

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							
Q1E3 CONFIGURED MODEL NO. BASE NUMBER Q1E3XXXX		WITH OPTION PC CIRCUIT BREAKER CB1				STANDARD NON-FUSED INPUT DISCONNECT SWITCH S1			
240V	480V	MFG. PART NUMBER	CURRENT RATING (AMPS)	WIRE SIZE RANGE (AWG)	TIGHTENING TORQUE (LB.-IN.)	MFG. PART NUMBER	CURRENT RATING (AMPS)	WIRE SIZE RANGE (AWG)	TIGHTENING TORQUE (LB.-IN.)
	B011	H_36020	20	14 - 10 OR 8 - 3/0	50 OR 120	OT30F3	30	14 - 4	55
	B014	H_36025	25						
	B021	H_36035	35						
		H_36040	40						
	B027	H_36045	45						
A028	B034	H_36050	50						
	B040	H_36060	60						
A042		H_36070	70						
	B052								
		H_36080	80						
A054	B065	H_36090	90						
	B077	H_36100	100						
A068		H_36110	110						
A081		H_36125	125						
	B096								
A104	B124	H_36150	150		H_36000S15	150	14 - 10 OR 8 - 3/0	50 OR 120	
A130		J_36200 ^①	200	4 - 4/0	225				
	B156					J_36000S25	250	3/0 - 350 kcmil	225
A154	B180	J_36225	225	3/0 - 350 kcmil	225				
A192		M_36300	300	(1-3) x (3/0 - 500 kcmil)	(1-3) x 450				
A248						L_36000S40X	400	(1-2) x (2/0 - 500 kcmil)	(1-2) x 442
	B240	M_36350	350	(1-3) x (3/0 - 500 kcmil)	(1-3) x 450				
	B302	M_36400	400						
	B361	M_36500	500						
	B414	M_36600	600			L_36000S60X	600		
	B477	M_36700	700	(1-3) x (3/0 - 500 kcmil)	(1-3) x 450				
	B515								
	B590	M_36800	800			P_36000S80	800	(1-3) x (3/0 - 500 kcmil)	(1-3) x 450

TABLE 2		A.C. MOTOR WIRING						REMOTE EQUIPMENT WIRING		
Q1E3 CONFIGURED MODEL NO. BASE NUMBER Q1E3XXXX		WITHOUT OPTION PK OR P8 TO STANDARD AC DRIVE	WITH OPTION PK AND WITHOUT OPTION P8 LOAD REACTOR L4			WITH OPTION P8 MOTOR TERMINAL BLOCK TB3			WITH OPTION SF PANEL MOUNTED FUSE BLOCK FOR REMOTE 115V RECEPTACLE	
240V	480V		MFG. PART NUMBER	WIRE SIZE RANGE (AWG)	TIGHTENING TORQUE (LB.-IN.)	MFG. PART NUMBER	WIRE SIZE RANGE (AWG)	TIGHTENING TORQUE (LB.-IN.)	WIRE SIZE RANGE (AWG)	TIGHTENING TORQUE (LB.-IN.)
	B011	CUSTOMER TO SUPPLY A UL LISTED CLOSED-LOOP CONNECTOR, PER THE AC DRIVE TECHNICAL MANUAL USE 75 C COPPER WIRE ONLY	RLW-00140_	22 - 10	4.5	LFS13003Z	14 - 2	40 - 50	22 - 10	25
	B014		RLW-00210_	14 - 6	16					
	B021		RLW-00280_							
A028	B027		RLW-00350_							
	B034		RLW-00460_	6 - 4	45					
A042	B040		RLW-00550_							
	B052		RLW-00650_	OR	OR					
A054			RLW-00830_	2 - 1/0	50					
	B065		RLW-01040_			1423572	14 - 10, 8, OR 6 - 2/0	35, 40, OR 120		
A068			RLW-01300_	2, 1, 1/0, 2/0, OR 3/0, 4/0	150, 180, OR 250	MPDB67003	6 - 350 kcmil	275		
A081	B077		RLW-01600_							
A104	B096		RLW-02000_							
A130			RLW-02500_	3/0, 4/0, (250-350) kcmil, OR (400-500) kcmil	250, 325, OR 375	1453129	(1-2) x (4 - 350 kcmil)	(1-2) x 275		
A154	B180		RLW-03220_							
A192	B240		RLW-03220_	(1-2) x (6 - 350 kcmil)	(1-2) x 375					
	B302	RLW-04140_								
	B361	RLW-05150_								
	B414	RLW-06000_	CUSTOMER TO SUPPLY A UL LISTED CLOSED-LOOP CONNECTOR			MPDB69093	(1-2) x (4 - 500 kcmil)	(1-2) x 500		
	B477	RLW-07500_			MPDB69313					
	B515				MPDB69543	(1-2) x (2 - 600 kcmil)	(1-2) x 600			
	B590									

