

# Global Short Circuit Current Ratings



## PowerFlex® Low Voltage AC Drives

### Global SCCR Solutions:

#### Drive Family:

- PowerFlex 525 AC Drive
- PowerFlex 4M AC Drive
- PowerFlex 4 AC Drive
- PowerFlex 750 AC Drive

#### Branch Circuit Protection:

- Fuses
- Circuit Breakers

#### Motor Starting Characteristics:

- Standard Duty
- Heavy Duty

#### Motor Sizes:

- 1/2...300 Hp
- 0.16...400 kW

#### Global Voltages:

- 220V, 50 Hz
- 230V, 60 Hz
- 380...400V, 50 Hz
- 415V, 50 Hz
- 440V, 50 Hz
- 460V (480 Line), 60 Hz
- 500...525V, 50 Hz
- 575V (600 Line), 60 Hz
- 690V, 50 Hz

#### Available Fault Levels:

- 65 kA and 100 kA

#### Standard Compliance:

- UL 508A Standard and High Fault SCCR
- UL 508C SC test requirements
- IEC 60947-4-1 Type 1 and Type 2 short circuit coordination
- UL listing and certification



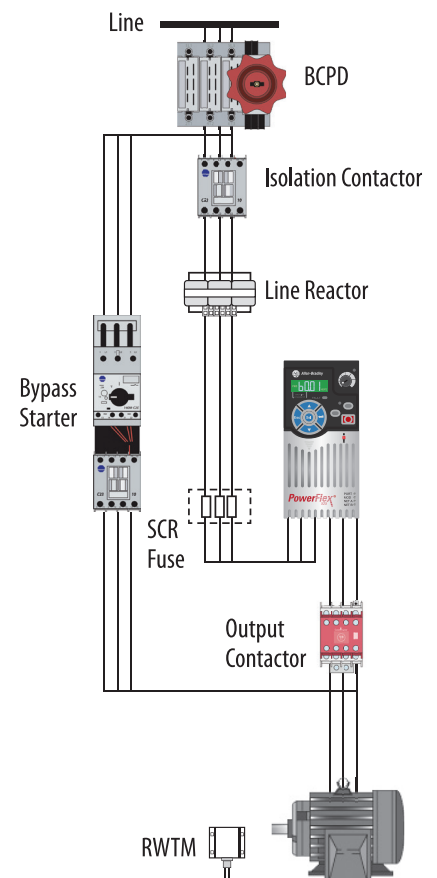
PowerFlex 525 Family

### Overview

Rockwell Automation has developed global **SCCR Selection Tables** for Component Drive circuits based on common global motor voltages (50/60 Hz) and short circuit current rating fault levels. These tables allow users the capability to select drive circuit components over a wide range of HP or kW ratings based on common voltage and SCCR application requirements.

Simply select the proper application parameters as prompted by the [RockwellAutomation.com](http://RockwellAutomation.com) web tool to locate the correct SCCR Selection Table, then read the **One-Line Bill of Material** for the desired motor rating. Both component selection and short circuit coordination is complete.

The selection tables are based on compliance to IEC and UL standards, and are in most cases covered by third party witness by Underwriters Laboratories and conducted in Rockwell Automation accredited test facilities.



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SOLVE.

# Global SCCR Selection Tool – NEW!

## Access on the Web

www.rockwellautomation.com/go/etools



### Global Short Circuit Current Ratings

Welcome to the Global Short Circuit Current Ratings Selection Tool, providing coordinated high fault branch circuit solutions.

