OTPC & BTPC
UTILITY TO GENSET

GENSET PACKAGE WITH PCC3200

(8-SLOT CARD CAGE)

PCC INTERCONNECTION BOX

TB3

CONTACT COMMON ALARM

B+ (20A FUSED I)

AUDIBLE ALARM (WHEN USED)

B+ SWITCHED (20A FUSED I)

GND

2-1

2-2

DAY TANK LOW FUEL ALARM CONTACT

SHUTDOWN RELAY (SEE NOTE 14)

AC SUPPLY TO CONTROL HEATER (OPTIONAL) (SEE NOTE 13)

50 WATT HEATER

COMMON ALARM RELAY (SEE NOTE 14)

NETWORK CIRCUIT BOARD

TB6

DATA 1 (NOTE 6)

DATA 2

TERMINAL BLOCK LOCATED ON CIRCUIT BOARD

TB8 (BASE PCB)

REMOTE EMERGENCY SHUTDOWN SWITCH (WHEN NEEDED)

SEE NOTE 12

1-2

1-4

OPTIONAL COOLANT AND/OR ALTERNATOR HEATER(S)

STARTER

B+ (NOTE 9) 1-1

GND 1-3

AC SOURCES DESCRIBED ON SUBMITTAL DATA

0541-0814 ANNUNCIATOR J1

B+ 3 2-1

GND 6 2-2

DATA1 1

DATA2 2

RUN #2 SEE NOTE 6

RUN #1 SEE NOTE 1

MOUNTED IN OTPC/BTPC CABINET

TB3

FOR CUSTOMER USE (SEE NOTE 5)

10 AMP 12 & 24V BATTERY CHARGER ALARMS (OPTIONAL)

AC LINE FAILURE — C 41, NC 42, NO 43

HI BATTERY VOLTAGE — C 44, NC 45, NO 46

LOW BATTERY VOLTAGE — C 47, NC 48, NO 49

50

DATA1 51

DATA2 52

DO NOT CONNECT TO THIS SIDE

(SEE NOTE 6)

RELAY MODULE

J14 J15

FOR CUSTOMER USE (SEE NOTE 11)

SOURCE	J14		J15	
SOURCE 1 CONNECTED	NO 1		16 COM	LOAD SHED
	COM 2		15 NO	
	NC 3		14 COM	FAIL TO CLOSE
SOURCE 2 CONNECTED	NO 4		13 NO	
	COM 5		12 NC	FAIL TO SYNC. (OPT.)
	NC 6		11 COM	
SOURCE 1 AVAILABLE	NO 7		10 NO	
	COM 8		9 NC	FAIL TO DISCONN. (OPT.)
	NC 9		8 COM	
SOURCE 2 AVAILABLE	NO 10		7 NO	
	COM 11		6 NC	ELEVATOR PRE-TRANSFER
	NC 12		5 COM	
TEST OR EXERCISE ACTIVE	NO 13		4 NO	
	COM 14		3 NC	NOT IN AUTO
	NC 15		2 COM	
	16		1 NO	

FOR CUSTOMER USE (SEE NOTE 11)

2 AMP, 12 AMP, 15 AMP CHARGER

(NOTE 15) REMOTE TEMPERATURE SENSOR INPUT

(NOTE 16) COMMON ALARM OUTPUT CONTACT RATING 2 AMP AT 30 VDC

NOTE:
TB3, J14 AND J15 ARE OPTIONAL AND ARE ONLY PROVIDED WHEN NEEDED FOR INSTALLED OPTIONS

REAR WALL OF CABINET

OTPC

BTPC

TB1

TRANSFER SWITCH NORMAL AUXILIARY SWITCH (NO, NC, C)

TRANSFER SWITCH EMERGENCY AUXILIARY SWITCH (NO, NC, C)

BYPASS SWITCH NORMAL AUXILIARY SWITCH (NO, NC, C)

BYPASS SWITCH EMERGENCY AUXILIARY SWITCH (NO, NC, C)

(SEE NOTE 10)

TB2

1	GND	
2	(SEE NOTE 8)	1-3
3	B+	1-4
4	RMT	1-1
5	REMOTE TEST	1-2
6	TRANSFER INHIBIT	SEE NOTE 4
7	LOAD SHED (OPTIONAL)	
8	COMMON	

REMOTE TEST SWITCH (WHEN USED)

(NOTE 1)

WIRE SIZE (AWG)	DISTANCE IN FEET, ONE WAY (MULTIPLY BY 0.3 FOR METERS)				
	A	B	C	D	E
16	1000	90	-	50	-
14	1600	150	20	80	5
12	2400	225	30	125	10
10	4000	350	50	200	15
8	-	600	80	300	25
6	-	1000	125	500	40

NOTES:

1. WIRE SIZES MUST BE AS FOLLOWS:
   RUN #1-GENSET TO TRANSFER SWITCH-LEAD SIZE MUST BE INCREASED IF A BATTERY CHARGER IS INSTALLED IN THE SWITCH.
   WITH NO BATT CHARGER-LEADS 1-1, -2, -3, -4 USE COL A.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1, & 1-3 USE COL B.
   WITH 12/15 AMP CHARGER MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1 & 1-3 USE COL. C.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL D.
   WITH 12/15 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL E. TO MEET THE NFPA110 REQUIREMENT TO RETURN A FULLY DISCHARGED BATTERY TO 100% OF IT'S AMPERE-HOUR RATING WITHIN 24 HOURS USE COL. E.
2. IF OTPC NETWORK CARD IS USED, YOU MUST CONNECT B+ OR EXTERNAL BATTERY-BACKED POWER TO OTPC/BTPC DIGITAL BOARD AT P27.21 (B+) AND P27.22 (GND).
3. FOR MULTIPLE TRANSFER SWITCHES, DUPLICATE RUN #1 FOR EACH SWITCH. DAISY CHAIN CONNECTION IS ACCEPTABLE PROVIDED WIRE SIZE & DISTANCE TO THE LAST SWITCH MEET THE SPECS IN NOTE 1.
4. CONNECT AN OPEN DRY CONTACT BETWEEN THE APPLICABLE TERMINAL AND COMMON (TB2-8). FOR REMOTE TEST, TRANSFER INHIBIT AND LOAD SHED. CLOSE TO ACTIVATE.
5. CONTACTS RATED: 4 AMPS AT 30 VDC OR 120V MAX.
6. REFER TO CUMMINS 900-0529 POWERCOMMAND NETWORK INSTALLATION & OPERATION MANUAL FOR WIRING INSTRUCTIONS, WIRE SIZE, AND LENGTH. USE STRANDED TWISTED PAIR WIRES WHEN CONNECTING DATA1 AND DATA2 TO NETWORK. PART # 0334-1350 OR EQUAL.
7. INPUTS FOR CUSTOMER FAULTS. GROUNDED SIGNAL REQUIRED TO ACTIVATE INPUT (MAX 50 MA.)
8. NO JUMPER IS REQUIRED BETWEEN TB2-1 & TB2-2 OR BETWEEN TB2-2 & TB2-3.
9. CONFIGURATION SHOWN IS FOR ATS-MOUNTED BATTERY CHARGER. IF WALL-MOUNTED CHARGER IS USED, CONNECT B+ AND GND FROM CHARGER DIRECTLY TO BATTERY OR STARTER.
10. TRANSFER SWITCH SHOWN CLOSED TO NORMAL BYPASS SWITCH SHOWN NEUTRAL POSITION.
11. CONTACTS RATED: 2 AMPS AT 30 VDC OR 0.60 AMPS AT 120 VAC.
12. OPEN CONNECTION TO INITIATE EMERGENCY STOP. THESE TERMINALS MUST BE SHORTED TOGETHER IF REMOTE EMERGENCY STOP OPTION NOT USED. JUMPER SHOWN BETWEEN TB8-1 AND TB8-2 NOT SUPPLIED WITH UNIT.
13. 120VAC OR 240VAC AT 50W.
14. CUSTOMER SUPPLIED EITHER 12 OR 240VDC RELAYS OUTPUT SIGNAL 20ma @ 24VDC MAX.
15. USE THE INVENTER REMOTE TEMPERATURE PROBE (0193-0530).
16. THE FOLLOWING FAILS WILL CAUSE A BATTERY CHARGER ALARM OUTPUT: LOW BATTERY VOLTAGE, HIGH BATTERY VOLTAGE, LOW AC INPUT VOLTAGE, HIGH AC INPUT VOLTAGE OVERCURRENT, HIGH CHARGER TEMPERATURE, BATTERY FAILURE, HIGH BATTERY TEMPERATURE (NOT AVAILABLE ON 2 AMP CHARGER).

LAST DATUM LETTER USED: -		LAST REFERENCE LETTER USED: -	
MODEL/PLATFORM: OTPC/BTPC		THIS PART IS SIMILAR TO: 0630-1975	
UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY			ANG. TOL.: ± 1°
DIMENSIONAL TOLERANCES:	X ± 1	.X ± 0.8	.XX ± 0.38
HOLE SIZE 0.00-4.99 TOL. +0.15/-0.08	HOLE SIZE 5.00-9.99 TOL. +0.20/-0.10	HOLE SIZE 10.00-17.49 TOL. +0.25/-0.13	HOLE SIZE 17.50-24.99 TOL. +0.30/-0.13

Cummins Inc.

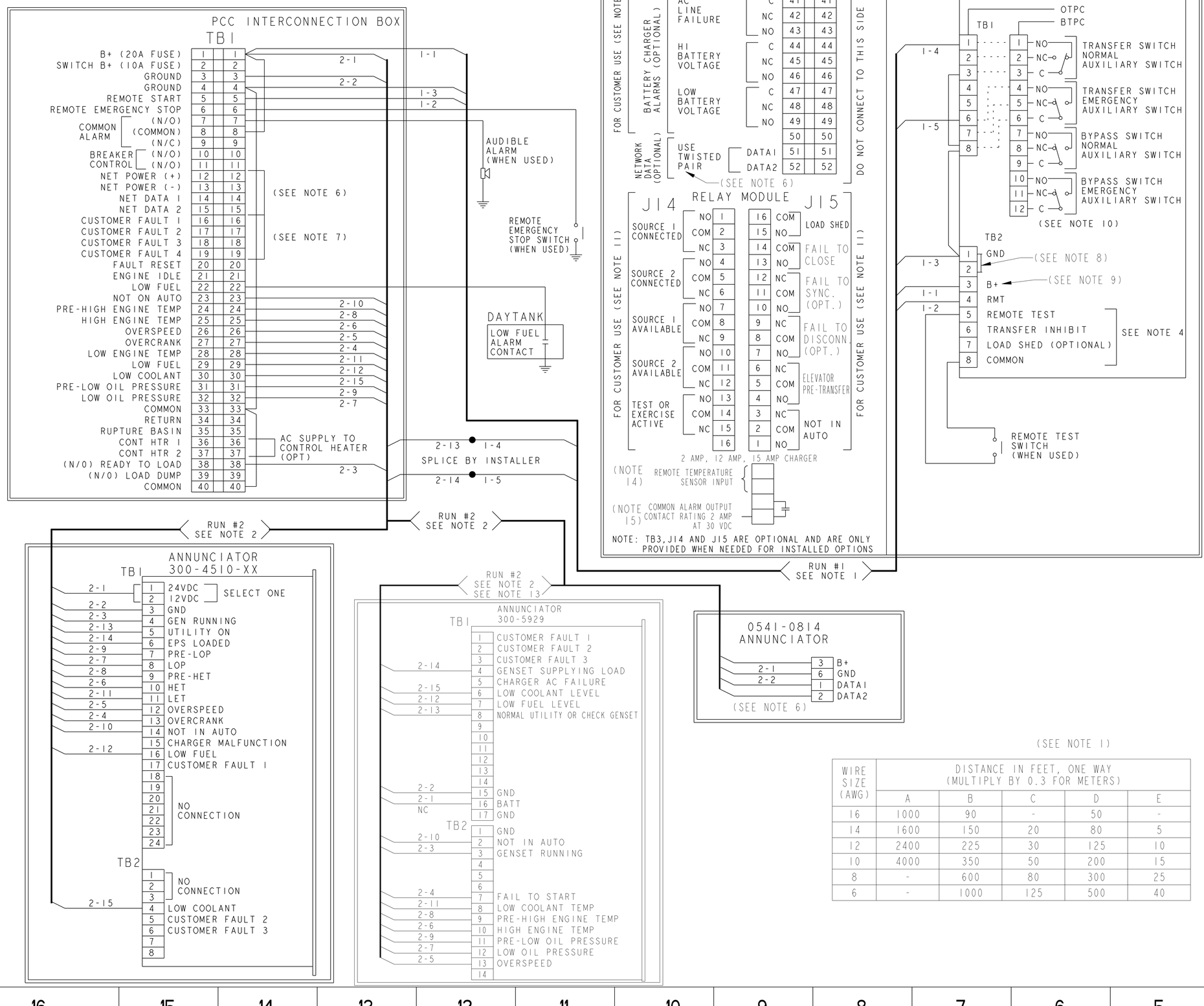
DIMENSIONS ARE IN: MILLIMETERS [ ] ARE IN: -

