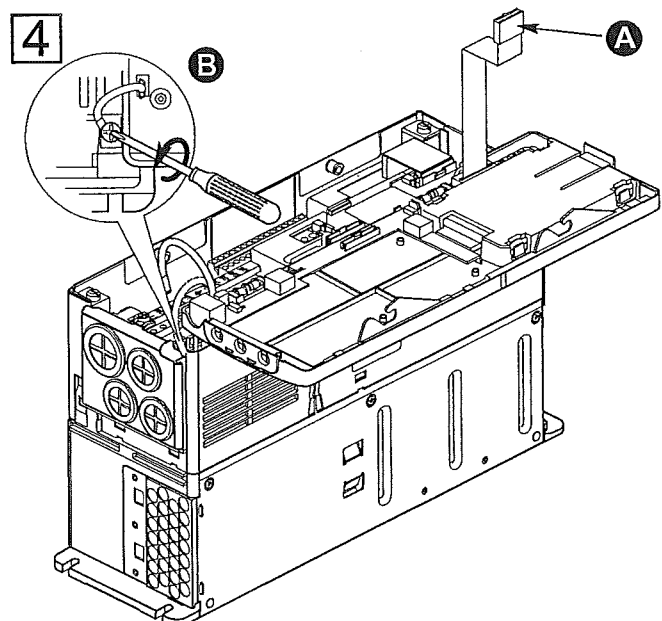
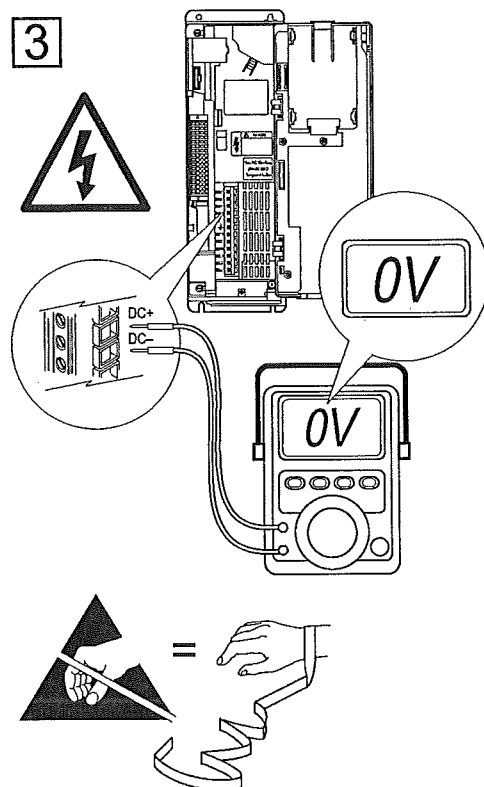
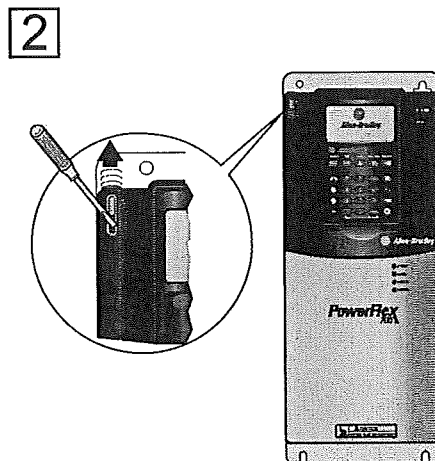
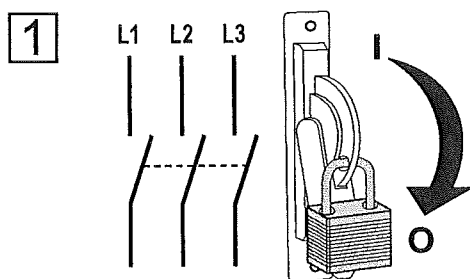
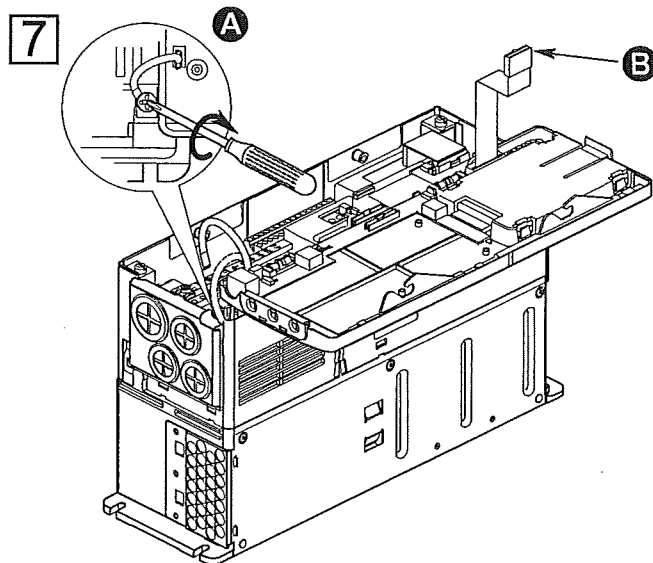
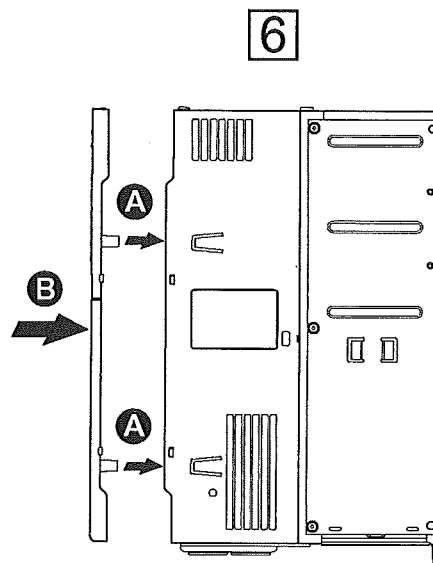
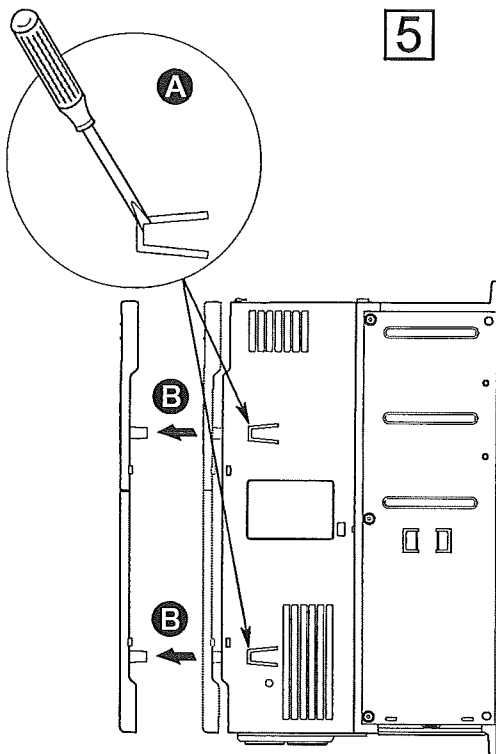




