

YASKAWA

U1000 DRIVE

MULTIPLE RATINGS SUPPLEMENT

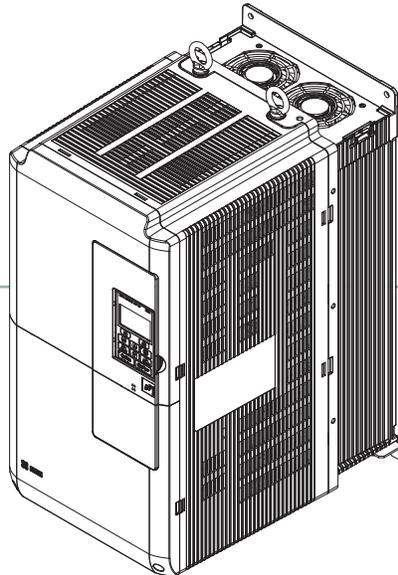
LOW HARMONIC REGENERATIVE DRIVE

AFFECTED DOCUMENTS:

U1000 Quick Start Guide (TOEPC71063604, TOEPC71063612)
U1000 Technical Manual (SIEPC71063604, SIEPC71063612)

PDF

yaskawa.com/TOEPYAISUP28



Simplify Drive Installation
Get DriveWizard® Mobile



<https://www.yaskawa.com/dwm>

DOCUMENT NUMBER: TOEPYAISUP28

1 Supplemental Information - Applicable Documents

The contents of this supplement apply to the product instructions in [Table 1.1](#).

Table 1.1 Affected Documents

Drive Series	Document
U1000	Quick Start Guide (TOEPC71063604, TOEPC71063612)
	Technical Manual (SIEPC71063604, SIEPC71063612)

2 Multiple Ratings for U1000 AC Drives

This document details the various ratings available for U1000 drives and outlines the correct sizing of branch circuit protection along with input and output conductors for U1000 installations.

Per the National Electric Code (NEC), input conductors must be rated at 125% of the drive maximum input current, and output conductors must be rated at 125% of the motor Full Load Amps (FLA). In the tables below, the drive output current rating was used instead of the motor FLA.

This reduced rating sizing approach is ideal in certain applications, such as emergency drive replacements that use a larger drive, drive systems with multiple motors, or where the drive is significantly oversized for the connected motor.

In these applications, power distribution components are often unnecessarily oversized to maintain NEC compliance. To mitigate this issue, UL permits multiple ratings for a single drive, providing a more efficient approach to conductor and branch circuit protection component sizing.

◆ Multiple Ratings

Calculate the total FLA for all motors connected to the drive by summing their individual FLA values. The value set for *E2-01* becomes the reference value for motor protection and the torque limit. Enter the motor rated current as written on the motor nameplate. Auto-Tuning automatically sets *E2-01* to the value input for "Motor Rated Current".

Once you have the total FLA, refer to [Table 2.1](#) to [Table 2.22](#) depending on the desired drive rating, and use the calculated current value to determine the appropriate allowable input current rating for the drive. This ensures proper conductor sizing while optimizing system efficiency. The following tables and examples are provided for guidance only. You must comply with NEC and local codes when you select conductors and branch circuit protection for your application.

MCCB recommendations are provided in the tables below. MCCBs (sized at 200% of drive output FLA rating) can use the reduced ratings, and you must follow NEC and local codes.

