

**CUSTOMER WIRING REQUIREMENTS**

- FOR 0 TO 100 AMPS, USE A MINIMUM OF 60° - 75° C COPPER WIRE. (USE COPPER CONDUCTORS ONLY)
- FOR ABOVE 100 AMPS, USE A MINIMUM OF 75° C COPPER WIRE. (USE COPPER CONDUCTORS ONLY)

TABLE 1		A.C. LINE WIRING			
Z1000U BYPASS MODEL NO. BASE NUMBER Z1D3XXXX		CIRCUIT BREAKER CB1 WITHOUT OPTION PW			
208V	480V	MFG. PART NUMBER	CURRENT RATING (AMPS)	WIRE SIZE RANGE (AWG)	TIGHTENING TORQUE (LB.-IN.)
	B011	H_ _36025	25	14 - 10 OR 8 - 3/0	50 OR 120
	B014	H_ _36030	30		
	B021	H_ _36045	45		
D024	B027	H_ _36060	60		
D030	B034	H_ _36070	70		
	B040	H_ _36080	80		
D046	B052	H_ _36110	110		
D059	B065	H_ _36125	125		
D074	B077	H_ _36150	150		
D088	B096				
D114					
D143	B124	J_ _36250 ①	250	4 - 4/0	225
D169	B156	J_ _36250		3/0 - 350 kcmil	
	B180				
D211		L_ _36400U31X	400	(1-2) x (2/0 - 500 kcmil)	(1-2) x 442
	B240	L_ _36600U31X	600		
	B302				
	B361	P_ _34060	600		
	B414			(1-3) x (3/0 - 500 kcmil)	(1-3) x 450

TABLE 2		A.C. LINE WIRING			
Z1000U BYPASS MODEL NO. BASE NUMBER Z1D3XXXX		CIRCUIT BREAKER CB1 WITH OPTION PW			
208V	480V	MFG. PART NUMBER	CURRENT RATING (AMPS)	WIRE SIZE RANGE (AWG)	TIGHTENING TORQUE (LB.-IN.)
	B011	H_ _36025	25	14 - 10 OR 8 - 3/0	50 OR 120
	B014				
	B021				
D024	B027				
D030	B034	H_ _36050	50		
	B040	H_ _36060	60		
D046	B052	H_ _36110	110		
D059	B065				
D074	B077				
D088	B096	H_ _36125	125		
D114		J_ _36175	175	4 - 4/0	225
D143	B124	J_ _36200 ①	200		
	B156	J_ _36225 ①	225		
D169	B180	L_ _36400U31X	400	(1-2) x(2/0 - 500 kcmil)	(1-2) x 442
D211					
	B240	L_ _36600U31X	600		
	B302				
	B361				
	B414				

TABLE 3		A.C. MOTOR WIRING			EARTH GROUND WIRING		NEUTRAL		CONTROL WIRING							
Z1000U BYPASS MODEL NO. BASE NUMBER Z1D3XXXX		MOTOR OVERLOAD RELAY S10			GROUND LUGS		PANEL MOUNTED TERMINAL BLOCK TBN1		DRIVE A1 TERMINAL BLOCKS TB1 - TB4		BYPASS CONTROL PCB A2 TERMINAL BLOCKS TB1 - TB3		PANEL MOUNTED TERMINAL BLOCK TB1			
208V	480V	MFG. PART NUMBER	WIRE SIZE RANGE (AWG)	TIGHTENING TORQUE (LB.-IN.)	WIRE SIZE RANGE (AWG)	TIGHTENING TORQUE (LB.-IN.)	WIRE SIZE RANGE (AWG)	TIGHTENING TORQUE (LB.-IN.)	WIRE SIZE RANGE (AWG)	TIGHTENING TORQUE (LB.-IN.)	WIRE SIZE RANGE (AWG)	TIGHTENING TORQUE (LB.-IN.)	WIRE SIZE RANGE (AWG)	TIGHTENING TORQUE (LB.-IN.)		
	B011	LRD15	18 - 8	15	14 - 10, OR 8, OR 6 - 4, OR 2 - 1/0	35, OR 40, OR 45, OR 120	14 - 10	35	24 - 16	4.4 - 5.3	26 - 12	4	26 - 10	5.3 - 7.1		
	B014															
	B021															
D024	B027						8	40								
D030		LRD15	18 - 8	15	14 - 2/0	120	OR	OR	6 - 2/0	120						
	B034	LRD340L	16 - 2	70												
	B040															
D046		LRD350L														
D059	B052	LRD365L														
	B065	LR2 D35	10 - 1/0	100												
D074	B077															
D088	B096	LR9-F5567	6 - 3/0	200	6 - 250 kcmil	275	6 - 350 kcmil	275								
D114	B124	LR9-F5569														
D143																
D169	B156	LR9-F5571	6 - 300 kcmil	275												
	B180															
D211	B240	LR9-F7575	(1-2) x (2 - 600 kcmil)	(1-2) x 500												
	B302	LR9-F7579														
	B361															
	B414	LR9-F7581	(1-3) x (2 - 600 kcmil)	(1-3) x 500												

① = STANDARD CIRCUIT BREAKER LUGS REPLACED WITH AL175JD (175A) LINE SIDE LUGS

REVISIONS			
REV.	DESCRIPTION	ECO #	DRAWN BY DATE
02	ADDED BUBBLE NOTE 1 TO CLARIFY LUG CHANGE	13735	RJJ 03/22/24
01	ADDED "(USE COPPER CONDUCTORS ONLY)" TO CUST. WIRING REQ.	7469	KM 11/10/16
00	INITIAL RELEASE	-	DRC 07/01/15

<b>YASKAWA</b>	DRAWN BY: D.R. CMELAK	DATE: 7/1/15	TITLE: CUSTOMER CONNECTION Z1000 U BYPASS 40C FULL AND 50C FULL W/O OPT. PK		
	CHECKED: N. LAWS	DATE: 7/1/15	SIZE: C	REVISION: 02	PAGE: 1 of 1
	TECH:	DATE:			
	APPROVED: K. FLIERL	DATE: 7/1/15			
ORIGINAL DESIGN: D.R. CMELAK		DATE: 7/1/15	DRAWING #: UDE00496		

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