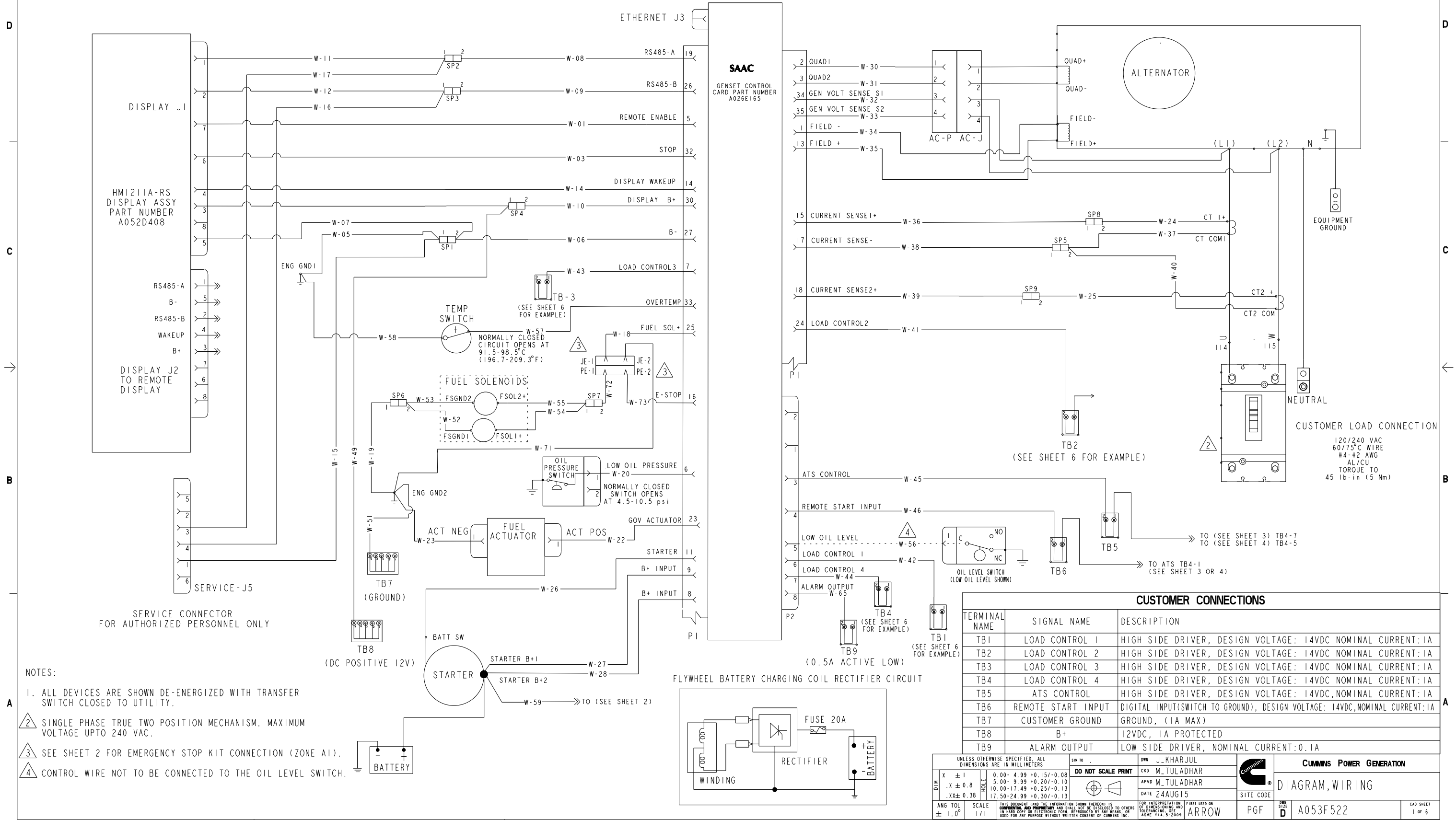


REL NO	REV	NO	REVISION	DRN	CKD	APVD	DATE
ECO-173028	H	1	DRAWING HAS BEEN PICTORIALLY UPDATED	PT	MT	M_TULADHAR	02NOV17
		2	MOVE NOTES TO ZONE (A6)	PT	MT	M_TULADHAR	02NOV17
		3	MOVE "HARNESS LEGEND" TO ZONE (D6)	PT	MT	M_TULADHAR	02NOV17
		4	ADD NOTE 4	PT	MT	M_TULADHAR	02NOV17
		5	ZONE (B3), UPDATE OIL LEVEL SWITCH CONNECTION	PT	MT	M_TULADHAR	02NOV17