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PowerFlex 700/700S Frame 0/1 Front Cover Replacement
PowerFlex 700/700S Frame 0/1: Austausch des Frontdeckels
Remplacement du panneau avant du PowerFlex 700/700S (coffret 0/1)
PowerFlex 700/700S Frame 0/1, sostituzione coperchio frontale
Reemplazo de la tapa frontal del PowerFlex 700/700S tamaño 0/1
PowerFlex 700/700S Frame 0/1 voordeksel vervanging
PowerFlex 700/700S - Gabinete 0/1 - Substituição da Tampa Frontal





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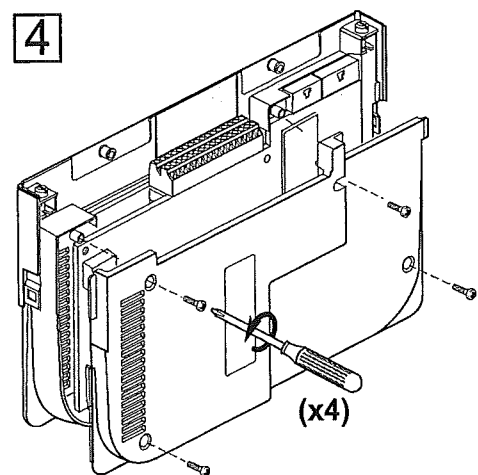
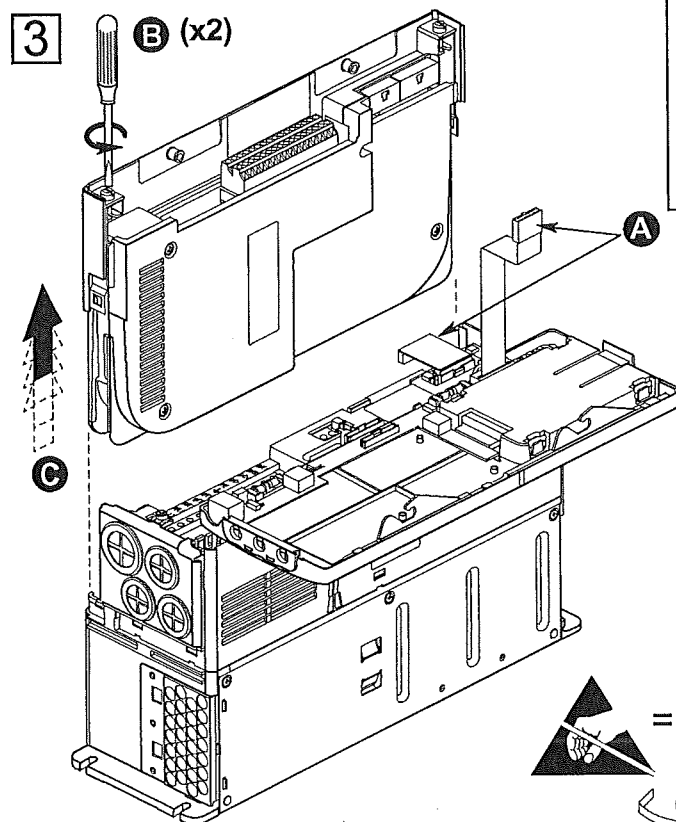
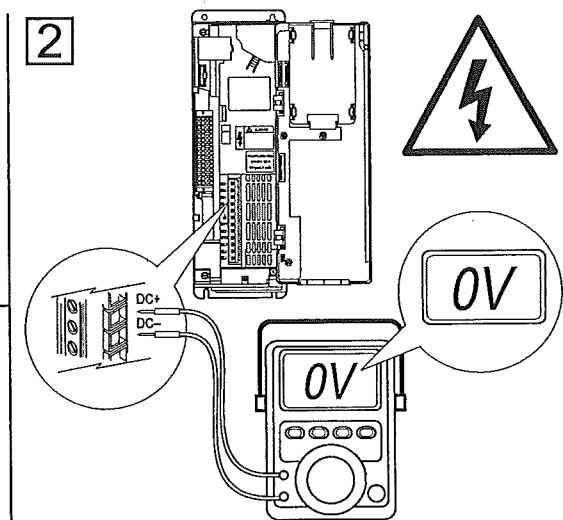
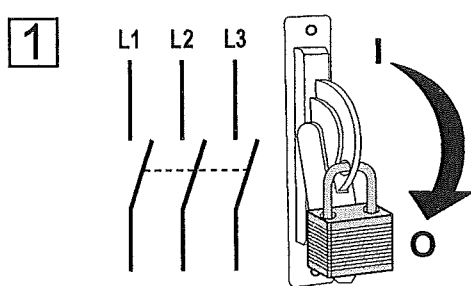
Tel: (1) 262.512.8176, Fax: (1) 262.512.2222, Email: support@drives.ra.rockwell.com, Online: www.ab.com/support/abdrives