SIZE: A1 SCALE: 1/1

DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994

THIRD ANGLE PROJECTION

CAD SYSTEM PTC® Creo® Parametric



(SEE NOTE 1)

WIRE SIZE (AWG)	DISTANCE IN FEET, ONE WAY (MULTIPLY BY 0.3 FOR METERS)				
	A	B	C	D	E
16	1000	90	-	50	-
14	1600	150	20	80	5
12	2400	225	30	125	10
10	4000	350	50	200	15
8	-	600	80	300	25
6	-	1000	125	500	40

NOTES:

1. WIRE SIZES MUST BE AS FOLLOWS:
   RUN #1-GENSET TO TRANSFER SWITCH-LEAD SIZE MUST BE INCREASED IF A BATTERY CHARGER IS INSTALLED IN THE SWITCH.
   WITH NO BATT CHARGER-LEADS 1-1, -2, -3, -4, -5 USE COL A.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1, & 1-3 USE COL B.
   WITH 12/15 AMP CHARGER MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1 & 1-3 USE COL. C.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL D.
   WITH 12/15 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL E. TO MEET THE NFPA110 REQUIREMENT TO RETURN A FULLY DISCHARGED BATTERY TO 100% OF IT'S AMPERE-HOUR RATING WITHIN 24 HOURS USE COL. E.
2. FOR 300-4510 ANNUNCIATOR, RUN #2-GENSET TO ANNUNCIATOR-ALL LEADS, USE COL. A
   FOR NETWORK ANNUNCIATOR, SEE NOTE 6.
3. FOR MULTIPLE TRANSFER SWITCHES, DUPLICATE RUN #1 FOR EACH SWITCH. DAISY CHAIN CONNECTION IS ACCEPTABLE PROVIDED WIRE SIZE & DISTANCE TO THE LAST SWITCH MEET THE SPECS IN NOTE 1.
4. CONNECT AN OPEN DRY CONTACT BETWEEN THE APPLICABLE TERMINAL AND COMMON (TB2-8). FOR REMOTE TEST, TRANSFER INHIBIT AND LOAD SHED. CLOSE TO ACTIVATE.
5. CONTACTS RATED: 4 AMPS AT 30 VDC OR 120V MAX.
6. REFER TO CUMMINS 900-0529 POWERCOMMAND NETWORK INSTALLATION & OPERATION MANUAL FOR WIRING INSTRUCTIONS, WIRE SIZE, AND LENGTH. USE STRANDED TWISTED PAIR WIRES WHEN CONNECTING DATA1 AND DATA2 TO NETWORK. PART # 0334-1350 OR EQUAL.
7. INPUTS FOR CUSTOMER FAULTS. GROUNDED SIGNAL REQUIRED TO ACTIVATE INPUT (MAX 50 MA.)
8. INSTALL JUMPER BETWEEN TB2-1 & TB2-2. FOR SETS WITH PCC 3100 CONTROL.
9. IF OTPC/BTPC NETWORK CARD IS USED, YOU MUST CONNECT B+ OR EXTERNAL BATTERY-BACKED POWER TO THE OTPC/BTPC DIGITAL BOARD AT P27.21 (B+) AND P27.22 (GND)
10. TRANSFER SWITCH SHOWN CLOSED TO NORMAL BYPASS SWITCH SHOWN NEUTRAL POSITION.
11. CONTACTS RATED: 2 AMPS AT 30 VDC OR 0.60 AMPS AT 120 VAC.
12. REFER TO 0900-0301 FOR INSTALLATION OF 0300-5929.
13. REFER TO 0900-0301 FOR INSTALLATION OF 0300-5929.
14. USE THE INVENTER REMOTE TEMPERATURE PROBE (0193-0530).
15. THE FOLLOWING FAILS WILL CAUSE A BATTERY CHARGER ALARM OUTPUT:
    LOW BATTERY VOLTAGE, HIGH BATTERY VOLTAGE, LOW AC INPUT VOLTAGE, HIGH AC INPUT VOLTAGE OVERCURRENT, HIGH CHARGER TEMPERATURE, BATTERY FAILURE, HIGH BATTERY TEMPERATURE (NOT AVAILABLE ON 2 AMP CHARGER).

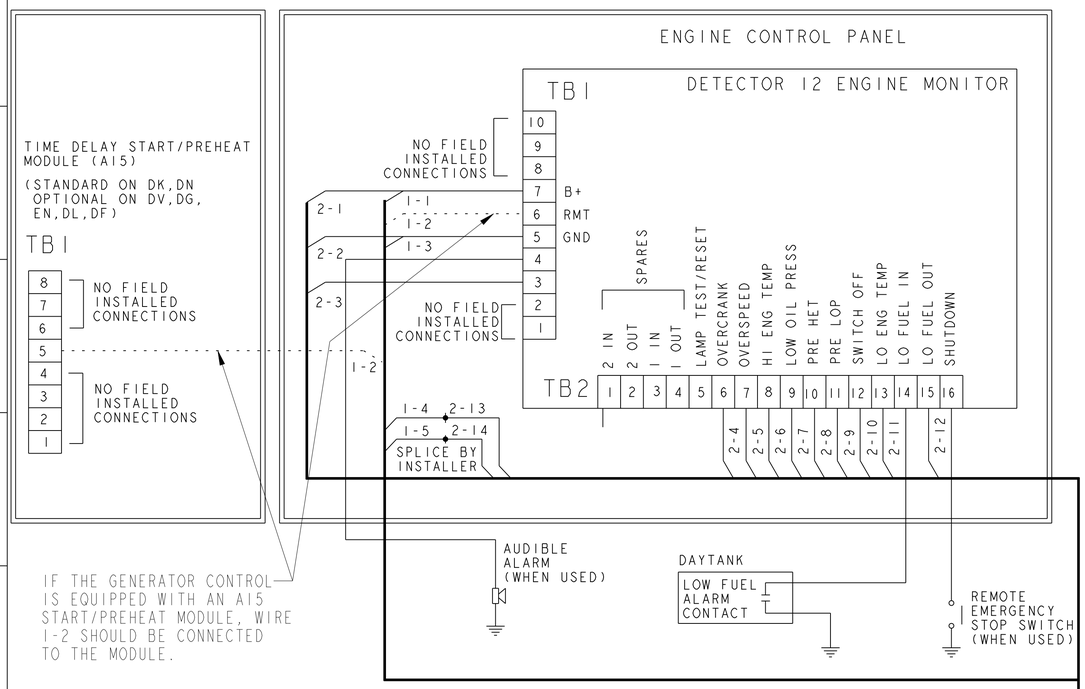
LAST DATUM LETTER USED: -		LAST REFERENCE LETTER USED: -	
MODEL/PLATFORM: OTPC/BTPC		THIS PART IS SIMILAR TO: 0630-1975	
UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY			ANG. TOL.: ± 1°
DIMENSIONAL TOLERANCES:	X ± 1	.X ± 0.8	.XX ± 0.38
HOLE SIZE 0.00-4.99 TOL. +0.15/-0.08	HOLE SIZE 5.00-9.99 TOL. +0.20/-0.10	HOLE SIZE 10.00-17.49 TOL. +0.25/-0.13	HOLE SIZE 17.50-24.99 TOL. +0.30/-0.13

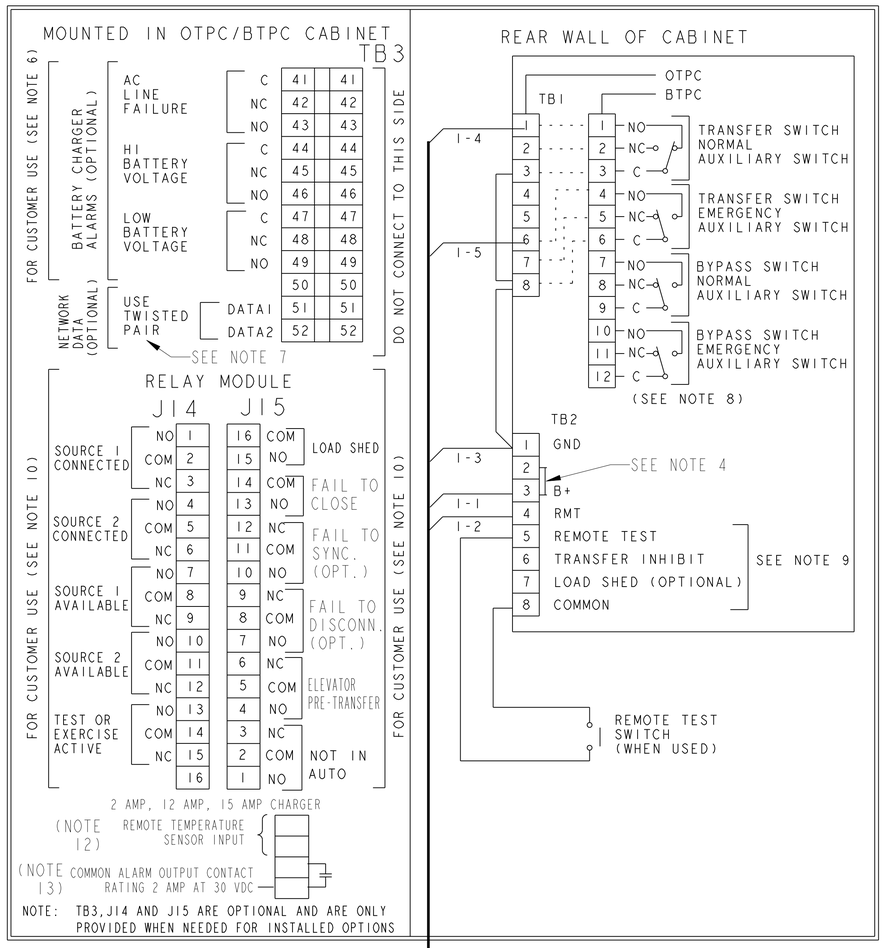
Cummins Inc.

DIMENSIONS ARE IN: MILLIMETERS [ ] ARE IN: -
SIZE: A1
SCALE: 1/1
DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994
THIRD ANGLE PROJECTION
CAD SYSTEM: PTC® Creo® Parametric

CUMMINS POWERGENERATOR SET WITH DETECTOR CONTROL

OTPC & BTPC UTILITY TO GENSET





NOTES:

1. WIRE SIZES MUST BE AS FOLLOWS:
   RUN #1-GENSET TO TRANSFER SWITCH-LEAD SIZE MUST BE INCREASED IF A BATTERY CHARGER IS INSTALLED IN THE SWITCH.
   WITH NO BATT CHARGER-LEADS 1-1, -2, -3, -4, -5 USE COL A.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1, & 1-3 USE COL B.
   WITH 12/15 AMP CHARGER MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1 & 1-3 USE COL. C.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL D.
   WITH 12/15 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL E. TO MEET THE NFPA110 REQUIREMENT TO RETURN A FULLY DISCHARGED BATTERY TO 100% OF IT'S AMPERE-HOUR RATING WITHIN 24 HOURS USE COL. E.
2. RUN #2-GENSET TO ANNUNCIATOR-ALL LEADS, USE COL. A
3. FOR MULTIPLE TRANSFER SWITCHES, DUPLICATE RUN #1 FOR EACH SWITCH. DAISY CHAIN CONNECTION IS ACCEPTABLE PROVIDED WIRE SIZE & DISTANCE TO THE LAST SWITCH MEET THE SPECS IN NOTE 1.
4. INSTALL JUMPER BETWEEN TB2-2 & TB2-3.
5. 300-4510-XX ANNUNCIATOR MAY BE USED ALSO. WIRE TBI AS SHOWN.
6. CONTACTS RATED: 4 AMPS AT 30 VDC OR 120V MAX.
7. USE STRANDED TWISTED PAIR WIRES WHEN CONNECTING DATAI AND DATA2 TO THE NETWORK.
8. TRANSFER SWITCH SHOWN CLOSED TO NORMAL BYPASS SWITCH SHOWN IN NEUTRAL POSITION.
9. CONNECT AN OPEN DRY CONTACT BETWEEN THE APPLICABLE TERMINAL AND COMMON (TB2-8). FOR REMOTE TEST, TRANSFER INHIBIT AND LOAD SHED. CLOSE TO ACTIVATE.
10. CONTACTS RATED: 2 AMPS AT 30 VDC OR 0.60 AMPS AT 120 VAC.
11. REFER TO 0900-0301 FOR INSTALLATION OF 0300-5929.
12. USE THE INVENTER REMOTE TEMPERATURE PROBE (0193-0530).
13. THE FOLLOWING FAILS WILL CAUSE A BATTERY CHARGER ALARM OUTPUT:
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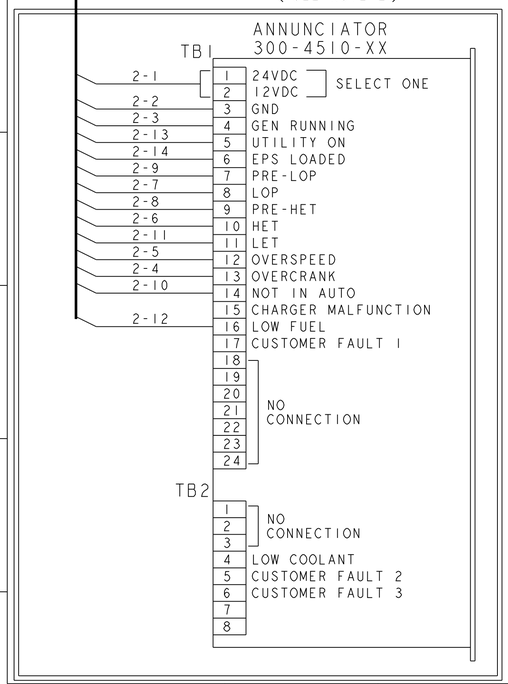

