DOC. N.º 1SQC900020M0201 REV B



ReliaGear™ neXT Panelboard

Ground And Neutral Types And Lug Termination Details

WARNING

Danger of electrical shock or injury. Turn OFF power ahead of the panel board or switchboard before working inside the equipment or removing any component. Equipment is to be installed and maintained by properly trained and qualified personnel only.











		LUG TYPE
A		CU - 750 MCM MAIN LUG
В		10 WIRE GROUND LUG - AL
F		1200A NEUTRAL LUG - CU
G		400A NEUTRAL LUG - CU
•	00000000000000000000000000000000000000	DUAL MAIN LUG NEUTRAL LUG - AL
•	00000000000000000000000000000000000000	Horizontal Main / Main Lug Only Neutral Lug - AL
•	Ω Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο	Standard Neutrals AL - 1200A
K	$\begin{array}{c} \circ \\ \circ $	Standard Neutrals AL - 400A

STANDARD NEUTRAL TYPE - CU		MAIN LUG QUANTITY	MAIN TYPE
MECHANICAL	COMPRESSION	(NO. OF WIRES)	
		0(0)	STANDARD NEUTRAL – 1200A
		0(0)	STANDARD NEUTRAL – 400A
		2 (4)	MAIN LUG/HORIZONTAL MAIN BREAKER
		4 (8)	DUAL MAIN LUG
		2 (4)	VERTICAL MAIN BREAKER

200% NEUTRAL TYPE - CU		MAIN LUG QUANTITY (NO. OF WIRES)	MAIN TYPE	
MECHANICAL	COMPRESSION	(NO. OF WIRES)		
		4 (8)	MAIN LUG/HORIZONTAL MAIN BREAKER	
		8 (16)	DUAL MAIN LUG	

NOTE: Compression Lug catalog numbers available in Appendix A .

GROUND FAULT MAIN NEUTRAL TYPE - CU		MAIN LUG QUANTITY (NO. OF WIRES)	MAIN TYPE	
MECHANICAL	COMPRESSION	(
		1 (2)	XT4 HORIZONTAL MAIN BREAKER	
		1 (2)	XT5 VERTICAL MAIN BREAKER	
		2 (4)	XT7 VERTICAL MAIN BREAKER	

GROUND FAULT ON FEEDERS WITH STANDARD NEUTRALS - CU MECHANICAL	MAIN LUG QUANTITY (NO. OF WIRES)	DESCRIPTION
	4 (8)	DUAL MAIN LUG – 15"
	0	VERTICAL MAIN/HORIZONTAL MAIN/MAIN LUG NEUTRAL – 15"
	0	VERTICAL MAIN/HORIZONTAL MAIN/MAIN LUG NEUTRAL – 15"
	4 (8)	DUAL MAIN LUG – 21"
	0	VERTICAL MAIN/HORIZONTAL MAIN/MAIN LUG NEUTRAL – 21"
	0	VERTICAL MAIN/HORIZONTAL MAIN/MAIN LUG NEUTRAL – 21"

GROUND FAULT ON FEEDER WITH GROUND FAULT MAIN - CU MECHANICAL	MAIN LUG QUANTITY (NO. OF WIRES)	DESCRIPTION
	1 (2)	XT4 MAIN BREAKER WITH GROUND FAULT – 15"
	1 (2)	XT5 MAIN BREAKER WITH GROUND FAULT – 15"
	2 (4)	XT7 MAIN BREAKER WITH GROUND FAULT – 15"
	1 (2)	XT4 MAIN BREAKER WITH GROUND FAULT – 21"
	1 (2)	XT5 MAIN BREAKER WITH GROUND FAULT – 21"
	2 (4)	XT7 MAIN BREAKER WITH GROUND FAULT – 21"

STANDARD NEUTRAL TYPE - AL MECHANICAL	MAIN LUG QUANTITY (NO. OF WIRES)	DESCRIPTION
	-	STANDARD NEUTRALS AL - 1200A
	-	STANDARD NEUTRALS AL - 400A
	-	HORIZONTAL MAIN / MAIN LUG ONLY NEUTRALS - AL
	-	DUAL MAIN LUG NEUTRALS - AL

NOTE: Main incoming cables to be terminated in the extrusion.

200% NEUTRAL TYPE - AL		MAIN LUG QUANTITY (NO. OF WIRES)	MAIN TYPE	
MECHANICAL	COMPRESSION	(No. or WIKES)		
		-	MAIN LUG/HORIZONTAL MAIN BREAKER	
		-	DUAL MAIN LUG	

NOTE: Main incoming cables to be terminated in the extrusion.