■ Three-Phase 240 V

Table 2.1 100% Ratings for U1000 AC Drives (Three-Phase 240 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0028	28.0	25.0	50.0	8.0	8.0	8.0	8.0
0042	42.0	38.0	80.0	6.0	6.0	6.0	6.0
0054	54.0	49.0	100.0	4.0	4.0	4.0	4.0
0068	68.0	62.0	125.0	4.0	4.0	4.0	4.0
0081	81.0	74.0	150	6 × 2P	3 or 6 × 2P	6 × 2P	2 or 6 × 2P
0104	104.0	95.0	200	1	1	1	1
0130	130.0	118.0	250	4 × 2P	2/0 4 × 2P ^{*I}	4 × 2P	2/0 4 × 2P ^{*I}
0154	154.0	140.0	300	3 × 2P	3/0 3 × 2P ^{*I}	3 × 2P	3/0 3 × 2P ^{*I}
0192	192.0	175.0	350	1 × 2P	1 × 2P ^{*I}	1 × 2P	1 × 2P ^{*I}
0248	248.0	226.0	450	2/0 × 2P	2/0 × 2P	2/0 × 2P	2/0 × 2P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.2 95% Ratings for U1000 AC Drives (Three-Phase 240 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0028	26.6	24.5	50	-	8	-	8
0042	39.9	36.1	70	-	8	-	8
0054	51.3	47.6	100	-	6	-	6
0068	64.6	58.9	125	-	4	-	4
0081	77.0	70.4	150	-	3	-	3
0104	98.8	93.0	175	-	1	-	1
0130	123.5	114.0	225	-	2/0 4 × 2P *1	-	2/0 4 × 2P *1
0154	146.3	137.9	250	-	3/0 3 × 2P *1	-	3/0 3 × 2P *1
0192	182.4	167.7	350	-	4/0 2 × 2P *1	-	1 × 2P *1
0248	235.6	214.7	450	-	1/0 × 2P	-	1/0 × 2P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.3 90% Ratings for U1000 AC Drives (Three-Phase 240 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0028	25.2	23.3	50	-	8	-	8
0042	37.8	34.2	70	-	8	-	8
0054	48.6	45.1	90	-	6	-	6
0068	61.2	55.8	110	-	4	-	4
0081	72.9	66.7	125	-	3	-	3
0104	93.6	88.2	175	-	1	-	1
0130	117.0	108.1	225	-	1/0	-	2/0 4 × 2P *1
0154	138.6	130.8	250	-	2/0 4 × 2P *1	-	3/0 3 × 2P *1
0192	172.8	159.1	300	-	4/0 2 × 2P *1	-	4/0 2 × 2P *1
0248	223.2	203.4	400	-	1/0 × 2P	-	1/0 × 2P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.4 85% Ratings for U1000 AC Drives (Three-Phase 240 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0028	23.8	22.0	45	-	10	-	8
0042	35.7	32.3	70	-	8	-	8
0054	45.9	42.7	90	-	6	-	6
0068	57.8	52.7	110	-	4	-	4
0081	68.9	62.9	125	-	4	-	3
0104	88.4	83.5	175	-	2	-	1
0130	110.5	102.3	200	-	1/0	-	1/0

2 Multiple Ratings for U1000 AC Drives

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0154	130.9	123.7	250	-	2/0 4 × 2P ^{*1}	-	2/0 4 × 2P ^{*1}
0192	163.2	150.5	300	-	3/0 3 × 2P ^{*1}	-	4/0 2 × 2P ^{*1}
0248	210.8	192.4	400	-	1/0 × 2P	-	1/0 × 2P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.5 80% Ratings for U1000 AC Drives (Three-Phase 240 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0028	22.4	20.8	40	-	10	-	10
0042	33.6	30.4	60	-	8	-	8
0054	43.2	40.3	80	-	6	-	6
0068	54.4	49.6	100	-	4	-	4
0081	64.8	59.2	125	-	4	-	4
0104	83.2	78.7	150	-	2	-	2
0130	104.0	96.4	200	-	1	-	1
0154	123.2	116.7	225	-	2/0 4 × 2P ^{*1}	-	2/0 4 × 2P ^{*1}
0192	153.6	141.8	300	-	3/0 3 × 2P ^{*1}	-	3/0 3 × 2P ^{*1}
0248	198.4	181.3	350	-	1 × 2P ^{*1}	-	1/0 × 2P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.6 75% Ratings for U1000 AC Drives (Three-Phase 240 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0028	21.0	19.6	40	-	10	-	10
0042	31.5	28.5	60	-	8	-	8
0054	40.5	37.9	80	-	6	-	6
0068	51.0	46.5	100	-	6	-	6
0081	60.8	55.6	110	-	4	-	4
0104	78.0	73.9	150	-	3	-	3
0130	97.5	90.6	175	-	1	-	1
0154	115.5	109.6	225	-	1/0	-	2/0 4 × 2P ^{*1}
0192	144.0	133.2	250	-	2/0 4 × 2P ^{*1}	-	3/0 3 × 2P ^{*1}
0248	186.0	170.2	350	-	4/0 2 × 2P ^{*1}	-	1 × 2P ^{*1}

