044 U.S.A. THIS DRAWING, IN DESIGN AND DETAIL, IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | |
| APPROVALS | | DATE | |
| DRAWN | DFS | 11-9-11 | |
| CHECKED | CRS | 11-9-11 | |
| APPROVED | JDZ | 11-9-11 | |
| TITLE | | DRAW. NO. | |
| DIAGRAM, ACCESSORY INTERCONNECTION | | GM78247 | |
| SCALE | | SHEET | |
| /// | | 4-4 | |
| PLOTTED | | D | |

8

7

6

5

4

3

2

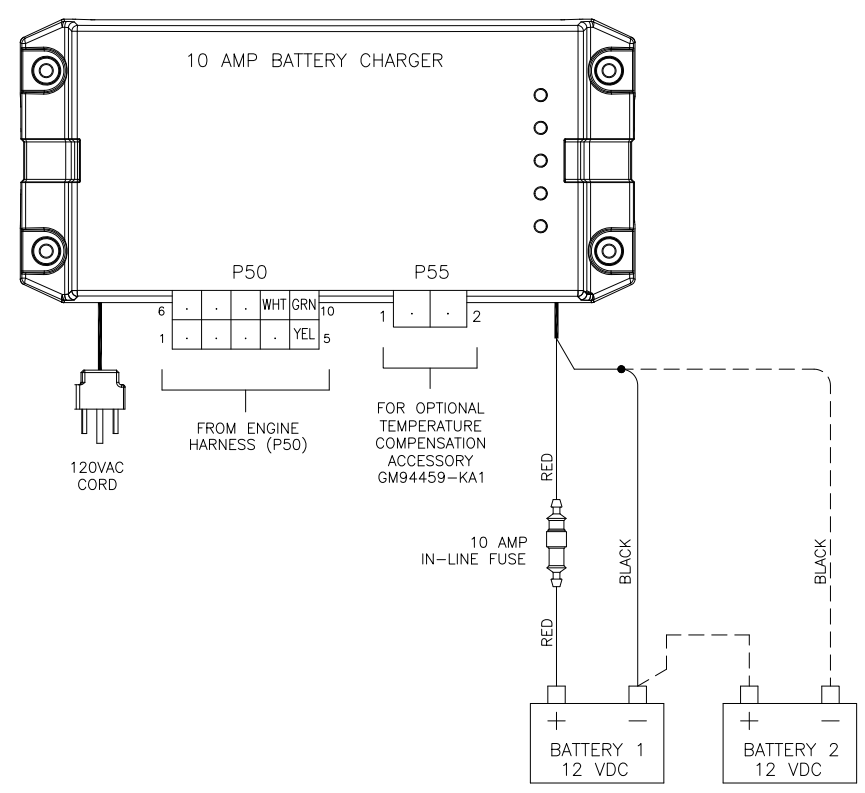
1

| REV | DATE | REVISION | BY | WF |
|-----|----------|---|-----|-----|
| - | 10-20-14 | NEW DRAWING [CT96697] | DFS | |
| A | 8-20-15 | (A-6, B-2 & -5) P50A-9, P50B-9 & P50C-9: WHITE (W3) | | |
| | | WAS N/C; (A-5) W3 ADDED & SEE SHEET 2 [CT120205] | DFS | |
| B | 3-24-17 | (B-6,C-2-4) UPDATED P50A, P50B & P50C PINS #2 & 7 | | |
| | | ADDED; (A-5) 2 ADDITIONAL WELDS ADDED; (C-7,-4-2) P50 | | |
| | | WAS P1, P55 WAS P2 (3 PLACES); [CT172520] | | BTW |

SINGLE BATTERY BANK CONECTIONS

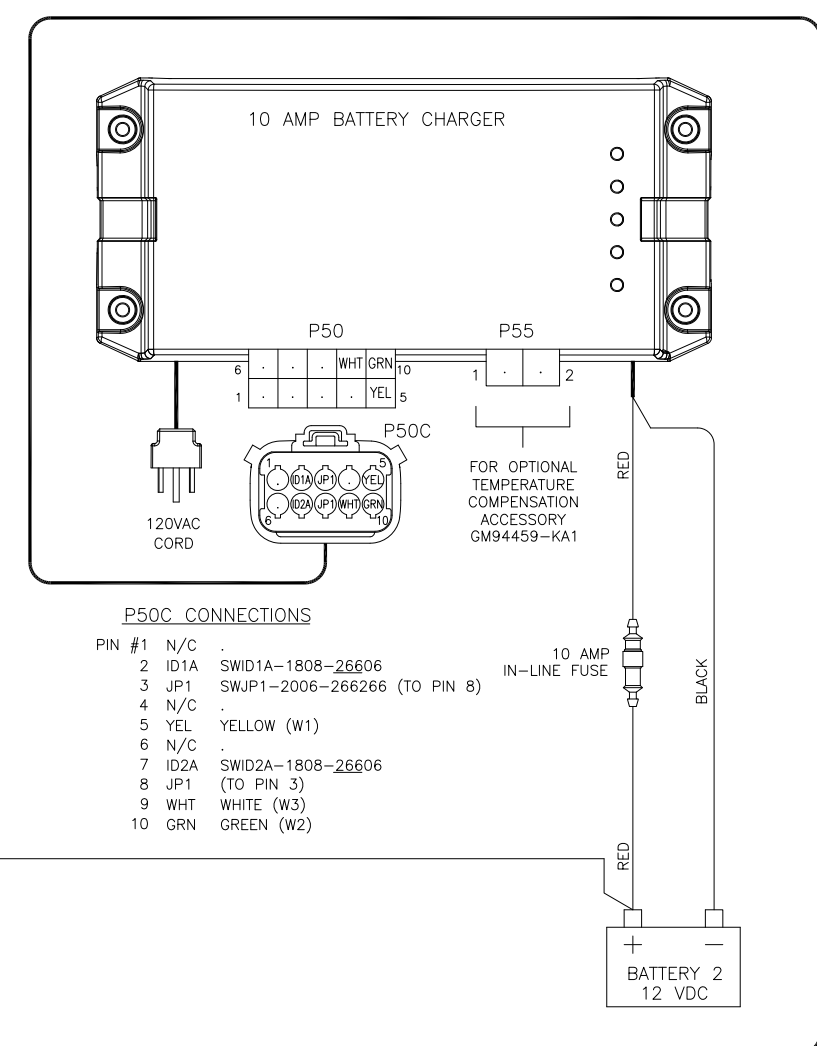
(1 CHARGER - 1 OR 2 BATTERIES) [12V OR 24V SYSTEM]

(2 CHARGERS - WITH 1 CHARGER FOR EACH 12V BATTERY) [24V SYSTEM]



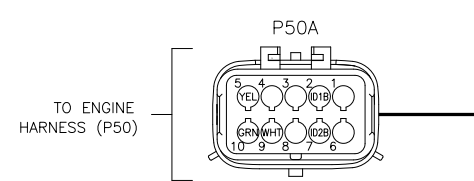
P50B CONNECTIONS

| PIN # | N/C | WIRE |
|-------|------|-------------------|
| 1 | N/C | |
| 2 | ID1C | SWID1C-1814-26606 |
| 3 | N/C | |
| 4 | N/C | |
| 5 | YEL | YELLOW (W1) |
| 6 | N/C | |
| 7 | ID2C | SWID2C-1814-26606 |
| 8 | N/C | |
| 9 | WHT | WHITE (W3) |
| 10 | GRN | GREEN (W2) |