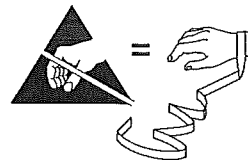
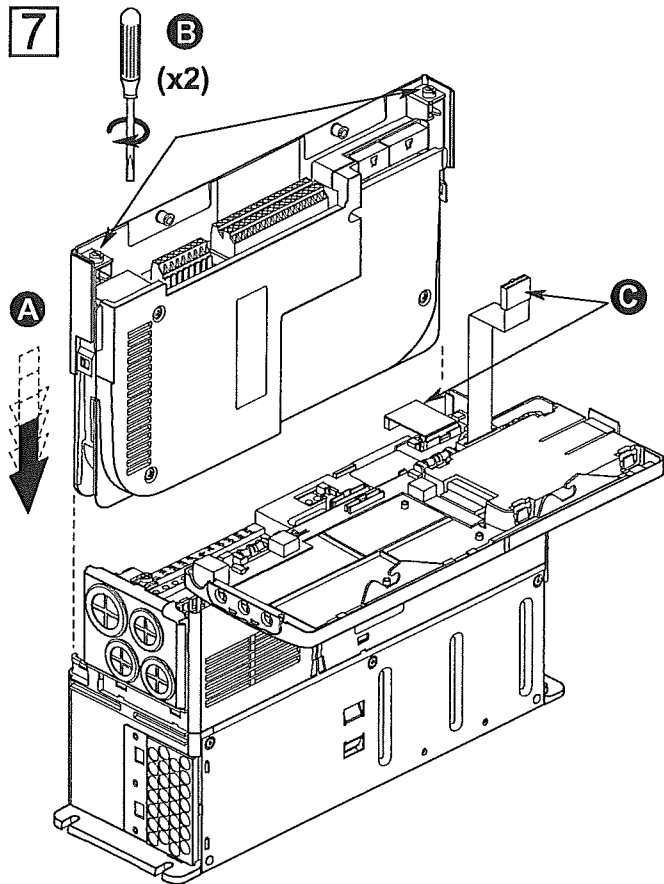
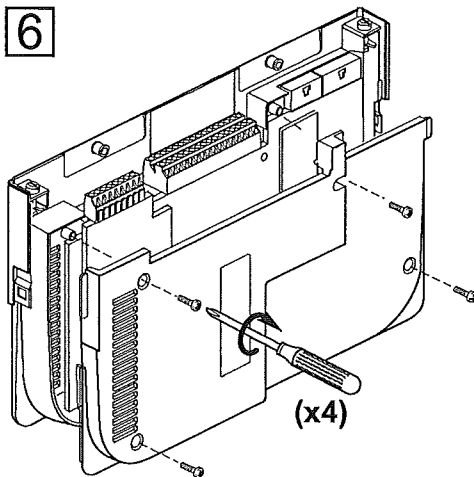
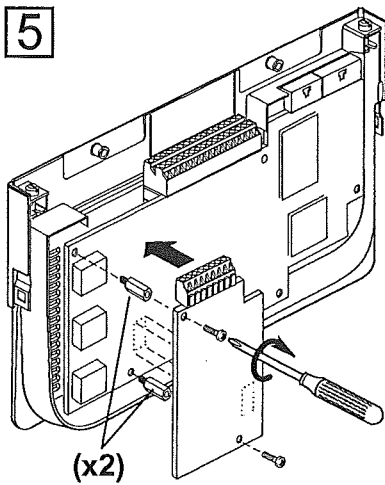




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PowerFlex 700 Vector Control Option Encoder Board
Vektorsteuerungsoptionen-Pulsgeberplatine des PowerFlex 700
Option carte codeur du PowerFlex 700 Contrôle Vectoriel
PowerFlex 700 - Scheda encoder con opzione di controllo vettoriale
Tarjeta de Encoder de Opción de Control Vectorial del PowerFlex 700
Encoderbord vectorbesturingsoptie PowerFlex 700
Placa de enconder da opção com controle vetorial do PowerFlex 700





