



PowerFlex 750-Series Option Modules

Catalog Numbers 20-750 Series and 20-750 Series -XT

Topic	Page
Summary of Changes	1
Option Modules	2
Option Module Installation	3
Using Option Modules 20-750-S1 / 20-750-S4 with Option Modules 20-750-DENC-1 / 20-750-UFB-1	4
TotalFORCE Auxiliary Power Supply (20-750-TAPS-XT) and Auxiliary Power Supply (20-750-APS) Installation	4
Option Module Installation Next to a PROFIBUS Option Module	5
T1-Series and 22-Series I/O Module Installation	5

Summary of Changes

This publication contains the following new or updated information. This list includes substantive updates only and is not intended to reflect all changes.

Topic	Page
Added illustration of TAPS option module to Option Modules figure.	2
Split Option Module Compatibility tables to add 755TR, TL, and TM drives and 755TS Drive.	2
Added TAPS to Option Module Compatibility tables.	2
Added 20-750-TAPS-XT information to TotalFORCE Auxiliary Power Supply (20-750-TAPS-XT) and Auxiliary Power Supply (20-750-APS) Installation	4
Added TAPS option module figure to show DIP Switch S1.	4
Added PowerFlex® 755TS Products with TotalFORCE® Control Installation Instructions, publication 750-IN119 to Additional Resources	6

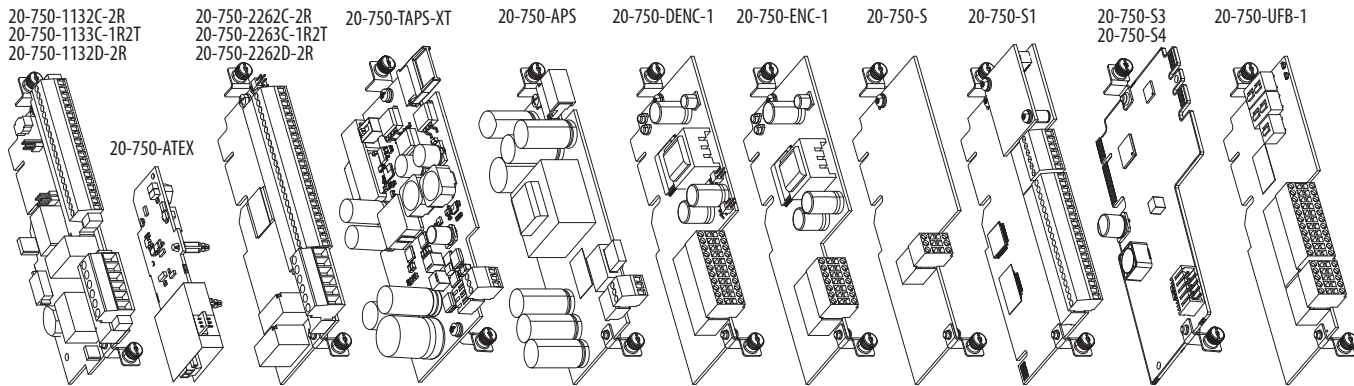
These instructions cover the installation of the option modules that are listed in the Compatible Ports figure and table. For wiring and jumper settings for these modules, see the PowerFlex 750-Series I/O, Feedback, and Power Option Modules Installation Instructions, publication [750-IN111](#). For information on access to the drive control pod and how to install network communication and safety option modules, see the publications that are listed in [Additional Resources](#).

IMPORTANT Only one safety option module can be installed at a time. Simultaneous safety option installations are not supported.

Option module catalog numbers that are used in this publication are for the standard protection versions. Select option modules are available with corrosive gas protection and contain an "XT" catalog number suffix.

The instructions in this publication apply to both standard and XT option modules unless otherwise noted.