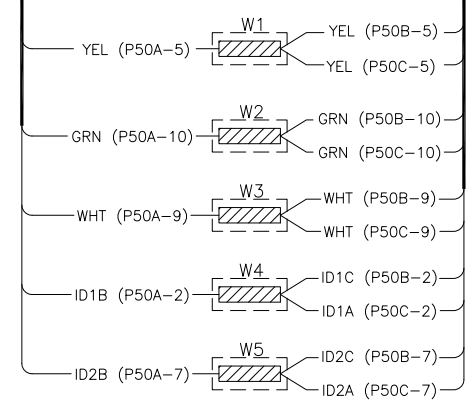
P50C CONNECTIONS

| PIN # | N/C | WIRE |
|-------|------|------------------------------|
| 1 | N/C | |
| 2 | ID1A | SWID1A-1808-26606 |
| 3 | JP1 | SWJP1-2006-266266 (TO PIN 8) |
| 4 | N/C | |
| 5 | YEL | YELLOW (W1) |
| 6 | N/C | |
| 7 | ID2A | SWID2A-1808-26606 |
| 8 | JP1 | (TO PIN 3) |
| 9 | WHT | WHITE (W3) |
| 10 | GRN | GREEN (W2) |



P50A CONNECTIONS

| PIN # | N/C | WIRE |
|-------|------|-------------------|
| 1 | N/C | |
| 2 | ID1B | SWID1B-1813-27306 |
| 3 | N/C | |
| 4 | N/C | |
| 5 | YEL | YELLOW (W1) |
| 6 | N/C | |
| 7 | ID2B | SWID2B-1813-27306 |
| 8 | N/C | |
| 9 | WHT | WHITE (W3) |
| 10 | GRN | GREEN (W2) |



NOTE:
FOR SCHEMATIC DIAGRAM SEE ADV-8749

| | | | |
|---|---------|---|-----------|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: XXX ± .010 ANGLES ± 1/2° XX ± .020 SURFACE FINISH X ± .060 MAX. FRACTIONS ± | | KOHLER CO. POWER SYSTEMS, KOHLER, WI 53044 U.S.A. THIS DRAWING, IN DESIGN AND DETAIL, IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | |
| APPROVALS | DATE | TITLE | |
| DRAWN DFS | 8-11-14 | DIAGRAM, WIRING | |
| CHECKED HCC | 8-11-14 | 10 AMP BATTERY CHARGER | |
| APPROVED HCC | 8-11-14 | GM94439 | |
| SCALE | PLOTTED | CAD NO. | SHEET 1-2 |

10 AMP INDUSTRIAL BATTERY CHARGER

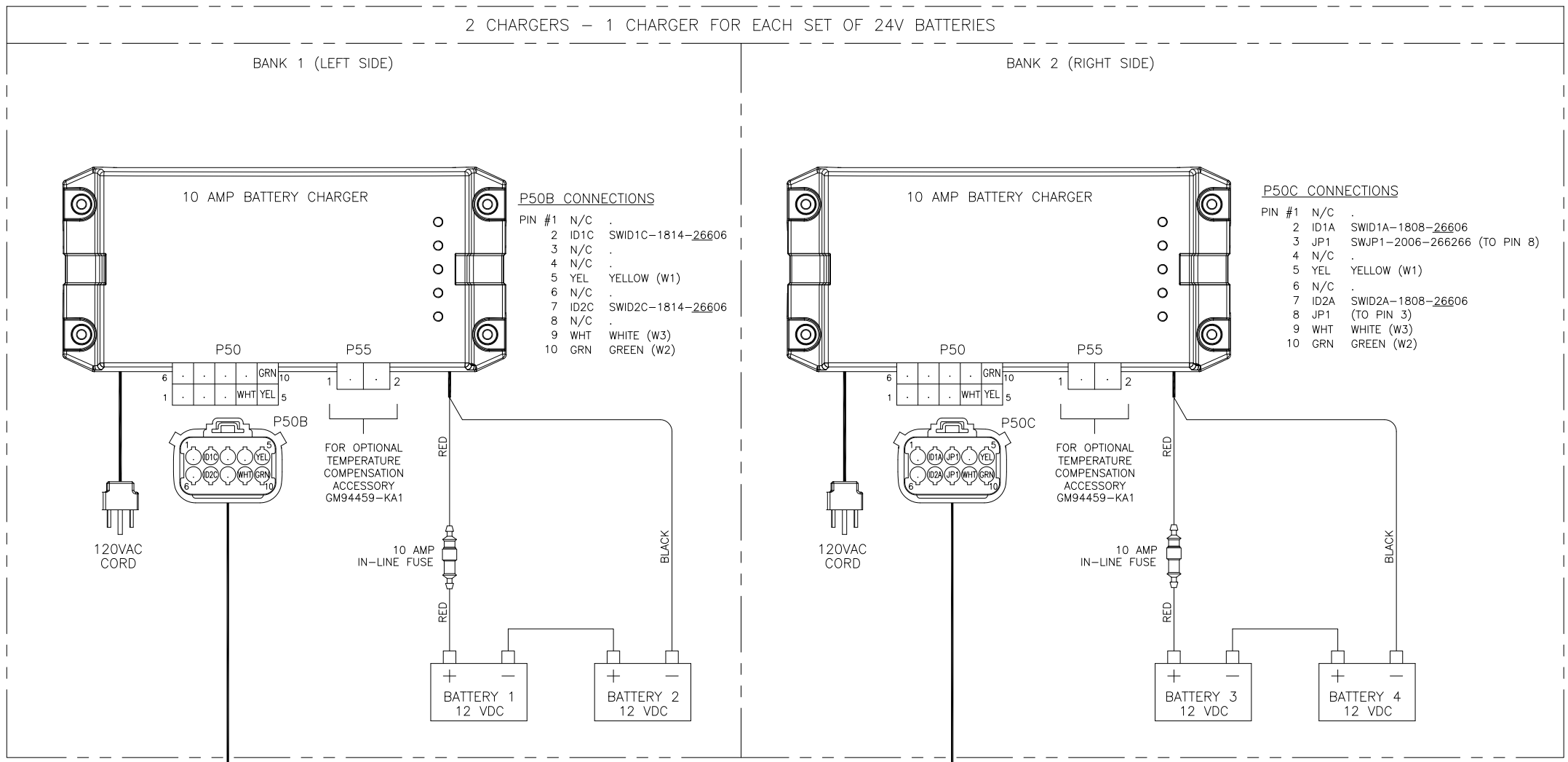
| REV | DATE | REVISION | BY |
|-----|---------|---|-----|
| - | 10-3-14 | NEW DRAWING [CT96697] | DFS |
| A | 8-20-15 | (B-1, B-4, & B-7) P50A-9, P50B-9 & P50C-9: WHITE (W3) WAS N/C; (A-6,-7) W3 ADDED & SEE SHEET 1 [CT120205] | DFS |
| B | 3-24-17 | (B-8,C-5-2) UPDATED P50A, P50B & P50C PINS #2 & 7 ADDED: (A-6) 2 ADDITIONAL WELDS ADDED; (C-6-3) P50 WAS P1, P55 WAS P2 (2 PLACES); [CT172520] | BTW |

DUAL BATTERY BANK CONNECTIONS (2 STARTERS)

