ACCESS TO:	Front Only	PHASE:	3P4W
CLASS:	2	AMPERE:	2000A
LABEL:	U/L SE	BUS MTL:	Al 750A/in²
VOLTAGE:	480/277V	PLATE:	Tin Plate
STYLE:	ReliaGear	RATING:	Fully Rated
BUS BRACING (RMS SYM):			65000A
DEV.MIN.INT.RATING (RMS SYM):			65000A

SwitchBoard / Device Information

Circuit No.	Device	Trip Amps	Sensor Amps	Poles	Nameplates	Lugs/Cable Size	Notes
1	FBN6	15	-	1		(1) - #14 - #10 AWG CU - Mech. AL	
2	XT5H	600	-	3		(2) - 2/0 - 500 MCM AL - Mech. AL	16,17 19,20
3	XT5H	600	-	3		(2) - 2/0 - 500 MCM AL - Mech. AL	16,17 19,20
4	XT5H	600	-	3		(2) - 2/0 - 500 MCM AL - Mech. AL	16,17 19,20
5	XT5H	600	-	3		(2) - 2/0 - 500 MCM AL - Mech. AL	16,17 19,20
6	XT5H	600	-	3		(2) - 2/0 - 500 MCM AL - Mech. AL	16,17 19,20
7	XT5H	600	-	3		(2) - 2/0 - 500 MCM AL - Mech. AL	16,17 19,20
8	FBN6	15	-	1		(1) - #14 - #10 AWG CU - Mech. AL	
Main	E2.2SF	2000		3			10,11,12,13,14,15,21,22, 23,24,27,28,29,30

NOTES:

1. Switchboard furnished with a rainproof TYPE 3R (non-walk-in) enclosure.
   NOTE: See plan view for details.Need additonal 1 inch space clearance on top and 1.5 inch clearance on the rear of the swbd.
2. Equipment ground bus furnished with lugs.
3. Switchboard qualified for Seismic Ratings per publication DET-463 and OSP-0044-10.
4. Shipping splits between each section, ship each section separately.
5. Switchboard furnished with section space heaters.
6. Switchboard furnished with thermostat control for section space heaters.
7. Switchboard furnished with lightning arrestor.
8. Switchboard furnished with hinged gutter covers.
9. Switchboard furnished with fully rated panel.
10. Device is 100 percent rated.
11. Device furnished with 120V electric operator.
12. Device is furnished with integral ground fault protection.
13. Device is furnished with RELT (Reduced Energy Let Through).
14. Device requires RELT or ZSI feature if Authority having jurisdiction has adopted NEC 2014 code requirements.
15. Device Furnished with Ekip Hi-Touch (LSIG) Programmer.
16. Device Furnished with (1) Open/close 250V AC/DC Auxiliary Contact + (1) Trip Signaling 250V AC/DC Auxiliary Contact.
17. Device Furnished with Pll Fixed Padlock - Open

19. Device Furnished with Thermal-Magnetic Adjustable Trip.
20. Device Furnished with Ekip Com Modbus TCP / STA Modbus TCP
21. Device furnished with (4Q) Auxiliary Contacts - 24V
22. Device furnished with (YR) Remote Reset - 110V AC/DC
23. Device furnished with (YC) Closing Coil - 110-120V AC/DC
24. Device furnished with (YO) Opening Coil - 110-120V AC/DC
25. Estimated total factory connected wiring points for the lineup 89.
26. Estimated shipping weight for the lineup is 1843 lbs.
27. Device furnished with DC Supply - 24V - 48V
28. Device furnished with RELT-Ekip Signalling 2K3
29. Device furnished with Charging motor/Ekip com actuator - 100-130V AC
30. Device furnished with 1% accuracy Measuring Package
31. Miscellaneous Add-Ons:

1 MOXA UC-3111-T-US-LX-QTC-ABB

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Switchboard / Device Information

1 SOLA POWER SUPPLY
1 1KVA UPS (needs 14H cover)
1 MOXA LPS69273NT-61SMAM antenna and RG58U-4-SMSF antenna cable
1 // ADD HUMISTAT TO HEATER CIRCUIT
32. Due to the presence of Miscellaneous Add-Ons, please review drawings with the factory to ensure accuracy.
33. Drawing Notes:
NEMA 3R to have rearward sloping roof. Insect screens on NEMA 3R enclosure over vent openings
Switchboard Doors: Open 90 degrees, can do split doors for 35” wide and wider sections
Factory installed 120V GFI 20A receptacle, need wire rated for 20Amp, behind any NEMA 3R doors
Ekip Com to be Modbus TCP/IP over CAT 5/6 cable