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.7 70% Ratings for U1000 AC Drives (Three-Phase 240 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0028	19.6	18.3	35	-	10	-	10
0042	29.4	26.6	50	-	8	-	8
0054	37.8	35.5	70	-	8	-	8
0068	47.6	43.4	90	-	6	-	6
0081	56.7	51.9	110	-	4	-	4
0104	72.8	69.1	125	-	3	-	3
0130	91.0	84.7	175	-	2	-	1
0154	107.8	102.5	200	-	1/0	-	1/0
0192	134.4	124.5	250	-	2/0 4 × 2P ^{*1}	-	2/0 4 × 2P ^{*1}
0248	173.6	159.1	300	-	4/0 2 × 2P ^{*1}	-	4/0 2 × 2P ^{*1}

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.8 65% Ratings for U1000 AC Drives (Three-Phase 240 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0028	18.2	17.1	35	-	10	-	10
0042	27.3	24.7	50	-	8	-	8
0054	35.1	33.0	70	-	8	-	8
0068	44.2	40.4	80	-	6	-	6
0081	52.7	48.1	100	-	6	-	4
0104	67.6	64.4	125	-	4	-	4
0130	84.5	78.9	150	-	2	-	2
0154	100.1	95.3	200	-	1	-	1
0192	124.8	115.9	225	-	2/0 4 × 2P ^{*1}	-	2/0 4 × 2P ^{*1}
0248	161.2	148.0	300	-	3/0 3 × 2P ^{*1}	-	4/0 2 × 2P ^{*1}

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.9 60% Ratings for U1000 AC Drives (Three-Phase 240 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0028	16.8	15.8	30	-	10	-	10
0042	25.2	22.8	50	-	10	-	8
0054	32.4	30.6	60	-	8	-	8
0068	40.8	37.4	80	-	8	-	6
0081	48.6	44.5	90	-	6	-	6
0104	62.4	59.6	110	-	4	-	4
0130	78.0	73.0	150	-	3	-	3
0154	92.4	88.2	175	-	1	-	1

2 Multiple Ratings for U1000 AC Drives

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0192	115.2	107.2	225	-	1/0	-	2/0 4 × 2P ^{*1}
0248	148.8	136.9	250	-	3/0 3 × 2P ^{*1}	-	3/0 3 × 2P ^{*1}

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.10 55% Ratings for U1000 AC Drives (Three-Phase 240 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0028	15.4	14.6	30	-	12	-	10
0042	23.1	21.0	45	-	10	-	8
0054	29.7	28.2	50	-	8	-	8
0068	37.4	34.4	70	-	8	-	8
0081	44.6	40.7	80	-	6	-	6
0104	57.2	54.8	110	-	4	-	4
0130	71.5	67.1	125	-	3	-	3
0154	84.7	81.1	150	-	2	-	2
0192	105.6	98.5	200	-	1	-	1/0
0248	136.4	125.8	250	-	2/0 4 × 2P ^{*1}	-	3/0 3 × 2P ^{*1}

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.11 50% Ratings for U1000 AC Drives (Three-Phase 240 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0028	14.0	13.3	25	-	12	-	12
0042	21.0	19.1	40	-	10	-	10
0054	27.0	25.7	50	-	8	-	8
0068	34.0	31.4	60	-	8	-	8
0081	40.5	37.1	80	-	8	-	6
0104	52.0	50.0	100	-	4	-	6
0130	65.0	61.2	125	-	4	-	4
0154	77.0	73.9	150	-	3	-	3
0192	96.0	89.8	175	-	1	-	1
0248	124.0	114.6	225	-	2/0 4 × 2P ^{*1}	-	2/0 4 × 2P ^{*1}