Revised January 2017

**Product Category**  
Your Selection: Low Voltage AC Drives

**Product Family**  
PowerFlex Family  
PowerFlex 520 Drives

**Motor Voltage**  
460V (480V Line), 60Hz

**Circuit Protection Type**  
UL Class J Fuses - Optimized Fuse Sizing

Reset Accept SCCR Inquiry

### Global Short Circuit Current Ratings

**Available Documents**  
SCCR Table Ref. Number: [SCCR-41632M.pdf](#)  
Test Summary Letter Ref. Number(s)

**Selection Summary**

**Product Category**  
Your Selection: Low Voltage AC Drives

**Product Family**  
PowerFlex Family  
PowerFlex 520 Drives

**Motor Voltage**  
460V (480V Line), 60Hz

**Circuit Protection Type**  
UL Class J Fuses - Optimized Fuse Sizing

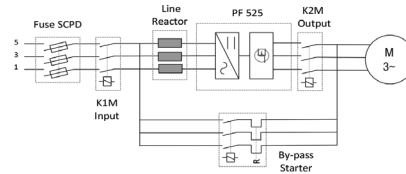
Modify Existing Begin New Search

## PowerFlex 525 Selection Table with Fuse Protection\*

### Short-circuit Coordination

Starter Type: AC Variable Frequency Drive  
PowerFlex 525  
S.C. Protective Device: UL/CSA Class J or T Fuses, Current Limiting  
Standard Fuse Selection for Component Sizing

Input/Output Contactor: 100-C, 100S-C  
Bypass Starters: 100-C, 100S-C and 193-E1 Plus, E3 & E3 Plus  
Rated Operational Voltage: 480V 60Hz (480V Line)  
Test Voltage: 480V 60Hz  
Rated Conditional S.C. Current (I<sub>g</sub>): 100kA (rms sym.)  
Level of S.C. Coordination: Type "1" or "2" per IEC 60947-4



One-Line  
Bill of Material

Motor Ratings		Drive Ratings - Normal Duty <sup>2)</sup>				SCPD - Fuse		Line Reactor	Contactor		Bypass Starter <sup>7)</sup>			IEC Coordination	
3 ph	1500 rpm	Input	Output	w/o EMC Filter	w/ EMC Filter	Max. Fuse Size	Disconnect Switch	Input/Output	Input	Output	Contactor	OLR	Coordination	Remark	
[HP]	[A] <sup>1)</sup>	kVA	[A]	[A]	Cat. No.	UL Class	Cat. No.		Cat. No.	Cat. No.	Cat. No.	Cat. No.	Type		
1/2	1.1	1.7	1.9	1.4	25B-D1P4N104	J, T	6	194R-J30-1753	1321-3RA1-C/B	100-C09...	100-C09...	100-C09...	193-EECB	1.0 - 5.0	---
3/4	1.6	2.9	3.2	2.3	25B-D2P3N104	J, T	6	194R-J30-1753	1321-3RA2-A/A	100-C09...	100-C09...	100-C09...	193-EECB	1.0 - 5.0	---
1	2.1	2.9	3.2	2.3	25B-D2P3N104	J, T	10	194R-J30-1753	1321-3RA2-A/A	100-C09...	100-C09...	100-C09...	193-EECB	1.0 - 5.0	---
1 1/2	3.0	5.2	5.7	4.0	25B-D4P0N104	J, T	10	194R-J30-1753	1321-3RA4-B/B	100-C09...	100-C09...	100-C09...	193-EECB	1.0 - 5.0	---
2	3.4	5.2	5.7	4.0	25B-D4P0N104	J, T	15	194R-J30-1753	1321-3RA4-B/B	100-C09...	100-C09...	100-C09...	193-EECB	1.0 - 5.0	---
3	4.8	6.9	7.4	6.0	25B-D6P0N104	J, T	15	194R-J30-1753	1321-3RA8-C/C	100-C09...	100-C09...	100-C09...	193-EECB	1.0 - 5.0	---
5	7.8	12.8	13.8	10.5	25B-D010N104	J, T	30	194R-J30-1753	1321-3RA8-B/B	100-C16...	100-C16...	100-C16...	193-EEDB	3.2 - 16	Type 2
7 1/2	11	14.1	15.4	13.0	25B-D013N104	J, T	35	194R-J60-1753	1321-3RA12-B/B	100-C23...	100-C23...	100-C23...	193-EEDB	3.2 - 16	---
10	14	16.8	18.4	17.0	25B-D017N104	J, T	40	194R-J60-1753	1321-3RA18-B/B	100-C23...	100-C23...	100-C23...	193-EEEB	5.4 - 27	---
15	21	24.1	26.4	24.0	25B-D024N104	J, T	60	194R-J60-1753	1321-3RA25-B/B	100-C43...	100-C43...	100-C43...	193-EEFD	9.0 - 45	---
20	27	30.2	33.0	30.0	25B-D030N104	J, T	70	194R-J100-1753	1321-3RA25-B/B	100-C43...	100-C43...	100-C43...	193-EEFD	9.0 - 45	---
25	34	30.8	33.7	37.0	---	J, T	70	194R-J100-1753	1321-3RA35-B/B	100-C43...	100-C43...	100-C43...	193-EEFD	9.0 - 45	---
30	40	35.6	38.9	43.0	---	J, T	80	194R-J100-1753	1321-3RA45-B/B	100-C60...	100-C60...	100-C60...	193-EEGE	18 - 90	---