**HARNESS LEGEND**  
GENSET HARNESS  
A049F902

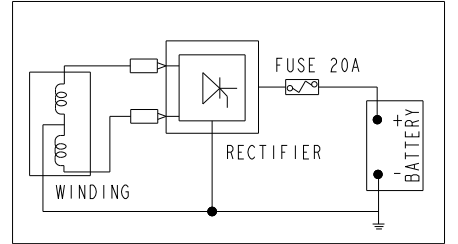


**CUSTOMER LOAD CONNECTION**  
120/240 VAC  
60/75°C WIRE  
#4-#2 AWG  
AL/CU  
TORQUE TO  
45 lb-in (5 Nm)

**CUSTOMER CONNECTIONS**

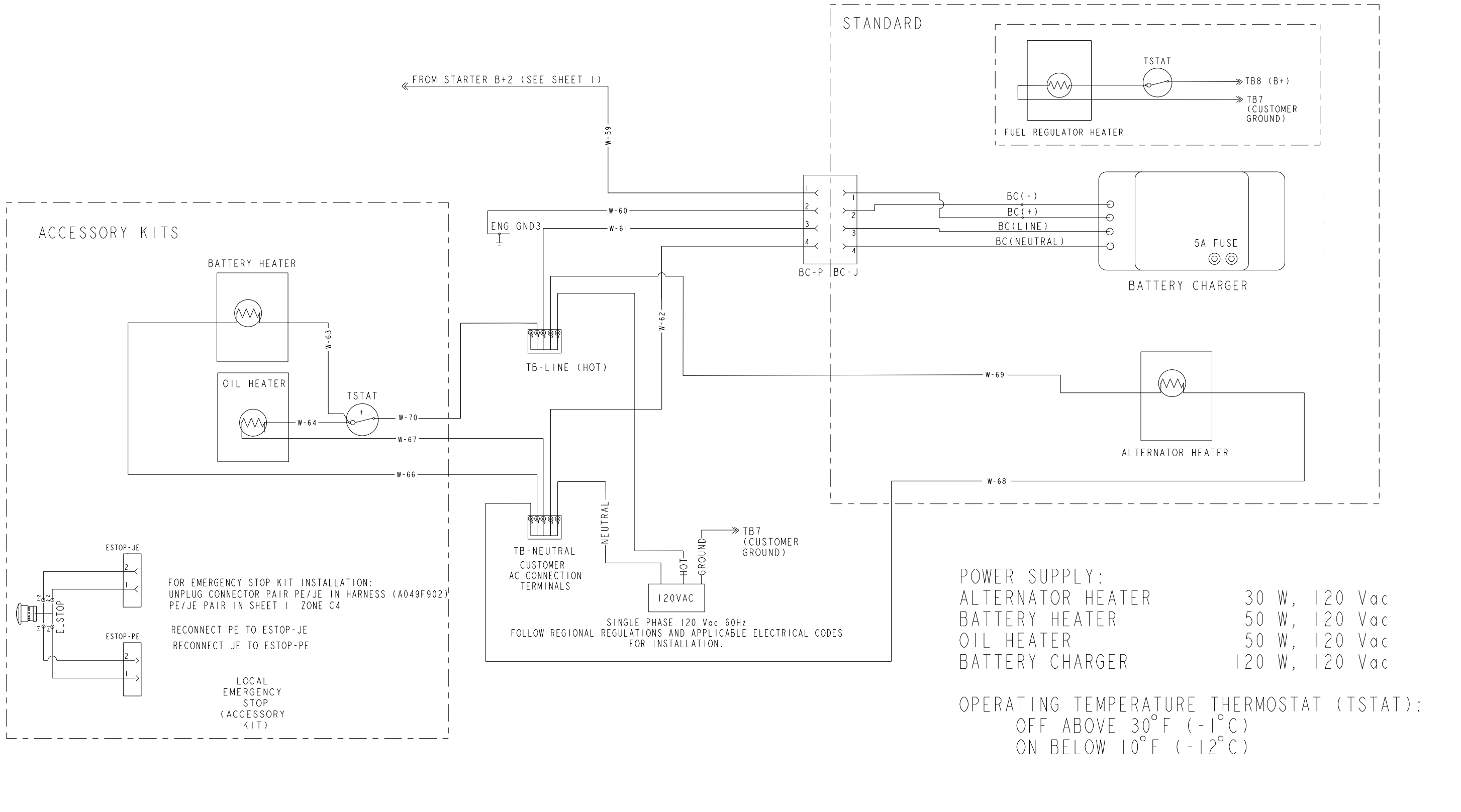
TERMINAL NAME	SIGNAL NAME	DESCRIPTION
TB1	LOAD CONTROL 1	HIGH SIDE DRIVER, DESIGN VOLTAGE: 14VDC NOMINAL CURRENT: 1A
TB2	LOAD CONTROL 2	HIGH SIDE DRIVER, DESIGN VOLTAGE: 14VDC NOMINAL CURRENT: 1A
TB3	LOAD CONTROL 3	HIGH SIDE DRIVER, DESIGN VOLTAGE: 14VDC NOMINAL CURRENT: 1A
TB4	LOAD CONTROL 4	HIGH SIDE DRIVER, DESIGN VOLTAGE: 14VDC NOMINAL CURRENT: 1A
TB5	ATS CONTROL	HIGH SIDE DRIVER, DESIGN VOLTAGE: 14VDC, NOMINAL CURRENT: 1A
TB6	REMOTE START INPUT	DIGITAL INPUT(SWITCH TO GROUND), DESIGN VOLTAGE: 14VDC, NOMINAL CURRENT: 1A
TB7	CUSTOMER GROUND	GROUND, (1A MAX)
TB8	B+	12VDC, 1A PROTECTED
TB9	ALARM OUTPUT	LOW SIDE DRIVER, NOMINAL CURRENT: 0.1A

- NOTES:**
- ALL DEVICES ARE SHOWN DE-ENERGIZED WITH TRANSFER SWITCH CLOSED TO UTILITY.
  - SINGLE PHASE TRUE TWO POSITION MECHANISM. MAXIMUM VOLTAGE UPTO 240 VAC.
  - SEE SHEET 2 FOR EMERGENCY STOP KIT CONNECTION (ZONE A1).
  - CONTROL WIRE NOT TO BE CONNECTED TO THE OIL LEVEL SWITCH.



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS		DRN	CKD	APVD	DATE
DIM	TOLERANCE	J_KHARJUL	M_TULADHAR	M_TULADHAR	24AUG15
X ± 1	0.00 - 4.99 +0.15/-0.08	<b>DO NOT SCALE PRINT</b> FIRST USED ON: [Symbol] FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009			
.X ± 0.8	5.00 - 9.99 +0.20/-0.10				
.XX ± 0.38	10.00 - 17.49 +0.25/-0.13 17.50 - 24.99 +0.30/-0.13				
ANG TOL	SCALE	DATE	PGF	SITE CODE	CAD SHEET
± 1.0°	1/1	24AUG15	ARROW	A053F522	1 of 6

REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-173028	H	--	---	PT	MT	M_TULADHAR	02NOV17



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS		SHW TO	DWN J_KHARJUL		CUMMINS POWER GENERATION
DO NOT SCALE PRINT		CKD M_TULADHAR	APVD M_TULADHAR		DATE 24AUG15
DIM	X ± 1	0.00-4.99 +0.15/-0.08	DATE 24AUG15	SITE CODE	
	.X ± 0.8	5.00-9.99 +0.20/-0.10			
	.XX ± 0.38	10.00-17.49 +0.25/-0.13			
		17.50-24.99 +0.30/-0.13			
ANG TOL	± 1.0°		SCALE 1/1	THIS DOCUMENT (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE DISCLOSED TO OTHERS IN HARD COPY OR ELECTRONIC FORM, REPRODUCED BY ANY MEANS, OR USED FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC.	FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009
			SCALE	ARROW	PGF
					D A053F522
					CAD SHEET 2 of 6