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

■ Three-Phase 480 V

Table 2.12 100% Ratings for U1000 AC Drives (Three-Phase 480 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0011	11.0	10.0	20	14	14	14	14
0014	14.0	13.0	25	12	12	12	12
0021	21.0	19.0	40	10	10	10	10
0027	27.0	25.0	50	8	8	8	8
0034	34.0	31.0	60	8	8	8	8
0040	40.0	36.0	80	8	8	8	8
0052	52.0	47.0	100	6	6	6	6
0065	65.0	59.0	125	4	4	4	4
0077	77.0	70.0	150	3	3	3	3
0096	96.0	87.0	175	1	1	1	1
0124	124.0	113.0	225	4x2P	2/0 4 × 2P ^{*1}	4x2P	2/0 4 × 2P ^{*1}
0156	156.0	142.0	300	3x2P	3/0 3 × 2P ^{*1}	3x2P	3/0 3 × 2P ^{*1}
0180	180.0	164.0	350	2x2P	4/0 2 × 2P ^{*1}	2x2P	4/0 2 × 2P ^{*1}
0216	216.0	197.0	400	1/0x2P	1/0 × 2P	1/0x2P	1/0 × 2P
0240	240.0	218.0	450	1/0x2P	1/0 × 2P	1/0x2P	1/0 × 2P
0302	302.0	275.0	600	3/0x2P	3/0 × 2P	3/0x2P	3/0 × 2P
0361	361.0	329.0	700	4/0x2P	4/0 × 2P	4/0x2P	4/0 × 2P
0414	414.0	377.0	800	300x2P	300 × 2P	300x2P	300 × 2P
0477	477.0	434.0	900	3/0x4P	3/0 × 4P	3/0x4P	3/0 × 4P
0590	590.0	537.0	1100	250x4P	250 × 4P	250x4P	250 × 4P
0720	720.0	655.0	1400	300x4P	300 × 4P	300x4P	300 × 4P
0900	900.0	819.0	1800	4/0x8P	4/0 × 8P	4/0x8P	4/0 × 8P
0930	930.0	846.0	1800	4/0x8P	4/0 × 8P	4/0x8P	4/0 × 8P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.13 95% Ratings for U1000 AC Drives (Three-Phase 480 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0011	10.5	9.5	20	-	14	-	14
0014	13.3	12.4	25	-	12	-	12
0021	20.0	18.1	35	-	10	-	10
0027	25.7	23.8	50	-	8	-	8
0034	32.3	29.5	60	-	8	-	8
0040	38.0	34.4	70	-	8	-	8
0052	49.4	46.5	90	-	6	-	6
0065	61.8	57.0	110	-	4	-	4
0077	73.2	69.0	125	-	3	-	3
0096	91.2	83.9	175	-	2	-	1

2 Multiple Ratings for U1000 AC Drives

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0124	117.8	107.4	225	-	1/0	-	2/0 4 × 2P ^{*1}
0156	148.2	135.7	250	-	3/0 3 × 2P ^{*1}	-	3/0 3 × 2P ^{*1}
0180	171.0	156.1	300	-	4/0 2 × 2P ^{*1}	-	4/0 2 × 2P ^{*1}
0216	205.2	187.3	400	-	1 × 2P ^{*1}	-	1/0 × 2P
0240	228.0	211.6	450	-	1/0 × 2P	-	1/0 × 2P
0302	286.9	261.3	500	-	3/0 × 2P	-	3/0 × 2P
0361	343.0	312.7	600	-	4/0 × 2P	-	4/0 × 2P
0414	393.3	363.7	700	-	250 × 2P	-	300 × 2P
0477	453.2	418.8	900	-	300 × 2P	-	3/0 × 4P
0590	560.5	521.9	1100	-	4/0 × 4P	-	250 × 4P
0720	684.0	624.9	1200	-	300 × 4P	-	300 × 4P
0900	855.0	778.3	1700	-	4/0 × 8P	-	4/0 × 8P
0930	883.5	804.0	1700	-	4/0 × 8P	-	4/0 × 8P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.14 90% Ratings for U1000 AC Drives (Three-Phase 480 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0011	9.9	9.0	15	-	14	-	14
0014	12.6	11.7	25	-	12	-	12
0021	18.9	17.1	35	-	10	-	10
0027	24.3	22.6	45	-	10	-	8
0034	30.6	27.9	60	-	8	-	8
0040	36.0	32.7	70	-	8	-	8
0052	46.8	44.1	90	-	6	-	6
0065	58.5	54.1	110	-	4	-	4
0077	69.3	65.4	125	-	3	-	3
0096	86.4	79.5	150	-	2	-	2
0124	111.6	101.7	200	-	1/0	-	1/0
0156	140.4	128.7	250	-	2/0 4 × 2P ^{*1}	-	3/0 3 × 2P ^{*1}
0180	162.0	148.0	300	-	3/0 3 × 2P ^{*1}	-	4/0 2 × 2P ^{*1}
0216	194.4	177.4	350	-	1 × 2P ^{*1}	-	1/0 × 2P
0240	216.0	200.7	400	-	1/0 × 2P	-	1/0 × 2P
0302	271.8	247.6	500	-	3/0 × 2P	-	3/0 × 2P
0361	324.9	296.1	600	-	4/0 × 2P	-	4/0 × 2P
0414	372.6	344.8	700	-	250 × 2P	-	250 × 2P
0477	429.3	397.0	800	-	300 × 2P	-	300 × 2P
0590	531.0	494.8	1000	-	4/0 × 4P	-	4/0 × 4P
0720	648.0	592.4	1200	-	250 × 4P	-	300 × 4P

