

Product Details and Certifications

Cross Reference RA Part Number: DB!% * (()

 **Product: 20-750-G%**

Description: PowerFlex 750, Úæ^ÁÚ] ^^áÁ [} ä [Á [á~ |^



Representative Photo Only (actual product may vary based on configuration selections)

CDHCBG'IN: CFA5HCB

Communications Kits

PF750-Series Úæ^ÁÚ] ^^áÁ [} ä [Á [á~ |^

I/O Option Kits

Description	Cat. No.	Used with PowerFlex Drive		AFE
		70	753/755	
ATEX Option Module with 1 Thermosensor Input Connection (requires 11-Series I/O Module below)	20-750-ATEX		✓ ⁽¹⁾	
24V DC 11-Series I/O Module with 1 Analog In, 1 Analog Out, 3 Digital In and 2 Relay Outputs	20-750-1132C-2R		✓ ⁽¹⁾	
24V DC 11-Series I/O Module with 1 Analog In, 1 Analog Out, 3 Digital In, 1 Relay and 2 Transistor Outputs	20-750-1133C-1R2T		✓ ⁽¹⁾	
115V AC 11-Series I/O Module with 1 Analog In, 1 Analog Out, 3 Digital In and 2 Relay Outputs	20-750-1132D-2R		✓ ⁽¹⁾	
24V DC 22-Series I/O Module with 2 Analog In, 2 Analog Out, 6 Digital In and 2 Relay Outputs	20-750-2262C-2R		✓ ⁽¹⁾	
115V AC 22-Series I/O Module with 2 Analog In, 2 Analog Out, 6 Digital In and 2 Relay Outputs	20-750-2262D-2R		✓ ⁽¹⁾	
24V DC 22-Series I/O Module with 2 Analog In, 2 Analog Out, 6 Digital In, 3 Digital Out, 1 Relay and 2 Transistor Outputs	20-750-2263C-1R2T		✓ ⁽¹⁾	

(1) I/O option kits are not allowed in CIP motion mode.

Safety Options

Description	Cat. No.	Used with PowerFlex Drive	
		70	753/755
DriveGuard Safe Torque-Off	20A-DG01	✓	
Safe Torque-Off	20-750-S		✓ ⁽¹⁾
Safe Speed Monitor	20-750-S1		✓ ⁽¹⁾⁽²⁾

(1) Drive can accommodate only one option.

(2) Requires the Dual Incremental Encoder or Universal Feedback Option. Also requires the 20-750-EMCSSM1-F8 EMC Option Kit with Frame 8...9 drives.



Feedback Options

Description	Cat. No.	Used with PowerFlex Drive	
		70	753/755
5V/12V Encoder ⁽¹⁾	20A-ENC-1	✓	
Incremental Encoder	20-750-ENC-1		✓ ⁽²⁾
Dual Incremental Encoder	20-750-DENC-1		✓ ⁽²⁾
Universal Feedback (includes Stegmann, Heidenhain, SSI, Biss, 5V Incremental)	20-750-UFB-1		✓ ⁽³⁾

(1) Works only with PowerFlex 70 Enhanced Control.

(2) Homing and registration functions are not supported when using this device with Studio 5000 Logix Designer embedded motion instructions. To use these functions, the Universal Feedback Board (20-750-UFB-1) must be used.

(3) PowerFlex 755 only.

PowerFlex 750-Series Option Kits

Integrated Motion Drives

PowerFlex 755 drives can be used as part of a Integrated Motion system.

Configuring Option Modules for Integrated Motion

The following option module combinations are supported by Integrated Motion.

Table 102 - Two Feedback Options

Supported Module	Cat. No.	Valid Port(s)
Single Incremental Encoder	20-750-ENC-1	4...8
Dual Incremental Encoder	20-750-DENC-1	4...8
Universal Feedback	20-750-UFB-1	4...6

Table 103 - Two Feedback Options and One Safe Torque Off Option

Supported Module	Cat. No.	Valid Port(s)
Single Incremental Encoder	20-750-ENC-1	4 and 5
Dual Incremental Encoder	20-750-DENC-1	4 and 5
Universal Feedback	20-750-UFB-1	4 and 5
Safe Torque Off	20-750-S	6

Table 104 - Two Feedback Options and One Safe Speed Monitor Option

Supported Module	Cat. No.	Valid Port(s)
Single Incremental Encoder	20-750-ENC-1	4 and 5
Dual Incremental Encoder	20-750-DENC-1	4 and 5
Universal Feedback	20-750-UFB-1	4 and 5
Safe Speed Monitor	20-750-S1	6



Safe Speed Monitor Option Module

The Safe Speed Monitor option is just one component in a safety control system. Components in the system must be chosen and applied appropriately to achieve the desired level of operational safety. For detailed information on applying this option, refer to the Safe Speed Monitor Option Module for PowerFlex 750-Series AC Drives Safety Reference Manual, publication [750-RM001](#).