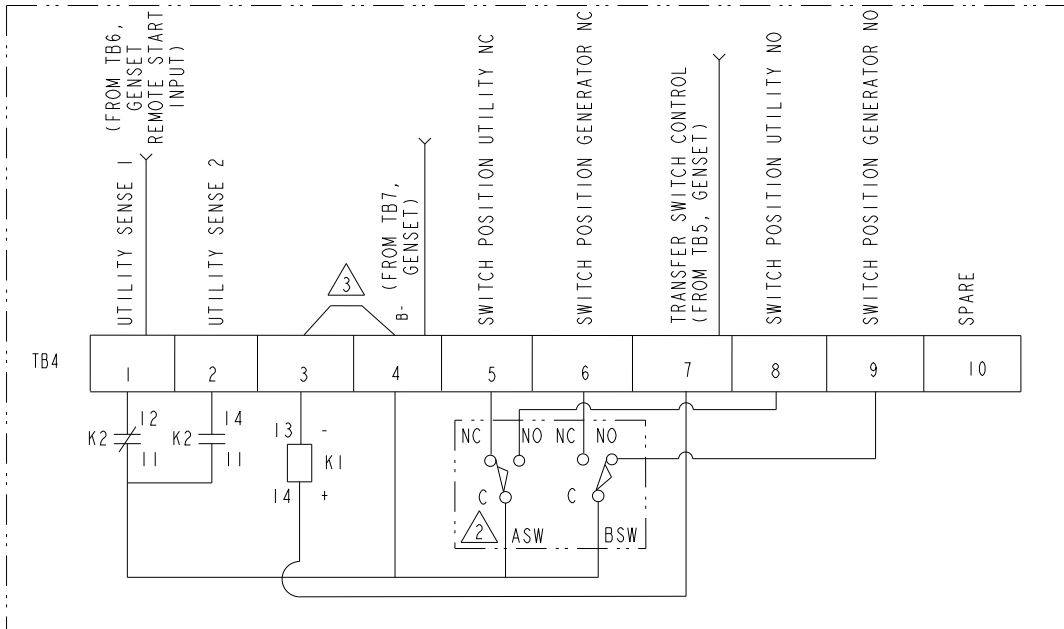
ATS WIRING WITH RA100, RA200, RA100SE, RA200SE, RA400, RA400SE

REL NO	REV	NO	REVISION	DRN	CKD	APVD	DATE
ECO-173028	H	--	--	PT	MT	M_TULADHAR	02NOV17

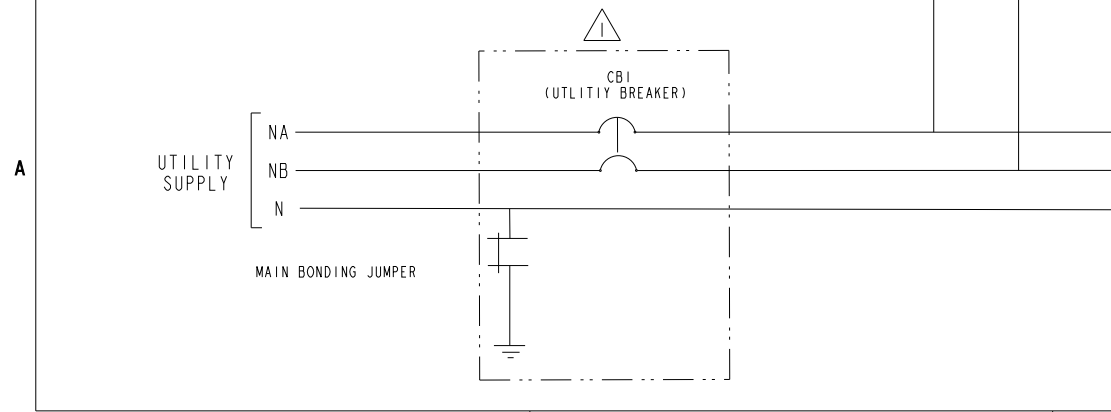
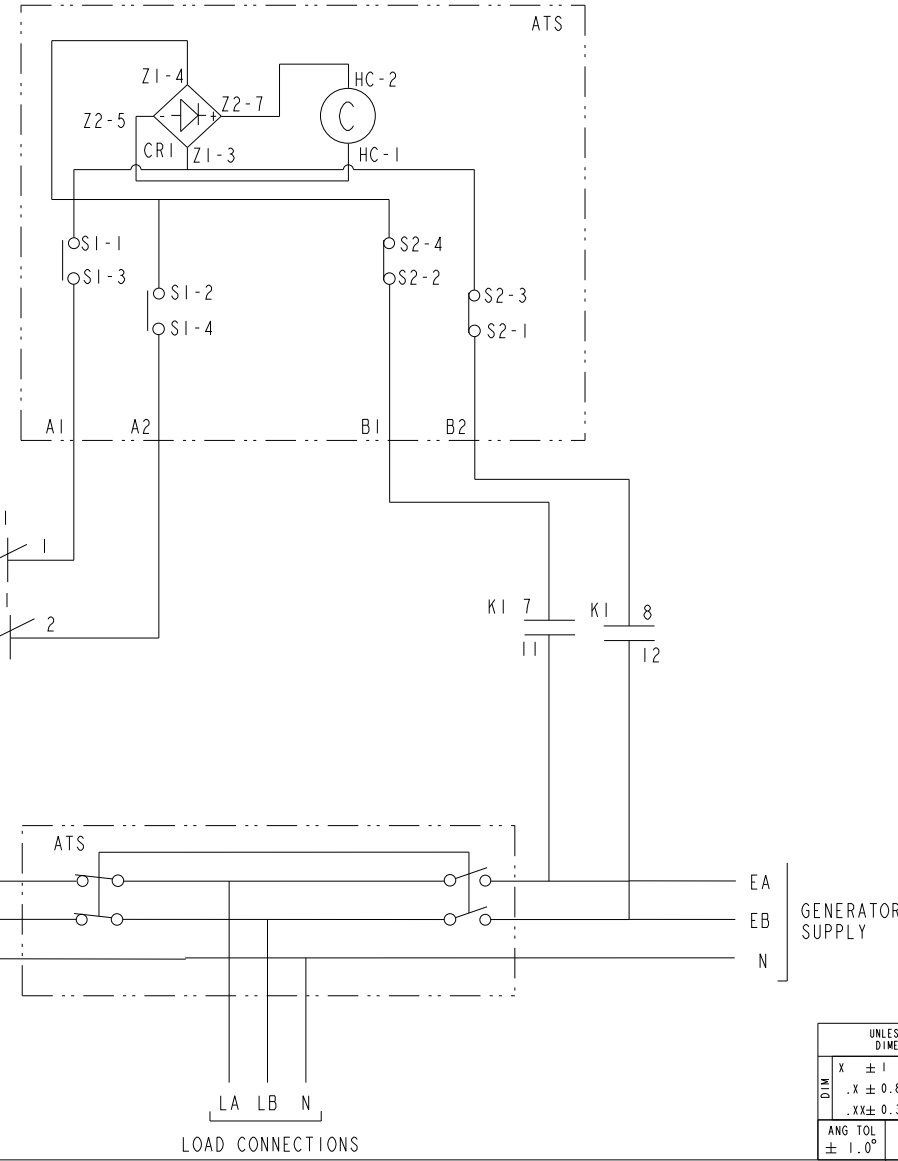
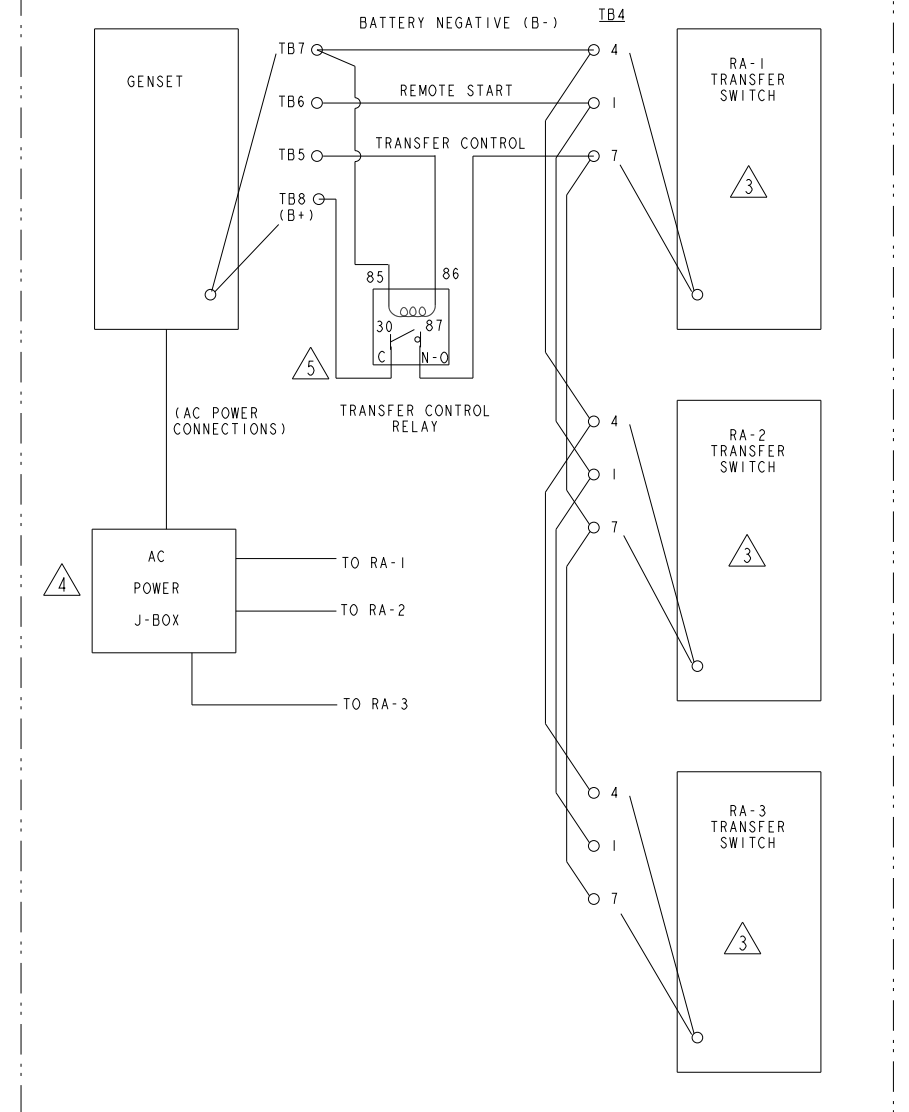
- TB4 TERMINAL BLOCK
- K1 RELAY
- ASW UTILITY POSITION AUXILIARY SWITCH
- BSW GENERATOR POSITION AUXILIARY SWITCH
- ATS AUTOMATIC TRANSFER SWITCH
- K2 UTILITY SENSE RELAY
- S1 OPEN WHEN ATS IS CONNECTED TO UTILITY
- S2 OPEN WHEN ATS IS CONNECTED TO GENERATOR
- CR1 BRIDGE RECTIFIER
- C ATS OPERATOR COIL
- CBI UTILITY CIRCUIT BREAKER