2 CHARGERS - 1 CHARGER FOR EACH SET OF 24V BATTERIES

BANK 1 (LEFT SIDE)

BANK 2 (RIGHT SIDE)



P50B CONNECTIONS

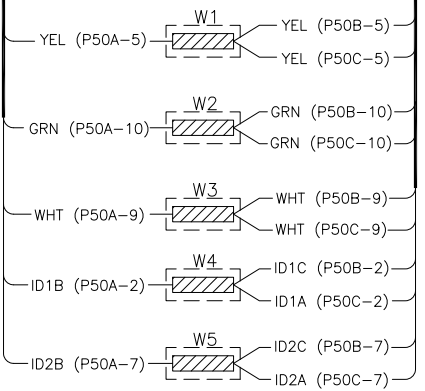
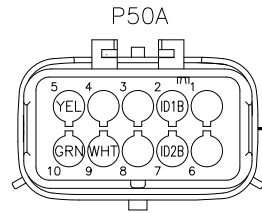
| | |
|--------|------------------------|
| PIN #1 | N/C |
| 2 | ID1C SWID1C-1814-26606 |
| 3 | N/C |
| 4 | N/C |
| 5 | YEL YELLOW (W1) |
| 6 | N/C |
| 7 | ID2C SWID2C-1814-26606 |
| 8 | N/C |
| 9 | WHT WHITE (W3) |
| 10 | GRN GREEN (W2) |

P50C CONNECTIONS

| | |
|--------|----------------------------------|
| PIN #1 | N/C |
| 2 | ID1A SWID1A-1808-26606 |
| 3 | JP1 SWJP1-2006-266266 (TO PIN 8) |
| 4 | N/C |
| 5 | YEL YELLOW (W1) |
| 6 | N/C |
| 7 | ID2A SWID2A-1808-26606 |
| 8 | JP1 (TO PIN 3) |
| 9 | WHT WHITE (W3) |
| 10 | GRN GREEN (W2) |

P50A CONNECTIONS

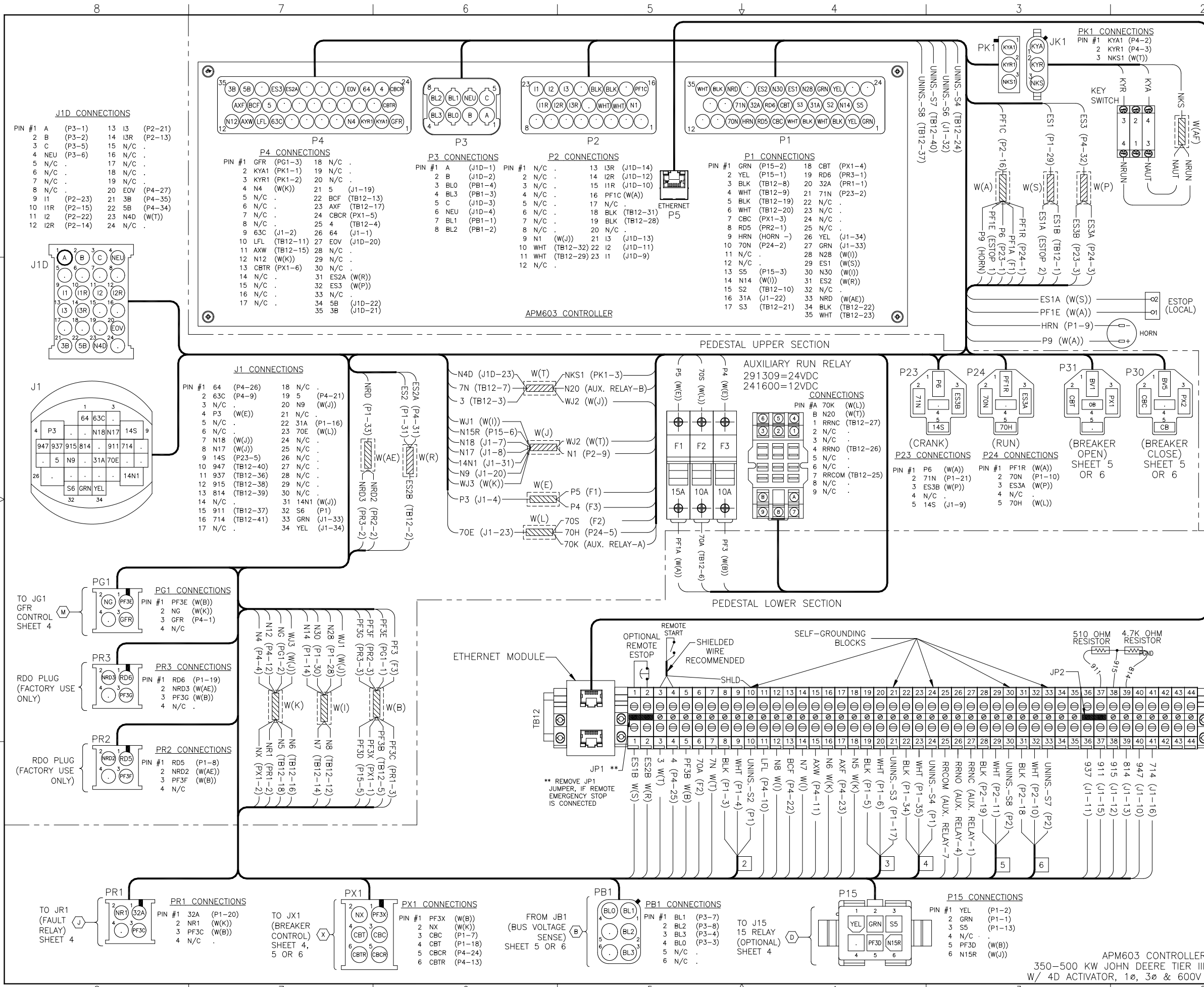
| | |
|--------|------------------------|
| PIN #1 | N/C |
| 2 | ID1B SWID1B-1813-27306 |
| 3 | N/C |
| 4 | N/C |
| 5 | YEL YELLOW (W1) |
| 6 | N/C |
| 7 | ID2B SWID2B-1813-27306 |
| 8 | N/C |
| 9 | WHT WHITE (W3) |
| 10 | GRN GREEN (W2) |



NOTE:
BOTH BATTERY CHARGERS ARE MOUNTED ON A SINGLE BRACKET. ON EITHER THE LEFT OR RIGHT SIDE OF GENSEET DEPENDING ON MODEL

10 AMP INDUSTRIAL BATTERY CHARGER

| | | | |
|---|---------|--|-------|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: XXX ± .010 ANGLES ± 1/2° XX ± .030 SURFACE FINISH X ± .060 MAX. FRACTIONS ± | | <p>KOHLER CO. POWER SYSTEMS, KOHLER, WI 53044 U.S.A. THIS DRAWING, IN DESIGN AND DETAIL, IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.</p> <p>TITLE: DIAGRAM, WIRING 10 AMP BATTERY CHARGER</p> | |
| APPROVALS | DATE | SCALE | SHEET |
| DRAWN DFS | 8-11-14 | /// | 2-2 |
| CHECKED HCC | 8-11-14 | | |
| APPROVED HCC | 8-11-14 | | |
| DWG. NO. GM94439 | | D | |



| REV | DATE | REVISION | BY |
|-----|---------|--|-----|
| B | 2-05-19 | (C-2,-3) WIRE OB IS MOVED TO 4 FROM 5 OF P31; SEE SHEETS 5 & 6 [CT193517] | SMH |
| C | 2-28-19 | (A-3) & (C,D-4) ADDED SPEED AND VOLTAGE BIAS [CT194009] | SMH |
| D | 5-13-19 | (B,2-6,) TB12-41 THRU 44 ADDED, MOVED CONNECTIONS FOR VOLTAGE AND SPEED BIAS, [CT195741] | TEV |
| E | 4-3-20 | (C-4) AUXILIARY RUN RELAY: 241600=12VDC WAS 248363=12VDC [CT203145] | DFS |