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0900	810.0	737.8	1600	-	3/0 × 8P	-	3/0 × 8P
0930	837.0	762.1	1600	-	4/0 × 8P	-	4/0 × 8P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.15 85% Ratings for U1000 AC Drives (Three-Phase 480 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0011	9.4	8.5	15	-	14	-	14
0014	11.9	11.1	20	-	14	-	12
0021	17.9	16.2	35	-	10	-	10
0027	23.0	21.4	45	-	10	-	10
0034	28.9	26.4	50	-	8	-	8
0040	34.0	30.9	60	-	8	-	8
0052	44.2	41.7	80	-	6	-	6
0065	55.3	51.1	110	-	4	-	4
0077	65.5	61.9	125	-	4	-	4
0096	81.6	75.2	150	-	3	-	2
0124	105.4	96.2	200	-	1	-	1/0
0156	132.6	121.7	250	-	2/0 4 × 2P *1	-	2/0 4 × 2P *1
0180	153.0	139.9	300	-	3/0 3 × 2P *1	-	3/0 3 × 2P *1
0216	183.6	167.5	350	-	4/0 2 × 2P *1	-	1 × 2P *1
0240	204.0	189.7	400	-	1/0 × 2P	-	1/0 × 2P
0302	256.7	233.9	500	-	2/0 × 2P	-	3/0 × 2P
0361	306.9	279.9	600	-	4/0 × 2P	-	4/0 × 2P
0414	351.9	325.9	700	-	4/0 × 2P	-	4/0 × 2P
0477	405.5	375.3	800	-	250 × 2P	-	300 × 2P
0590	501.5	467.7	1000	-	3/0 × 4P	-	4/0 × 4P
0720	612.0	559.9	1200	-	250 × 4P	-	300 × 4P
0900	765.0	696.5	1500	-	3/0 × 8P	-	3/0 × 8P
0930	790.5	719.4	1500	-	3/0 × 8P	-	3/0 × 8P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.16 80% Ratings for U1000 AC Drives (Three-Phase 480 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0011	8.8	8.0	15	-	14	-	14
0014	11.2	10.4	20	-	14	-	14
0021	16.8	15.2	30	-	12	-	10
0027	21.6	20.2	40	-	10	-	10

2 Multiple Ratings for U1000 AC Drives

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0034	27.2	24.8	50	-	8	-	8
0040	32.0	29.1	60	-	8	-	8
0052	41.6	39.3	80	-	6	-	6
0065	52.0	48.2	100	-	6	-	6
0077	61.6	58.3	110	-	4	-	4
0096	76.8	70.9	150	-	3	-	3
0124	99.2	90.7	175	-	1	-	1
0156	124.8	114.7	225	-	2/0 4 × 2P ^{*1}	-	2/0 4 × 2P ^{*1}
0180	144.0	131.9	250	-	2/0 4 × 2P ^{*1}	-	3/0 3 × 2P ^{*1}
0216	172.8	157.7	300	-	4/0 2 × 2P ^{*1}	-	4/0 2 × 2P ^{*1}
0240	192.0	178.8	350	-	1 × 2P ^{*1}	-	1 × 2P ^{*1}
0302	241.6	220.2	450	-	2/0 × 2P	-	2/0 × 2P
0361	288.8	263.4	500	-	3/0 × 2P	-	3/0 × 2P
0414	331.2	307.0	600	-	4/0 × 2P	-	4/0 × 2P
0477	381.6	353.5	700	-	250 × 2P	-	300 × 2P
0590	472.0	440.5	900	-	3/0 × 4P	-	3/0 × 4P
0720	576.0	527.4	1100	-	4/0 × 4P	-	250 × 4P
0900	720.0	655.2	1400	-	300 × 4P	-	300 × 4P
0930	744.0	677.6	1400	-	3/0 × 8P	-	3/0 × 8P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.17 75% Ratings for U1000 AC Drives (Three-Phase 480 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0011	8.3	7.6	15	-	14	-	14
0014	10.5	9.8	20	-	14	-	14
0021	15.8	14.3	30	-	12	-	10
0027	20.3	18.9	40	-	10	-	10
0034	25.5	23.3	50	-	8	-	8
0040	30.0	27.4	60	-	8	-	8
0052	39.0	37.0	70	-	8	-	8
0065	48.8	45.3	90	-	6	-	6
0077	57.8	54.8	110	-	4	-	4
0096	72.0	66.6	125	-	3	-	3
0124	93.0	85.1	175	-	2	-	1
0156	117.0	107.7	225	-	1/0	-	2/0 4 × 2P ^{*1}
0180	135.0	123.8	250	-	2/0 4 × 2P ^{*1}	-	3/0 3 × 2P ^{*1}
0216	162.0	148.0	300	-	3/0 3 × 2P ^{*1}	-	4/0 2 × 2P ^{*1}
0240	180.0	167.8	350	-	4/0 2 × 2P ^{*1}	-	4/0 2 × 2P ^{*1}
0302	226.5	206.4	450	-	1/0 × 2P	-	1/0 × 2P