NOTES:

- 1 SERVICE ENTRANCE MODELS ONLY.
- 2 LOCATED ON THE SIDE OF THE ATS MECHANISM.
- 3 INSTALL JUMPER A034N106 SUPPLIED IN SHIPPING PARTS BAG WITH GENSET, BETWEEN TB4-3 AND TB4-4.
- 4 USE APPROPRIATELY SIZED TERMINAL BOX FOR POWER CONDUCTORS. LUGS ARE RATED FOR 1 CONDUCTOR ONLY.
- 5 INSTALL INTERPOSING RELAY 0307-2817-01 OR EQUIVALENT FOR MORE THAN 1 SWITCH



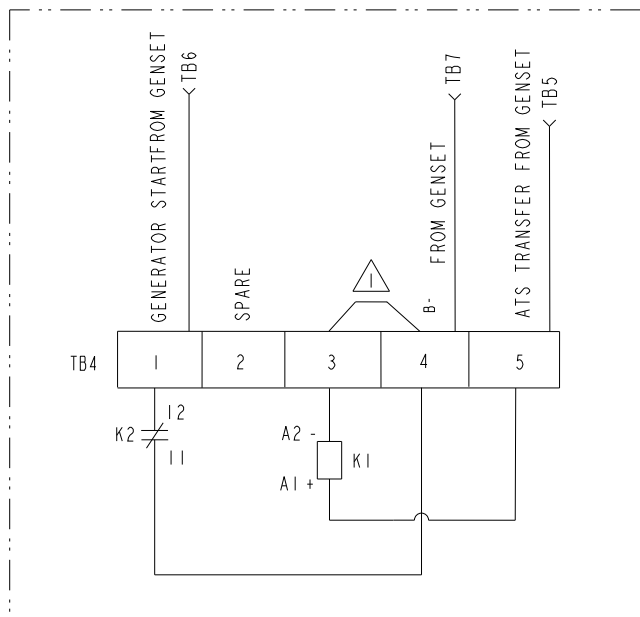
ATS WIRING WITH MULTIPLE RA100, RA200, RA100SE, RA200SE, RA400 & RA400SE TRANSFER SWITCHES.