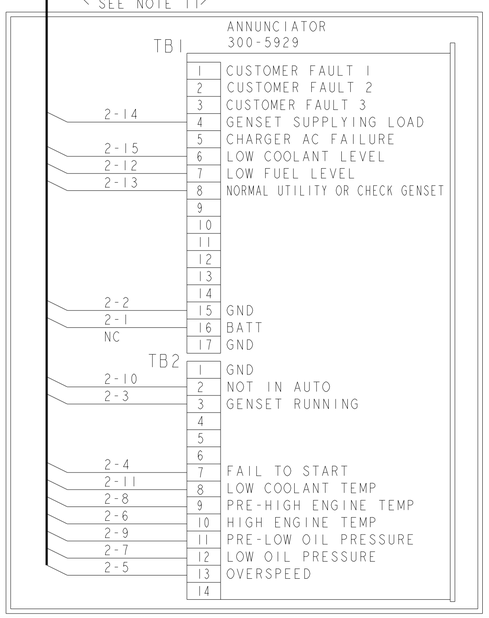

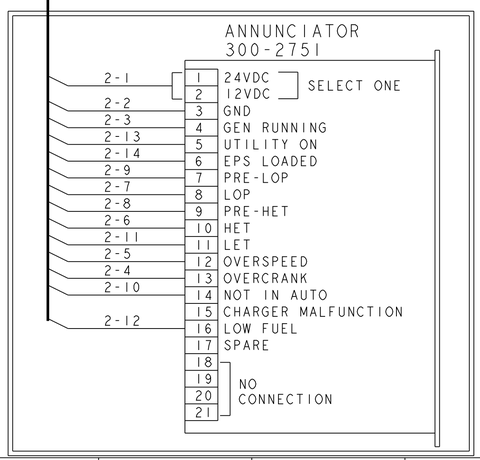

RUN #2 SEE NOTE 2

RUN #2 SEE NOTE 2

RUN #1 SEE NOTE 1

WIRE SIZE (AWG)	DISTANCE IN FEET, ONE WAY (MULTIPLY BY 0.3 FOR METERS)				
	A	B	C	D	E
16	1000	90	-	50	-
14	1600	150	20	80	5
12	2400	225	30	125	10
10	4000	350	50	200	15
8	-	600	80	300	25
6	-	1000	125	500	40

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MODEL/PLATFORM: OTPC/BTPC		THIS PART IS SIMILAR TO: 0630-1975	
UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY			ANG. TOL.: ± 1°
DIMENSIONAL TOLERANCES:	X ± 1	.X ± 0.8	.XX ± 0.38
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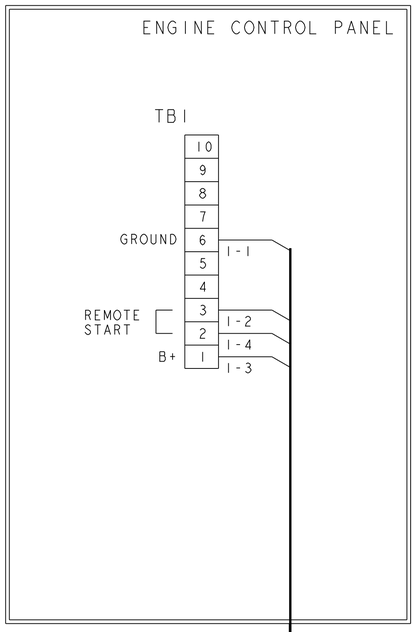
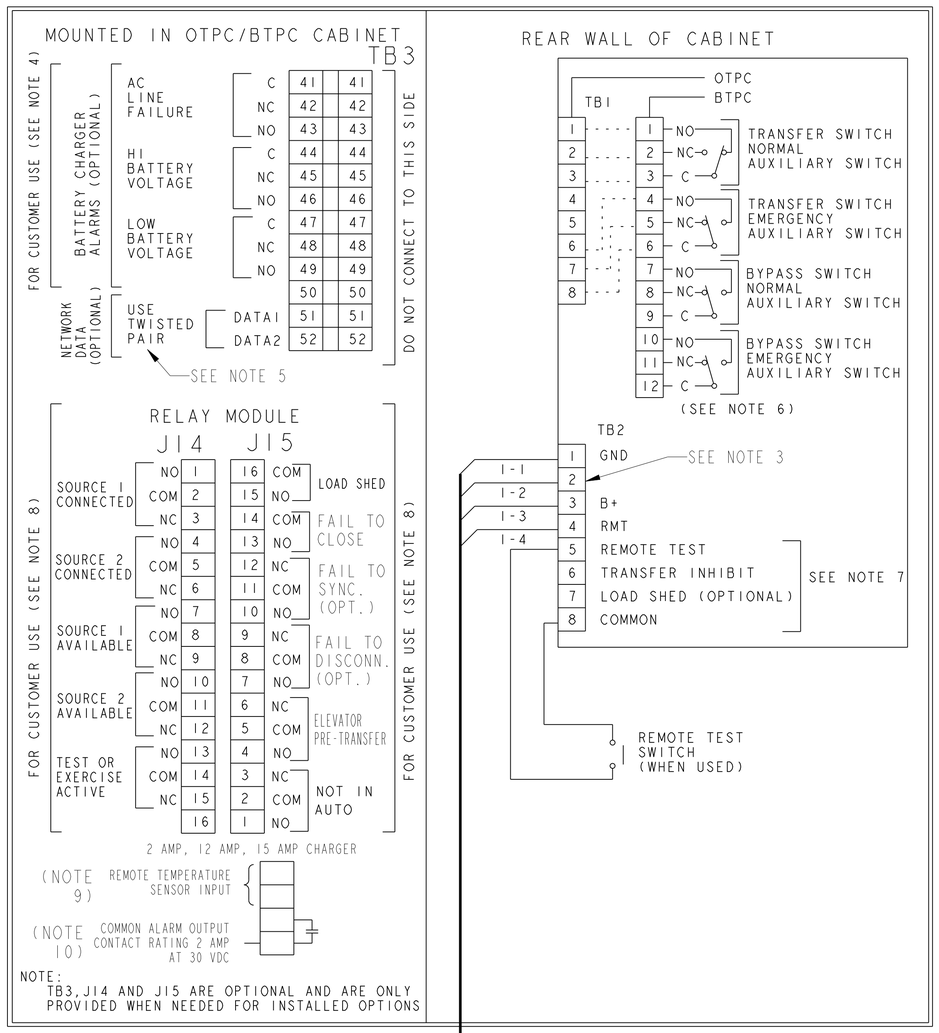
Cummins Inc.

DIMENSIONS ARE IN: MILLIMETERS [ ] ARE IN: -
SIZE: A1 SCALE: 1/1
DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994
THIRD ANGLE PROJECTION
CAD SYSTEM PTC® Creo® Parametric

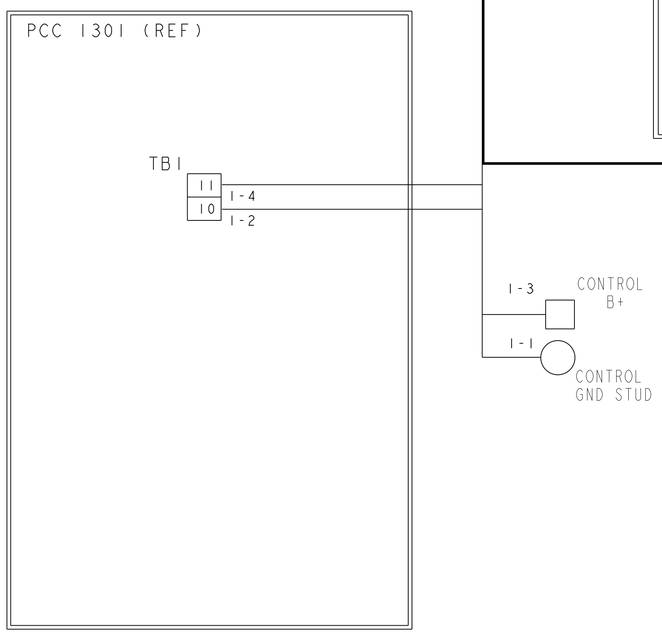
CUMMINS POWERGENERATOR SET SERIES GGDB SPEC A-E, GN SPEC B, DN SPEC B WITH TWO WIRE CONTROL



OTPC & BTPC UTILITY TO GENSET



CUMMINS POWERGENERATOR SET SERIES GGDB SPEC F



WIRE SIZE (AWG)	DISTANCE IN FEET, ONE WAY (MULTIPLY BY 0.3 FOR METERS)				
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16	1000	90	-	50	-
14	1600	150	20	80	5
12	2400	225	30	125	10
10	4000	350	50	200	15
8	-	600	80	300	25
6	-	1000	125	500	40

NOTES:

1. WIRE SIZES MUST BE AS FOLLOWS:
   RUN #1-GENSET TO TRANSFER SWITCH-LEAD SIZE MUST BE INCREASED IF A BATTERY CHARGER IS INSTALLED IN THE SWITCH.
   WITH NO BATT CHARGER-LEADS 1-1, -2, -3, -4 USE COL A.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1, & 1-3 USE COL B.
   WITH 12/15 AMP CHARGER MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1 & 1-3 USE COL. C.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL D.
   WITH 12/15 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL E. TO MEET THE NFPA110 REQUIREMENT TO RETURN A FULLY DISCHARGED BATTERY TO 100% OF IT'S AMPERE-HOUR RATING WITHIN 24 HOURS USE COL. E.
2. FOR MULTIPLE TRANSFER SWITCHES, DUPLICATE RUN #1 FOR EACH SWITCH. DAISY CHAIN CONNECTION IS ACCEPTABLE PROVIDED WIRE SIZE & DISTANCE TO THE LAST SWITCH MEET THE SPECS IN NOTE 1.
3. DO NOT INSTALL JUMPER BETWEEN TB2-2 & TB2-3 OR BETWEEN TB2-2 & TB2-1.
4. CONTACTS RATED: 4 AMPS AT 30 VDC OR 120V MAX.
5. USE STRANDED TWISTED PAIR WIRES WHEN CONNECTING DATA1 AND DATA2 TO THE NETWORK.
6. TRANSFER SWITCH SHOWN CLOSED TO NORMAL BYPASS SWITCH SHOWN IN NEUTRAL POSITION.
7. CONNECT AN OPEN DRY CONTACT BETWEEN THE APPLICABLE TERMINAL AND COMMON (TB2-8). FOR REMOTE TEST, TRANSFER INHIBIT AND LOAD SHED. CLOSE TO ACTIVATE.
8. CONTACTS RATED: 2 AMPS AT 30 VDC OR 0.60 AMPS AT 120 VAC.
9. USE THE INVENTER REMOTE TEMPERATURE PROBE (0193-0530).
10. THE FOLLOWING FAILS WILL CAUSE A BATTERY CHARGER ALARM OUTPUT:
    LOW BATTERY VOLTAGE, HIGH BATTERY VOLTAGE, LOW AC INPUT VOLTAGE, HIGH AC INPUT VOLTAGE OVERCURRENT, HIGH CHARGER TEMPERATURE, BATTERY FAILURE, HIGH BATTERY TEMPERATURE (NOT AVAILABLE ON 2 AMP CHARGER).

LAST DATUM LETTER USED: -		LAST REFERENCE LETTER USED: -	
MODEL/PLATFORM: OTPC/BTPC		THIS PART IS SIMILAR TO: 0630-1975	
UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY			ANG. TOL.: ± 1°
DIMENSIONAL TOLERANCES:	X ± 1	.X ± 0.8	.XX ± 0.38
HOLE SIZE 0.00-4.99 TOL. +0.15/-0.08	HOLE SIZE 5.00-9.99 TOL. +0.20/-0.10	HOLE SIZE 10.00-17.49 TOL. +0.25/-0.13	HOLE SIZE 17.50-24.99 TOL. +0.30/-0.13

Cummins Inc.