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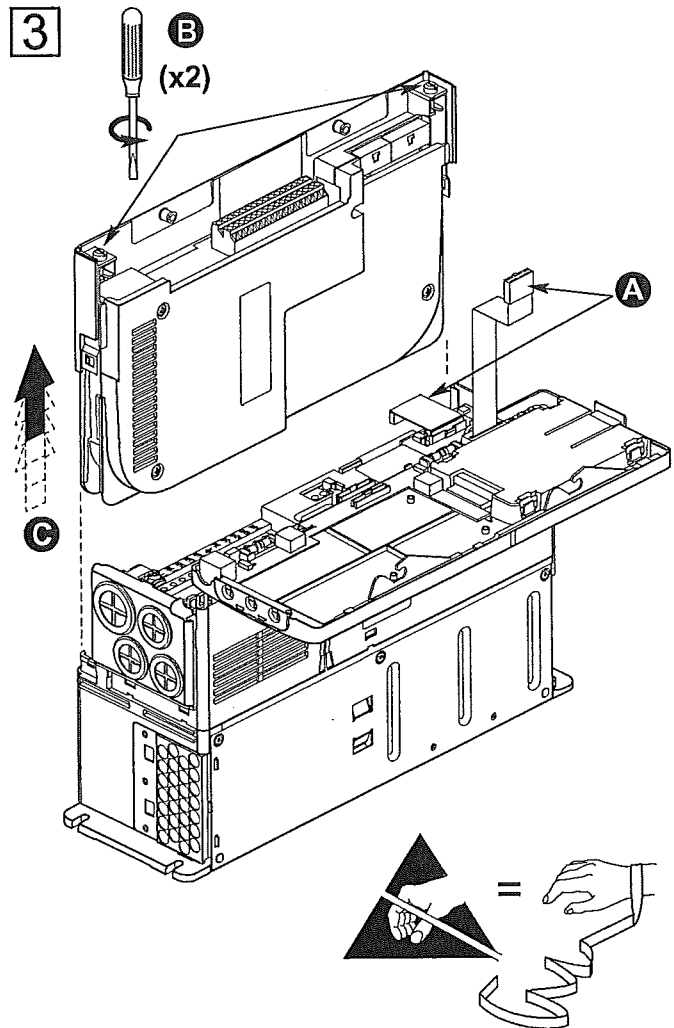
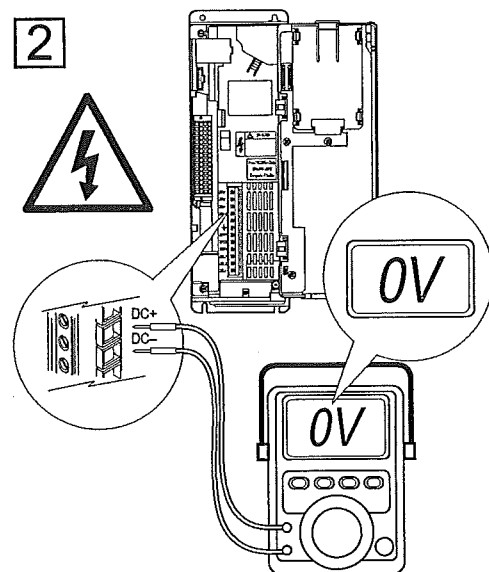
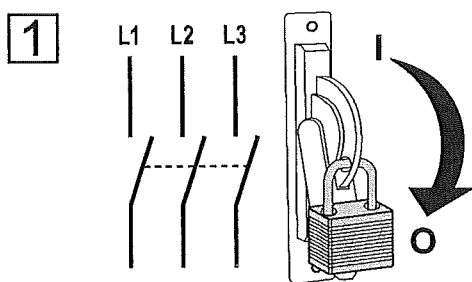
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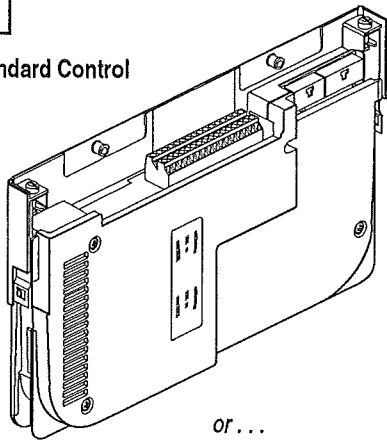
Control and I/O Cassette
 Steuerungs- und E/A-Kassette
 Boîtier de commande et d'E/S
 cassetto estraibile per schede di regolazione ed I/O
 Tarjeta de Control y Modulo de Entradas/Salidas
 Controle en I/O cassette
 Gaveta de Controle e E/S

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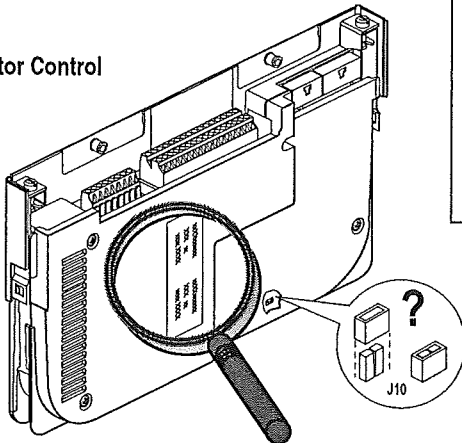
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Standard Control

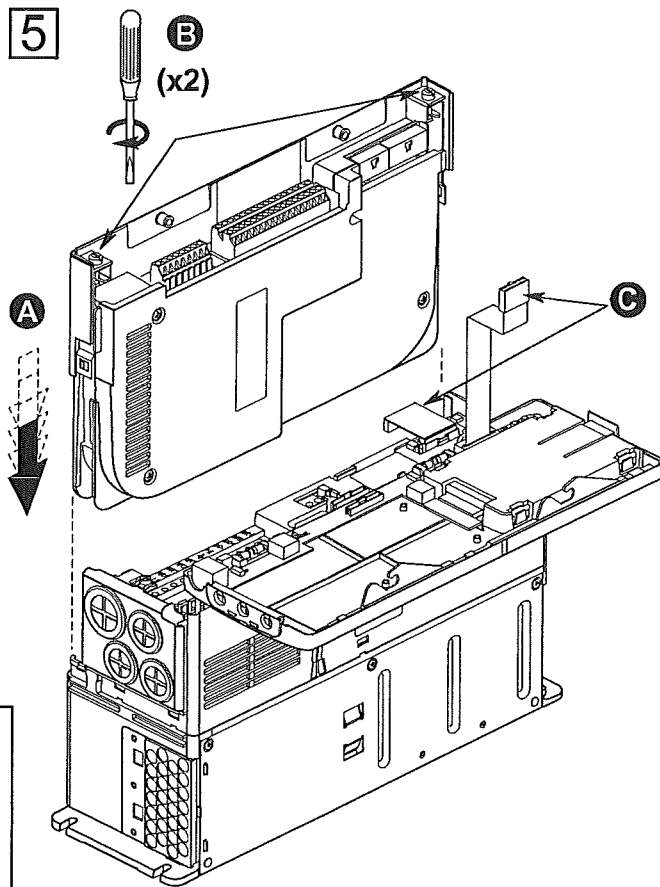


or ...