- LEGEND**
- BCA - BATTERY CHARGING ALTERNATOR
 - BTCS - BATTERY TEMP COMPENSATION SENSOR
 - CAS - CAM SENSOR
 - CLS - COOLANT LEVEL SENDER
 - CRS - CRANK SENSOR
 - CT(#)- CURRENT TRANSFORMER
 - DTS - COOLANT TEMPERATURE SENDER
 - D/# - DIODE
 - DIAG - DIAGNOSTIC LAMP
 - ECM - ENGINE CONTROL MODULE
 - ESC - EMERGENCY STOP SWITCH
 - FIC - FUEL INJECTOR CONTROLLER
 - FLA - FUEL LEAK ALARM
 - FLS - FUEL LEVEL SENDER
 - FTS - FUEL TEMP SENDER
 - LCT - LOW COOLANT TEMPERATURE SWITCH
 - MAT - MANIFOLD AIR TEMP SENSOR
 - OPS - OIL PRESSURE SENDER
 - P(#)- PLUG
 - PCV - POSITIVE CRANKCASE VENTILATION VALVE
 - QCON(#)- QUICK CONNECT
 - RPS - RAIL PRESSURE SENSOR
 - SLB - STATIONARY LED BOARD
 - SM - STARTER MOTOR
 - SS - STARTER SOLENOID
 - STAT - STATOR
 - SW(#)- SWITCH
 - TB(#)- TERMINAL BLOCK
 - W(#)- WIRE WELD
 - WFS - WATER IN FUEL SENDER
 - EBG - ENGINE BLOCK GROUND
 - GND - CONTROLLER BOX GROUND
 - PGND - PANEL GROUND

FOR SCHEMATIC SEE ADV-9078

| | | | |
|---|--|--|--|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: XXX ± .010 ANGLES ± 1/2° .XX ± .030 SURFACE FINISH .X ± .060 | | KOHLER KOHLER, WI 53044 THIS DRAWING IN DESIGN AND DETAIL IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. TITLE: DIAGRAM, WIRING JD 350-500KW, APM603 SCALE: N/A SHEET: 1-6 DRAWN: SBR 8-22-18 CHECKED: TLK 8-22-18 APPROVED: TLK 8-22-18 DWG. NO.: GM105806 | |
|---|--|--|--|

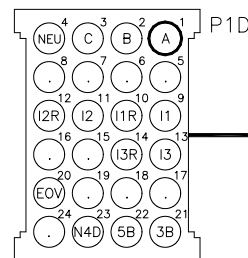
APM603 CONTROLLER
350-500 KW JOHN DEERE TIER III
W/ 4D ACTIVATOR, 1ø, 3ø & 600V

JUNCTION BOX

| REV | DATE | REVISION | BY |
|-----|---------|--------------------------------|-----|
| B | 2-05-19 | SEE SHEETS 1, 5 & 6 [CT193517] | SMH |
| C | 2-28-19 | SEE SHEET 1 [CT194009] | SMH |
| D | 5-13-19 | SEE SHEET 1 [CT195741] | TEV |
| E | 4-3-20 | SEE SHEET 1 [CT203145] | DFS |

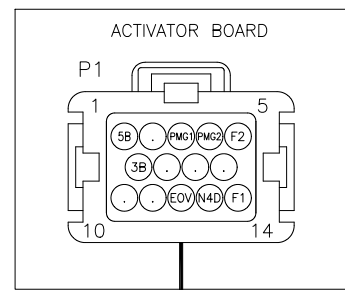
P1D CONNECTIONS

- PIN #1 A (P2D-1)
- 2 B (P2D-2)
- 3 C (P2D-3)
- 4 NEU (P2D-4)
- 5 N/C
- 6 N/C
- 7 N/C
- 8 N/C
- 9 I1 (P26-1)
- 10 I1R (P26-2)
- 11 I2 (P26-3)
- 12 I2R (P26-4)
- 13 I3 (P26-5)
- 14 I3R (P26-6)
- 15 N/C
- 16 N/C
- 17 N/C
- 18 N/C
- 19 N/C
- 20 EOV (P1-12)
- 21 3B (P1-6)
- 22 5B (P1-1)
- 23 N4D (P1-13)
- 24 N/C



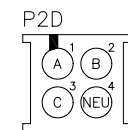
P1 CONNECTIONS

- PIN #1 5B (P1D-22)
- 2 N/C
- 3 PMG1 (QCONPMG1)
- 4 PMG2 (QCONPMG2)
- 5 F2 (QCONF2)
- 6 3B (P1D-21)
- 7 N/C
- 8 N/C
- 9 N/C
- 10 N/C
- 11 N/C
- 12 EOV (P1D-20)
- 13 N4D (P1D-23)
- 14 F1 (QCONF1)



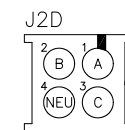
P2D CONNECTIONS

- PIN #1 A (P1D-1)
- 2 B (P1D-2)
- 3 C (P1D-3)
- 4 NEU (P1D-4)



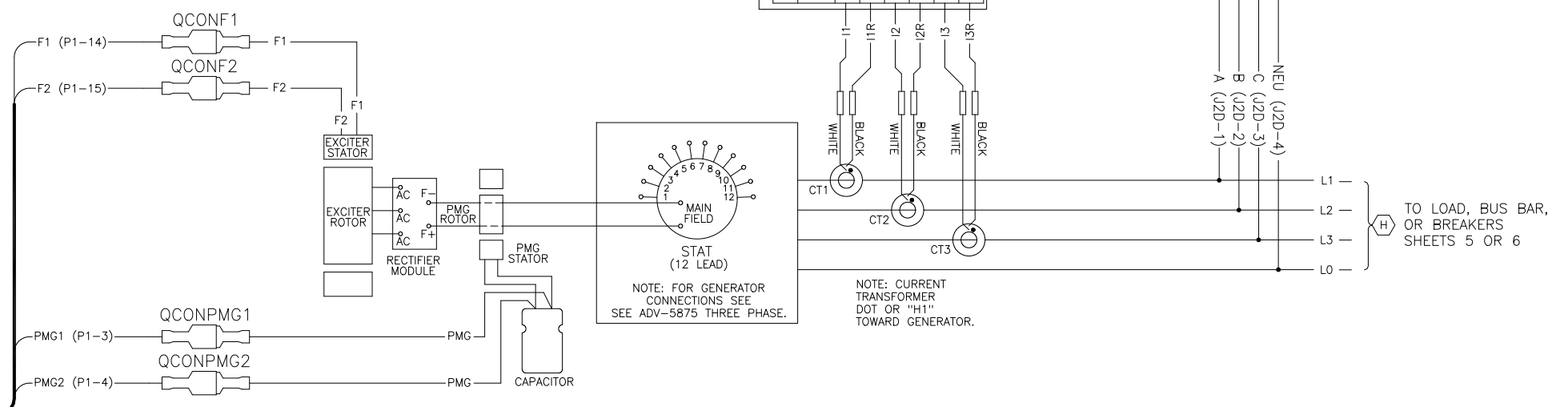
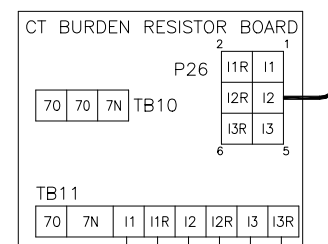
J2D CONNECTIONS

- PIN #1 A (L1)
- 2 B (L2)
- 3 C (L3)
- 4 NEU (L0)



P26 CONNECTIONS

- PIN #1 I1 (P1D-9)
- 2 I1R (P1D-10)
- 3 I2 (P1D-11)
- 4 I2R (P1D-12)
- 5 I3 (P1D-13)
- 6 I3R (P1D-14)



NOTE: FOR GENERATOR CONNECTIONS SEE ADV-5875 THREE PHASE.