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0361	270.8	246.9	500	-	3/0 × 2P	-	3/0 × 2P
0414	310.5	288.1	600	-	4/0 × 2P	-	4/0 × 2P
0477	357.8	331.7	700	-	4/0 × 2P	-	4/0 × 2P
0590	442.5	413.4	800	-	300 × 2P	-	3/0 × 4P
0720	540.0	494.8	1000	-	4/0 × 4P	-	4/0 × 4P
0900	675.0	614.8	1200	-	300 × 4P	-	300 × 4P
0930	697.5	635.7	1200	-	300 × 4P	-	300 × 4P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.18 70% Ratings for U1000 AC Drives (Three-Phase 480 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0011	7.7	7.1	15	-	14	-	14
0014	9.8	9.2	15	-	14	-	14
0021	14.7	13.3	25	-	12	-	12
0027	18.9	17.7	35	-	10	-	10
0034	23.8	21.7	45	-	10	-	8
0040	28.0	25.6	50	-	8	-	8
0052	36.4	34.6	70	-	8	-	8
0065	45.5	42.4	90	-	6	-	6
0077	53.9	51.2	100	-	4	-	4
0096	67.2	62.3	125	-	4	-	4
0124	86.8	79.6	150	-	2	-	2
0156	109.2	100.7	200	-	1/0	-	1/0
0180	126.0	115.7	250	-	2/0 4 × 2P *1	-	2/0 4 × 2P *1
0216	151.2	138.3	300	-	3/0 3 × 2P *1	-	3/0 3 × 2P *1
0240	168.0	156.8	300	-	4/0 2 × 2P *1	-	4/0 2 × 2P *1
0302	211.4	192.7	400	-	1/0 × 2P	-	1/0 × 2P
0361	252.7	230.7	500	-	2/0 × 2P	-	3/0 × 2P
0414	289.8	269.2	500	-	3/0 × 2P	-	3/0 × 2P
0477	333.9	309.9	600	-	4/0 × 2P	-	4/0 × 2P
0590	413.0	386.2	800	-	300 × 2P	-	300 × 2P
0720	504.0	462.2	1000	-	3/0 × 4P	-	4/0 × 4P
0900	630.0	573.6	1200	-	250 × 4P	-	300 × 4P
0930	651.0	593.9	1200	-	250 × 4P	-	300 × 4P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.19 65% Ratings for U1000 AC Drives (Three-Phase 480 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0011	7.2	6.5	10	-	14	-	14
0014	9.1	8.5	15	-	14	-	14
0021	13.7	12.4	25	-	12	-	12
0027	17.6	16.5	35	-	10	-	10
0034	22.1	20.2	40	-	10	-	10
0040	26.0	23.9	50	-	8	-	8
0052	33.8	32.2	60	-	8	-	8
0065	42.3	39.4	80	-	6	-	6
0077	50.1	47.7	100	-	6	-	6
0096	62.4	57.9	110	-	4	-	4
0124	80.6	74.0	150	-	3	-	2
0156	101.4	93.6	200	-	1	-	1
0180	117.0	107.6	225	-	1/0	-	2/0 4 × 2P *1
0216	140.4	128.6	250	-	2/0 4 × 2P *1	-	3/0 3 × 2P *1
0240	156.0	145.8	300	-	3/0 3 × 2P *1	-	3/0 3 × 2P *1
0302	196.3	179.1	350	-	1 × 2P *1	-	1/0 × 2P
0361	234.7	214.0	450	-	1/0 × 2P	-	1/0 × 2P
0414	269.1	250.3	500	-	3/0 × 2P	-	3/0 × 2P
0477	310.1	288.1	600	-	4/0 × 2P	-	4/0 × 2P
0590	383.5	359.0	700	-	250 × 2P	-	300 × 2P
0720	468.0	429.7	900	-	3/0 × 4P	-	3/0 × 4P
0900	585.0	533.1	1100	-	4/0 × 4P	-	250 × 4P
0930	604.5	551.9	1200	-	250 × 4P	-	300 × 4P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.20 60% Ratings for U1000 AC Drives (Three-Phase 480 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0011	6.6	6.0	10	-	14	-	14
0014	8.4	7.9	15	-	14	-	14
0021	12.6	11.4	25	-	14	-	12
0027	16.2	15.3	30	-	12	-	10
0034	20.4	18.7	40	-	10	-	10
0040	24.0	22.1	45	-	10	-	8
0052	31.2	29.8	60	-	8	-	8
0065	39.0	36.5	70	-	8	-	8
0077	46.2	44.1	90	-	6	-	6
0096	57.6	53.6	110	-	4	-	4
0124	74.4	68.5	125	-	3	-	3