Motor Ratings		Drive Ratings - Heavy Duty <sup>2)</sup>				SCPD - Fuse		Line Reactor	Contactor		Bypass Starter <sup>7)</sup>			IEC Coordination	
3 ph	1500 rpm	Input	Output	w/o EMC Filter	w/ EMC Filter	Max. Fuse Size	Disconnect Switch	Input/Output	Input	Output	Contactor	OLR	Coordination	Remark	
[HP]	[A] <sup>1)</sup>	kVA	[A]	[A]	Cat. No.	UL Class	Cat. No.		Cat. No.	Cat. No.	Cat. No.	Cat. No.	Type		
1/2	1.1	1.7	1.9	1.4	25B-D1P4N104	J, T	6	194R-J30-1753	1321-3RA1-C/B	100-C09...	100-C09...	100-C09...	193-EECB	1.0 - 5.0	---
3/4	1.6	2.9	3.2	2.3	25B-D2P3N104	J, T	6	194R-J30-1753	1321-3RA2-A/A	100-C09...	100-C09...	100-C09...	193-EECB	1.0 - 5.0	---
1	2.1	2.9	3.2	2.3	25B-D2P3N104	J, T	10	194R-J30-1753	1321-3RA2-A/A	100-C09...	100-C09...	100-C09...	193-EECB	1.0 - 5.0	---
1 1/2	3.0	5.2	5.7	4.0	25B-D4P0N104	J, T	10	194R-J30-1753	1321-3RA4-B/B	100-C09...	100-C09...	100-C09...	193-EECB	1.0 - 5.0	---
2	3.4	5.2	5.7	4.0	25B-D4P0N104	J, T	15	194R-J30-1753	1321-3RA4-B/B	100-C09...	100-C09...	100-C09...	193-EECB	1.0 - 5.0	---
3	4.8	6.9	7.4	6.0	25B-D6P0N104	J, T	15	194R-J30-1753	1321-3RA8-C/C	100-C09...	100-C09...	100-C09...	193-EECB	1.0 - 5.0	---
5	7.8	12.8	13.8	10.5	25B-D010N104	J, T	30	194R-J30-1753	1321-3RA8-B/B	100-C16...	100-C16...	100-C16...	193-EEDB	3.2 - 16	Type 2
7 1/2	11	14.1	15.4	13.0	25B-D013N104	J, T	35	194R-J60-1753	1321-3RA12-B/B	100-C23...	100-C23...	100-C23...	193-EEDB	3.2 - 16	---
10	14	16.8	18.4	17.0	25B-D017N104	J, T	40	194R-J60-1753	1321-3RA18-B/B	100-C23...	100-C23...	100-C23...	193-EEEB	5.4 - 27	---
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20	27	30.2	33.0	30.0	25B-D030N104	J, T	70	194R-J100-1753	1321-3RA25-B/B	100-C43...	100-C43...	100-C43...	193-EEFD	9.0 - 45	---
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30	40	35.6	38.9	43.0	---	J, T	80	194R-J100-1753	1321-3RA45-B/B	100-C60...	100-C60...	100-C60...	193-EEGE	18 - 90	---



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