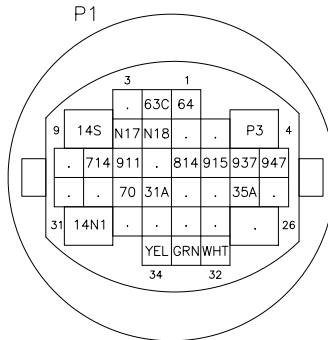
NOTE: CURRENT TRANSFORMER DOT OR "H1" TOWARD GENERATOR.

| | | | |
|---|-----|---|-------|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: XXX ± .010 ANGLES ± 1/2° XX ± .030 SURFACE FINISH X ± .060 MAX. FRACTIONS ± | | KOHLER KOHLER, WI 53044 THIS DRAWING IN DESIGN AND DETAIL IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | |
| APPROVALS | | DATE | |
| DRAWN | SBR | 5-8-18 | |
| CHECKED | TLK | 8-14-18 | |
| APPROVED | TLK | 8-14-18 | |
| TITLE | | SCALE | SHEET |
| APM603 CONTROLLER 350-500 KW JOHN DEERE TIER III W/ SPLIT ACTIVATOR, 1Ø, 3Ø & 600V | | N/A | 2-6 |
| DWG. NO. | | D | |
| GM105806 | | | |

| REV | DATE | REVISION | BY | UF |
|-----|---------|--------------------------------|-----|----|
| B | 2-05-19 | SEE SHEETS 1, 5 & 6 [CT193517] | SMH | |
| C | 2-28-19 | SEE SHEET 1 [CT194009] | SMH | |
| D | 5-13-19 | SEE SHEET 1 [CT195741] | TEV | |
| E | 4-3-20 | SEE SHEET 1 [CT203145] | DFS | |

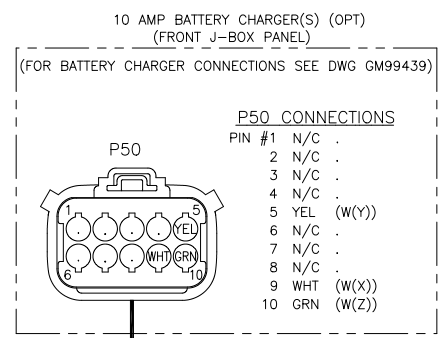
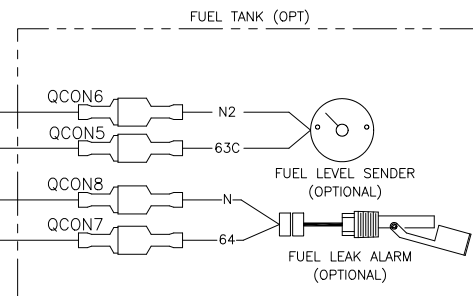
ENGINE

JUNCTION BOX



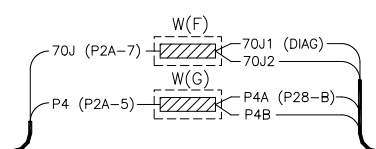
P1 CONNECTIONS

| PIN # | Label | Color | Notes |
|-------|-------|---------|---------------|
| 1 | 64 | QCON7 | 18 N/C |
| 2 | 63C | QCON5 | 19 35A (W(M)) |
| 3 | N/C | | 20 N/C |
| 4 | P3 | (SS) | 21 N/C |
| 5 | N/C | | 22 31A (P6-A) |
| 6 | N/C | | 23 70 (W(H)) |
| 7 | N18 | QCON8 | 24 N/C |
| 8 | N17 | QCON6 | 25 N/C |
| 9 | 14S | (SS) | 26 N/C |
| 10 | 947 | (P4-B4) | 27 N/C |
| 11 | 937 | (P4-H4) | 28 N/C |
| 12 | 915 | (P4-A4) | 29 N/C |
| 13 | 814 | (P4-C3) | 30 N/C |
| 14 | N/C | | 31 14N1 (EBG) |
| 15 | 911 | (P4-G2) | 32 WHT (W(X)) |
| 16 | 714 | (P4-G3) | 33 GRN (W(Z)) |
| 17 | N/C | | 34 YEL (W(Y)) |



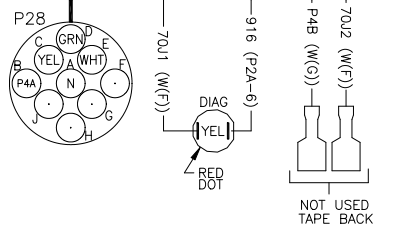
P2A CONNECTIONS

| PIN # | Color | Notes |
|-------|-------|---------|
| 1 | YEL | (P28-C) |
| 2 | GRN | (P28-D) |
| 3 | N/C | |
| 4 | N/C | |
| 5 | YEL | (W(Y)) |
| 6 | N/C | |
| 7 | N/C | |
| 8 | N/C | |
| 9 | N/C | |



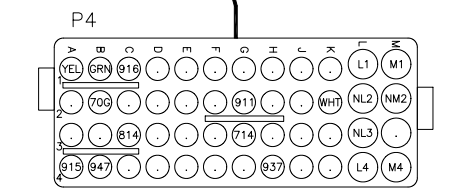
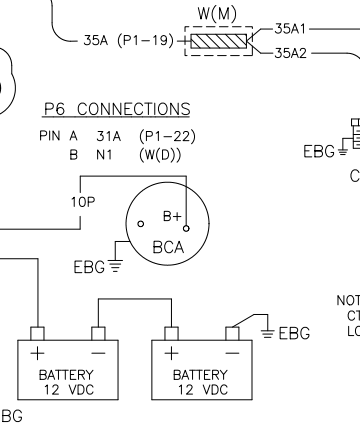
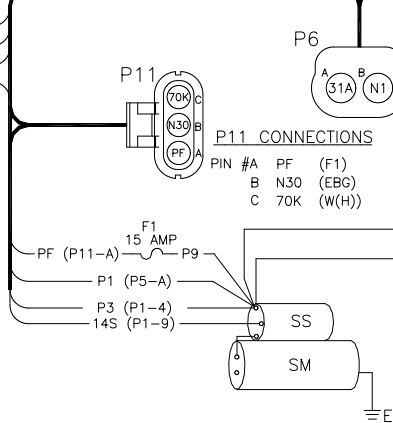
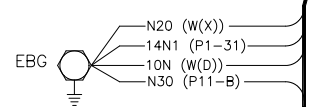
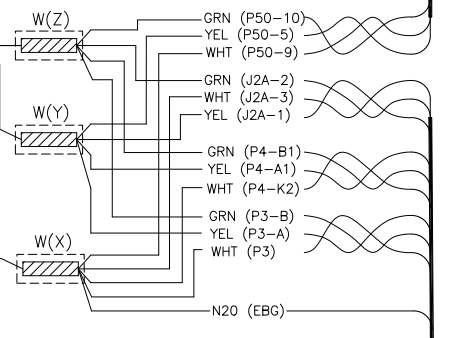
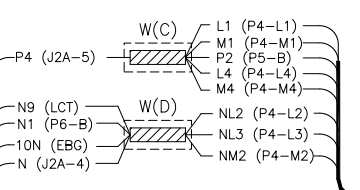
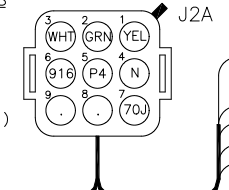
P28 CONNECTIONS

