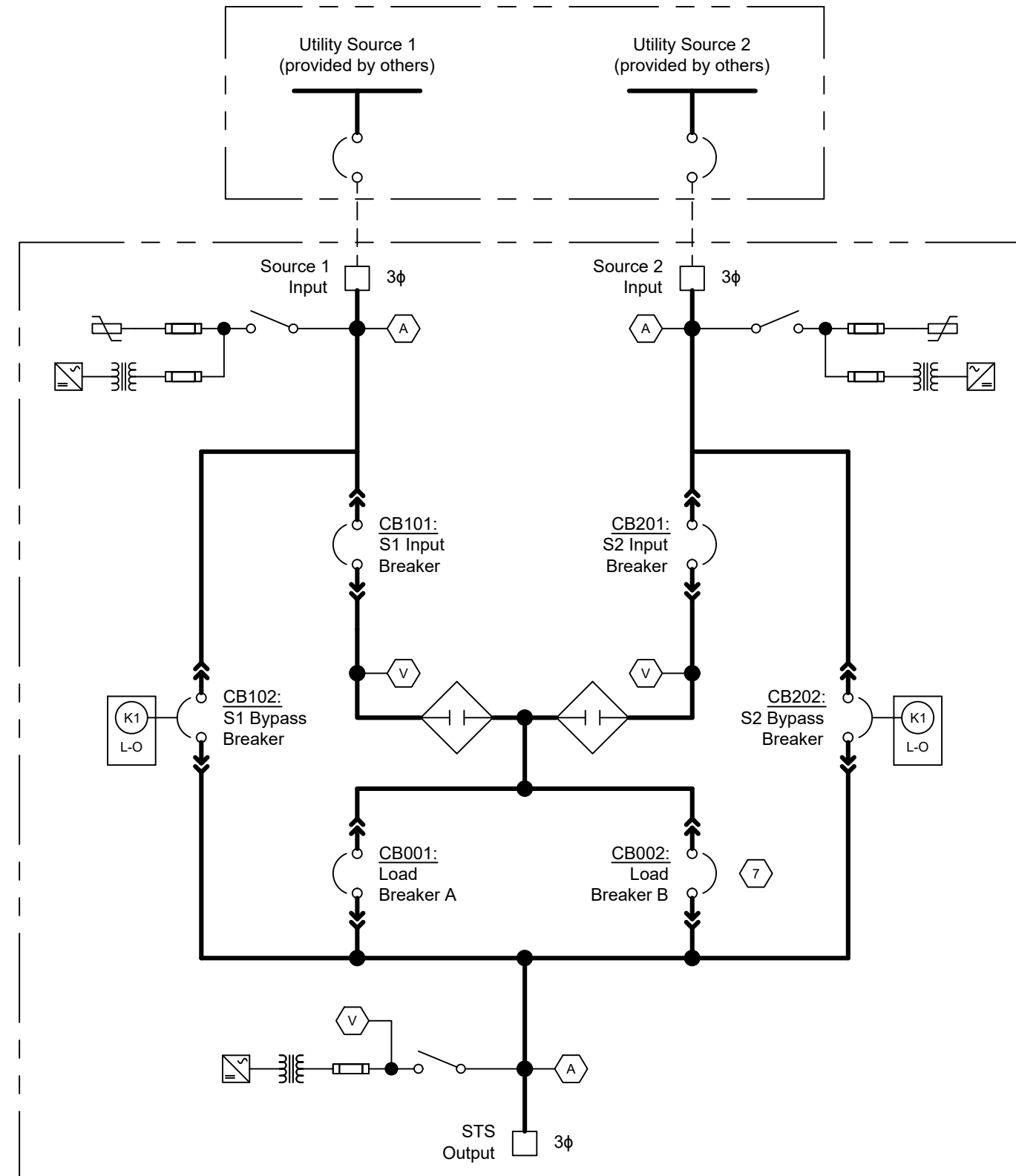


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**NOTES:**

1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES.
2. REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
3. THE ONELINE DIAGRAM PROVIDES AN OVERVIEW OF THE POWER STAGE OF THE TYPICAL STS AND IS NOT REPRESENTATIVE OF ITS PHYSICAL LAYOUT. REFER TO THE OUTLINE DIAGRAM FOR DETAILS.
4. THE STS IS DESIGNED FOR CONNECTION TO VAC 3φ, 3W or 4W SOLIDLY GROUNDED SOURCES ONLY. CONTACT ABB IF OTHER.
5. UPSTREAM OVERCURRENT PROTECTION IS REQUIRED, REFER TO TABLES 2.1 - 2.3 ON SHEET 2 FOR RECOMMENDATIONS.
6. MAXIMUM RATED SHORT CIRCUIT CURRENT IS 100kA.
7. ONE (1) LOAD BREAKER, CB001, IS PROVIDED WITH STANDARD STS CONFIGURATIONS. A SECOND LOAD BREAKER, CB002, IS AN OPTIONAL FEATURE THAT IS AVAILABLE UPON REQUEST.

**Legend:**

- Power Cable
- Power Cable (by others)
- Interlock
- Control
- Customer Terminal
- SPD (MOV)
- Molded Case Switch
- Transformer
- Current Sensing
- Voltage Sensing
- Keyed Note
- AC Switch
- Lock Open Key Removed
- Interlock Key Number
- Disconnect Switch
- Power Supply