Option Modules



Option Module Compatible Ports PowerFlex 753 Drives Frames 1...7 and PowerFlex 755 Drives Frames 1...10

Option Module Cat. No. 20-750-	PowerFlex 753 Drives						PowerFlex 755 Drives							
	Frame 1 Ports			Frame 2...7 Ports			Frame 1 Ports			Frame 2...10 Ports				
	6	5	4	6	5	4	6	5	4	8	7	6	5	4
1132C-2R, 1133C-1R2T, 1132D-2R ⁽¹⁾	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1132C-2R, 1133C-1R2T, 1132D-2R, with 20-750-ATEX installed ⁽²⁾	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	No	No	Yes	Yes
2262C-2R, 2263C-1R2T, 2262D-2R ⁽¹⁾	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TAPS ⁽³⁾	See Page 4			See Page 4			See Page 4			Yes ⁽³⁾	No	No	No	No
APS	See Page 4			See Page 4			See Page 4			Yes	No	No	No	No
DENC-1 ⁽⁵⁾	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes ⁽⁴⁾	Yes ⁽⁴⁾	Yes	Yes	Yes
ENC-1	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
S ⁽⁶⁾	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
S1 ⁽⁵⁾⁽⁶⁾	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
S3/S4 ⁽⁵⁾⁽⁶⁾	Not Supported						Not Supported							
UFB-1	Not Supported						Not Supported							

- (1) I/O cards must be installed in port 7 for integrated motion.
- (2) For detailed instructions on installation of 11-Series I/O with the ATEX option module, see the PowerFlex 750-Series ATEX User Manual, publication [750-UM003](#).
- (3) TAPS works with PowerFlex 753 and PowerFlex 755 frames 1...7 with TAPS DIP switch set to classic mode (DIP Switch S1 in Down position, see Page 4).
- (4) Not allowed if using an S1 or S4 option module.
- (5) See [Using Option Modules 20-750-S1 / 20-750-S4 with Option Modules 20-750-DENC-1 / 20-750-UFB-1](#).
- (6) Must be installed in port 6 for integrated motion.

Option Modules Compatible Ports PowerFlex 755T⁽¹⁾ Drives Frames 5...15, PowerFlex 755TS Drives Frames 1...7

Option Module Cat. No. 20-750-	PowerFlex 755T Drives ⁽¹⁾					PowerFlex 755TS Drives								
	Frame 5...15 Ports					Frame 1 Ports		Frame 2...7 Ports						
	8	7	6	5	4	6	5	4	8	7	6	5	4	
1132C-2R, 1133C-1R2T, 1132D-2R ⁽²⁾	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
1132C-2R, 1133C-1R2T, 1132D-2R with 20-750-ATEX installed ⁽³⁾	No	No	No	Yes	Yes	No	Yes	Yes	No	No	No	Yes	Yes	
2262C-2R, 2263C-1R2T, 2262D-2R ⁽²⁾	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
TAPS ⁽⁴⁾	Not Supported					See Page 4		Yes ⁽⁴⁾			No	No	No	No
APS	No	No	No	No	No	See Page 4		No			No	No	No	No
DENC-1 ⁽⁵⁾	No	No	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	
ENC-1	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
S ⁽⁶⁾	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
S1 ⁽⁵⁾⁽⁶⁾	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	
S3/S4 ⁽⁵⁾⁽⁶⁾	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	
UFB-1	No	No	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	

- (1) PowerFlex 755T compatible ports apply to PowerFlex 755TL, PowerFlex 755TR, and PowerFlex 755TM products.
- (2) I/O cards must be installed in port 7 for integrated motion.
- (3) For detailed instructions on installation of 11-Series I/O with the ATEX option module, see the PowerFlex 750-Series ATEX User Manual, publication [750-UM003](#).
- (4) TAPS works with PowerFlex 755TS frames 1...7 with TAPS DIP switch set to HPC mode (DIP Switch S1 in up position, see Page 4).
- (5) See [Using Option Modules 20-750-S1 / 20-750-S4 with Option Modules 20-750-DENC-1 / 20-750-UFB-1](#).
- (6) Must be installed in port 6 for integrated motion.

Option Module Installation



ATTENTION:

- Electric shock hazard. Verify that all sources of AC and DC power are de-energized and locked out or tagged out in accordance with the requirements of ANSI/NFPA 70E, Part II.
- To avoid an electric shock hazard, verify that the voltage on the bus capacitors has discharged before performing any work on the drive. Measure the DC bus voltage at the +DC and -DC terminals or test points. The voltage must be zero.