| PIN # | Color | Notes |
|-------|-------|---------|
| A | N | (P2A-4) |
| B | P4A | (W(G)) |
| C | YEL | (P2A-1) |
| D | GRN | (P2A-2) |
| E | WHT | (P2A-3) |
| F | N/C | |
| G | N/C | |
| H | N/C | |
| J | N/C | |



J2A CONNECTIONS

| PIN # | Color | Notes |
|-------|-------|---------|
| 1 | YEL | (W(Y)) |
| 2 | GRN | (W(Z)) |
| 3 | WHT | (W(X)) |
| 4 | N | (W(D)) |
| 5 | P4 | (W(C)) |
| 6 | 916 | (P4-C1) |
| 7 | 70J | (W(H)) |
| 8 | N/C | |
| 9 | N/C | |



NOTE:
CTS: USED FOR APM603 CONTROLLER
LCT: FOR 550 CONTROLLER ONLY.
NOT USED WITH APM603.

UNLESS OTHERWISE SPECIFIED -
1) DIMENSIONS ARE IN INCHES
2) TOLERANCES ARE:
XXXX ± .010 ANGLES ± 1/2°
.XX ± .030 SURFACE FINISH
.X ± .060 MAX.
FRACTIONS ±

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KOHLER, WI 53044
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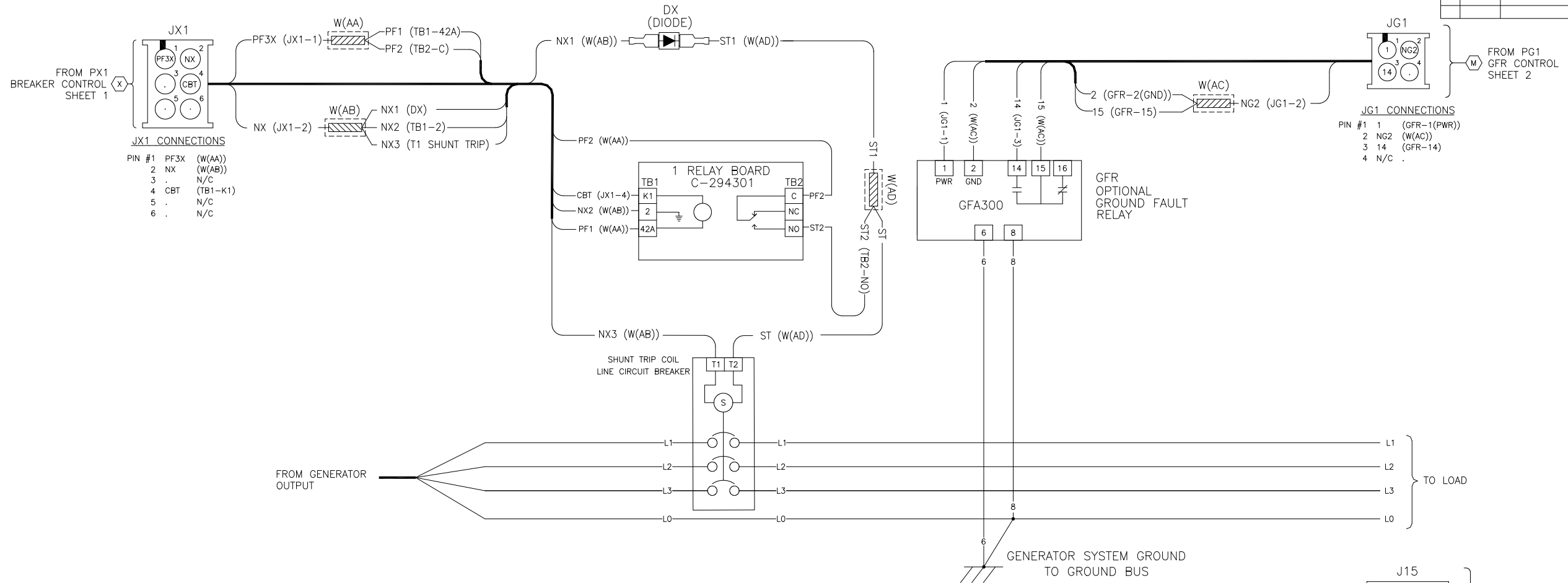
TITLE: **DIAGRAM, WIRING**
JD 350-500KW, APM603

| APPROVALS | DATE | SCALE | SHEET |
|--------------|---------|-------|-------|
| DRAWN SBR | 5-8-18 | N/A | 3-6 |
| CHECKED TLK | 8-14-18 | | |
| APPROVED TLK | 8-14-18 | | |

DWG. NO. **GM105806**

APM603 CONTROLLER
350-500 KW JOHN DEERE TIER III
W/ SPLIT ACTIVATOR, 1ø, 3ø & 600V

| REV | DATE | REVISION | BY |
|-----|---------|--------------------------------|-----|
| B | 2-05-19 | SEE SHEETS 1, 5 & 6 [CT193517] | SMH |
| C | 2-28-19 | SEE SHEET 1 [CT194009] | SMH |
| D | 5-13-19 | SEE SHEET 1 [CT195741] | TEV |
| E | 4-3-20 | SEE SHEET 1 [CT203145] | DFS |



JX1 CONNECTIONS

| PIN # | WIRE | TERMINAL |
|-------|------|----------|
| 1 | PF3X | (W(AA)) |
| 2 | NX | (W(AB)) |
| 3 | . | N/C |
| 4 | CBT | (TB1-K1) |
| 5 | . | N/C |
| 6 | . | N/C |

JG1 CONNECTIONS

| PIN # | WIRE | TERMINAL |
|-------|---------|----------|
| 1 | (GFR-1) | (PWR) |
| 2 | NG2 | (W(AC)) |
| 3 | 14 | (GFR-14) |
| 4 | . | N/C |