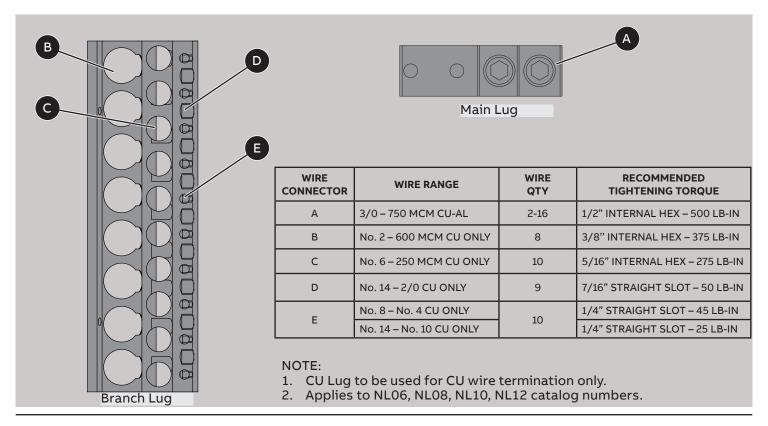
GROUND FAULT MAIN NEUTRAL TYPE - AL		MAIN LUG QUANTITY (NO. OF WIRES)	MAIN TYPE	
MECHANICAL	COMPRESSION			
		1 (2)	XT4 HORIZONTAL MAIN BREAKER	
		1 (2)	XT5 VERTICAL MAIN BREAKER	
		2 (4)	XT7 VERTICAL MAIN BREAKER	

GROUND FAULT ON FEEDERS WITH STANDARD NEUTRALS - AL MECHANICAL	MAIN LUG QUANTITY (NO. OF WIRES)	DESCRIPTION
	-	DUAL MAIN LUG – 15"
	0	VERTICAL MAIN/HORIZONTAL MAIN/MAIN LUG NEUTRAL – 15"
	•	DUAL MAIN LUG – 21"
	0	VERTICAL MAIN/HORIZONTAL MAIN/MAIN LUG NEUTRAL – 21"

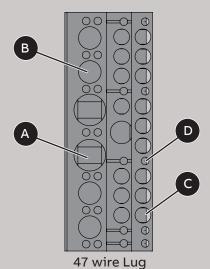
NOTE: Main incoming cables to be terminated in the extrusion.

GROUND FAULT ON FEEDER WITH GROUND FAULT MAIN - AL MECHANICAL	MAIN LUG QUANTITY (NO. OF WIRES)	DESCRIPTION
	1 (2)	XT4 MAIN BREAKER WITH GROUND FAULT – 15"
	1 (2)	XT5 MAIN BREAKER WITH GROUND FAULT – 15"
	2 (4)	XT7 MAIN BREAKER WITH GROUND FAULT – 15"
	1 (2)	XT4 MAIN BREAKER WITH GROUND FAULT – 21"
	1 (2)	XT5 MAIN BREAKER WITH GROUND FAULT – 21"
	2 (4)	XT7 MAIN BREAKER WITH GROUND FAULT – 21"

1200A Neutral Lug and 750MCM Main Lug Termination Details - CU



400A Neutral Termination Details - CU



CONNECTOR	WIRE RANGE	WIRE QTY	RECOMMENDED TIGHTENING TORQUE
А	No. 2–600 MCM CU ONLY	2	3/8" INTERNAL HEX - 375 LB-IN
В	No. 6–250 MCM CU ONLY	5	5/16" INTERNAL HEX - 275 LB-IN
С	No. 14–2/0 CU ONLY	16	7/16" STRAIGHT SLOT - 50 LB-IN
-	No. 8–No. 4 CU ONLY	2.4	1/4" STRAIGHT SLOT - 45 LB-IN
D	No. 14-No. 10 CU ONLY	24	1/4" STRAIGHT SLOT - 25 LB-IN

10 wire Lug - CU/AL

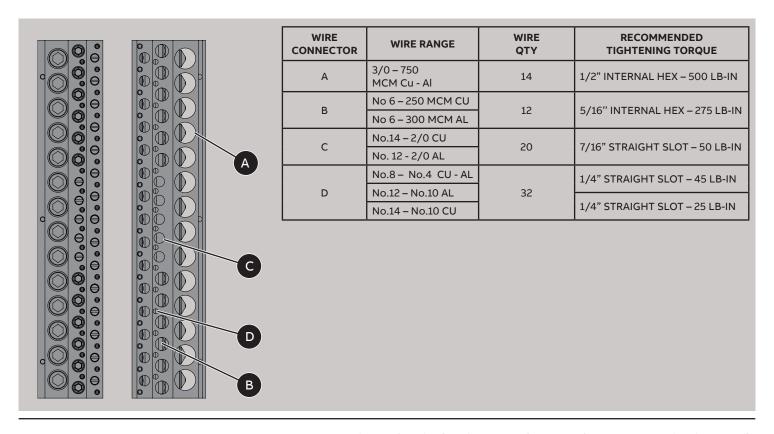
NOTE:

- 1. CU Lug to be used for CU wire termination only.
- 2. Applies to NL02, NL04 catalog numbers.
- 3. 10 Wire Lugs are AL but can accept AL/CU wires.