For the location of the terminal block and test point sockets, see the manual for your drive:

- PowerFlex 750-Series AC Drives Installation Instructions, publication [750-IN001](#).
- PowerFlex 750-Series Products with TotalFORCE® Control Installation Instructions, publication [750-IN100](#).
- PowerFlex 755TM IPO0 Open Type Kits Installation Instructions, publication [750-IN101](#).
- PowerFlex 755TS Products with TotalFORCE Control Installation Instructions, publication [750-IN119](#).
- In Safe Torque Off mode, hazardous voltages may still be present at the motor. To avoid an electric shock hazard, disconnect power to the motor and verify that the voltage is zero before performing any work on the motor.

To install an option module, follow these steps

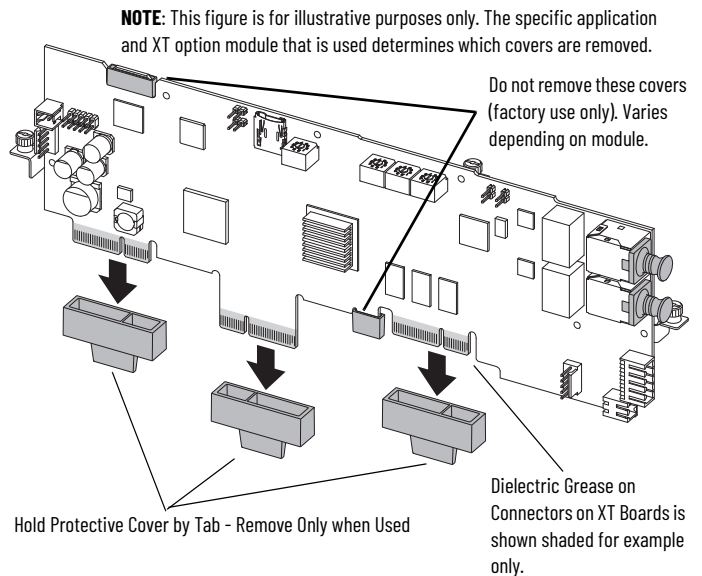
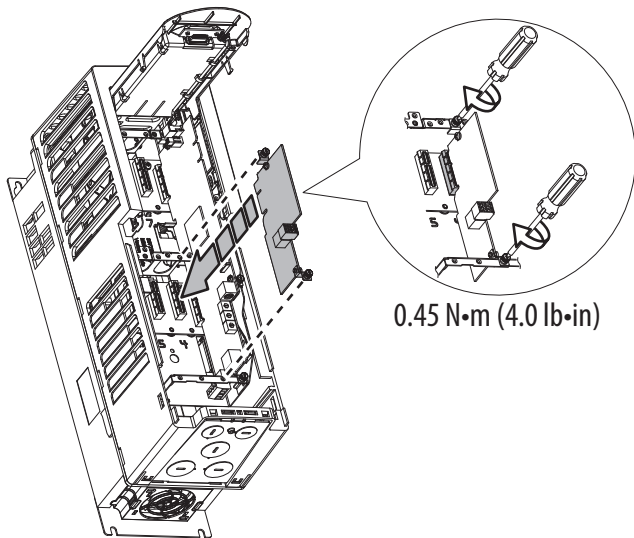
IMPORTANT

For XT option modules, protective covers on connectors must be removed before installation. To maintain corrosion resistance, do not touch dielectric grease on circuit board connectors. For additional information on dielectric grease and protective covers, see the PowerFlex 750-Series Products with TotalFORCE Control Hardware Service Manual, publication [750-TG100](#), Chapter 1: Dielectric Grease Application

1. Press the module edge connector firmly into the desired port.
2. Tighten the top and bottom retaining screws.
 - a. Recommended torque = 0.45 N•m (4.0 lb•in)
 - b. Recommended screwdriver = T15 Hexalobular

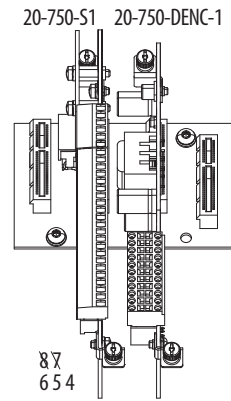
IMPORTANT

Do not overtighten the retaining screws.