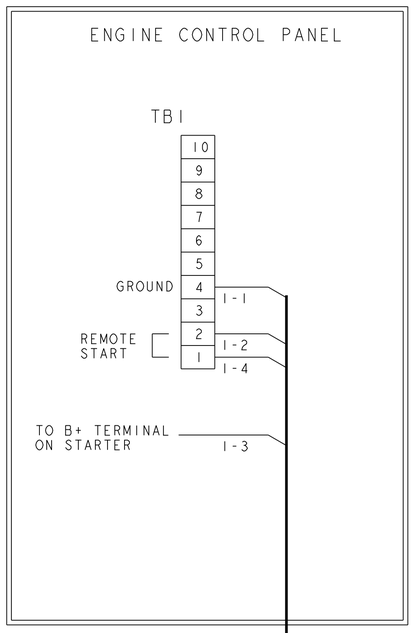
DIMENSIONS ARE IN: MILLIMETERS [ ] ARE IN: - | SIZE: A1 | SCALE: 1/1

DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994 | THIRD ANGLE PROJECTION

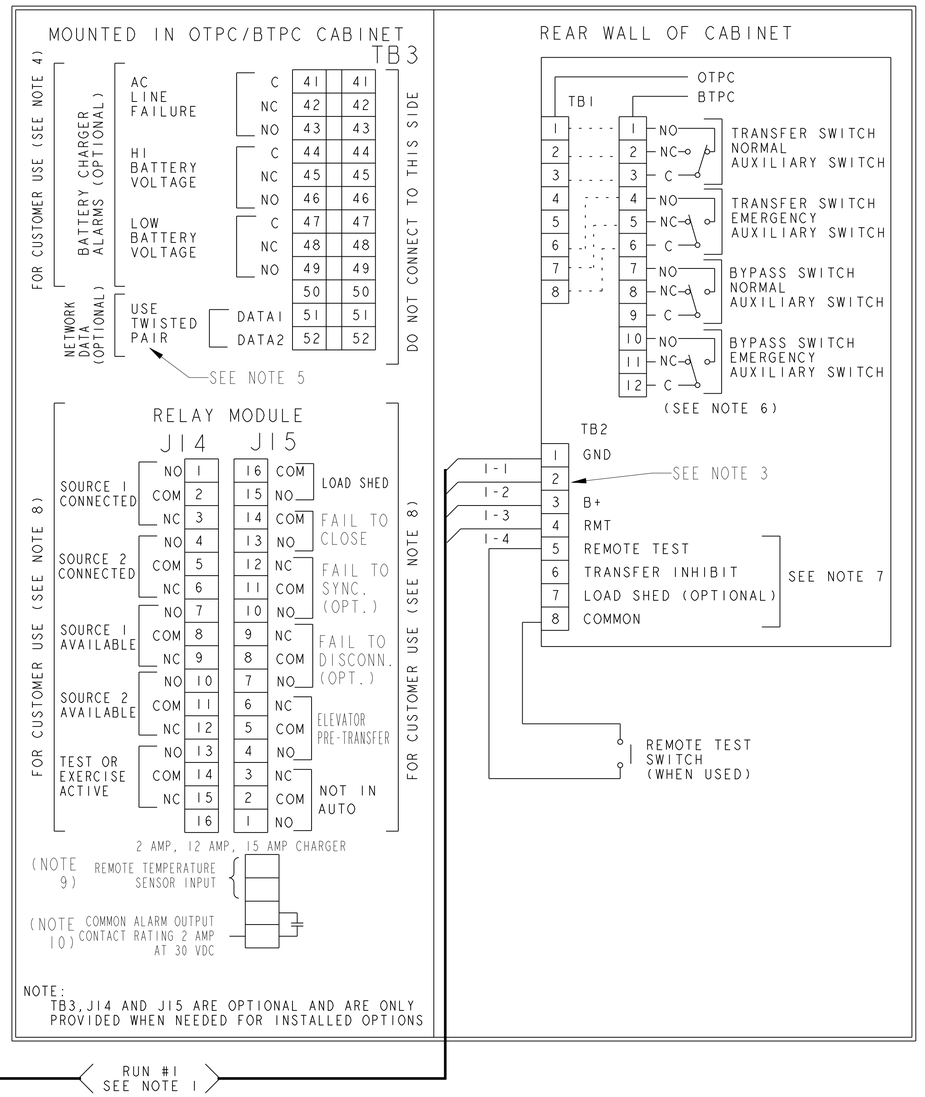
CAD SYSTEM: PTC® Creo® Parametric

CUMMINS POWERGENERATOR SET

SERIES GN SPEC A, DN SPEC A WITH TWO WIRE CONTROL



OTPC & BTPC UTILITY TO GENSET



NOTES:

1. WIRE SIZES MUST BE AS FOLLOWS:
   RUN #1-GENSET TO TRANSFER SWITCH-LEAD SIZE MUST BE INCREASED IF A BATTERY CHARGER IS INSTALLED IN THE SWITCH.
   WITH NO BATT CHARGER-LEADS 1-1, -2, -3, -4 USE COL A.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1, & 1-3 USE COL B.
   WITH 12/15 AMP CHARGER MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1 & 1-3 USE COL. C.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL D.
   WITH 12/15 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL E. TO MEET THE NFPA110 REQUIREMENT TO RETURN A FULLY DISCHARGED BATTERY TO 100% OF IT'S AMPERE-HOUR RATING WITHIN 24 HOURS USE COL. E.
2. FOR MULTIPLE TRANSFER SWITCHES, DUPLICATE RUN #1 FOR EACH SWITCH. DAISY CHAIN CONNECTION IS ACCEPTABLE PROVIDED WIRE SIZE & DISTANCE TO THE LAST SWITCH MEET THE SPECS IN NOTE 1.
3. DO NOT INSTALL JUMPER BETWEEN TB2-2 & TB2-3 OR BETWEEN TB2-2 & TB2-1.
4. CONTACTS RATED: 4 AMPS AT 30 VDC OR 120V MAX.
5. USE STRANDED TWISTED PAIR WIRES WHEN CONNECTING DATA1 AND DATA2 TO THE NETWORK.
6. TRANSFER SWITCH SHOWN CLOSED TO NORMAL BYPASS SWITCH SHOWN IN NEUTRAL POSITION.
7. CONNECT AN OPEN DRY CONTACT BETWEEN THE APPLICABLE TERMINAL AND COMMON (TB2-8). FOR REMOTE TEST, TRANSFER INHIBIT AND LOAD SHED. CLOSE TO ACTIVATE.
8. CONTACTS RATED: 2 AMPS AT 30 VDC OR 0.60 AMPS AT 120 VAC.
9. USE THE INVENTER REMOTE TEMPERATURE PROBE (0193-0530).
10. THE FOLLOWING FAILS WILL CAUSE A BATTERY CHARGER ALARM OUTPUT:
    LOW BATTERY VOLTAGE, HIGH BATTERY VOLTAGE, LOW AC INPUT VOLTAGE, HIGH AC INPUT VOLTAGE OVERCURRENT, HIGH CHARGER TEMPERATURE, BATTERY FAILURE, HIGH BATTERY TEMPERATURE (NOT AVAILABLE ON 2 AMP CHARGER).

WIRE SIZE (AWG)	DISTANCE IN FEET, ONE WAY (MULTIPLY BY 0.3 FOR METERS)				
	A	B	C	D	E
16	1000	90	-	50	-
14	1600	150	20	80	5
12	2400	225	30	125	10
10	4000	350	50	200	15
8	-	600	80	300	25
6	-	1000	125	500	40

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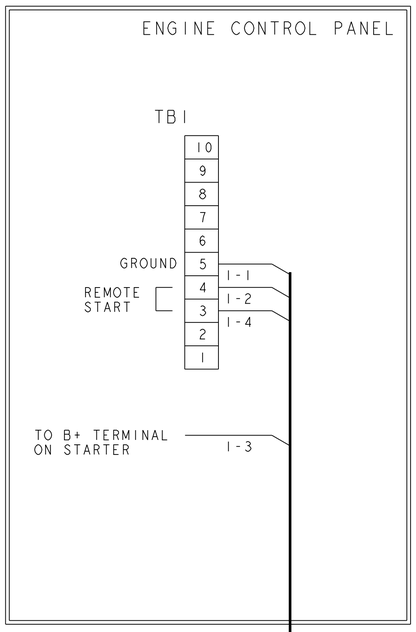
MODEL/PLATFORM: OTPC/BTPC		THIS PART IS SIMILAR TO: 0630-1975	
UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY			ANG. TOL.: ± 1°
DIMENSIONAL TOLERANCES:	X ± 1	.X ± 0.8	.XX ± 0.38
HOLE SIZE 0.00-4.99 TOL. +0.15/-0.08	HOLE SIZE 5.00-9.99 TOL. +0.20/-0.10	HOLE SIZE 10.00-17.49 TOL. +0.25/-0.13	HOLE SIZE 17.50-24.99 TOL. +0.30/-0.13

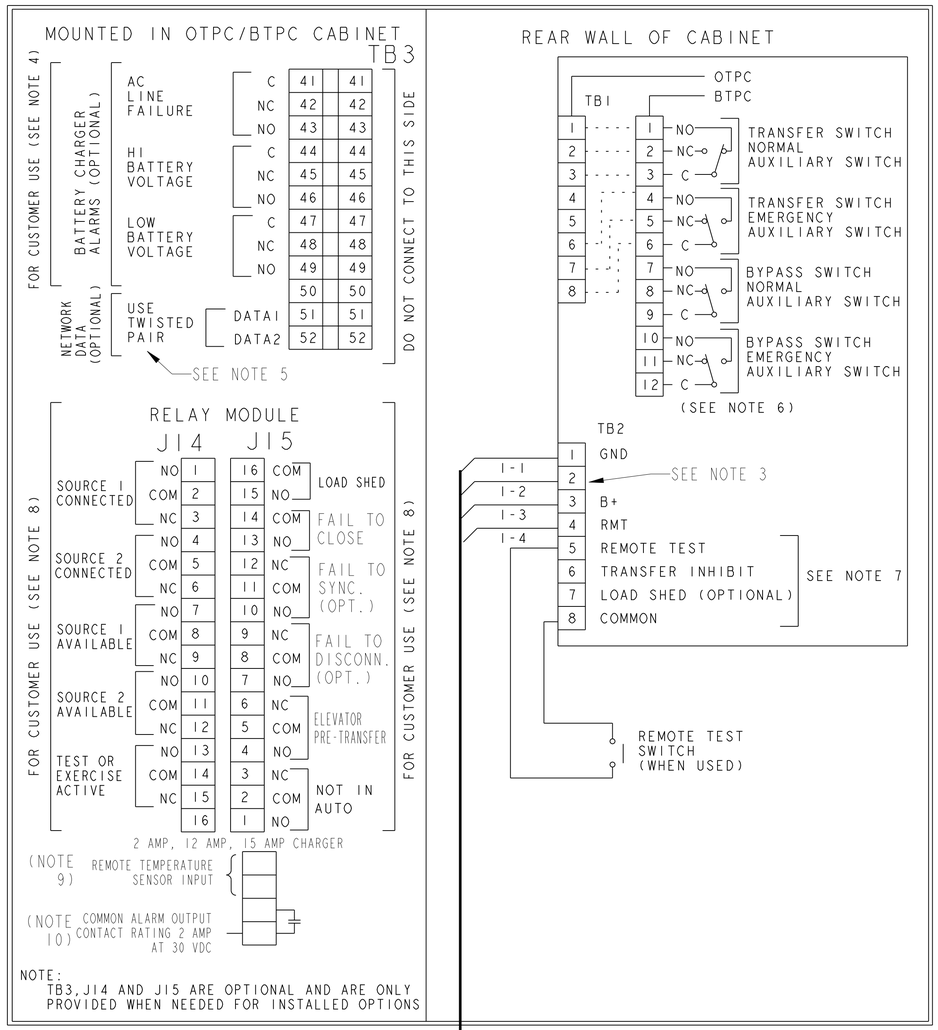
Cummins Inc.