Vector Control



5



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Tel: (1) 800.726.8112, Online: www.reliance.com/prodserv/standriv/customer

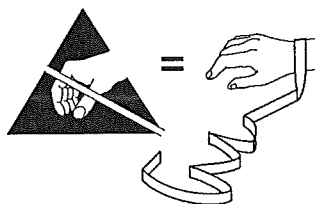
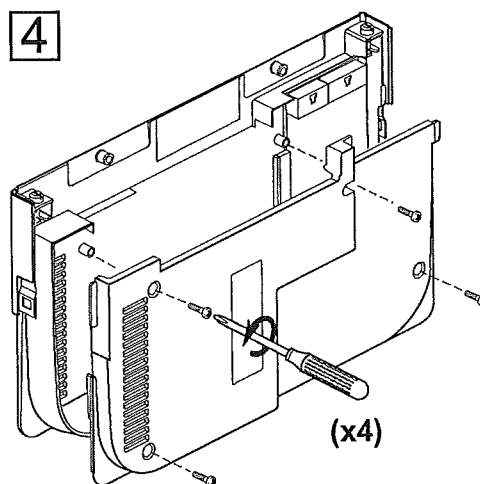
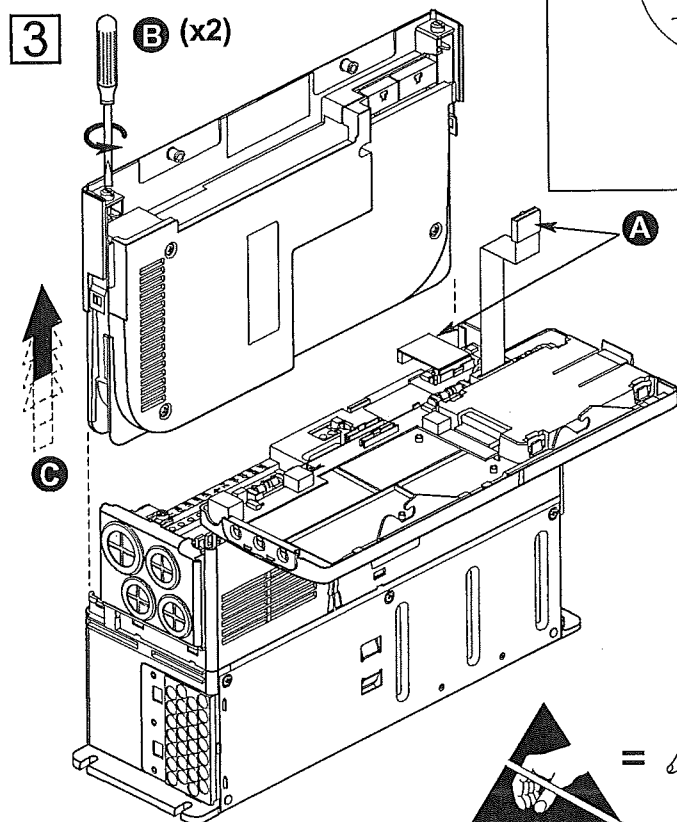
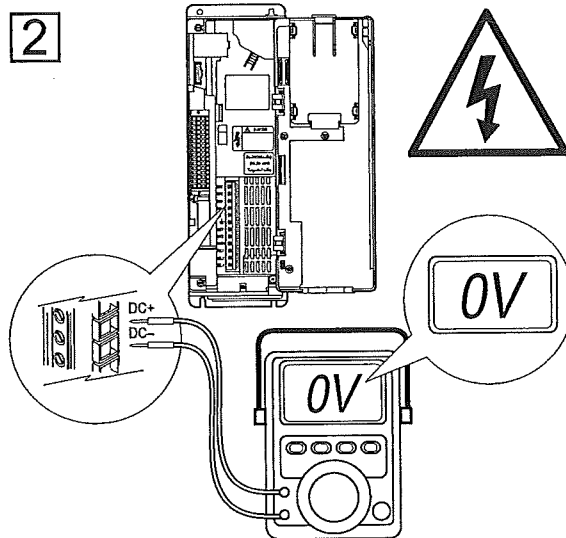
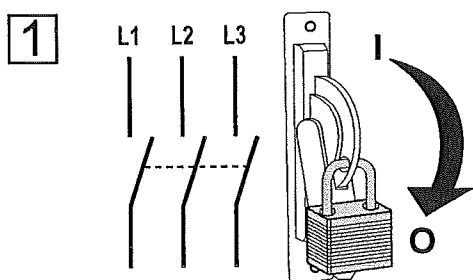
Publication RA-IN002A-MU-P – August, 2002