Using Option Modules 20-750-S1 / 20-750-S4 with Option Modules 20-750-DENC-1 / 20-750-UFB-1

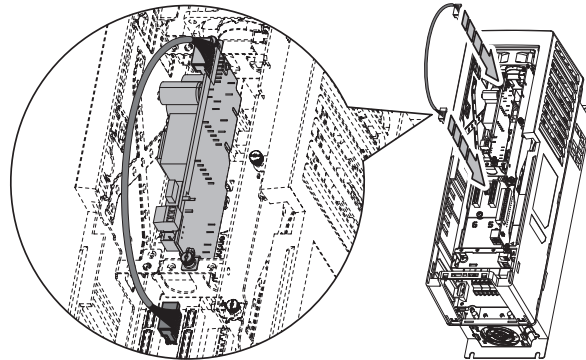
IMPORTANT When a Safe Speed Monitor option module (catalog number 20-750-S1), or a PowerFlex 755/755T Integrated Safety Functions option module (catalog number 20-750-S4), is used with a Dual Incremental Encoder option module (catalog number 20-750-DENC-1), or a Universal Feedback Encoder option module (catalog number 20-750-UFB-1), you must install both modules on the same backplane (ports 6, 5, 4). Only the 20-750-S1 and the 20-750-DENC-1 are depicted in the illustration to the right.



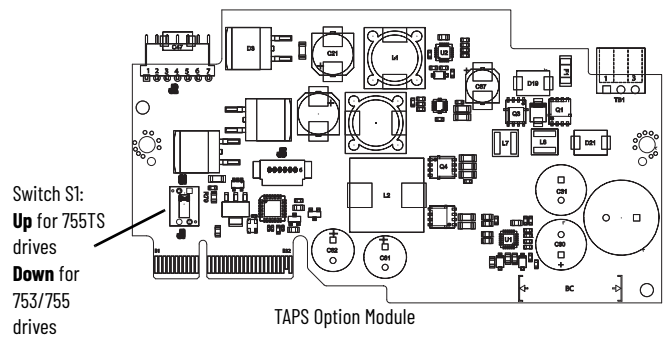
TotalFORCE Auxiliary Power Supply (20-750-TAPS-XT) and Auxiliary Power Supply (20-750-APS) Installation

A connector cable is provided with the APS option module for use in PowerFlex 753 drives and in PowerFlex 755 Frame 1 drives. The cable is used to connect the module to the backplane when installed on the upper control pod brackets. The TAPS option module only works with PowerFlex 753 and PowerFlex 755 drives Frames 1...7 if the S1 DIP switch is in the down position.

IMPORTANT Do not use the Auxiliary Power Supply option module with PowerFlex 755 Frame 8 and larger drives. See the PowerFlex 750-Series AC Drives Installation Instructions, publication [750-IN001](#), for information on the connection of an external power supply to a PowerFlex 755 Frame 8 and larger drive.



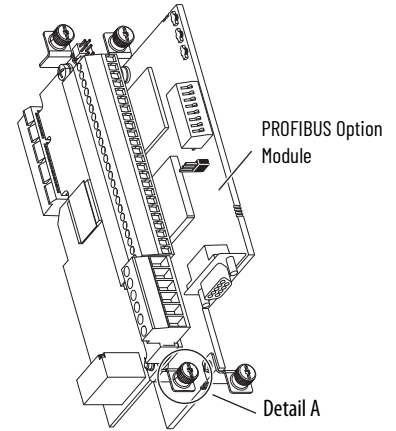
IMPORTANT To use the TAPS with a PowerFlex 755TS The TAPS DIP Switch S1 must be in the up position. To use the TAPS-XT with a PowerFlex 753 or Power Flex 755 drive, you must set the TAPS DIP switch S1 to the down position. See PowerFlex 750-Series I/O, Feedback, and Power Option Modules Installation Instructions, publication [750-IN111](#) for more information.



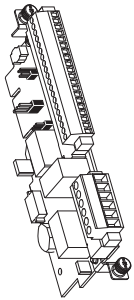
Option Module Installation Next to a PROFIBUS Option Module

Do not allow the lower T15 Torx mounting screw (Detail A) on a new module to contact the metal cable connector of an installed PowerFlex 20-750-PBUS PROFIBUS option module. Electrical contact of the two metal parts can cause faulty operation. Perform these steps to help prevent contact. If a PowerFlex 20-750-PBUS PROFIBUS option module is not in that port, disregard these steps.