DIMENSIONS ARE IN: MILLIMETERS [ ] ARE IN: -	SIZE: A1	SCALE: 1/1
DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994	THIRD ANGLE PROJECTION	CAD SYSTEM PTC® Creo® Parametric

CUMMINS POWERGENERATOR SET
SERIES DG, GGFB, GGFC, GGHB, GGHC, GGHD WITH TWO WIRE CONTROL

OTPC & BTPC
UTILITY TO GENSET





NOTES:

1. WIRE SIZES MUST BE AS FOLLOWS:
   RUN #1-GENSET TO TRANSFER SWITCH-LEAD SIZE MUST BE INCREASED IF A BATTERY CHARGER IS INSTALLED IN THE SWITCH.
   WITH NO BATT CHARGER-LEADS 1-1, -2, -3, -4 USE COL A.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1, & 1-3 USE COL B.
   WITH 12/15 AMP CHARGER MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1 & 1-3 USE COL. C.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL D.
   WITH 12/15 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL E. TO MEET THE NFPA110 REQUIREMENT TO RETURN A FULLY DISCHARGED BATTERY TO 100% OF IT'S AMPERE-HOUR RATING WITHIN 24 HOURS USE COL. E.
2. FOR MULTIPLE TRANSFER SWITCHES, DUPLICATE RUN #1 FOR EACH SWITCH. DAISY CHAIN CONNECTION IS ACCEPTABLE PROVIDED WIRE SIZE & DISTANCE TO THE LAST SWITCH MEET THE SPECS IN NOTE 1.
3. DO NOT INSTALL JUMPER BETWEEN TB2-2 & TB2-3 OR BETWEEN TB2-2 & TB2-1.
4. CONTACTS RATED: 4 AMPS AT 30 VDC OR 120V MAX.
5. USE STRANDED TWISTED PAIR WIRES WHEN CONNECTING DATA1 AND DATA2 TO THE NETWORK.
6. TRANSFER SWITCH SHOWN CLOSED TO NORMAL BYPASS SWITCH SHOWN IN NEUTRAL POSITION.
7. CONNECT AN OPEN DRY CONTACT BETWEEN THE APPLICABLE TERMINAL AND COMMON (TB2-8). FOR REMOTE TEST, TRANSFER INHIBIT AND LOAD SHED. CLOSE TO ACTIVATE.
8. CONTACTS RATED: 2 AMPS AT 30 VDC OR 0.60 AMPS AT 120 VAC.
9. USE THE INVENTER REMOTE TEMPERATURE PROBE (0193-0530).
10. THE FOLLOWING FAILS WILL CAUSE A BATTERY CHARGER ALARM OUTPUT:
    LOW BATTERY VOLTAGE, HIGH BATTERY VOLTAGE, LOW AC INPUT VOLTAGE, HIGH AC INPUT VOLTAGE OVERCURRENT, HIGH CHARGER TEMPERATURE, BATTERY FAILURE, HIGH BATTERY TEMPERATURE (NOT AVAILABLE ON 2 AMP CHARGER).

WIRE SIZE (AWG)	DISTANCE IN FEET, ONE WAY (MULTIPLY BY 0.3 FOR METERS)				
	A	B	C	D	E
16	1000	90	-	50	-
14	1600	150	20	80	5
12	2400	225	30	125	10
10	4000	350	50	200	15
8	-	600	80	300	25
6	-	1000	125	500	40

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Cummins Inc.

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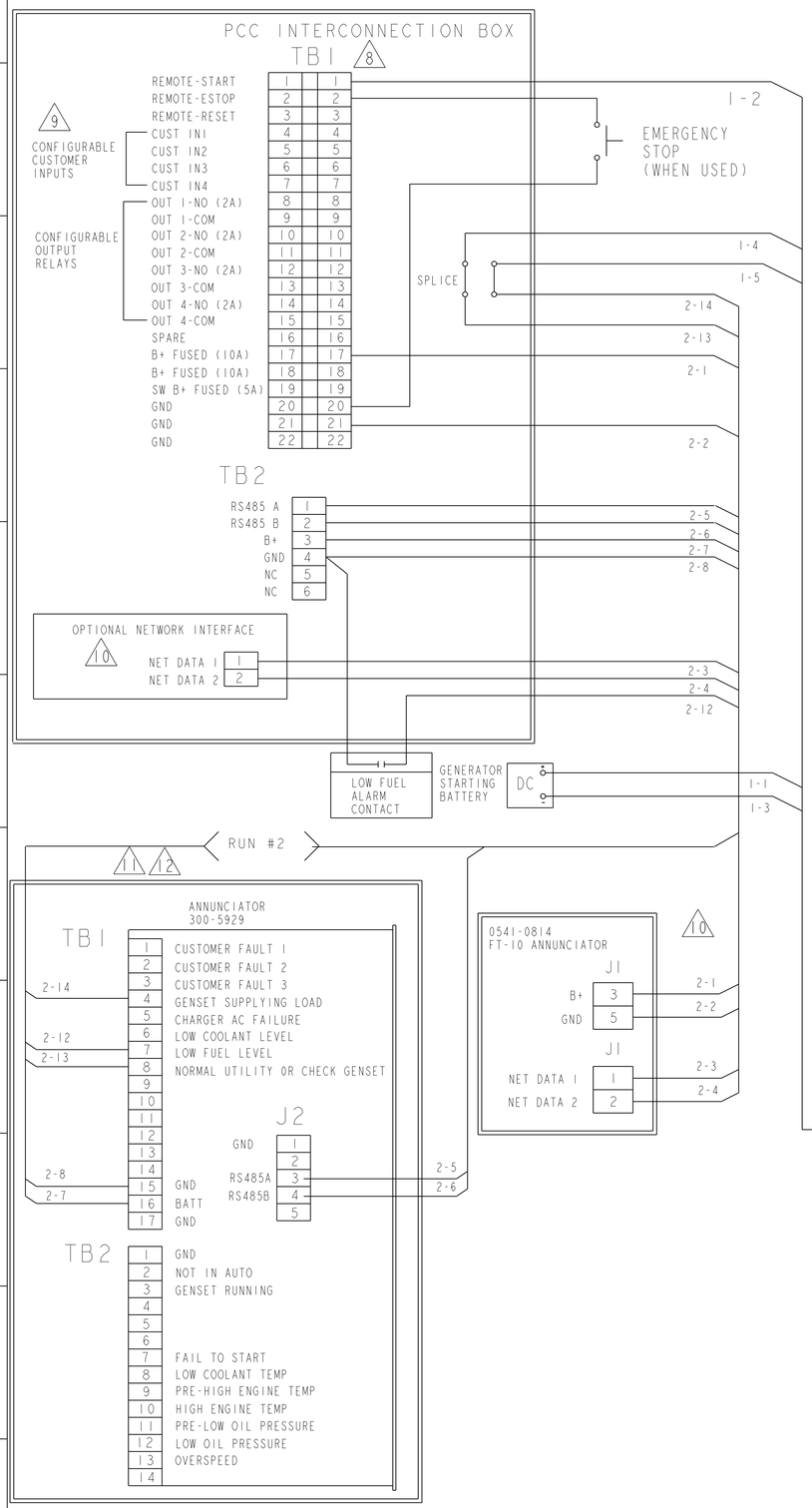
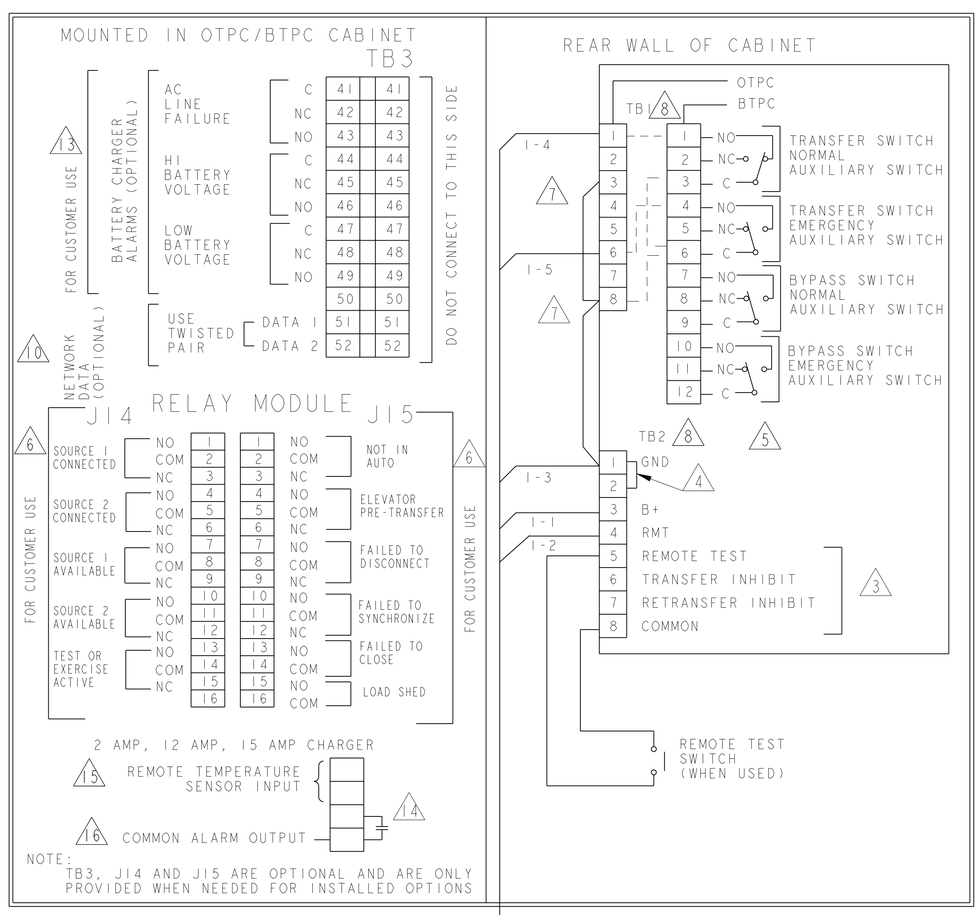
THIRD ANGLE PROJECTION
CAD SYSTEM
PTC® Creo® Parametric





NOTES:

1. WIRE SIZES MUST BE AS FOLLOWS:
   RUN #1-GENSET TO TRANSFER SWITCH-LEAD SIZE MUST BE INCREASED IF A BATTERY CHARGER IS INSTALLED IN THE TRANSFER SWITCH ENCLOSURE. WITH NO BATTERY CHARGER-LEADS 1-1, 1-2, 1-3, 1-4 AND 1-5 USE COLUMN A.

   WITH 2 AMP BATTERY CHARGER, MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1 AND 1-3 USE COLUMN B.

   WITH 12/15 AMP BATTERY CHARGER, MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1 AND 1-3 USE COLUMN C.

   WITH A 2 AMP BATTERY CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1 AND 1-3 USE COLUMN D.

   WITH 12/15 AMP BATTERY CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1 AND 1-3 USE COLUMN E. COLUMN E MEETS THE NFPA110 REQUIREMENT TO RETURN A FULLY DISCHARGED BATTERY TO 100% OF ITS AMP-HOUR RATING WITHIN 24 HOURS.

2. FOR MULTIPLE TRANSFER SWITCHES, DUPLICATE RUN #1 FOR EACH SWITCH. DAISY CHAIN CONNECTION IS ACCEPTABLE PROVIDED WIRE SIZE AND DISTANCE TO THE LAST SWITCH MEET THE SPECS IN NOTE 1.

3. CONNECT AN OPEN DRY CONTACT BETWEEN THE APPLICABLE TERMINAL AND COMMON (TB2-8). FOR REMOTE TEST, TRANSFER INHIBIT AND LOAD SHED, CLOSE TO ACTIVATE.

4. INSTALL JUMPER BETWEEN TB2-1 AND TB2-2.

5. TRANSFER SWITCH SHOWN CLOSED TO NORMAL, BYPASS SWITCH SHOWN IN NEUTRAL POSITION.

6. RELAY MODULE CONTACTS RATED 2 AMPS AT 30 VDC OR 0.60 AMPS AT 120 VAC MAXIMUM.

7. THIS CONNECTION IS MADE IF ATS POSITION DISPLAY IS DESIRED IN REMOTE ANNUNCIATOR AND ATS DOES NOT HAVE NETWORK INTERFACE. THE CONFIGURABLE INPUT IS PROGRAMMED "EPS SUPPLYING LOAD" AND BOUND TO ANNUNCIATOR OVER NETWORK.

8. TB1 IN THE GENSET CONTROL AND TB2 IN TRANSFER SWITCH WILL ACCEPT A MAXIMUM WIRE SIZE OF 12 AWG. WIRE MUST BE STRANDED.

9. CONNECTIONS TO TB1-4 THRU TB1-7 IN THE GENSET CONTROL ARE FOR CUSTOMER USE AND MAY BE CONFIGURED TO DISPLAY CUSTOM ALARM MESSAGES ON THE GENSET CONTROL.
   LOW FUEL IS REQUIRED FOR NFPA110 COMPLIANCE.

10. REFER TO CUMMINS 0900-0529, POWERCOMMAND FT-10 NETWORK INSTALLATION AND OPERATION MANUAL, FOR WIRING INSTRUCTIONS, WIRE SIZE AND LENGTH. USE STRANDED TWISTED PAIR WIRES WHEN CONNECTING DATA 1 AND DATA 2 TO NETWORK, PART NO. 0334-1350 OR EQUIVALENT.

11. REFER TO CUMMINS 0900-0301, POWERCOMMAND UNIVERSAL ANNUNCIATOR 0300-5929 OWNER MANUAL, FOR INSTALLATION INSTRUCTIONS. USE 18 AWG TWISTED PAIR OR CAT 5 CABLE. TOTAL NETWORK LENGTH CANNOT EXCEED 4000 FEET. UP TO 20 NODES CAN BE CONNECTED TO THE NETWORK. (NOTE: ANY COMMUNICATIONS WIRE CONNECTED TO THE GENSET SHOULD BE STRANDED CABLE)

12. 0300-5929 ANNUNCIATOR COMMUNICATION ONLY AVAILABLE WITH PCC2100 SOFTWARE VERSION 2.400 OR HIGHER.