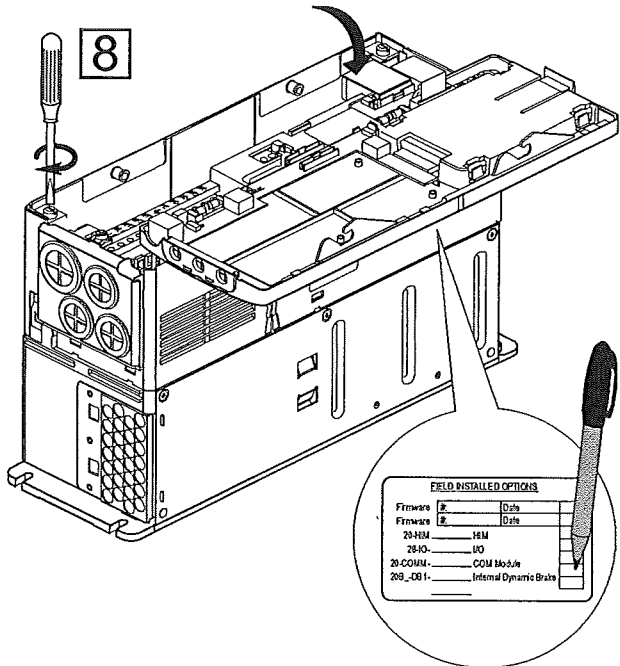
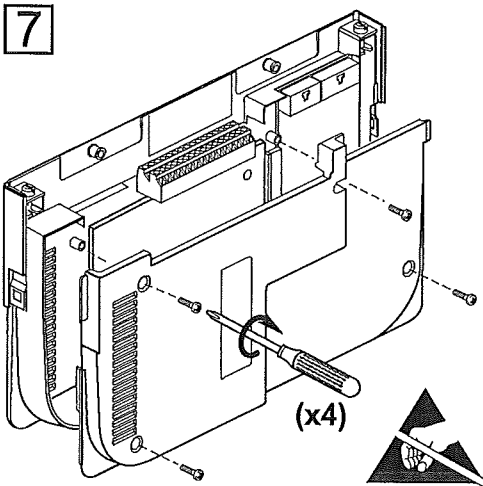
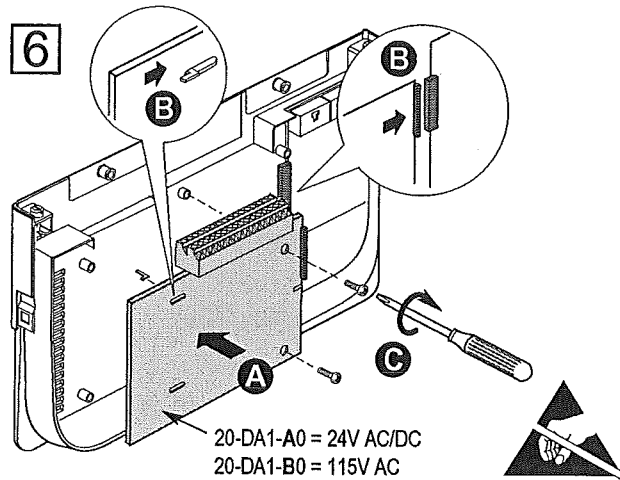
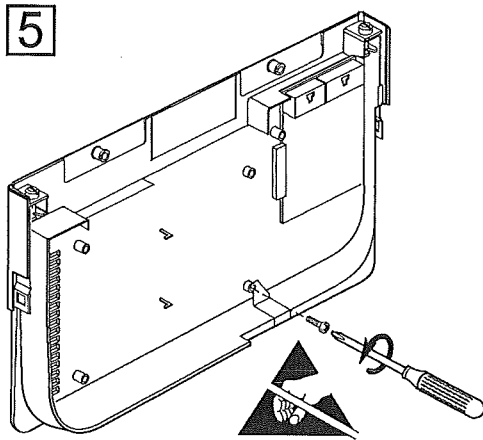
P/N 310198-P01
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PowerFlex 700 I/O Options
E/A-Optionen für PowerFlex 700
Options d'E/S du PowerFlex 700
Opzioni I/O PowerFlex 700
Opciones de E/S del PowerFlex 700
PowerFlex 700 I/O Opties
Opções de E/S do PowerFlex 700





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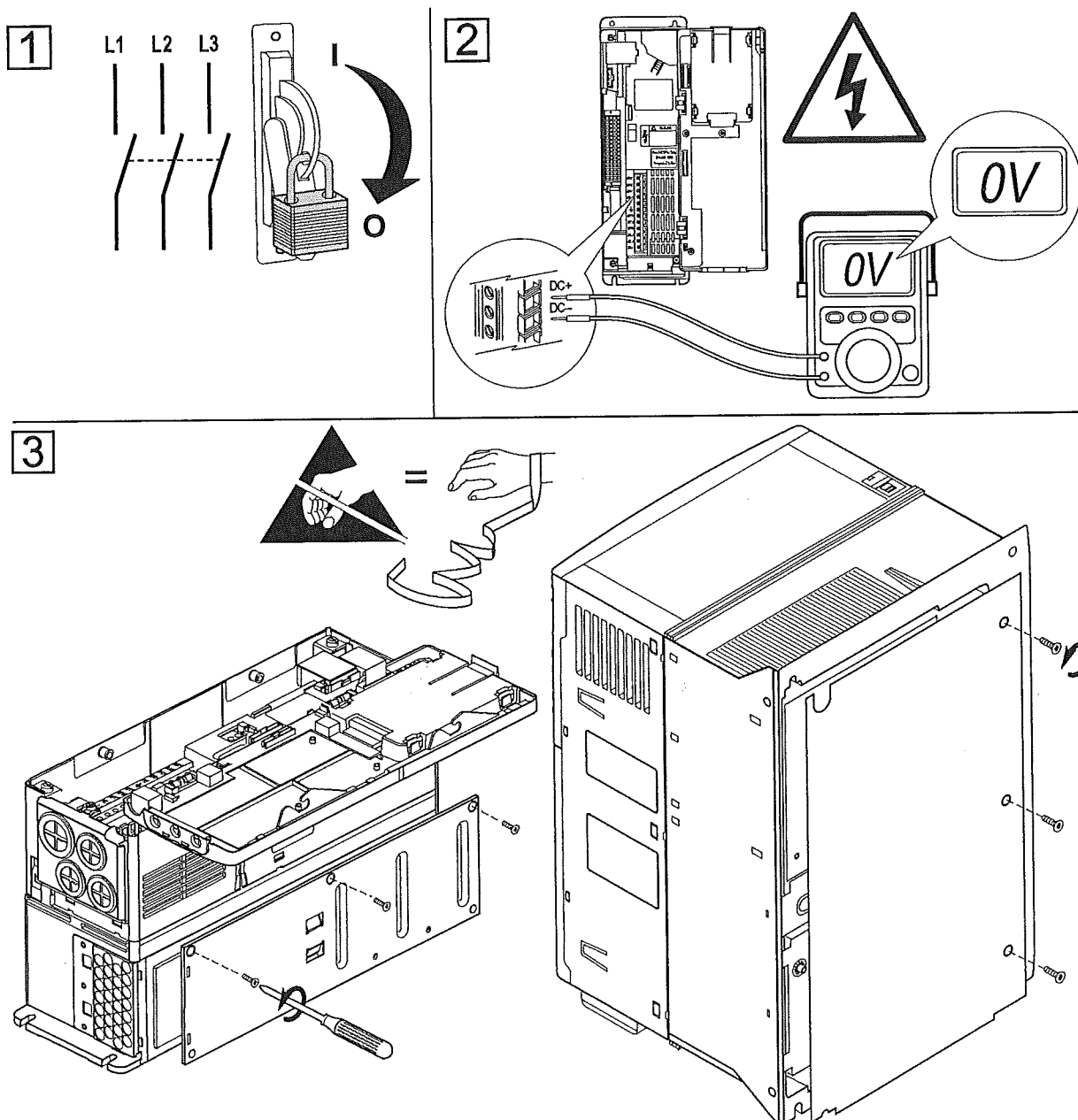
Tel: (1) 262.512.8176, Fax: (1) 262.512.2222, Email: support@drives.ra.rockwell.com, Online: www.ab.com/support/abdrives