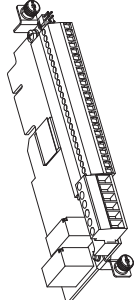
1. Remove the lower T15 Torx mounting screw (Detail A) from the new module being installed. To remove the captive T15 Torx screw, the module must be removed to back the screw out of the mounting clip.
2. Replace the larger T15 Torx screw with the smaller spare T8 Torx mounting screw that was shipped with the PowerFlex 20-750-PBUS PROFIBUS option module.



T1-Series and 22-Series I/O Module Installation



20-750-1132C-2R (24V DC)
20-750-1133C-1R2T (24V DC)
20-750-1132D-2R (120V AC)



20-750-2262C-2R (24V DC)
20-750-2263C-1R2T (24V DC)
20-750-2262D-2R (120V DC)



ATTENTION: When used in an Integrated Motion on EtherNet/IP™ network application for firmware revisions 12 and later, both the T1-Series and 22-Series I/O modules must be installed in port 7 only. You cannot use the ATEX option module with the T1-Series I/O module in port 7 when used in an Integrated Motion on EtherNet/IP application.

Additional Resources

These documents contain additional information concerning related products from Rockwell Automation®.

Resource	Description
PowerFlex 750-Series I/O, Feedback, and Power Option Modules Installation Instructions, publication 750-IN111	Provides drive compatibility, jumper settings, terminal designations, wiring examples for analog and digital I/O, feedback, and auxiliary power options option modules.
PowerFlex 750-Series Products with TotalFORCE Control Hardware Service Manual, publication 750-TG001 .	Provides detailed information on: <ul style="list-style-type: none"> • Preventive maintenance • Component testing • Hardware replacement procedures
Network Communication Option Module Installation Instructions, publication 750COM-IN002	Provides information on the installation of PowerFlex 750-Series Network Communication modules.
PowerFlex 750-Series AC Drives Installation Instructions, publication 750-IN001	Provides information on the mechanical and electrical installation of PowerFlex 750-Series drives.
PowerFlex 750-Series Products with TotalFORCE Control Installation Instructions, publication 750-IN100	Provides the basic steps to install PowerFlex 755TL low harmonic drives, PowerFlex 755TR regenerative drives, and PowerFlex 755TM drive systems.
PowerFlex 755TM IP00 Open Type Kits Installation Instructions, publication 750-IN101	Information on the installation of PowerFlex 755TM IP00 / Open Type kits in customer-sourced enclosures.
PowerFlex 755TS Products with TotalFORCE Control Installation Instructions, publication 750-IN119	Provides the basic steps to install PowerFlex 755TS drives.
PowerFlex 750-Series Safe Speed Monitor Option Module Safety Reference Manual, publication 750-RM001	These publications provide detailed information on installation, set-up, and operation of the 750-Series safety option modules.
PowerFlex 750-Series Safe Torque Off Option Module User Manual, publication 750-UM002	
PowerFlex 750-Series ATEX Option Module User Manual, publication 750-UM003	
PowerFlex 755 Integrated Safety - Safe Torque Off Option Module User Manual, publication 750-UM004	
PowerFlex 755/755T Integrated Safety Functions Option Module User Manual, publication 750-UM005	
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website rok.auto/certifications	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <http://www.rockwellautomation.com/global/literature-library/overview.page>.

Notes:

Rockwell Automation Support

Use these resources to access support information.

Technical Support Center	Find help with how-to videos, FAQs, chat, user forums, and product notification updates.	rok.auto/support
Knowledgebase	Access Knowledgebase articles.	rok.auto/knowledgebase
Local Technical Support Phone Numbers	Locate the telephone number for your country.	rok.auto/phonesupport
Literature Library	Find installation instructions, manuals, brochures, and technical data publications.	rok.auto/literature
Product Compatibility and Download Center (PCDC)	Download firmware, associated files (such as AOP, EDS, and DTM), and access product release notes.	rok.auto/pcdc

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Waste Electrical and Electronic Equipment (WEEE)







At the end of life, this equipment should be collected separately from any unsorted municipal waste.

Rockwell Automation maintains current product environmental compliance information on its website at rok.auto/pec.

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