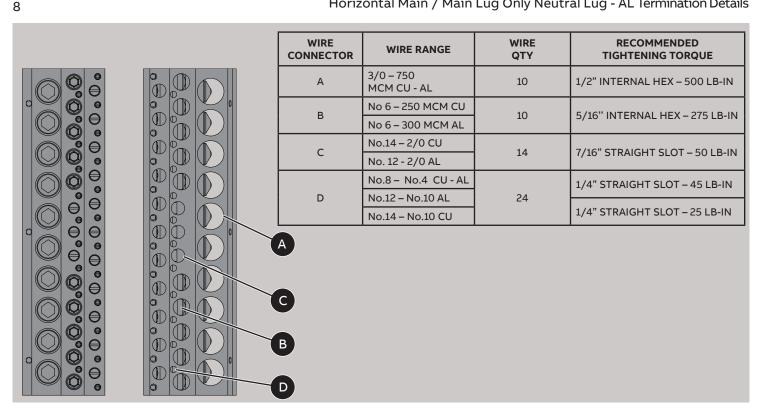
CONNECTOR	WIRE RANGE FOR 10 WIRE LUG	WIRE QTY	RECOMMENDED TIGHTENING TORQUE		
E	NO. 6-2/0 AWG CU - AL	10	SLOTTED SCREW (LB-IN)		
			AWG SIZE	MIN	MAX
			6 - 4	41	45
			3-2/0	45	50

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Dual Main Lug Neutral Lug - AL Termination Details



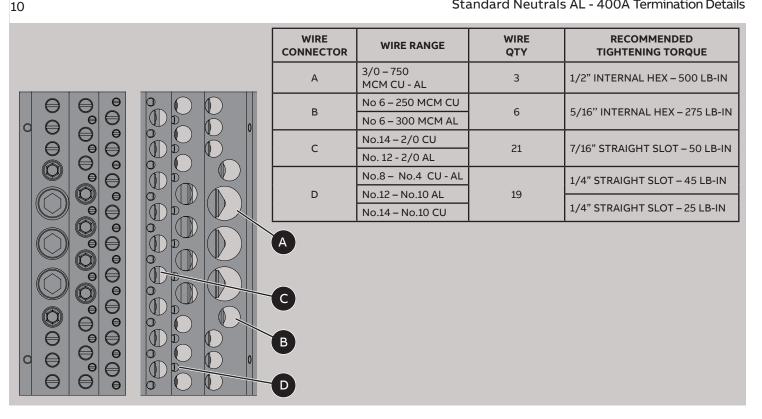
Horizontal Main / Main Lug Only Neutral Lug - AL Termination Details



Standard Neutrals AL - 1200A Termination Details

		WIRE CONNECTOR	WIRE RANGE	WIRE QTY	RECOMMENDED TIGHTENING TORQUE
	A	А	3/0 – 750 MCM CU - AL	7	1/2" INTERNAL HEX – 500 LB-IN
		В	No 6 – 250 MCM CU	10	5/16" INTERNAL HEX – 275 LB-IN
			No 6 – 300 MCM AL		
		С	No.14 – 2/0 CU	9	7/16" STRAIGHT SLOT – 50 LB-IN
			No. 12 - 2/0 AL		
		D	No.8 – No.4 CU - AL	19	1/4" STRAIGHT SLOT – 45 LB-IN
			No.12 – No.10 AL		1/4" CTDAIGHT CLOT 25 LD IN
			No.14 – No.10 CU		1/4" STRAIGHT SLOT – 25 LB-IN
		C			
		9			
		В			

Standard Neutrals AL - 400A Termination Details



Appendix A

SR.NO	DESCRIPTION	WIRE QTY	USCON CATALOG NUMBER	
1	NEXT LUGS NEUTRALS 1/0	2	LGN010	
2	NEXT LUGS NEUTRALS 2/0	2	LGN020	
3	NEXT LUGS NEUTRALS 3/0	2	LGN030	
4	NEXT LUGS NEUTRALS 4/0	2	LGN040	
5	NEXT LUGS NEUTRALS 250 MCM	2	LGN250	
6	NEXT LUGS NEUTRALS 300 MCM	2	LGN300	
7	NEXT LUGS NEUTRALS 350 MCM	2	LGN350	
8	NEXT LUGS NEUTRALS 400 MCM	2	LGN400	
9	NEXT LUGS NEUTRALS 500 MCM	2	LGN500	
10	NEXT LUGS NEUTRALS 600 MCM	2	LGN600	
11	NEXT LUGS NEUTRALS 750 MCM	2	LGN750	

Disclaimer: These instructions do not cover all details or variations in equipment nor do they provide for every possible contingency that may be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to the ABB Company.

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