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS		SW TO	DRN J_KHARJUL		CUMMINS POWER GENERATION	
DO NOT SCALE PRINT		CKD M_TULADHAR	DATE 24AUG15		DIAGRAM, WIRING	
DIM X ± 1 .X ± 0.8 .XX ± 0.38	TOLERANCE 0.00 - 4.99 +0.15/-0.08 5.00 - 9.99 +0.20/-0.10 10.00 - 17.49 +0.25/-0.13 17.50 - 24.99 +0.30/-0.13		APVD M_TULADHAR SITE CODE	PGF	D A053F522	CAD SHEET 3 of 6
ANG TOL ± 1.0°	SCALE 1/1	THIS DOCUMENT (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE DISCLOSED TO OTHERS IN HARD COPY OR ELECTRONIC FORM, REPRODUCED BY ANY MEANS, OR USED FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC.	FIRST USED ON ARROW			

REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-173028	H	--	--	PT	MT	M_TULADHAR	02NOV17

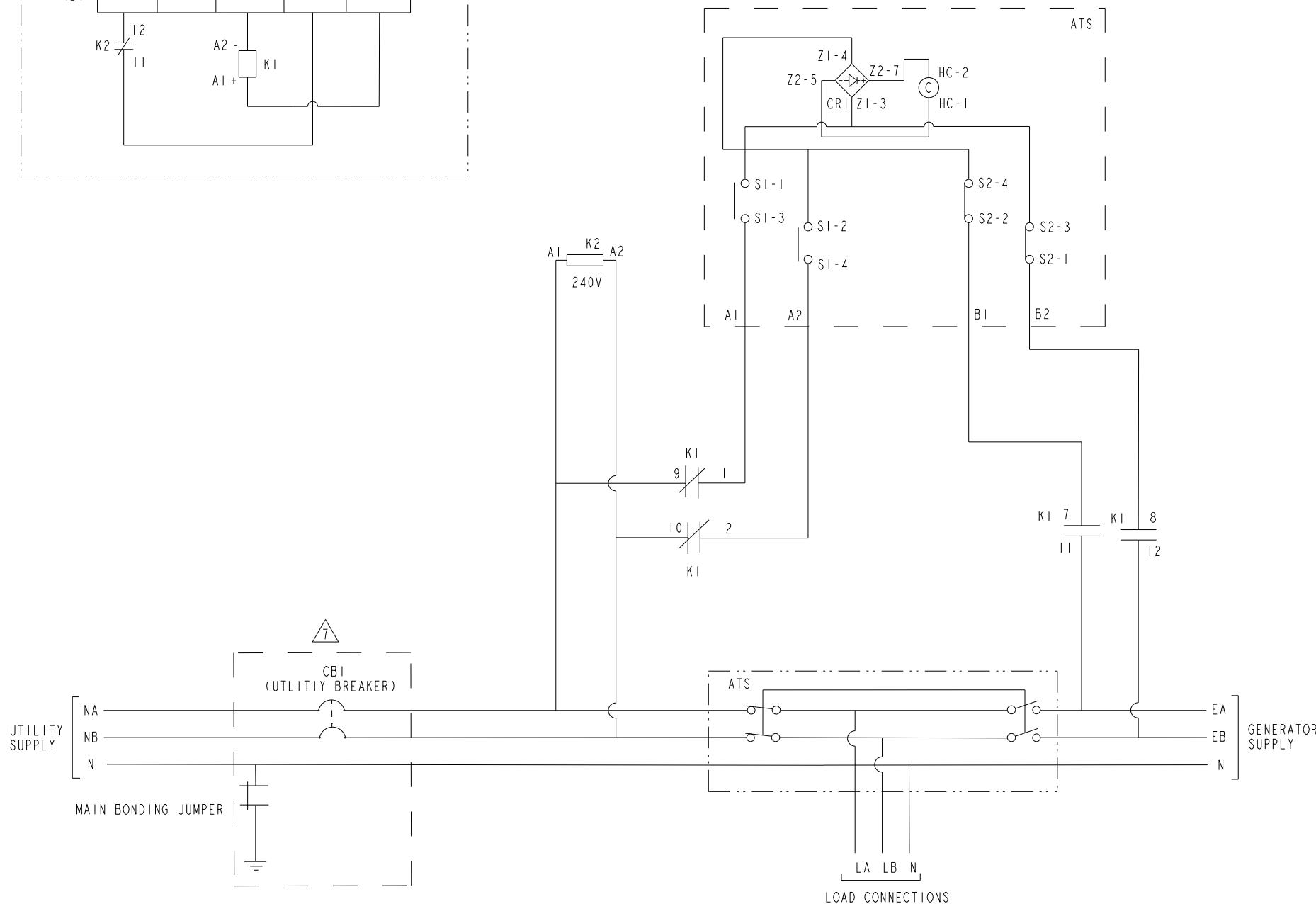
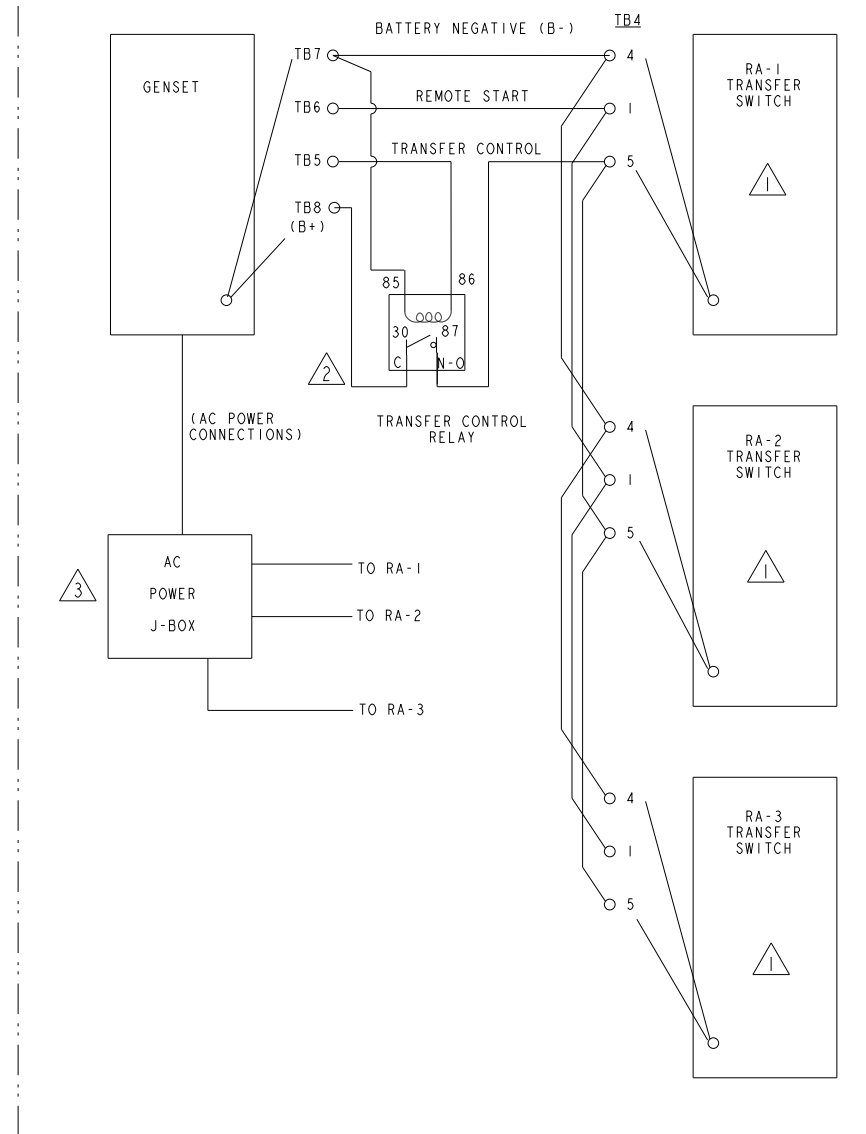
### ATS WIRING WITH RA112L1