13. BATTERY CHARGER CONTACTS RATED 4 AMPS AT 30 VDC OR 120 VAC MAXIMUM ON THE 0300-3257 (10A 12V) AND 0300-3298 (10A 24V) CHARGERS.

14. BATTERY CHARGER COMMON ALARM CONTACT RATED 2 AMPS AT 30 VDC ON THE 0300-6026 (2A) AND 0300-5878 (12A/15A) CHARGERS.

15. BATTERY TEMPERATURE SENSOR, 0193-0530, CAN BE USED ON THE 0300-6026 (2A) AND 0300-5878 (12A/15A) BATTERY CHARGERS.

16. THE FOLLOWING FAILS WILL CAUSE A BATTERY CHARGER ALARM OUTPUT ON THE 0300-6026 (2A) AND 0300-5878 (12A/15A) CHARGERS:

LOW BATTERY VOLTAGE	OVERCURRENT
HIGH BATTERY VOLTAGE	HIGH CHARGER TEMPERATURE
LOW AC INPUT VOLTAGE	BATTERY FAILURE
HIGH AC INPUT VOLTAGE	HIGH BATTERY TEMPERATURE (NOT AVAILABLE ON 0300-6026)

1

WIRE SIZE (AWG)	DISTANCE IN FEET, ONE WAY (MULTIPLY BY 0.3 FOR METERS)				
	A	B	C	D	E
16	1000	90	-	50	-
14	1600	150	20	80	5
12	2400	225	30	125	10
10	4000	350	50	200	15
8	-	600	80	300	25
6	-	1000	125	500	40

LAST DATUM LETTER USED: -		LAST REFERENCE LETTER USED: -
MODEL/PLATFORM: OTPC/BTPC		THIS PART IS SIMILAR TO: 0630-1975
UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY		ANG. TOL.: ± 1°
DIMENSIONAL TOLERANCES: X ± 1	.X ± 0.8	.XX ± 0.38
HOLE SIZE 0.00-4.99 TOL. +0.15/-0.08	HOLE SIZE 5.00-9.99 TOL. +0.20/-0.10	HOLE SIZE 10.00-17.49 TOL. +0.25/-0.13 / HOLE SIZE 17.50-24.99 TOL. +0.30/-0.13

Cummins Inc.

DIMENSIONS ARE IN: MILLIMETERS
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SIZE: A1 SCALE: 1/1

DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994
THIRD ANGLE PROJECTION

CAD SYSTEM
PTC® Creo® Parametric

OTPC & BTPC
UTILITY TO GENSET

GENSET PACKAGE WITH PCC3201 (4-SLOT CARD CAGE)

PCC INTERCONNECTION BOX

TB3

CONTACT COMMON ALARM

AUDIBLE ALARM (WHEN USED)

B+ (20A FUSED I)

B+ SWITCHED (20A FUSED I)

GND

2-1

2-2

NETWORK CIRCUIT BOARD

TB6

DATA I

DATA 2

(NOTE 6)

TB8 (BASE PCB)

TERMINAL BLOCK LOCATED ON CIRCUIT BOARD

REMOTE EMERGENCY SHUTDOWN SWITCH (WHEN NEEDED)

SEE NOTE 12

I-2

I-4

OPTIONAL COOLANT AND/OR ALTERNATOR HEATER(S)

STARTER

B+ (NOTE 9) I-1

GND I-3

AC SOURCES DESCRIBED ON SUBMITTAL DATA

0541-0814 ANNUNCIATOR JI

B+ 3 2-1

GND 6 2-2

DATAI I

DATA2 2

RUN #2 SEE NOTE 6

RUN #1 SEE NOTE 1

MOUNTED IN OTPC/BTPC CABINET

TB3

FOR CUSTOMER USE (SEE NOTE 5)

BATTERY CHARGER ALARMS (OPTIONAL)

AC LINE FAILURE — C 41, NC 42, NO 43

HI BATTERY VOLTAGE — C 44, NC 45, NO 46

LOW BATTERY VOLTAGE — C 47, NC 48, NO 49

50

DATAI 51

DATA2 52

DO NOT CONNECT TO THIS SIDE

(SEE NOTE 6)

RELAY MODULE

J14 J15

	J14	J15	
SOURCE 1 CONNECTED	NO 1	16	COM — LOAD SHED
	COM 2	15	NO
	NC 3	14	COM — FAIL TO CLOSE
SOURCE 2 CONNECTED	NO 4	13	NO
	COM 5	12	NC — FAIL TO SYNC. (OPT.)
	NC 6	11	COM
SOURCE 1 AVAILABLE	NO 7	10	NO
	COM 8	9	NC — FAIL TO DISCONN. (OPT.)
	NC 9	8	COM
SOURCE 2 AVAILABLE	NO 10	7	NO
	COM 11	6	NC — ELEVATOR PRE-TRANSFER
	NC 12	5	COM
TEST OR EXERCISE ACTIVE	NO 13	4	NO
	COM 14	3	NC — NOT IN AUTO
	NC 15	2	COM
	16	1	NO

FOR CUSTOMER USE (SEE NOTE 11) — FOR CUSTOMER USE (SEE NOTE 11)

2 AMP, 12 AMP, 15 AMP CHARGER

(NOTE 13) REMOTE TEMPERATURE SENSOR INPUT

(NOTE 14) COMMON ALARM OUTPUT CONTACT RATING 2 AMP AT 30 VDC

NOTE:
TB3, J14 AND J15 ARE OPTIONAL AND ARE ONLY PROVIDED WHEN NEEDED FOR INSTALLED OPTIONS

REAR WALL OF CABINET

OTPC

BTPC

TB1

TRANSFER SWITCH NORMAL AUXILIARY SWITCH (NO, NC, C)

TRANSFER SWITCH EMERGENCY AUXILIARY SWITCH (NO, NC, C)

BYPASS SWITCH NORMAL AUXILIARY SWITCH (NO, NC, C)

BYPASS SWITCH EMERGENCY AUXILIARY SWITCH (NO, NC, C)

(SEE NOTE 10)

TB2

I	GND	
2	(SEE NOTE 8)	I-3
3	B+	I-4
4	RMT	I-1
5	REMOTE TEST	I-2
6	TRANSFER INHIBIT	SEE NOTE 4
7	LOAD SHED (OPTIONAL)	
8	COMMON	

REMOTE TEST SWITCH (WHEN USED)

(NOTE I)

WIRE SIZE (AWG)	DISTANCE IN FEET, ONE WAY (MULTIPLY BY 0.3 FOR METERS)				
	A	B	C	D	E
16	1000	90	-	50	-
14	1600	150	20	80	5
12	2400	225	30	125	10
10	4000	350	50	200	15
8	-	600	80	300	25
6	-	1000	125	500	40

NOTES:

1. WIRE SIZES MUST BE AS FOLLOWS:
   RUN #1-GENSET TO TRANSFER SWITCH-LEAD SIZE MUST BE INCREASED IF A BATTERY CHARGER IS INSTALLED IN THE SWITCH.
   WITH NO BATT CHARGER-LEADS 1-1, -2, -3, -4 USE COL A.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1, & 1-3 USE COL B.
   WITH 12/15 AMP CHARGER MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1 & 1-3 USE COL. C.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL D.
   WITH 12/15 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL E. TO MEET THE NFPA110 REQUIREMENT TO RETURN A FULLY DISCHARGED BATTERY TO 100% OF IT'S AMPERE-HOUR RATING WITHIN 24 HOURS USE COL. E.
2. IF OTPC NETWORK CARD IS USED, YOU MUST CONNECT B+ OR EXTERNAL BATTERY-BACKED POWER TO OTPC/BTPC DIGITAL BOARD AT P27.21 (B+) AND P27.22 (GND).
3. FOR MULTIPLE TRANSFER SWITCHES, DUPLICATE RUN #1 FOR EACH SWITCH. DAISY CHAIN CONNECTION IS ACCEPTABLE PROVIDED WIRE SIZE & DISTANCE TO THE LAST SWITCH MEET THE SPECS IN NOTE 1.
4. CONNECT AN OPEN DRY CONTACT BETWEEN THE APPLICABLE TERMINAL AND COMMON (TB2-8). FOR REMOTE TEST, TRANSFER INHIBIT AND LOAD SHED. CLOSE TO ACTIVATE.
5. CONTACTS RATED: 4 AMPS AT 30 VDC OR 120V MAX.
6. REFER TO CUMMINS 900-0529 POWERCOMMAND NETWORK INSTALLATION & OPERATION MANUAL FOR WIRING INSTRUCTIONS, WIRE SIZE, AND LENGTH. USE STRANDED TWISTED PAIR WIRES WHEN CONNECTING DATA1 AND DATA2 TO NETWORK. PART # 0334-1350 OR EQUAL.
7. INPUTS FOR CUSTOMER FAULTS. GROUNDED SIGNAL REQUIRED TO ACTIVATE INPUT (MAX 50 MA.)
8. NO JUMPER IS REQUIRED BETWEEN TB2-1 & TB2-2 OR BETWEEN TB2-2 & TB2-3.
9. CONFIGURATION SHOWN IS FOR ATS-MOUNTED BATTERY CHARGER. IF WALL-MOUNTED CHARGER IS USED, CONNECT B+ AND GND FROM CHARGER DIRECTLY TO BATTERY OR STARTER.
10. TRANSFER SWITCH SHOWN CLOSED TO NORMAL BYPASS SWITCH SHOWN NEUTRAL POSITION.
11. CONTACTS RATED: 2 AMPS AT 30 VDC OR 0.60 AMPS AT 120 VAC.
12. OPEN CONNECTION TO INITIATE EMERGENCY STOP. THESE TERMINALS MUST BE SHORTED TOGETHER IF REMOTE EMERGENCY STOP OPTION NOT USED. JUMPER SHOWN BETWEEN TB8-1 AND TB8-2 NOT SUPPLIED WITH UNIT.
13. 120VAC OR 240VAC AT 50W.
14. CUSTOMER SUPPLIED EITHER 12 OR 240VDC RELAYS OUTPUT SIGNAL 20ma @ 24VDC MAX.
15. USE THE INVENTER REMOTE TEMPERATURE PROBE (0193-0530).
16. THE FOLLOWING FAILS WILL CAUSE A BATTERY CHARGER ALARM OUTPUT:
    LOW BATTERY VOLTAGE, HIGH BATTERY VOLTAGE, LOW AC INPUT VOLTAGE, HIGH AC INPUT VOLTAGE OVERCURRENT, HIGH CHARGER TEMPERATURE, BATTERY FAILURE, HIGH BATTERY TEMPERATURE (NOT AVAILABLE ON 2 AMP CHARGER).

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Cummins Inc.

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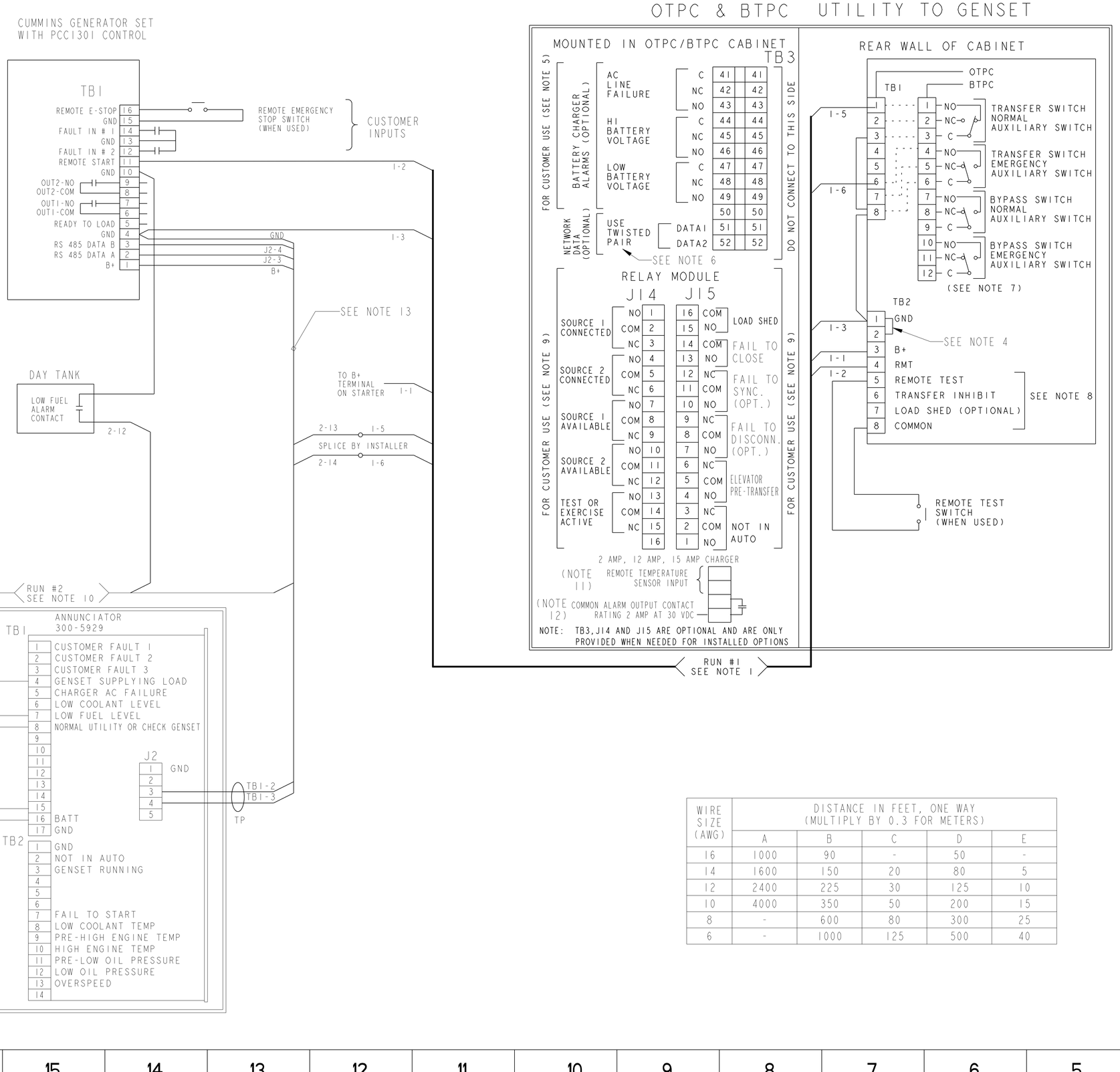
SIZE: A1 SCALE: 1/1

DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994

THIRD ANGLE PROJECTION

CAD SYSTEM PTC® Creo® Parametric

OTPC & BTPC UTILITY TO GENSET



NOTES:

1. WIRE SIZES MUST BE AS FOLLOWS:
   RUN #1-GENSET TO TRANSFER SWITCH-LEAD SIZE MUST BE INCREASED IF A BATTERY CHARGER IS INSTALLED IN THE SWITCH.
   WITH NO BATT CHARGER-LEADS 1-1, -2, -3, -5, -6 USE COL A.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1, &1-3 USE COL B.
   WITH 12/15 AMP CHARGER MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1 & 1-3 USE COL. C.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, &1-3 USE COL D.
   WITH 12/15 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL E. TO MEET THE NFPA110 REQUIREMENT TO RETURN A FULLY DISCHARGED BATTERY TO 100% OF IT'S AMPERE-HOUR RATING WITHIN 24 HOURS USE COL. E.
2. RUN #2-GENSET TO ANNUNCIATOR-ALL LEADS, USE COL. A
3. FOR MULTIPLE TRANSFER SWITCHES, DUPLICATE RUN #1 FOR EACH SWITCH. DAISY CHAIN CONNECTION IS ACCEPTABLE PROVIDED WIRE SIZE & DISTANCE TO THE LAST SWITCH MEET THE SPECS IN NOTE 1.
4. INSTALL JUMPER BETWEEN TB2-1 & TB2-2.
5. CONTACTS RATED: 4 AMPS AT 30 VDC OR 120V MAX.
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9. CONTACTS RATED: 2 AMPS AT 30 VDC OR 0.60 AMPS AT 120 VAC.
10. REFER TO 0900-0301 FOR INSTALLATION OF 0300-5929.
11. USE THE INVENTER REMOTE TEMPERATURE PROBE (0193-0530).
12. THE FOLLOWING FAILS WILL CAUSE A BATTERY CHARGER ALARM OUTPUT:
    LOW BATTERY VOLTAGE, HIGH BATTERY VOLTAGE, LOW AC INPUT VOLTAGE, HIGH AC INPUT VOLTAGE OVERCURRENT, HIGH CHARGER TEMPERATURE, BATTERY FAILURE, HIGH BATTERY TEMPERATURE (NOT AVAILABLE ON 2 AMP CHARGER).
13. NETWORK CONNECTIONS: 18 GA TWISTED PAIR OR CAT 5 CABLE. TOTAL NETWORK LENGTH CANNOT EXCEED 4000 FEET. UP TO 20 NODES CAN BE CONNECTED TO THE NETWORK. (NOTE: ANY COMMUNICATIONS WIRE CONNECTED TO THE GENSET SHOULD BE STRANDED CABLE.)

WIRE SIZE (AWG)	DISTANCE IN FEET, ONE WAY (MULTIPLY BY 0.3 FOR METERS)				
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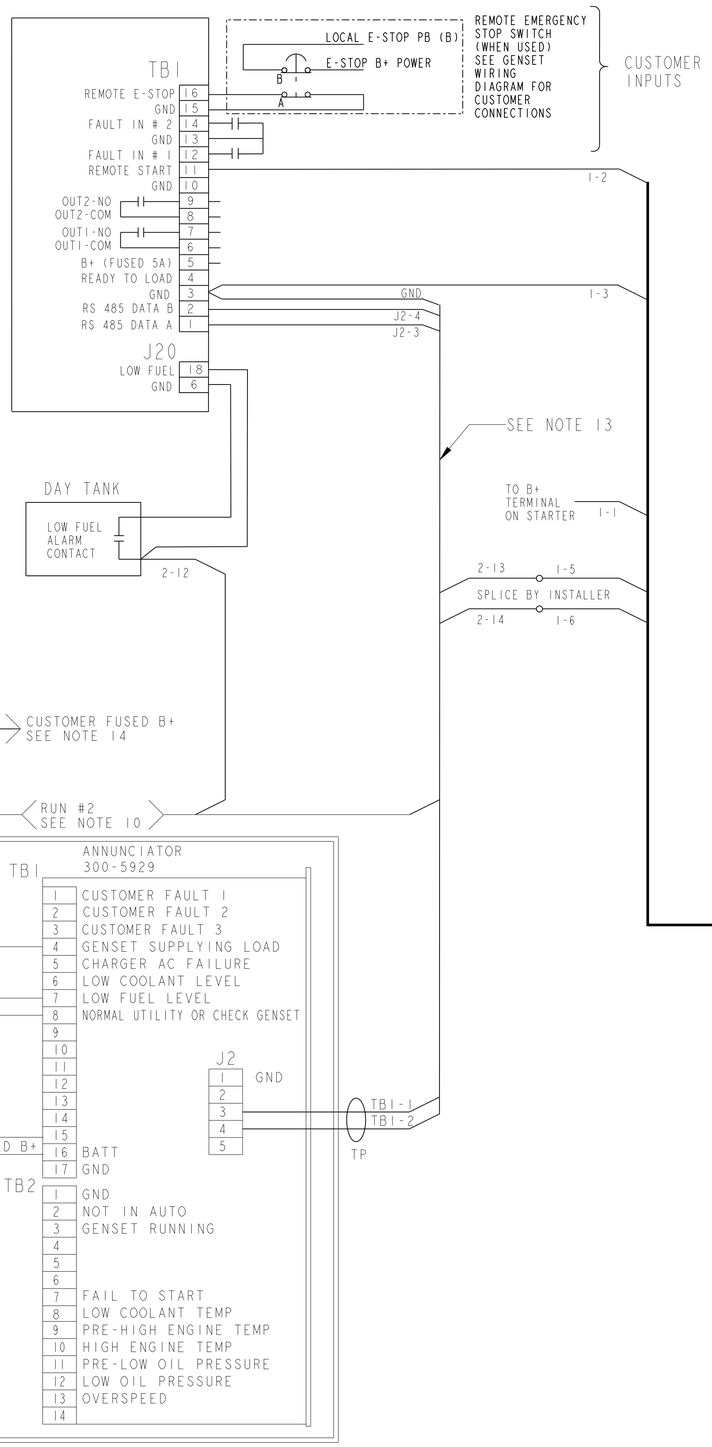
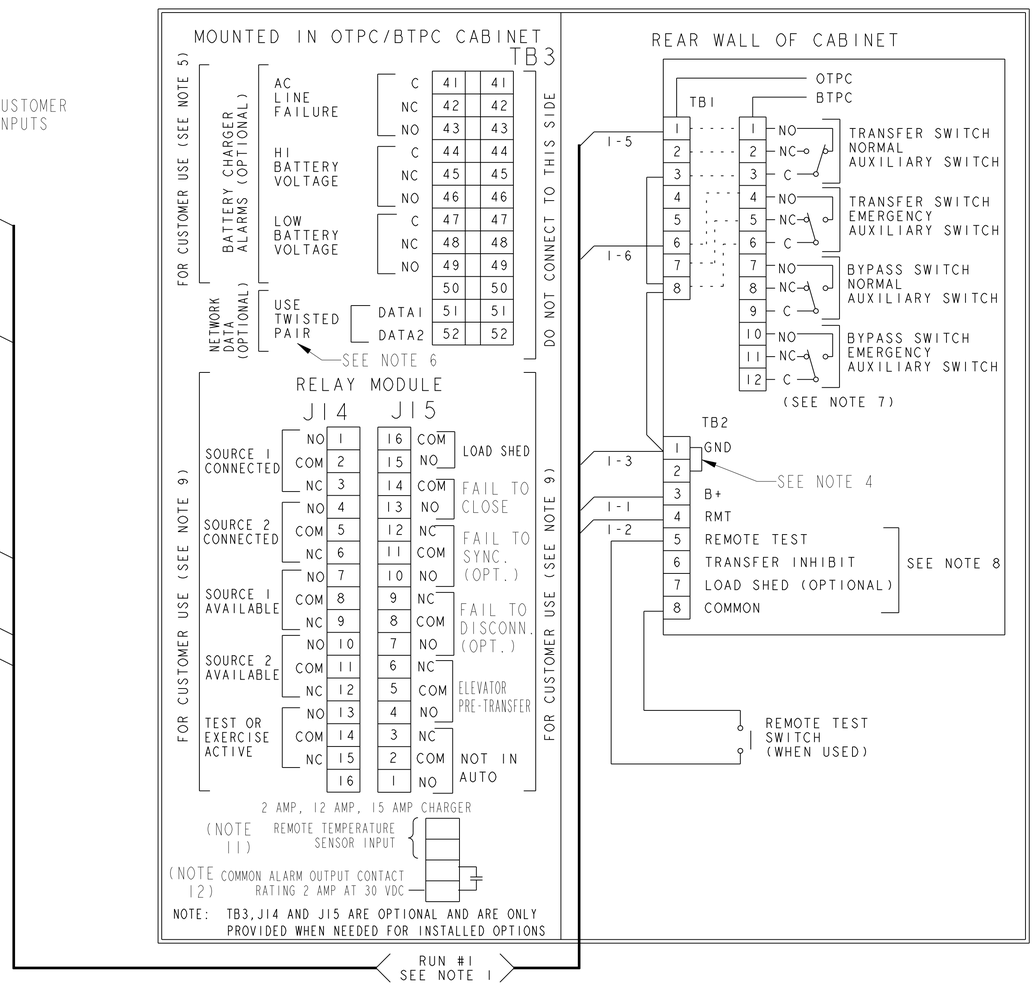
OTPC & BTPC UTILITY TO GENSET





WIRE SIZE (AWG)	DISTANCE IN FEET, ONE WAY (MULTIPLY BY 0.3 FOR METERS)				
	A	B	C	D	E
16	1000	90	-	50	-
14	1600	150	20	80	5
12	2400	225	30	125	10
10	4000	350	50	200	15
8	-	600	80	300	25
6	-	1000	125	500	40

NOTES:

1. WIRE SIZES MUST BE AS FOLLOWS:
   RUN #1-GENSET TO TRANSFER SWITCH-LEAD SIZE MUST BE INCREASED IF A BATTERY CHARGER IS INSTALLED IN THE SWITCH.
   WITH NO BATT CHARGER-LEADS 1-1, -2, -3, -5, -6 USE COL A.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1, &1-3 USE COL B.
   WITH 12/15 AMP CHARGER MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1 & 1-3 USE COL. C.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, &1-3 USE COL D.
   WITH 12/15 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL E. TO MEET THE NFPA110 REQUIREMENT TO RETURN A FULLY DISCHARGED BATTERY TO 100% OF IT'S AMPERE-HOUR RATING WITHIN 24 HOURS USE COL. E.
2. RUN #2-GENSET TO ANNUNCIATOR-ALL LEADS, USE COL. A
3. FOR MULTIPLE TRANSFER SWITCHES, DUPLICATE RUN #1 FOR EACH SWITCH. DAISY CHAIN CONNECTION IS ACCEPTABLE PROVIDED WIRE SIZE & DISTANCE TO THE LAST SWITCH MEET THE SPECS IN NOTE 1.
4. INSTALL JUMPER BETWEEN TB2-1 & TB2-2.
5. CONTACTS RATED: 4 AMPS AT 30 VDC OR 120V MAX.
6. USE STRANDED TWISTED PAIR WIRES WHEN CONNECTING DATA1 AND DATA2 TO THE NETWORK.
7. TRANSFER SWITCH SHOWN CLOSED TO NORMAL BYPASS SWITCH SHOWN IN NEUTRAL POSITION.
8. CONNECT AN OPEN DRY CONTACT BETWEEN THE APPLICABLE TERMINAL AND COMMON (TB2-8). FOR REMOTE TEST, TRANSFER INHIBIT AND LOAD SHED. CLOSE TO ACTIVATE.
9. CONTACTS RATED: 2 AMPS AT 30 VDC OR 0.60 AMPS AT 120 VAC.
10. REFER TO 0900-0301 FOR INSTALLATION OF 0300-5929.
11. USE THE INVENTER REMOTE TEMPERATURE PROBE (0193-0530).
12. THE FOLLOWING FAILS WILL CAUSE A BATTERY CHARGER ALARM OUTPUT:
    LOW BATTERY VOLTAGE, HIGH BATTERY VOLTAGE, LOW AC INPUT VOLTAGE, HIGH AC INPUT VOLTAGE OVERCURRENT, HIGH CHARGER TEMPERATURE, BATTERY FAILURE, HIGH BATTERY TEMPERATURE (NOT AVAILABLE ON 2 AMP CHARGER).
13. NETWORK CONNECTIONS: 18 GA TWISTED PAIR OR CAT 5 CABLE. TOTAL NETWORK LENGTH CANNOT EXCEED 4000 FEET. UP TO 20 NODES CAN BE CONNECTED TO THE NETWORK. (NOTE: ANY COMMUNICATIONS WIRE CONNECTED TO THE GENSET MUST BE STRANDED CABLE.)
14. CUSTOMER SUPPLIED FUSED B+ SOURCE. USE AT LEAST 5 AMP FUSE, WIRE SIZE, USE COL.A.