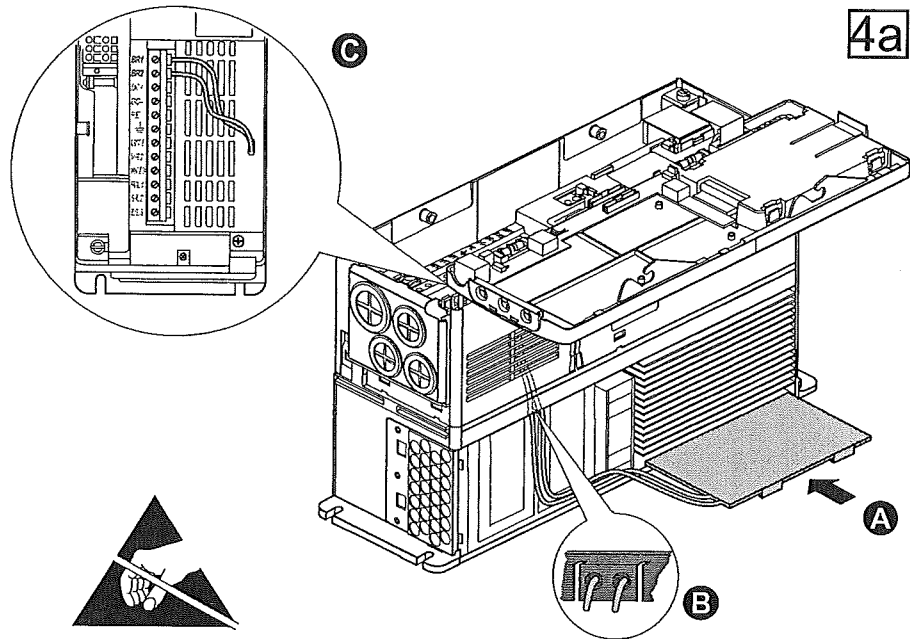


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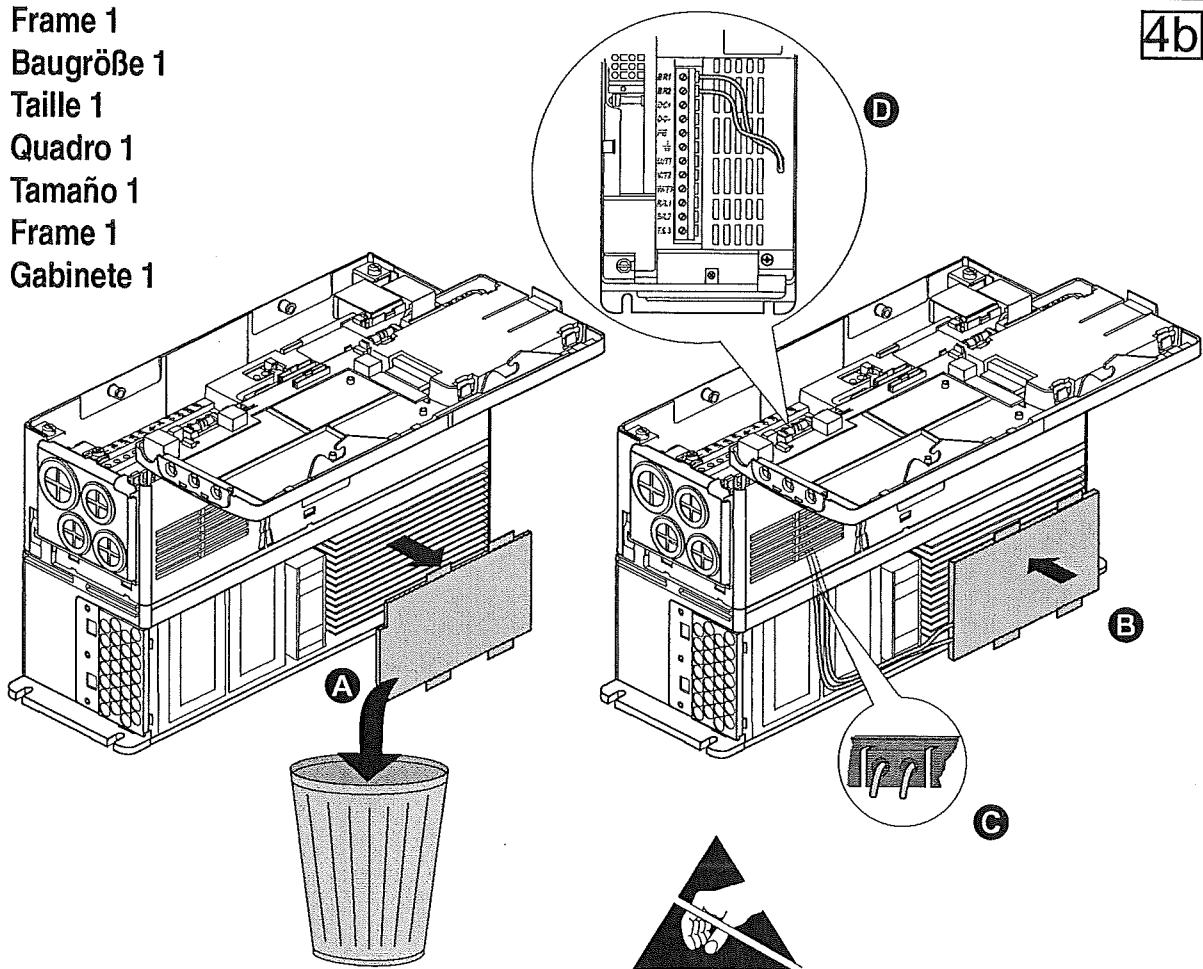
PowerFlex 700 Internal Dynamic Brake Kits
Interne Bremswiderstände für PowerFlex 700
Kits de Freinage Dynamique Interne pour PowerFlex 700
Kit Interno per Frenatura Dinamica PowerFlex 700
Accesorio para Freno Dinámico Interno
PowerFlex 700 Interne Dynamische-remsets
Kits de Frenagem Dinâmica Interna do PowerFlex 700