TB4 TERMINAL BLOCK  
 K1 RELAY  
 ATS AUTOMATIC TRANSFER SWITCH  
 K2 UTILITY SENSE RELAY  
 S1 OPEN WHEN ATS IS CONNECTED TO UTILITY  
 S2 OPEN WHEN ATS IS CONNECTED TO GENERATOR  
 CBI UTILITY CIRCUIT BREAKER

- NOTE:
- 1 INSTALL JUMPER A034N106 SUPPLIED IN SHIPPING PARTS BAG WITH GENSET, BETWEEN TB4-3 AND TB4-4.
  - 2 INSTALL INTERPOSING RELAY 0307-2817-01 OR EQUIVALENT FOR MORE THAN 1 SWITCH.
  - 3 USE APPROPRIATELY SIZED TERMINAL BOX FOR POWER CONDUCTORS. LUGS ARE RATED FOR 1 CONDUCTOR ONLY.

### ATS WIRING WITH MULTIPLE RA112L1, TRANSFER SWITCHES.



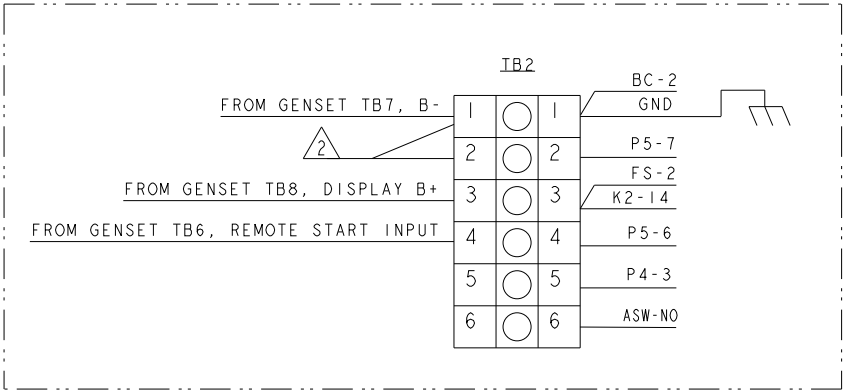
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS		SW TO	DWN	CKD	APVD	DATE	CUMMINS POWER GENERATION	
DIM	X ± 1	0.00 - 4.99 +0.15/-0.08	DO NOT SCALE PRINT	J_KHARJUL	M_TULADHAR	24AUG15	DIAGRAM, WIRING	
	.X ± 0.8	5.00 - 9.99 +0.20/-0.10						
	.XX ± 0.38	10.00 - 17.49 +0.25/-0.13						
		17.50 - 24.99 +0.30/-0.13						
ANG TOL	± 1.0°	SCALE 1/1	THIS DOCUMENT (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE DISCLOSED TO OTHERS IN HARD COPY OR ELECTRONIC FORM, REPRODUCED BY ANY MEANS, OR USED FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC.	FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009	FIRST USED ON	ARROW	PGF	A053F522
							SITE CODE	CAD SHEET 4 of 6

REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-173028	H	--	---	PT	MT	M_TULADHAR	02NOV17

NOTES:

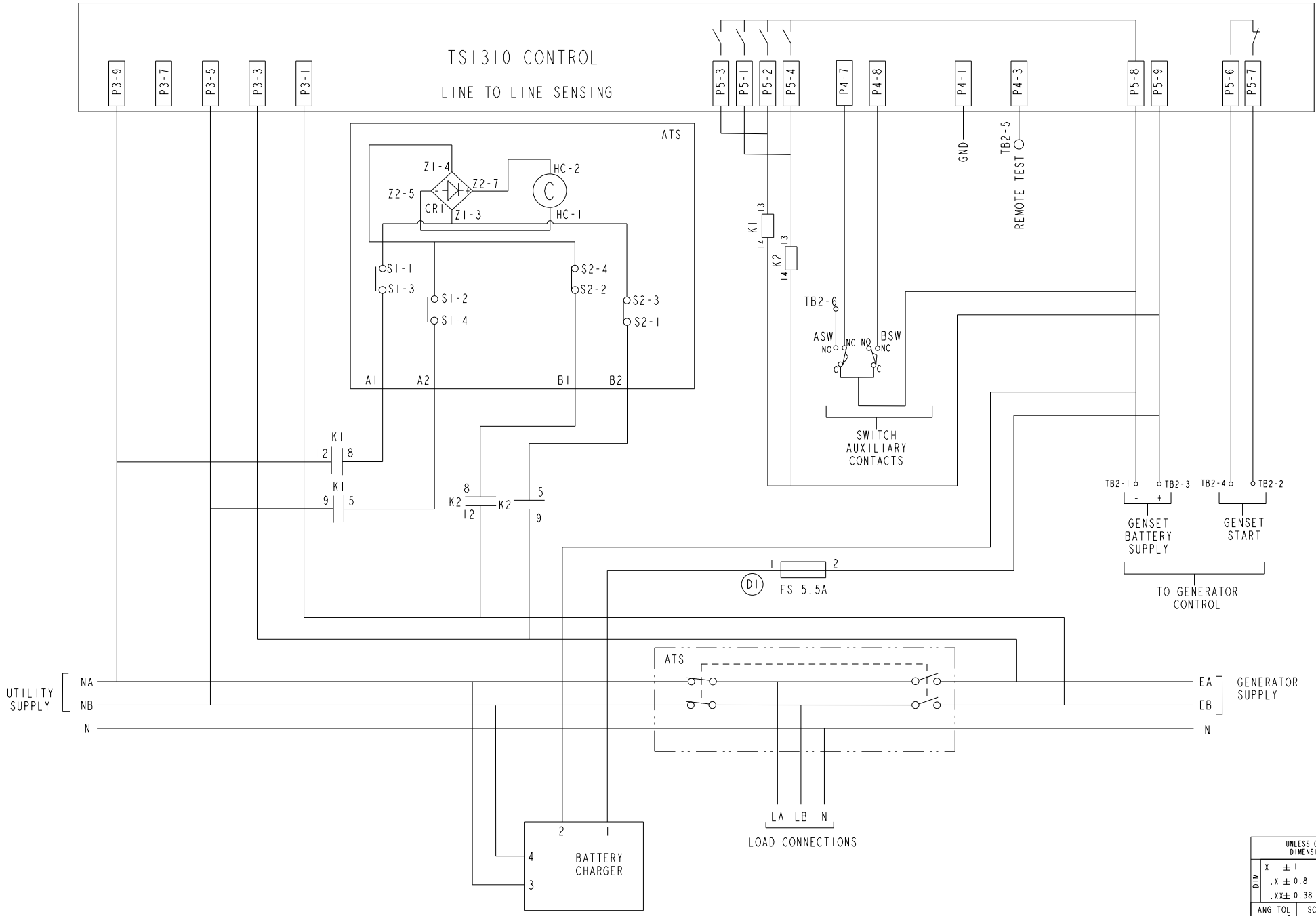
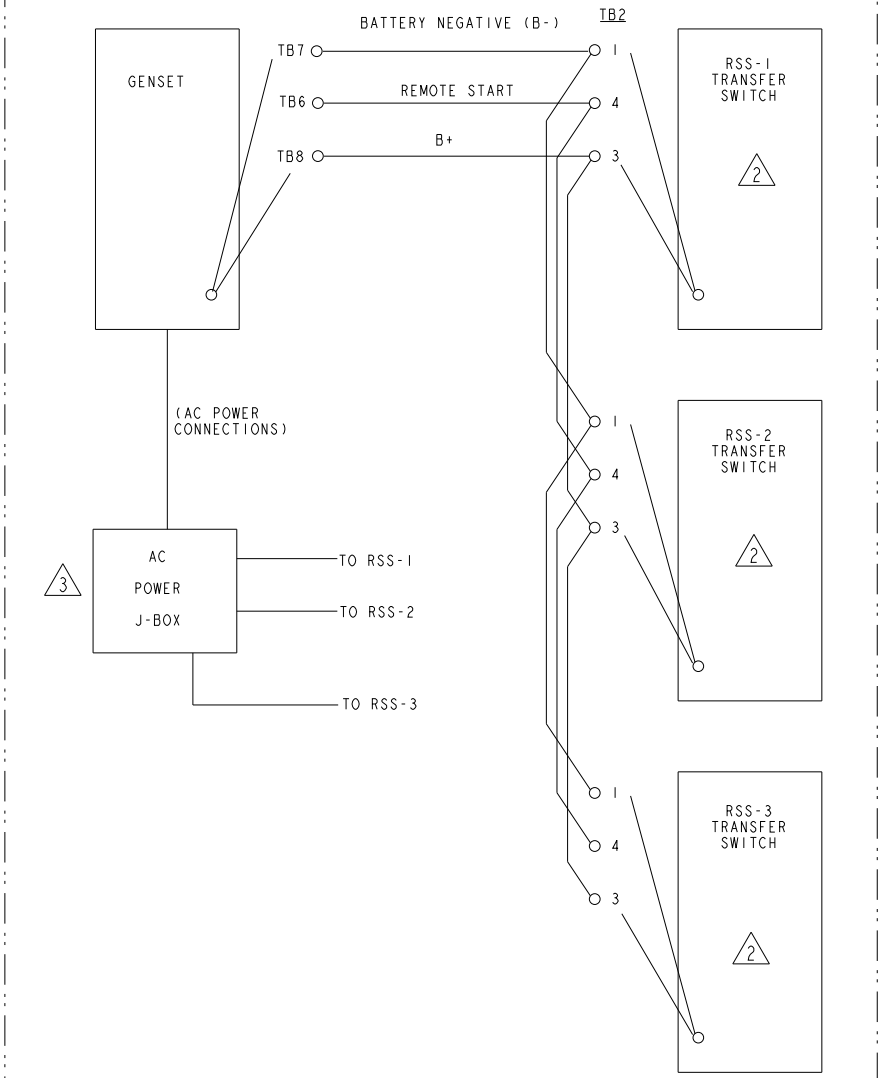
1. ALL DEVICES ARE SHOWN DE-ENERGIZED WITH TRANSFER SWITCH CLOSED TO NORMAL.
2. ADD 16-18AWG JUMPER WIRE BETWEEN TB2-1 AND TB2-2.
3. USE APPROPRIATELY SIZED TERMINAL BOX FOR POWER CONDUCTORS. LUGS ARE RATED FOR 1 CONDUCTOR ONLY.

ATS WIRING WITH RSS 100-6634, RSS 200-6635



- K1 CLOSE NORMAL RELAY
- K2 CLOSE EMERGENCY RELAY
- ASW NORMAL POSITION AUXILIARY SWITCH
- BSW EMERGENCY POSITION AUXILIARY SWITCH
- ATS AUTOMATIC TRANSFER SWITCH
- S1 OPENS WHEN ATS IS CONNECTED TO NORMAL
- S2 OPENS WHEN ATS IS CONNECTED TO EMERGENCY
- CR1 BRIDGE RECTIFIER
- C ATS OPERATOR COIL

