

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



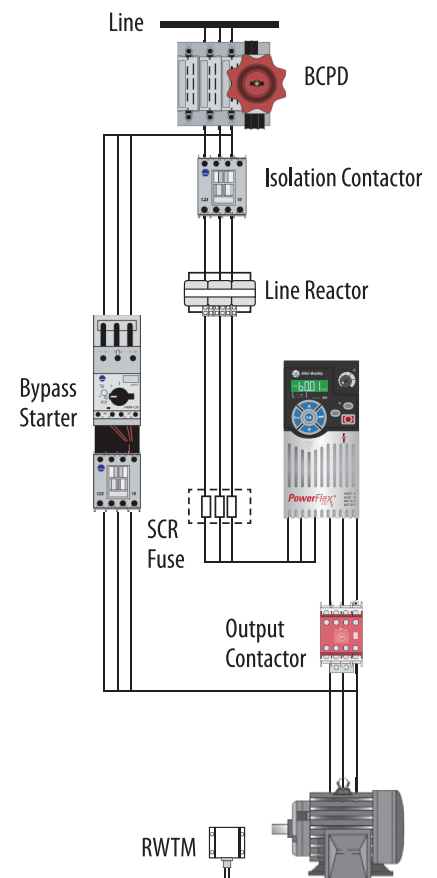
PowerFlex 525 Family

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 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.

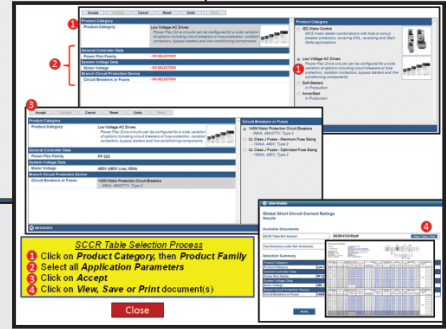
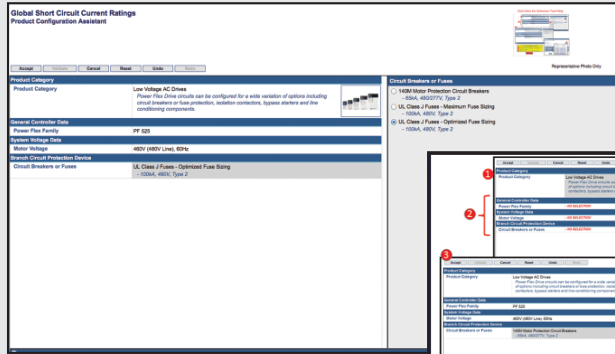
The selection tables are based on compliance to IEC and UL standards, and are in most cases covered by third party witness by Underwriters Laboratories and conducted in Rockwell Automation accredited test facilities.



LISTEN.
THINK.
SOLVE.

Global SCCR Selection Tool – NEW! Access on the Web

www.rockwellautomation.com/go/etools

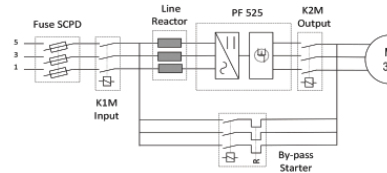


SCCR Table Selection Process
 1 Click on Product Category, then Product Family
 2 Select all Application Parameters
 3 Click on Accept
 4 Click on View, Save or Print documents)

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: 460V 60Hz (480V Line)
 Test Voltage: 480V 60Hz
 Rated Conditional S.C. Current (I_{sc}): 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 ²⁾				SCPD - Fuse		Line Reactor	Contactor		Bypass Starter ⁷⁾			IEC Coordination	
3 ph	1500 rpm	Input	Output	w/ EMC Filter	w/ EMC Filter	Max. Fuse Size	Disconnect Switch	Input/Output	Input	Output	Contactor	OLR	Adj range	Coordination	Remark
[HP]	[A] ¹⁾	kVA	[A]	[A]	Cat. No.	UL Class [A] ³⁾	Cat. No.		Cat. No.	Cat. No.	Cat. No.	Cat. No.	[A]	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...	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...	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...	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...	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...	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...	193-EECB	1.0 - 5.0	---	---
5	7.6	12.6	13.8	10.5	25B-D010N104	J, T	30	194R-J30-1753	1321-3RA8-B/B	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...	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...	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...	193-EFFD	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...	193-EFFD	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...	193-EFFD	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...	193-EEGE	18 - 90	---	---

Motor Ratings		Drive Ratings - Heavy Duty ²⁾				SCPD - Fuse		Line Reactor	Contactor		Bypass Starter ⁷⁾			IEC Coordination	
3 ph	1500 rpm	Input	Output	w/ EMC Filter	w/ EMC Filter	Max. Fuse Size	Disconnect Switch	Input/Output	Input	Output	Contactor	OLR	Adj range	Coordination	Remark
[HP]	[A] ¹⁾	kVA	[A]	[A]	Cat. No.	UL Class [A] ³⁾	Cat. No.		Cat. No.	Cat. No.	Cat. No.	Cat. No.	[A]	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...	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...	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...	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...	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...	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...	193-EECB	1.0 - 5.0	---	---
5	7.6	12.6	13.8	10.5	25B-D010N104	J, T	30	194R-J30-1753	1321-3RA8-B/B	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...	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...	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...	193-EFFD	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...	193-EFFD	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...	193-EFFD	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...	193-EEGE	18 - 90	---	---

* SAMPLES ONLY, go to www.rockwellautomation.com/go/etools for current documentation.



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