

PowerFlex 753 AC Drive

Designed for general purpose applications, the PowerFlex 753 AC drive offers multiple options and features along with the added benefit of simple integration. The PowerFlex 753 comes standard with built-in I/O making it a cost effective solution ideal for OEMs and system integrators looking to reduce engineering costs, deliver machines to market faster and meet end-user demand for more productive and safer machines.

PowerFlex 753 at a glance

Ratings

380...480V:	0.75...250 kW / 1.0...350 Hp / 2.1...456 A
600V:	1.0...300 Hp / 1.7...289 A
690V:	7.5...250 kW / 12...263 A

Motor Control

- V/Hz Control
- Sensorless Vector Control
- Vector Control with FORCE Technology (with and without encoder)
- Interior Permanent Magnet with and without encoder

Enclosures

- IP00/IP20, NEMA/UL Type Open
- Flange Mount
- IP54/NEMA/UL Type 12

Safety

- Safe Torque-Off PLe/SIL3 Cat. 3
- Safe Speed Monitor PLe/SIL3 Cat. 4

Additional Features

- DeviceLogix
- Predictive Diagnostics
- Adjustable Voltage Control
- Three option slots for I/O, feedback, safety, auxiliary control power, communications
- Indexing
- Pump Jack and Pump Off for oil well applications
- Pjump and Traverse for Fibers application
- Conformal Coating
- DC Link Choke
- Automatic Device Configuration ★

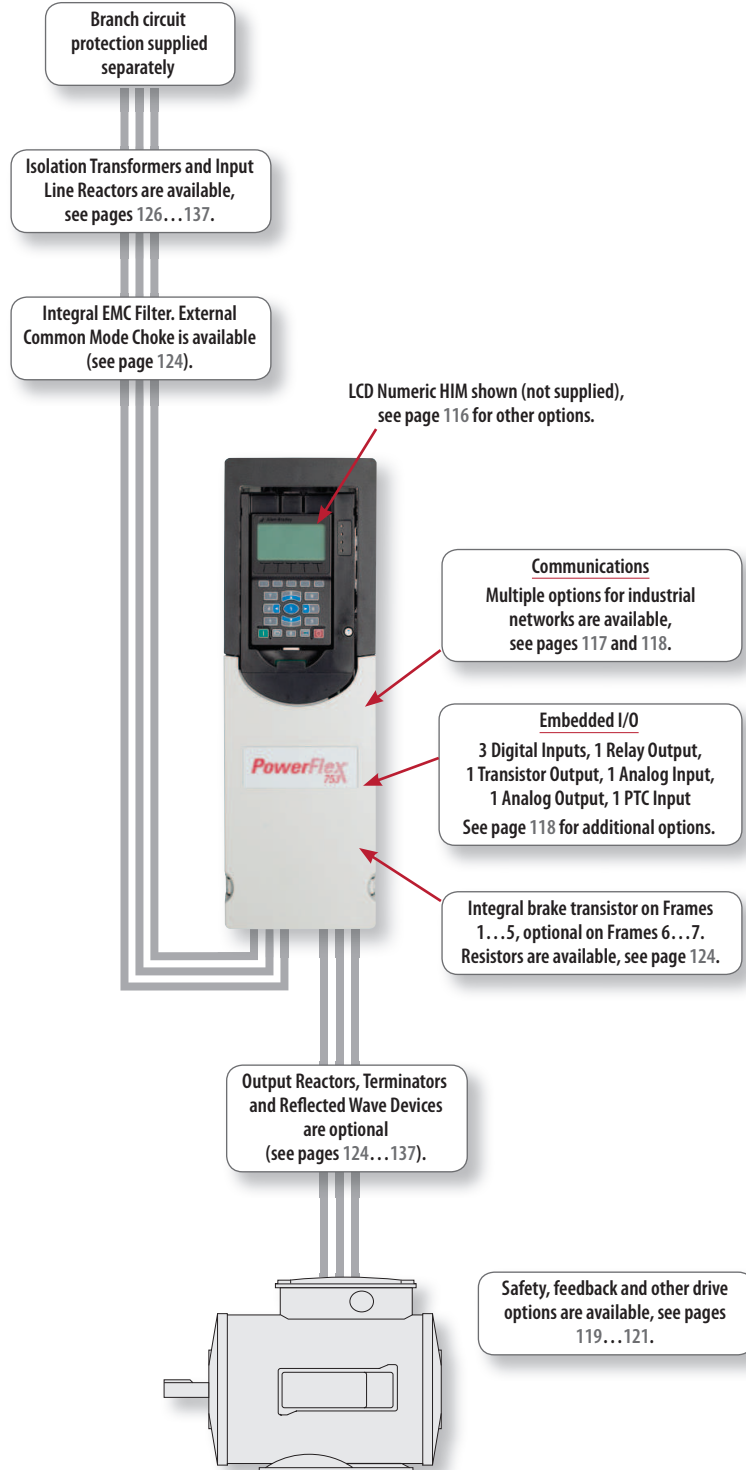
Certifications

- ABS
- ATEX Certified with appropriate options
- C-Tick
- c-UL-us
- CE
- EPRI/SEMI F47
- GOST-R
- Lloyd's Register
- RINA
- RoHS compliant materials
- FS ISO/EN13849-1 (EN954-1) with Safe Torque-Off option

Options

See pages 116...137

- ★ Requires Dual-port EtherNet/IP Option Module (Cat. No. 20-750-ENETR), firmware V7, Studio 5000 Logix Designer, and Drive Add-On Profiles Version 4.04 or higher.