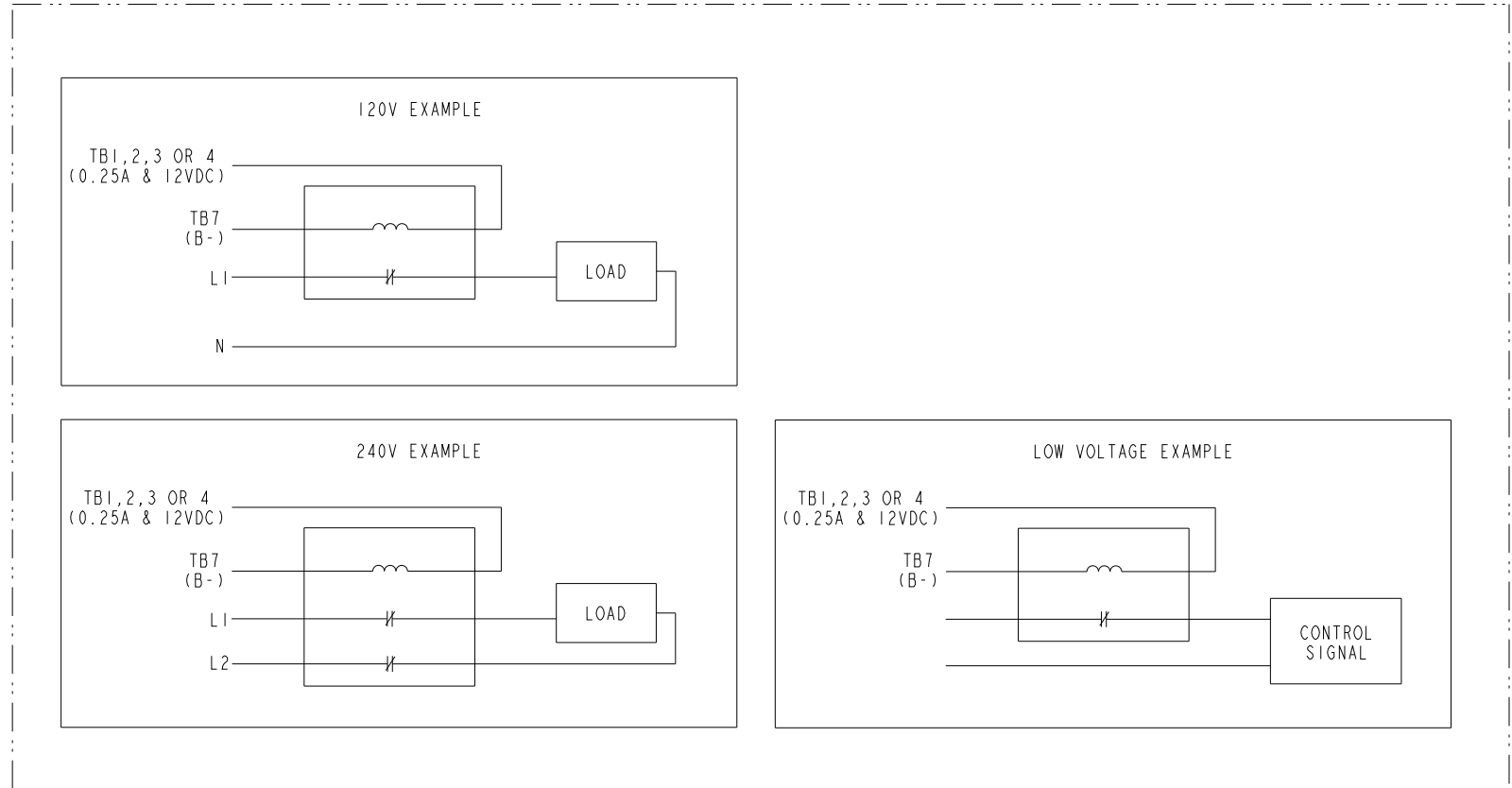
ATS WIRING WITH MULTIPLE RSS 100-6634, RSS 200-6635, TRANSFER SWITCHES.



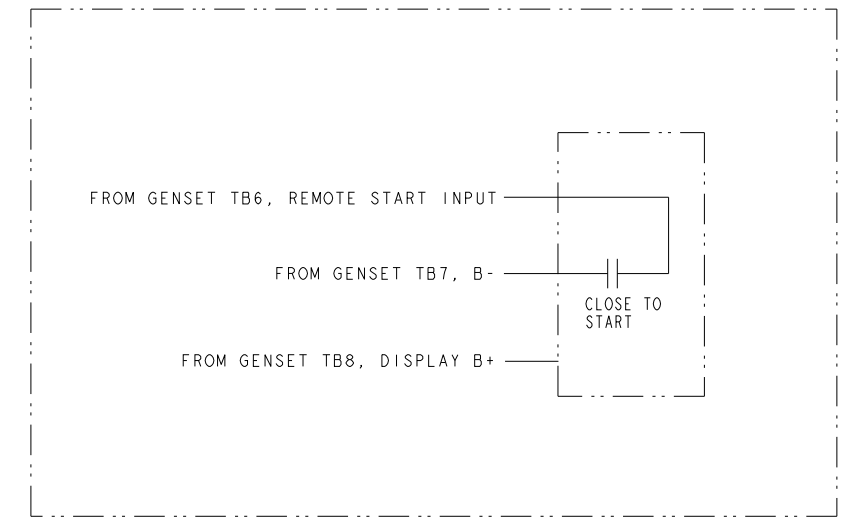
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS		SW TO	DWN J_KHARJUL	<b>CUMMINS POWER GENERATION</b>
DO NOT SCALE PRINT		CKD M_TULADHAR	APVD M_TULADHAR	
DATE 24AUG15		SITE CODE		DIAGRAM, WIRING
ANG TOL ± 1.0°		SCALE 1/1	PGF	A053F522
CAD SHEET 5 of 6				

REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-173028	H	--	---	PT	MT	M_TULADHAR	02NOV17

### LOAD SHED WIRING



### GENERIC 2-WIRE START ATS



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS			SHW TO	DWN J_KHARJUL		CUMMINS POWER GENERATION
DO NOT SCALE PRINT				CKD M_TULADHAR		DIAGRAM, WIRING
DIM	X ± 1	0.00- 4.99 +0.15/-0.08		APVD M_TULADHAR	SITE CODE	
	.X ± 0.8	5.00- 9.99 +0.20/-0.10		DATE 24AUG15		
	.XX ± 0.38	10.00-17.49 +0.25/-0.13 17.50-24.99 +0.30/-0.13		FIRST USED ON ARROW	PGF	
ANG TOL	± 1.0°	SCALE 1/1	<small>THIS DOCUMENT (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE DISCLOSED TO OTHERS IN HARD COPY OR ELECTRONIC FORM, REPRODUCED BY ANY MEANS, OR USED FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC. © ASME Y14.5-2009</small>			A053F522 6 of 6

**Part A053F522 H**

Description	Legacy Name	External Regulations	Application Status	Release Phase Code	Security Classification	Alternates
DIAGRAM,WIRING	A053F522	No External Regulations Apply	Production Only	Production	Confidential	

**Part Specifications :A053F522 H**

Name	Description	Legacy Name
A030B356	SPECIFICATION,MATERIAL	CES10903
A053F523	DRAWING,ENGINEERING	A053F523