- Fuse

Prepared <b>T. Kendzia</b>	Title <b>ONELINE DIAGRAM: SS4 100-250A, POWER STAGE</b>
Reviewed <b>V. Bose</b>	
Approved <b>C. Belcastro</b>	<b>ABB</b> Division/Dept. <b>Power Solutions</b>

Rev.	ECN#	TAK Resp.	Description	Initial Release Date	12/03/2021
Revision Table					
Item ID	94-9100-00068645	Item Rev.	A0	Date Drawn	12/03/2021
Document ID	ONE-00089733	Doc. Rev.	A0	Sheet Size	B
Document Kind	CircuitDiagram	Page	1 / 3		


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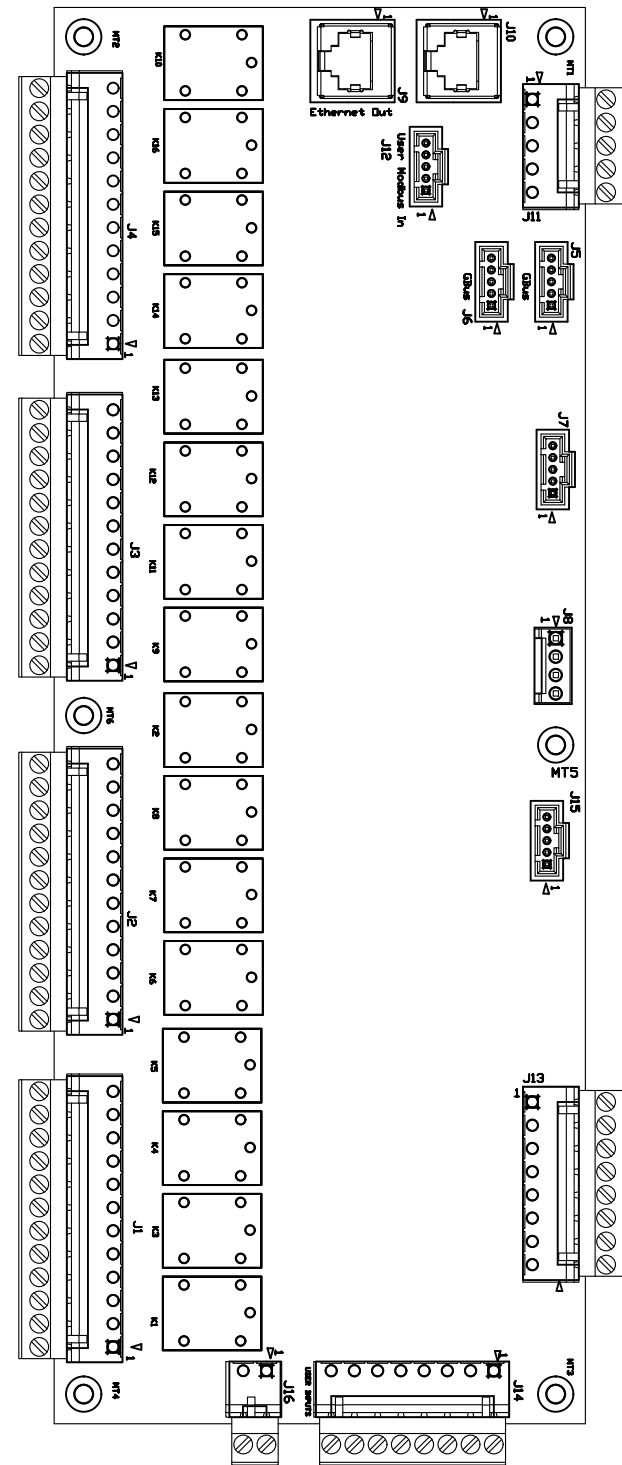
TABLE 2.1: 480V OCPD RECOMMENDATIONS					
STS AMPERES	MAXIMUM AVAILABLE FAULT CURRENT (RMS SYMMETRICAL)	MAKE	MODEL	RATING	TYPE
100A	35kA @ 480VAC	ABB	TMAX XT2 S	100A, 600V	3P MCCB
	65kA @ 480VAC	ABB	TMAX XT2 H	100A, 600V	3P MCCB
	100kA @ 480VAC	ABB	TMAX XT2 L	100A, 600V	3P MCCB
200A	35kA @ 480VAC	ABB	TMAX XT4 S	200A, 600V	3P MCCB
	65kA @ 480VAC	ABB	TMAX XT4 H	200A, 600V	3P MCCB
	100kA @ 480VAC	ABB	TMAX XT4 L	200A, 600V	3P MCCB
250A	35kA @ 480VAC	ABB	TMAX XT4 S	250A, 600V	3P MCCB
	65kA @ 480VAC	ABB	TMAX XT4 H	250A, 600V	3P MCCB
	100kA @ 480VAC	ABB	TMAX XT4 L	250A, 600V	3P MCCB