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

REVISIONS				
REV.	DESCRIPTION	ECO #	DRAWN BY	DATE
03	ADDED BUBBLE NOTE 1 TO CLARIFY LUG CHANGE	13735	RJJ	03/25/24
02	CHANGED B240 - B414 TO M FRAME CB	8633	R.ROH	04/04/18
01	ADDED B477, B515, & B590 VOLTAGE CODES	8391	NSL	01/30/18

YASKAWA	DRAWN BY: A. MEILAHN	DATE: 2/23/17	TITLE: CUSTOMER CONNECTION Q1E3 CONFIGURED TYPE 3R		
	CHECKED: N. LAWS	DATE: 2/27/17			
	TECH:	DATE:			
	APPROVED: K. FLIERL	DATE: 3/6/17	SIZE: C	REVISION: 03	PAGE: 1 of 2
ORIGINAL DESIGN: A. MEILAHN	DATE: 2/23/17	DRAWING #: UDE00539			

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TABLE 3		EARTH GROUND WIRING		NEUTRAL		CONTROL WIRING			
Q1E3 CONFIGURED MODEL NO. BASE NUMBER Q1E3XXXX		GROUND LUG		PANEL MOUNTED TERMINAL BLOCK TBN1		A1 TERMINAL BLOCKS TB1-TB4		PANEL MOUNTED TERMINAL BLOCK TB1	
240V	480V	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	14 - 2/0	120	14 - 10,	35,	24 - 16	4.4 - 5.3	26 - 10	5.3 - 7.1
	B014								
	B021								
A028	B027								
A042	B034								
	B040								
A054	B052								
A068	B065								
A081	B077								
A104	B096			8,	40,				
A130	B124*			OR	OR				
A154	B156	6 - 250 kcmil	275	6 - 350 kcmil	275				
A192	B180								
A248	B240								
	B302								
	B361								
	B414								
	B477								
	B515								
	B590								

- * WITH OPTIONS P4 AND PK, GROUND LUG WIRE SIZE RANGE (AWG) IS 6 - 250 kcmil WITH TIGHTENING TORQUE 275 (LB.-IN).
- * WITH OPTIONS P4 AND PK, PANEL MOUNTED TEMRINAL BLOCK TBN1 WIRE SIZE RANGE (AWG) IS 6 - 350 kcmil WITH TIGHTENING TORQUE 275 (LB.-IN).

YASKAWA	DRAWN BY: A. MEILAHN	DATE: 2/23/17	TITLE: CUSTOMER CONNECTION Q1E3 CONFIGURED TYPE 3R		
	CHECKED: N. LAWS	DATE: 2/27/17			
	TECH:	DATE:			
	APPROVED: K. FLIERL	DATE: 3/6/17	SIZE: C	REVISION: 03	PAGE: 2 of 2
	ORIGINAL DESIGN: A. MEILAHN	DATE: 2/23/17	DRAWING #: UDE00539		