

**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 Z1DXXXXX		STANDARD 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					
	B124	J_36250	250	4 - 4/0	225
D143	B156			3/0 - 350 kcmil	225
D169	B180				
D211	B240	L_36400U31X	400	(1-2) x (2/0 - 500 kcmil)	(1-2) x 442
	B302	L_36600U31X	600		
	B361	P_34060	600	(1-3) x	(1-3) x 450
	B414			(3/0 - 500 kcmil)	

TABLE 2		A.C. LINE WIRING			
Z1000U BYPASS MODEL NO. BASE NUMBER Z1DXXXXX		STANDARD 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	H_36040	40		
D024	B027	H_36045	45		
	B034	H_36050	50		
D030	B034	H_36060	60		
	B040	H_36080	80		
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	200		
	B156	J_36225	225		
D169	B180	L_36400U31X	400	(1-2) x(2/0 - 500 kcmil)	(1-2) x 442
D211					
	B240	L_36600U31X	600		
	B302				
	B361	P_34060	600	(1-3) x	(1-3) x 450
	B414			(3/0 - 500 kcmil)	

TABLE 3		A.C. MOTOR WIRING			EARTH GROUND WIRING		CONTROL WIRING							
Z1000U BYPASS MODEL NO. BASE NUMBER Z1DXXXXX		STANDARD BYPASS MOTOR OVERLOAD RELAY			GROUND LUG		DRIVE A1 TB1-TB4		DRIVE A1 TB5		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	35	24 - 16	4.4 - 5.3	20 - 14	4.4 - 8.9	26 - 12	4	26 - 10	5.3 - 7.1
	B014				OR	OR								
D024	B021				8	40								
D030	B027	LRD340L	16 - 2	70	OR	OR								
	B040				OR	OR								
D046		LRD350L			6 - 4	45								
D059	B052	LRD365L			OR	OR								
	B065	LR2 D35	10 - 1/0	100	2	50								
D074	B077				14 - 2/0	120								
D088	B096	LR9-F5567	6 - 3/0	200										
D114	B124	LR9-F5569												
D143														
D169	B156	LR9-F5571	6 - 300 kcmil	275										
	B180													
D211	B240	LR9-F7575	(1-2) x	(1-2) x 500										
	B302	LR9-F7579	(2 - 600 kcmil)											
	B361													
	B414	LR9-F7581	(1-3) x	(1-3) x 500										
			(2 - 600 kcmil)											

REVISIONS				
REV.	DESCRIPTION	ECO #	DRAWN BY	DATE
02	CHANGED Z1B1XXXX TO Z1BXXXXX, AND ADDED TB5 SPECS	12784	KL	12/20/22
01	ADDED "USE COPPER CONDUCTORS ONLY" TO CUST. WIRING REQ.	7469	KM	11/10/16
00	INITIAL RELEASE	-	NSL	11/19/14

 <p><b>THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA AMERICA INC.</b></p>	DRAWN BY: N. LAWS	DATE: 11/17/13	TITLE: CUSTOMER CONNECTION Z1000U BYPASS			
	CHECKED: D.R. CMELAK	DATE: 11/18/13				
	TECH:	DATE:				
	APPROVED: K. FLIERL	DATE: 11/19/13	SIZE: C	REVISION: 02	PAGE: 1 of 1	
ORIGINAL DESIGN: N. LAWS	DATE: 11/17/13	DRAWING #: UDE00472				