TABLE 2.2: 380-415V OCPD RECOMMENDATIONS					
STS AMPERES	MAXIMUM AVAILABLE FAULT CURRENT (RMS SYMMETRICAL)	MAKE	MODEL	RATING	TYPE
100A	35kA @ 480VAC	ABB	TMAX XT2 S	100A, 600V	3P MCCB
	65kA @ 480VAC	ABB	TMAX XT2 H	100A, 600V	3P MCCB
	100kA @ 480VAC	ABB	TMAX XT2 L	100A, 600V	3P MCCB
200A	35kA @ 480VAC	ABB	TMAX XT4 S	200A, 600V	3P MCCB
	65kA @ 480VAC	ABB	TMAX XT4 H	200A, 600V	3P MCCB
	100kA @ 480VAC	ABB	TMAX XT4 L	200A, 600V	3P MCCB
250A	35kA @ 480VAC	ABB	TMAX XT4 S	250A, 600V	3P MCCB
	65kA @ 480VAC	ABB	TMAX XT4 H	250A, 600V	3P MCCB
	100kA @ 480VAC	ABB	TMAX XT4 L	250A, 600V	3P MCCB

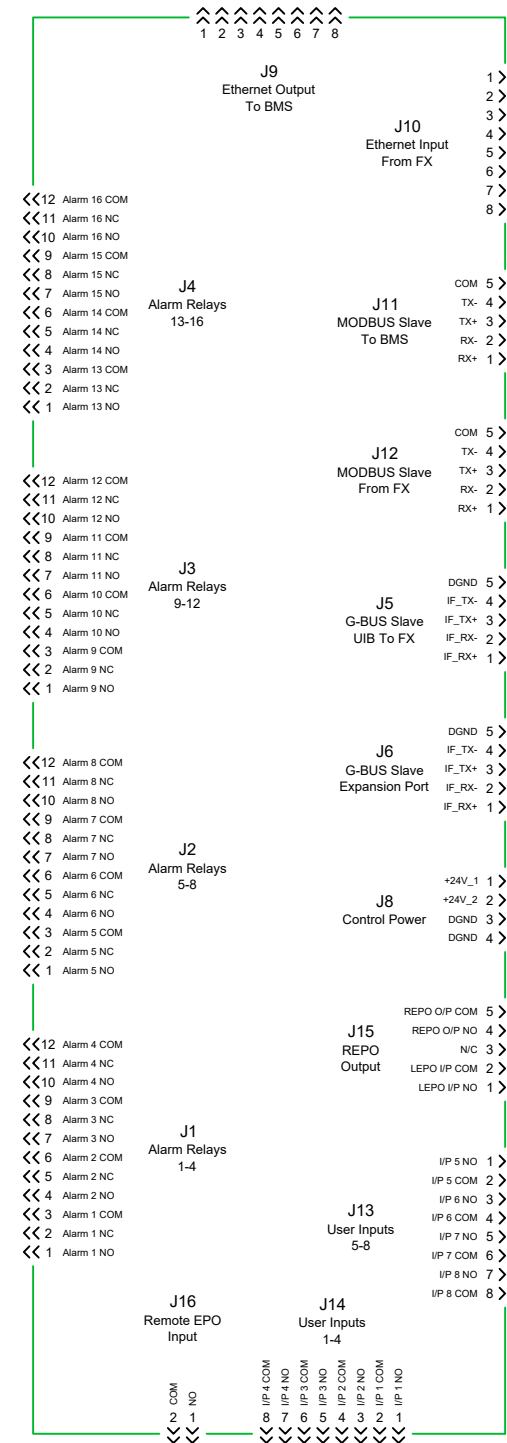
TABLE 2.3: 208V OCPD RECOMMENDATIONS					
STS AMPERES	MAXIMUM AVAILABLE FAULT CURRENT (RMS SYMMETRICAL)	MAKE	MODEL	RATING	TYPE
100A	100kA @ 240VAC	ABB	TMAX XT2 S	100A, 600V	3P MCCB
200A	100kA @ 240VAC	ABB	TMAX XT4 S	200A, 600V	3P MCCB
250A	100kA @ 240VAC	ABB	TMAX XT4 S	250A, 600V	3P MCCB

A0	--	TAK	Initial Release	12/03/2021
Rev.	ECN#	Resp.	Description	Date
Revision Table				

Prepared <b>T. Kendzia</b>	Title <b>ONLINE DIAGRAM: SS4 100-250A, 60Hz OCPD TABLES</b>	Item ID <b>94-9100-00068645</b>	Item Rev. <b>A0</b>	Date Drawn <b>12/03/2021</b>
Reviewed <b>V. Bose</b>		Document ID <b>ONE-00089733</b>	Doc. Rev. <b>A0</b>	Sheet Size <b>B</b>