Breaker logic needs to be outage resilient, meaning breakers need to be able to communicate
status even in the event of an outage or after opening or trip. Provide UPS to accomplish.
Use UPS for control power ride through on utility main due to reverse power shut off.
Reverse power via relay when battery breaker in scope.
1200Amp main breaker to be EMAX 1.2, 2000A to be EMAX 2.2,
3000A to be EMAX 4.2, 4000A to be EMAX 6.2
Battery back feed breaker with GF to be at end of bus, opposite end from utility main
XT7M to be 1200Amp frame with a 1000Amp rating plug
Battery Breaker: LSIG branch breaker to be XT7M with ability to remotely operate
[redacted]
Main breaker and battery breaker (when in scope) to have Hi Touch trip units.
600Amp branch breakers to have Touch trip units when battery breaker in scope.
600Amp branch breakers to have thermal magnetic trip units when no battery breaker in scope.
EKIP Connect free downloadable software needed for all field technicians
Provide dual rated CU/AL lugs on the branch breakers.
All doors to be split doors
Dimensional notes for scopes:
Width: 1200A and 2000A main breaker section 30" wide when combined with utility doors, else 35"
Width: 3000A main breaker section 35" wide, 4000A 45" wide.
Depth: 1200A and 2000A depth 35", 3000A depth 40", 4000A depth 50"
Horizontal and neutral bus to be oversized when battery breaker in scope (BESS)
Horizontal bus to be 2000A for 1200A Main breaker, 3000A for 2000A Main breaker when BESS
Horizontal bus to be 4000A for 3000A Main breaker, 5000A for 4000A Main breaker when BESS
Vertical bus in distribution section to be 2000Amp for 1200Amp Main breaker when BESS.
Notes for short scopes when applicable:
Short board max panel height is 32X, Full height max panel height 40X
We can not offer reduced height switchboards for some utilities if CT compartment in switchboard
Examples EUSERC, PEPCO, Dominion due to minimum cable bending space required
[redacted]
34. As a result of Drawing Notes, this product may require modification to reflect correct footprint, price, cycle or UL certification.

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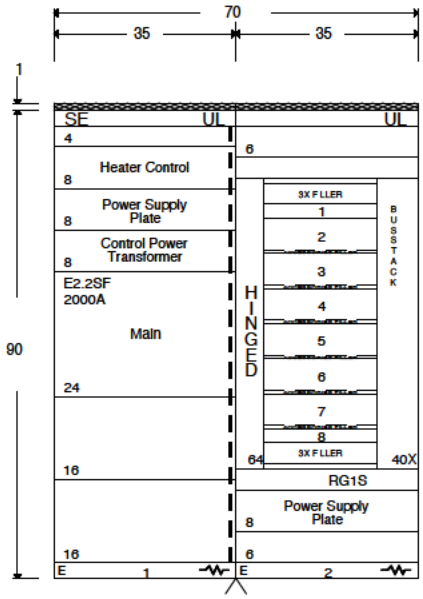
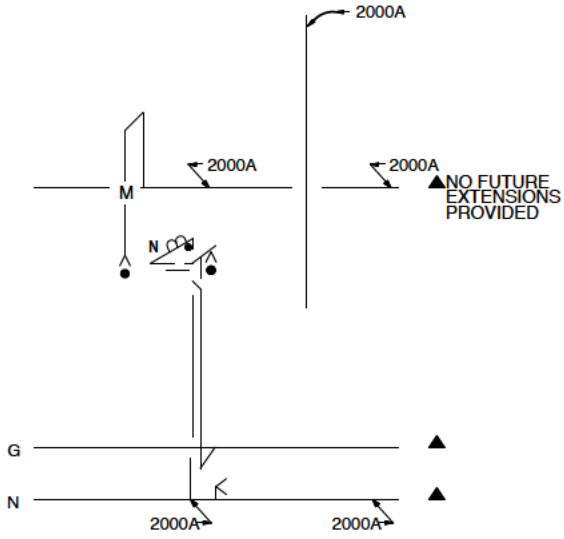


FRONT VIEW



BUSSING DIAGRAM

●(6) 600 MCM AL MECHANICAL (2 HOLE) AL PER PHASE & NEUTRAL

PROJECT NAME : [redacted]	Industrial Solutions by ABB	DRAWING TITLE: Front View/ Bussing	PRODUCT NAME: ReliaGear Switchboard	DRAWING NO:	
CUSTOMER: [redacted]		CREATED BY: [redacted]		ITEM NO:	4
		DATE: 03/02/2021 19:13:55		MARKS: [redacted]	
		REVISION NO.: 53		QUOTE NO: [redacted]	
				SHEET:	3 of 4

ACCESS TO:	Front Only	PHASE:	3P4W
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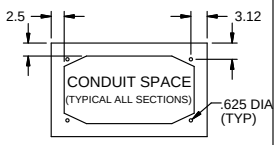
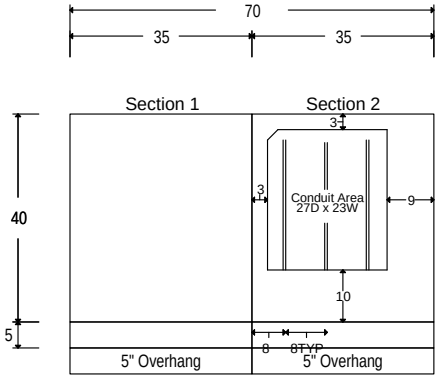
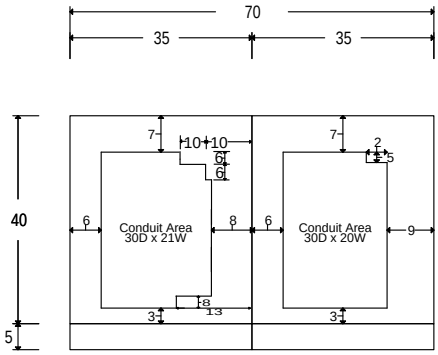


Top Conduit Area



Front Plan View

Bottom Conduit Area



Front Plan View

PROJECT NAME : [redacted]	Industrial Solutions by ABB	DRAWING TITLE: Conduit View	PRODUCT NAME: ReliaGear Switchboard	DRAWING NO:	
CUSTOMER: [redacted]		CREATED BY: [redacted]		ITEM NO:	4
		DATE: 03/02/2021 19:13:55		MARKS: [redacted]	
		REVISION NO.: 53		QUOTE NO: [redacted]	
				SHEET:	4 of 4