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0156	93.6	86.6	175	-	2	-	1
0180	108.0	99.5	200	-	1	-	1/0
0216	129.6	118.9	250	-	2/0 4 × 2P ^{*1}	-	2/0 4 × 2P ^{*1}
0240	144.0	134.8	250	-	3/0 3 × 2P ^{*1}	-	3/0 3 × 2P ^{*1}
0302	181.2	165.6	350	-	4/0 2 × 2P ^{*1}	-	1 × 2P ^{*1}
0361	216.6	197.4	400	-	1/0 × 2P	-	1/0 × 2P
0414	248.4	231.3	450	-	2/0 × 2P	-	2/0 × 2P
0477	286.2	266.3	500	-	3/0 × 2P	-	3/0 × 2P
0590	354.0	331.7	700	-	4/0 × 2P	-	4/0 × 2P
0720	432.0	397.0	800	-	300 × 2P	-	300 × 2P
0900	540.0	492.6	1000	-	4/0 × 4P	-	4/0 × 4P
0930	558.0	510.0	1100	-	4/0 × 4P	-	250 × 4P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.21 55% Ratings for U1000 AC Drives (Three-Phase 480 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0011	6.1	5.5	10	-	14	-	14
0014	7.7	7.3	15	-	14	-	14
0021	11.6	10.5	20	-	14	-	12
0027	14.9	14.1	25	-	12	-	12
0034	18.7	17.2	35	-	10	-	10
0040	22.0	20.3	40	-	10	-	10
0052	28.6	27.4	50	-	8	-	8
0065	35.8	33.5	70	-	8	-	8
0077	42.4	40.5	80	-	6	-	6
0096	52.8	49.3	100	-	4	-	4
0124	68.2	62.9	125	-	4	-	3
0156	85.8	79.5	150	-	2	-	2
0180	99.0	91.4	175	-	1	-	1
0216	118.8	109.2	225	-	1/0	-	2/0 4 × 2P ^{*1}
0240	132.0	123.8	250	-	2/0 4 × 2P ^{*1}	-	2/0 4 × 2P ^{*1}
0302	166.1	152.0	300	-	3/0 3 × 2P ^{*1}	-	4/0 2 × 2P ^{*1}
0361	198.6	181.2	350	-	1 × 2P ^{*1}	-	1/0 × 2P
0414	227.7	212.4	450	-	1/0 × 2P	-	1/0 × 2P
0477	262.4	244.5	500	-	2/0 × 2P	-	3/0 × 2P
0590	324.5	304.5	600	-	4/0 × 2P	-	4/0 × 2P
0720	396.0	364.4	700	-	250 × 2P	-	300 × 2P
0900	495.0	452.1	900	-	3/0 × 4P	-	4/0 × 4P
0930	511.5	468.0	1000	-	3/0 × 4P	-	4/0 × 4P