Communication Option Kits

Description	Cat. No.	Used with PowerFlex Drive					
		70	700	700H	700S	700L	753/755
BACnet/IP Option Module	20-750-BNETIP						✓
BACnet® MS/TP RS485 Communication Adapter	20-COMM-B	✓	✓	✓			
Coaxial ControlNet™ Option Module	20-750-CNETC						✓
ControlNet™ Communication Adapter (Coax)	20-COMM-C	✓	✓	✓	✓	✓	✓ §
DeviceNet™ Option Module	20-750-DNET						✓
DeviceNet™ Communication Adapter	20-COMM-D	✓	✓	✓	✓	✓	✓ §
Dual-port EtherNet/IP Option Module	20-750-ENETR						✓
EtherNet/IP™ Communication Adapter	20-COMM-E	✓	✓	✓	✓	✓	✓ §
Dual-port EtherNet/IP™ Communication Adapter	20-COMM-ER	✓	✓	✓	✓	✓	
HVAC Communication Adapter	20-COMM-H	✓	✓	✓	✓♣	✓	✓ §
CANopen® Communication Adapter	20-COMM-K	✓	✓	✓	✓	✓	✓ §
LonWorks® Communication Adapter	20-COMM-L	✓	✓	✓			✓ §
Modbus/TCP Communication Adapter	20-COMM-M	✓	✓	✓	✓	✓	✓ §
Profibus DPV1 Option Module	20-750-PBUS						✓
Single-port Profinet I/O Option Module	20-750-PNET						✓
Dual-port Profinet I/O Option Module	20-750-PNET2P						✓
PROFIBUS™ DP Communication Adapter	20-COMM-P	✓	✓	✓	✓	✓	✓ §
ControlNet™ Communication Adapter (Fiber)	20-COMM-Q	✓	✓	✓	✓	✓	✓ §
Remote I/O Communication Adapter Δ	20-COMM-R	✓	✓	✓	✓	✓	✓ §
RS485 DF1 Communication Adapter	20-COMM-S	✓	✓	✓	✓	✓	✓ §
External Communications Kit Power Supply	20-XCOMM-AC-PS1	✓	✓	✓	✓	✓	✓
DPI External Communications Kit	20-XCOMM-DC-BASE	✓	✓	✓	✓	✓	✓
External DPI I/O Option Board ♦	20-XCOMM-IO-OPT1	✓	✓	✓	✓	✓	✓
Compact I/O Module (3 Channel)	1769-SM1	✓	✓	✓	✓	✓	✓
DriveLogix ControlNet Communication Adapter (Coax) ‡	1788-CNC				✓	✓▽	
DriveLogix Comm Option, ControlNet Redundant (Coax) ‡	1788-CNCR				✓	✓▽	
DriveLogix Comm Option, ControlNet (Fiber) ‡	1788-CNF				✓	✓▽	
DriveLogix Comm Option, ControlNet Redundant (Fiber) ‡	1788-CNFR				✓	✓▽	
DriveLogix Comm Option, DeviceNet (Open Conn.) ‡	1788-DNBO				✓	✓▽	
DriveLogix Comm Option, EtherNet/IP (Twisted Pair) ‡	1788-ENBT				✓	✓▽	
DriveLogix5730 Comm Option, Embedded EtherNet/IP	20D-DL2-ENETO				✓	✓▽	

♦ For use only with DPI External Communications Kits 20-XCOMM-DC-BASE.

♣ Only Modbus RTU can be used.

‡ For use with DriveLogix option only. Requires Logix Expansion Board (20D-DL2-LEB0).

§ Requires a Communication Carrier Card (20-750-20COMM or 20-750-20COMM-F1). Refer to PowerFlex 750-Series Legacy Communication Compatibility for details.

▽ When using a PowerFlex 700S control.

Δ This item has Silver Series status.

PowerFlex 750-Series Legacy Communication Compatibility

Most legacy communication adapters (20-COMM) can be used with the PowerFlex 753/755. However, the restrictions stated below do apply.

Frame 1 - It is recommended that the 20-750-20COMM-F1 Communication Carrier Card only be installed in Port 4. Port 5 will not be accessible when this module is installed.

Frames 2 and larger - It is recommended that the 20-750-20COMM Communication Carrier Card be installed in Port 6. Using Port 4 or 5 will make the adjacent left port inaccessible to other option modules and may interfere with network cable connections.