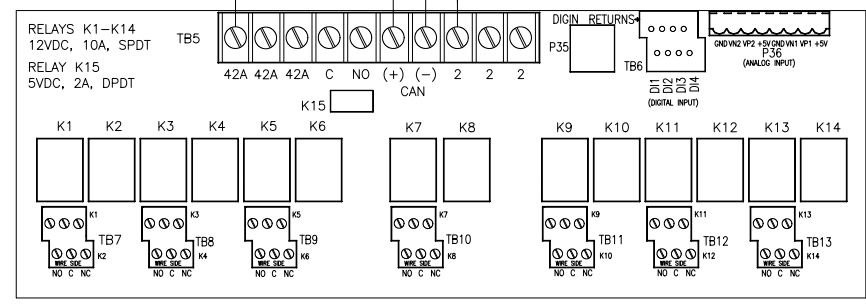
J15 CONNECTIONS

| PIN # | WIRE | TERMINAL |
|-------|------------|--------------|
| 1 | YEL | (TB5-CAN(+)) |
| 2 | GRN | (TB5-CAN(-)) |
| 3 | UNINS (S5) | (TB5) |
| 4 | . | N/C |
| 5 | P15R | (TB5-42A) |
| 6 | N15R | (TB5-2) |

JR1 CONNECTIONS

| PIN # | WIRE | TERMINAL |
|-------|------|-----------|
| 1 | 32A | (TB1-K1) |
| 2 | NR1 | (TB1-2) |
| 3 | PF3C | (TB1-42A) |
| 4 | . | N/C |

(OPTIONAL)
15 RELAY DRY CONTACT KIT
W/ NO & NC CONTACTS

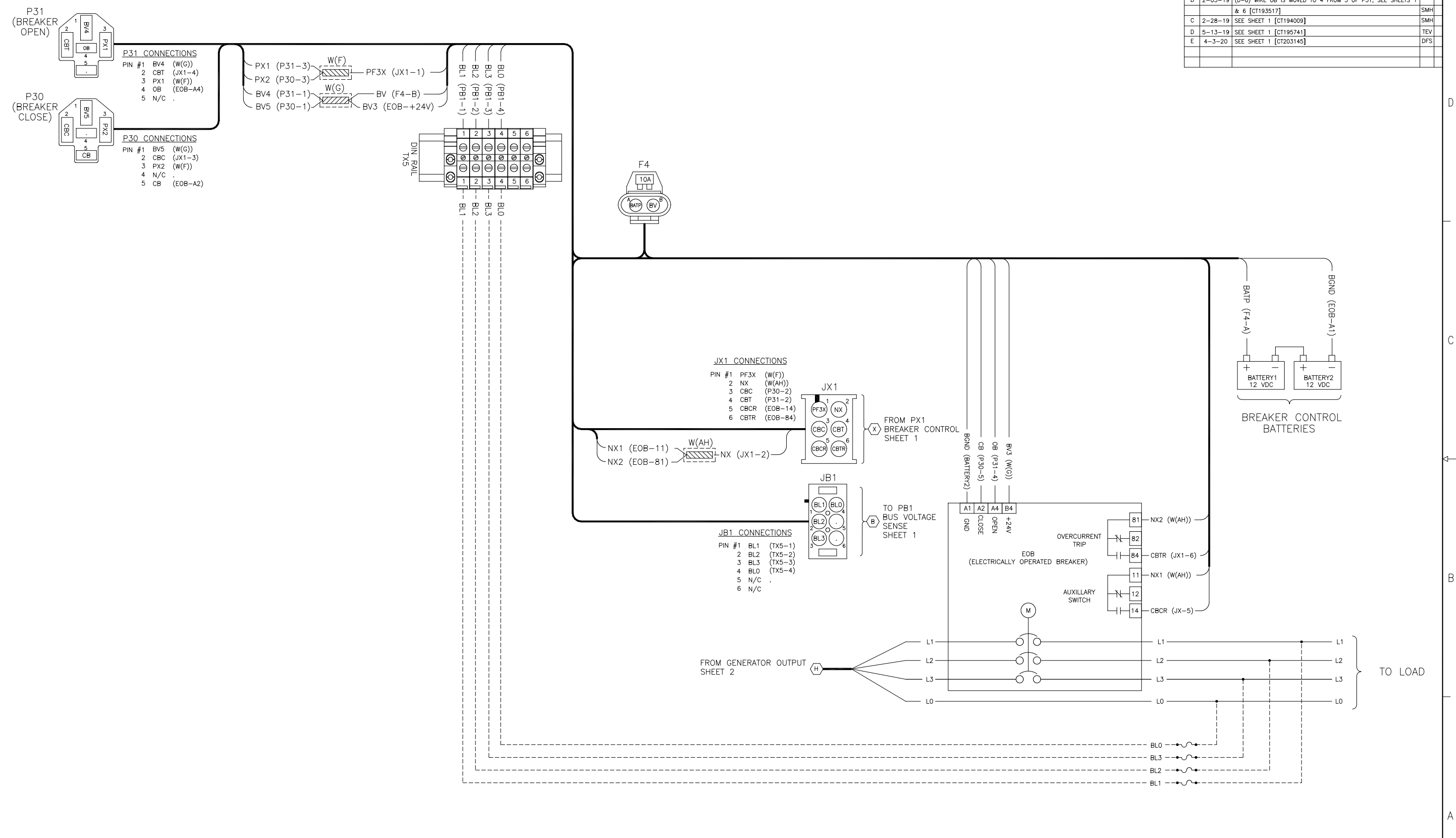


CUSTOMER CONNECTIONS

| | | | |
|--|--|--|--|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: XXX ± .010 ANGLES ± 1/2° .XX ± .030 SURFACE FINISH X ± .060 MAX. FRACTIONS ± | | KOHLER. KOHLER, WI 53044 THIS DRAWING IN DESIGN AND DETAIL IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | |
| APPROVALS | | DATE | |
| DRAWN SBR | | 5-8-18 | |
| CHECKED TLK | | 8-14-18 | |
| APPROVED TLK | | 8-14-18 | |
| SCALE N/A | | SHEET 4-6 | |
| TITLE | | DIAGRAM, WIRING JD 350-500KW, APM603 | |
| DWG. NO. GM105806 | | D | |

APM603 CONTROLLER
350-500 KW JOHN DEERE TIER III
W/ SPLIT ACTIVATOR, 1ø, 3ø & 600V

| REV | DATE | REVISION | BY | UF |
|-----|---------|--|-----|----|
| B | 2-05-19 | (D-8) WIRE OB IS MOVED TO 4 FROM 5 OF P31; SEE SHEETS 1 & 6 [CT193517] | SMH | |
| C | 2-28-19 | SEE SHEET 1 [CT194009] | SMH | |
| D | 5-13-19 | SEE SHEET 1 [CT195741] | TEV | |
| E | 4-3-20 | SEE SHEET 1 [CT203145] | DFS | |



- P31 CONNECTIONS**
- PIN #1 BV4 (W(G))
 - 2 CBT (JX1-4)
 - 3 PX1 (W(F))
 - 4 OB (EOB-A4)
 - 5 N/C
- P30 CONNECTIONS**
- PIN #1 BV5 (W(G))
 - 2 CBC (JX1-3)
 - 3 PX2 (W(F))
 - 4 N/C
 - 5 CB (EOB-A2)