2 Multiple Ratings for U1000 AC Drives

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Table 2.22 50% Ratings for U1000 AC Drives (Three-Phase 480 V)

Drive Model			Protection	Cable Sizing			
Drive Model	Drive Rated Output Current [Arms]	Drive Rated Input Current [Arms]	MCCB Maximum Amps [Amps]	Input Cable (U1000 Manual) [AWG]	Input Cable @ 125% Rated Current [AWG]	Motor Cable (U1000 Manual) [AWG]	Motor Cable @ 125% Rated Current [AWG]
0011	5.5	5.0	10	-	14	-	14
0014	7.0	6.7	10	-	14	-	14
0021	10.5	9.6	20	-	14	-	14
0027	13.5	12.9	25	-	12	-	12
0034	17.0	15.7	30	-	10	-	10
0040	20.0	18.5	40	-	10	-	10
0052	26.0	25.0	50	-	8	-	8
0065	32.5	30.6	60	-	8	-	8
0077	38.5	37.0	70	-	8	-	8
0096	48.0	44.9	90	-	6	-	6
0124	62.0	57.3	110	-	4	-	4
0156	78.0	72.5	150	-	3	-	3
0180	90.0	83.3	175	-	2	-	1
0216	108.0	99.5	200	-	1	-	1/0
0240	120.0	112.8	225	-	1/0	-	2/0 4 × 2P ^{*1}
0302	151.0	138.5	300	-	3/0 3 × 2P ^{*1}	-	3/0 3 × 2P ^{*1}
0361	180.5	164.7	350	-	4/0 2 × 2P ^{*1}	-	1 × 2P ^{*1}
0414	207.0	193.4	400	-	1/0 × 2P	-	1/0 × 2P
0477	238.5	222.6	450	-	2/0 × 2P	-	1/0 × 2P
0590	295.0	277.2	500	-	3/0 × 2P	-	3/0 × 2P
0720	360.0	331.7	700	-	4/0 × 2P	-	4/0 × 2P
0900	450.0	411.5	900	-	300 × 2P	-	3/0 × 4P
0930	465.0	426.0	900	-	3/0 × 4P	-	3/0 × 4P

*1 UL508A does not allow parallel conductors smaller than 1/0 AWG.

Revision History

Date of Publication	Revision Number	Revised Content
February 2026	-	First release

YASKAWA

U1000 DRIVE MULTIPLE RATINGS SUPPLEMENT

YASKAWA AMERICA, INC.

2121, Norman Drive South, Waukegan, IL
60085, U.S.A.
Phone: +1-800-YASKAWA (927-5292) or +1-
847-887-7000 Fax: +1-847-887-7310
www.yaskawa.com

DRIVE CENTER (INVERTER PLANT)

2-13-1, Nishimiyaichi, Yukuhashi, Fukuoka,
824-8511, Japan
Phone: +81-930-25-2548 Fax: +81-930-25-
3431
www.yaskawa.co.jp

YASKAWA EUROPE GmbH

Philipp-Reis-Str. 6, 65795 Hattersheim am
Main, Germany
Phone: +49-6196-569-300
E-mail: support@yaskawa.eu
www.yaskawa.eu.com

YASKAWA ELÉTRICO DO BRASIL LTDA.

777, Avenida Piraporinha, Diadema, São
Paulo, 09950-000, Brasil
Phone: +55-11-3585-1100 Fax: +55-11-3585-
1187
www.yaskawa.com.br

In the event that the end user of this product is to be the military and said product is to be employed in any weapons systems or the manufacture thereof, the export will fall under the relevant regulations as stipulated in the Foreign Exchange and Foreign Trade Regulations. Therefore, be sure to follow all procedures and submit all relevant documentation according to any and all rules, regulations and laws that may apply.

Specifications are subject to change without notice for ongoing product modifications and improvements.

Original Instructions

© 2026 YASKAWA AMERICA, Inc.

YASKAWA AMERICA, Inc.



TOEPYAISUP28

TOEPYAISUP28
Revision: A <0>-0
February 2026
Published in U.S.A.