Approved <b>C. Belcastro</b>	 Division/Dept. <b>Power Solutions</b>	Document Kind <b>CircuitDiagram</b>	Page <b>2 / 3</b>	



DETAIL A  
PHYSICAL LAYOUT

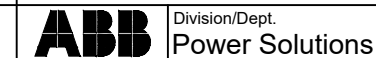


DETAIL B  
ELECTRICAL CONNECTIONS

**NOTES:**

1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES.
2. REFER TO INSTALLATION GUIDE AND PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
3. ALL CUSTOMER WIRING TO THE USER INTERFACE BOARD (UIB) SHALL BE CONSIDERED FIELD WIRING AND CONSTRUCTED OF COPPER CONDUCTORS ONLY.
4. THE FIELD WIRING CONNECTION TO J9 OF THE UIB, FOR ETHERNET / MODBUS TCP COMMUNICATIONS SHALL BE MADE USING CAT 5 CABLING.
5. ALL OTHER FIELD WIRING CONNECTIONS ARE MADE VIA PLUGGABLE SCREW TERMINALS, RATED FOR SOLID OR STRANDED WIRING SIZED #12 TO #22AWG.
6. ALL UIB OUTPUTS ARE SPDT RELAYS EQUIPPED WITH DRY FORM C CONTACTS RATED FOR 250VAC 5A, 120VAC 10A, AND 30VDC 8A RESISTIVE LOADS MAX. SEE INSTALLATION GUIDE AND USER MANUAL FOR DETAILS.
7. ALL UIB INPUTS ARE CONFIGURED FOR N.O. CONTACTS. SEE INSTALLATION GUIDE AND USER MANUAL FOR DETAILS.

Prepared <b>T. Kendzia</b>	Title <b>ONLINE DIAGRAM: SS4 100-250A, USER INTERFACE DETAILS</b>
Reviewed <b>V. Bose</b>	
Approved <b>C. Belcastro</b>	



Rev.	ECN#	TAK Resp.	Initial Release Description	Date
A0	--	TAK	Initial Release	12/03/2021
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