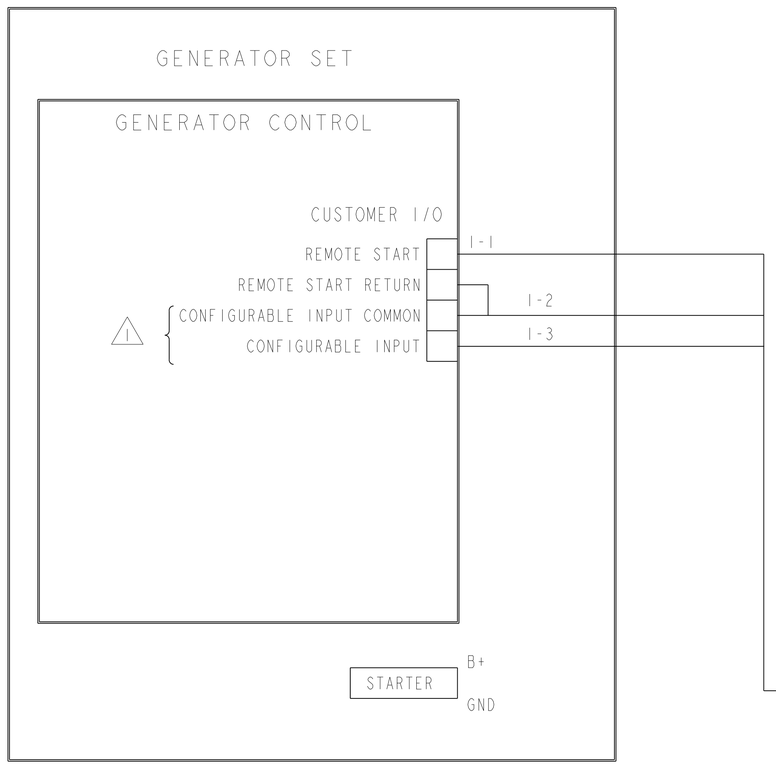
LAST DATUM LETTER USED: -		LAST REFERENCE LETTER USED: -
MODEL/PLATFORM: OTPC/BTPC		THIS PART IS SIMILAR TO: 0630-1975
UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY		ANG. TOL.: ± 1°
DIMENSIONAL TOLERANCES:	X ± 1	.X ± 0.8 / .XX ± 0.38
HOLE SIZE 0.00-4.99 TOL. +0.15/-0.08	HOLE SIZE 5.00-9.99 TOL. +0.20/-0.10	HOLE SIZE 10.00-17.49 TOL. +0.25/-0.13 / HOLE SIZE 17.50-24.99 TOL. +0.30/-0.13

Cummins Inc.

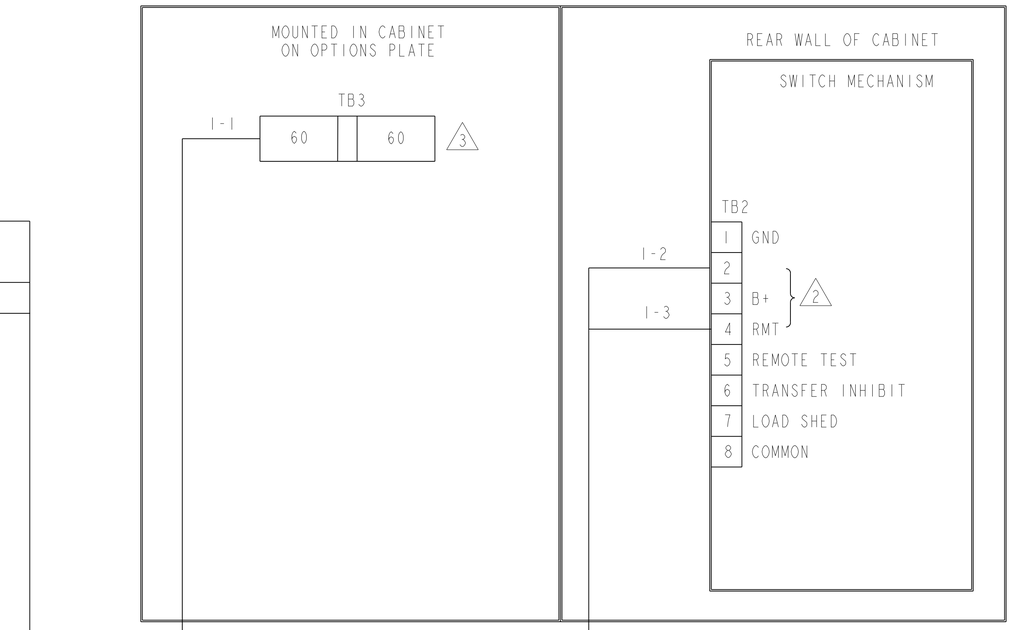
DIMENSIONS ARE IN: MILLIMETERS
[ ] ARE IN: -
SIZE: A1 SCALE: 1/1
DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994
THIRD ANGLE PROJECTION
CAD SYSTEM PTC® Creo® Parametric

NFPA 70 ARTICLE 700.10(D)(3) COMPLIANT GENERATOR CONTROL WIRING

CUMMINS PCC 1302, PCC2300, PCC3300 GENERATOR SET CONTROLS



SINGLE ATS CONFIGURATION



NOTES:

1. THESE PHYSICAL CONNECTIONS CAN BE ANY OF THE ONBOARD CONFIGURABLE CUSTOMER INPUTS AVAILABLE FROM THE GENSET CONTROL BOARD OR AUX I01 OR I02 BOARDS CONFIGURED FOR FUNCTION POINTER "START SIGNAL INTEGRITY".
2. FOR BTPC E,F,G,H,J (1200A-4000A), REVERSE THE TRANSFER SWITCH TB2-2 AND TB2-4 CONNECTIONS SUCH THAT TB2-4 CONNECTS TO GENSET I/O COMMON.
3. TB3-60 IS FACTORY WIRED TO ATS CONTROL PCB J27-10. SEE TRANSFER SWITCH WIRING DIAGRAM CUSTOMER CONNECTIONS PAGE FOR DETAILS
4. REFERENCE TECHNICAL SERVICE BULLETIN TSB180133 FOR ADDITIONAL INFORMATION.

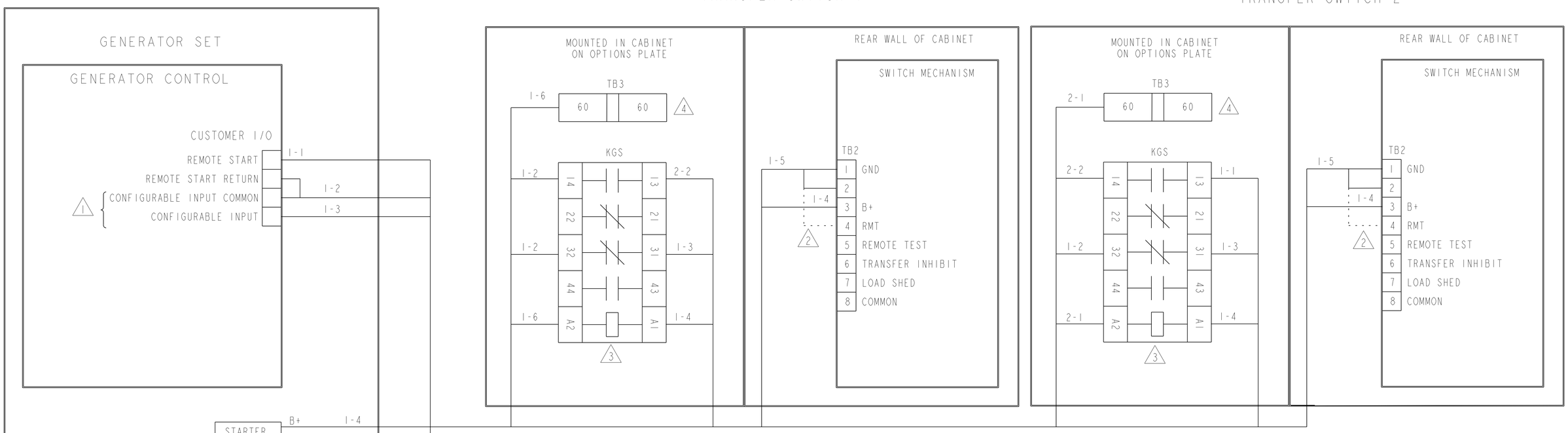
LAST DATUM LETTER USED: -		LAST REFERENCE LETTER USED: -	
MODEL/PLATFORM: OTPC/BTPC		THIS PART IS SIMILAR TO: 0630-1975	
UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY			ANG. TOL.: ± 1°
DIMENSIONAL TOLERANCES:	X ± 1	.X ± 0.8	.XX ± 0.38
HOLE SIZE 0.00-4.99 TOL. +0.15/-0.08	HOLE SIZE 5.00-9.99 TOL. +0.20/-0.10	HOLE SIZE 10.00-17.49 TOL. +0.25/-0.13	HOLE SIZE 17.50-24.99 TOL. +0.30/-0.13

Cummins Inc.			
DIMENSIONS ARE IN: MILLIMETERS [ ] ARE IN: -	SIZE: A1	SCALE: 1/1	
DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994	THIRD ANGLE PROJECTION		CAD SYSTEM PTC® Creo® Parametric

NFPA 70 ARTICLE 700.10(D)(3) COMPLIANT
GENERATOR CONTROL WIRING

CUMMINS PCC 1302, PCC 2300, PCC 3300
GENERATOR SET CONTROLS

DUAL ATS CONFIGURATION



NOTES:

1. THESE PHYSICAL CONNECTIONS CAN BE ANY OF THE ONBOARD CONFIGURABLE CUSTOMER INPUTS AVAILABLE FROM THE GENSET CONTROL BOARD OR AUX I01 OR I02 BOARDS CONFIGURED FOR FUNCTION POINTER "START SIGNAL INTEGRITY".
2. FOR BTPC E,F,G,H,J (1200A-4000A), JUMPER GND TO TB2-4 INSTEAD OF TB2-2.
3. KGS IS NOT PROVIDED STANDARD. RELAY CAN BE ORDERED BY SELECTING FEATURE L101-7 OR L201-7 WHEN CONFIGURING PRODUCT OR AS AN ACCESSORY KIT.
4. TB3-60 IS FACTORY WIRED TO ATS CONTROL PCB J27-10. SEE TRANSFER SWITCH WIRING DIAGRAM CUSTOMER CONNECTIONS PAGE FOR DETAILS.
5. REFERENCE TECHNICAL SERVICE BULLETIN TSB180133 FOR ADDITIONAL INFORMATION.

LAST DATUM LETTER USED: -		LAST REFERENCE LETTER USED: -	
MODEL/PLATFORM: OTPC/BTPC		THIS PART IS SIMILAR TO: 0630-1975	
UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY			ANG. TOL.: ± 1°
DIMENSIONAL TOLERANCES:	X ± 1	.X ± 0.8	.XX ± 0.38
HOLE SIZE 0.00-4.99 TOL. +0.15/-0.08	HOLE SIZE 5.00-9.99 TOL. +0.20/-0.10	HOLE SIZE 10.00-17.49 TOL. +0.25/-0.13	HOLE SIZE 17.50-24.99 TOL. +0.30/-0.13

Cummins Inc.

DIMENSIONS ARE IN: MILLIMETERS
[ ] ARE IN: -

SIZE: A1 SCALE: 1/1

DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994

THIRD ANGLE PROJECTION

CAD SYSTEM
PTC® Creo® Parametric