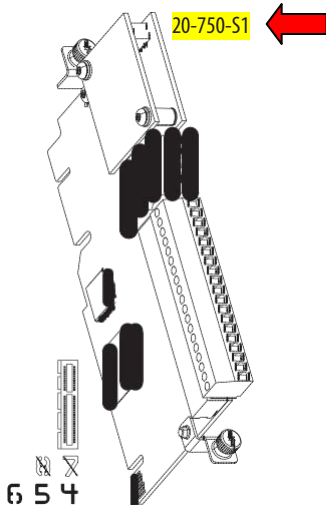


Table 64 - TB1 Terminal Designations

Terminal	Name	Signal Name	Description
S11	Pto0	TEST_OUT_0	Pulse test source for safety inputs.
S11			
S11			
S21	Pto1	TEST_OUT_1	Pulse test source for safety inputs.
S21			
S21			

Table 65 - TB2 Terminal Designations

Terminal	Name	Description	Related Param
S34	Res0	Reset	
52	Dco1	Door Control Output.	74
51	Dco0	Enables pulse testing.	
78	Slo1	Safe Limited Speed Output.	73
68	Slo0	Enables pulse testing.	
44	Sso1	Safe Stop Output.	72
34	Sso0	Enables pulse testing.	
X42	Lmi1	Lock Monitoring Input	60
X32	Lmi0		
S42	Dmi1	Door Monitoring Input	58
S32	Dmi0		
S62	Sli1	Safe Limited Speed Input	52
S52	Sli0		
S82	Esm1	Enabling Switch Monitoring Input	54
S72	Esm0		
S22	Ssi1	Safe Stop Input	44
S12	Ssi0		
A2	24VC	Customer supplied 24V DC. Module is not functional without these connections.	
A1	+24V		

Table 35 - I/O Wire Recommendations

Type		Wire Type(s)	Description	Min. Insulation Rating
Signal ⁽¹⁾⁽²⁾⁽³⁾	Standard Analog I/O	–	0.750 mm ² (18 AWG), twisted pair, 100% shield with drain.	300V, 75...90 °C (167...194 °F)
	Remote Pot	–	0.750 mm ² (18 AWG), 3 conductor, shielded.	
	Encoder/ Pulse I/O < 30 m (100 ft)	Combined	0.196 mm ² (24 AWG) individually shielded pairs.	
	Encoder/ Pulse I/O 30 to 152 m (100 to 500 ft)	Signal	0.196 mm ² (24 AWG) individually shielded pairs.	
		Power	0.750 mm ² (18 AWG) in.dividually shielded pairs	
		Combined	0.330 mm ² (22 AWG), power is 0.500 mm ² (20 AWG) individually shielded pairs.	
	Encoder/ Pulse I/O 152 to 259 m (500 to 850 ft.)	Signal	0.196 mm ² (24 AWG) individually shielded pairs.	
		Power	0.750 mm ² (18 AWG) individually shielded pairs.	
		Combined	0.750 mm ² (18 AWG) individually shielded pairs.	
Digital I/O Safety Inputs Homing Inputs ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾	Shielded	Multi-conductor shielded cable	0.750 mm ² (18 AWG), 3 conductor, shielded.	300V, 60 °C (140 °F)
Digital I/O Homing Inputs ⁽¹⁾⁽²⁾⁽³⁾	Un-shielded	–	Per US NEC or applicable national or local code.	

(1) Control and signal wires should be separated from power wires by at least 0.3 meters (1 foot).

(2) If the wires are short and contained within a cabinet which has no sensitive circuits, the use of shielded wire may not be necessary, but is always recommended.

(3) I/O terminals labeled "(–)" or "Common" are not referenced to earth ground and are designed to greatly reduce common mode interference. Grounding these terminals can cause signal noise.

(4) Safety option modules 20-750-S and 20-750-S1 require shielded cable.