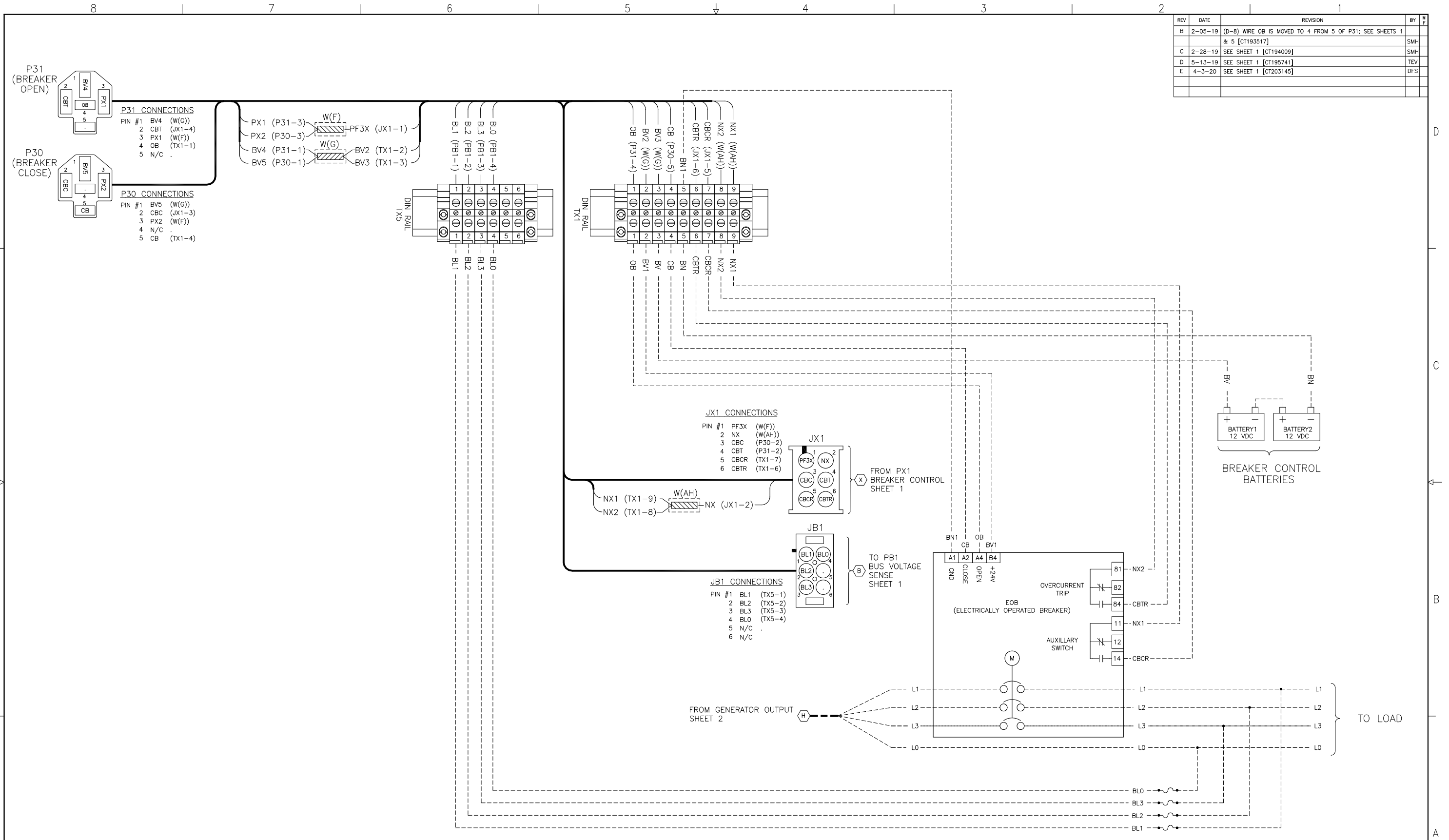
- JX1 CONNECTIONS**
- PIN #1 PF3X (W(F))
 - 2 NX (W(AH))
 - 3 CBC (P30-2)
 - 4 CBT (P31-2)
 - 5 CBCR (EOB-14)
 - 6 CBTR (EOB-84)

- JB1 CONNECTIONS**
- PIN #1 BL1 (TX5-1)
 - 2 BL2 (TX5-2)
 - 3 BL3 (TX5-3)
 - 4 BL0 (TX5-4)
 - 5 N/C
 - 6 N/C

APM603 CONTROLLER
350-500 KW JOHN DEERE TIER III
W/ SPLIT ACTIVATOR, 1Ø, 3Ø & 600V

| | | | |
|--|--------|--|-------------------|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: XXXX ± .010 ANGLES ± 1/2° .XX ± .030 SURFACE FINISH .X ± .060 MAX. FRACTIONS ± | | KOHLER. KOHLER, WI 53044 THIS DRAWING IN DESIGN AND DETAIL IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | |
| APPROVALS | DATE | TITLE | |
| DRAWN SBR | 5-8-18 | DIAGRAM, WIRING JD 350-500KW, APM603 | |
| CHECKED | | SCALE N/A | SHEET 5-6 |
| APPROVED | | PLOTTED | ENG. NO. GM105806 |

| REV | DATE | REVISION | BY | UF |
|-----|---------|--|-----|----|
| B | 2-05-19 | (D-B) WIRE OB IS MOVED TO 4 FROM 5 OF P31; SEE SHEETS 1 & 5 [CT193517] | SMH | |
| C | 2-28-19 | SEE SHEET 1 [CT194009] | SMH | |
| D | 5-13-19 | SEE SHEET 1 [CT195741] | TEV | |
| E | 4-3-20 | SEE SHEET 1 [CT203145] | DFS | |



- P31 CONNECTIONS**
- | | | |
|--------|-----|---------|
| PIN #1 | BV4 | (W(G)) |
| 2 | CBT | (JX1-4) |
| 3 | PX1 | (W(F)) |
| 4 | OB | (TX1-1) |
| 5 | N/C | . |
- P30 CONNECTIONS**
- | | | |
|--------|-----|---------|
| PIN #1 | BV5 | (W(G)) |
| 2 | CBC | (JX1-3) |
| 3 | PX2 | (W(F)) |
| 4 | N/C | . |
| 5 | CB | (TX1-4) |

- JX1 CONNECTIONS**
- | | | |
|--------|------|---------|
| PIN #1 | PF3X | (W(F)) |
| 2 | NX | (W(AH)) |
| 3 | CBC | (P30-2) |
| 4 | CBT | (P31-2) |
| 5 | CBCR | (TX1-7) |
| 6 | CBTR | (TX1-6) |

- JB1 CONNECTIONS**
- | | | |
|--------|-----|---------|
| PIN #1 | BL1 | (TX5-1) |
| 2 | BL2 | (TX5-2) |
| 3 | BL3 | (TX5-3) |
| 4 | BL0 | (TX5-4) |
| 5 | N/C | . |
| 6 | N/C | . |

NOTE:
DASHED LINES ARE WIRES/COMPONENTS PROVIDED BY CUSTOMER
WHEN BREAKER IS REMOTE MOUNTED.

| | | | |
|--|--------|--|-------------------|
| UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: XXXX ± .010 ANGLES ± 1/2° XX ± .030 SURFACE FINISH X ± .060 MAX. FRACTIONS ± | | KOHLER. KOHLER, WI 53044 THIS DRAWING IN DESIGN AND DETAIL IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. | |
| APPROVALS | DATE | TITLE | |
| DRAWN SBR | 5-8-18 | DIAGRAM, WIRING JD 350-500KW, APM603 | |
| CHECKED | | SCALE N/A | SHEET 6-6 |
| APPROVED | | PLOTTED | DWG. NO. GM105806 |

APM603 CONTROLLER
350-500 KW JOHN DEERE TIER III
W/ SPLIT ACTIVATOR, 1ø, 3ø & 600V

TP-6797 5/20g

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