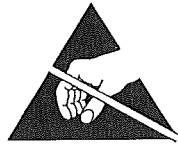
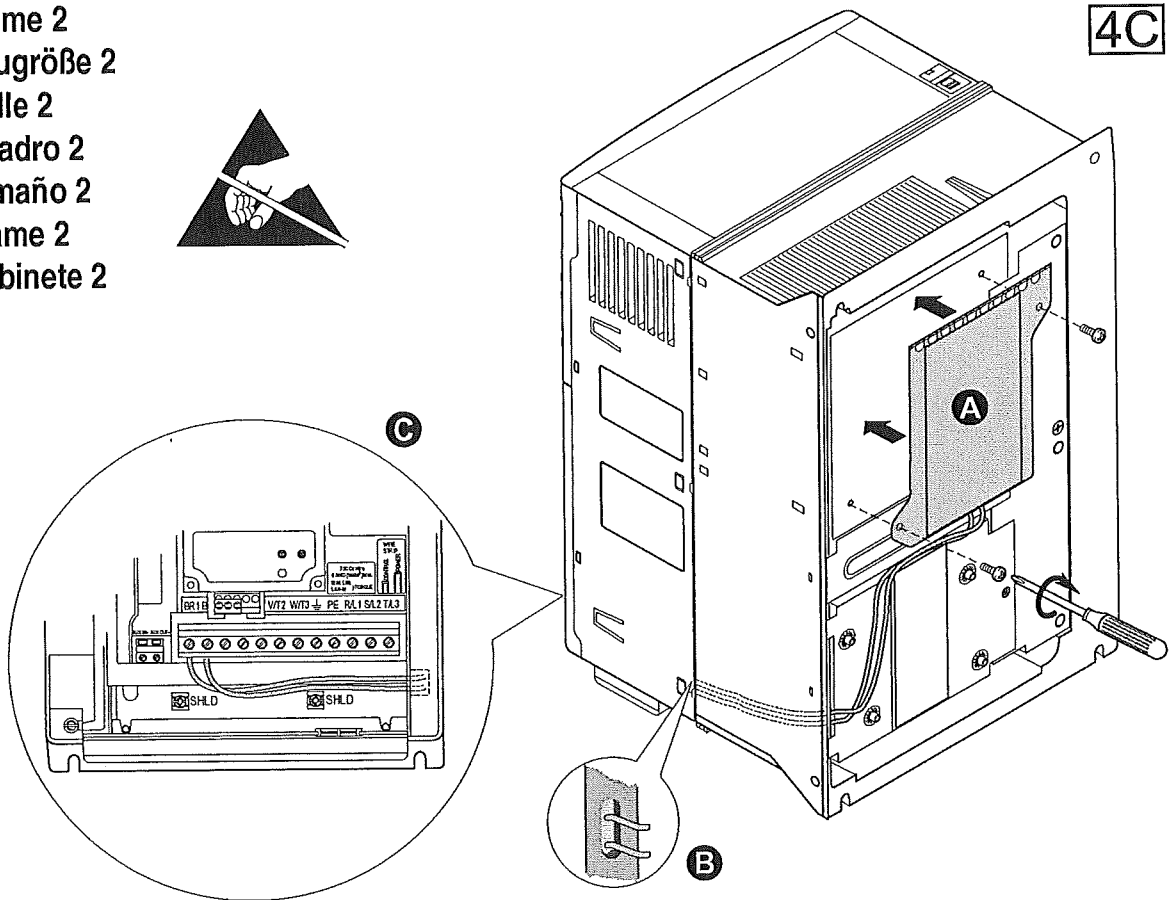
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 Taille 0
 Quadro 0
 Tamaño 0
 Frame 0
 Gabinete 0



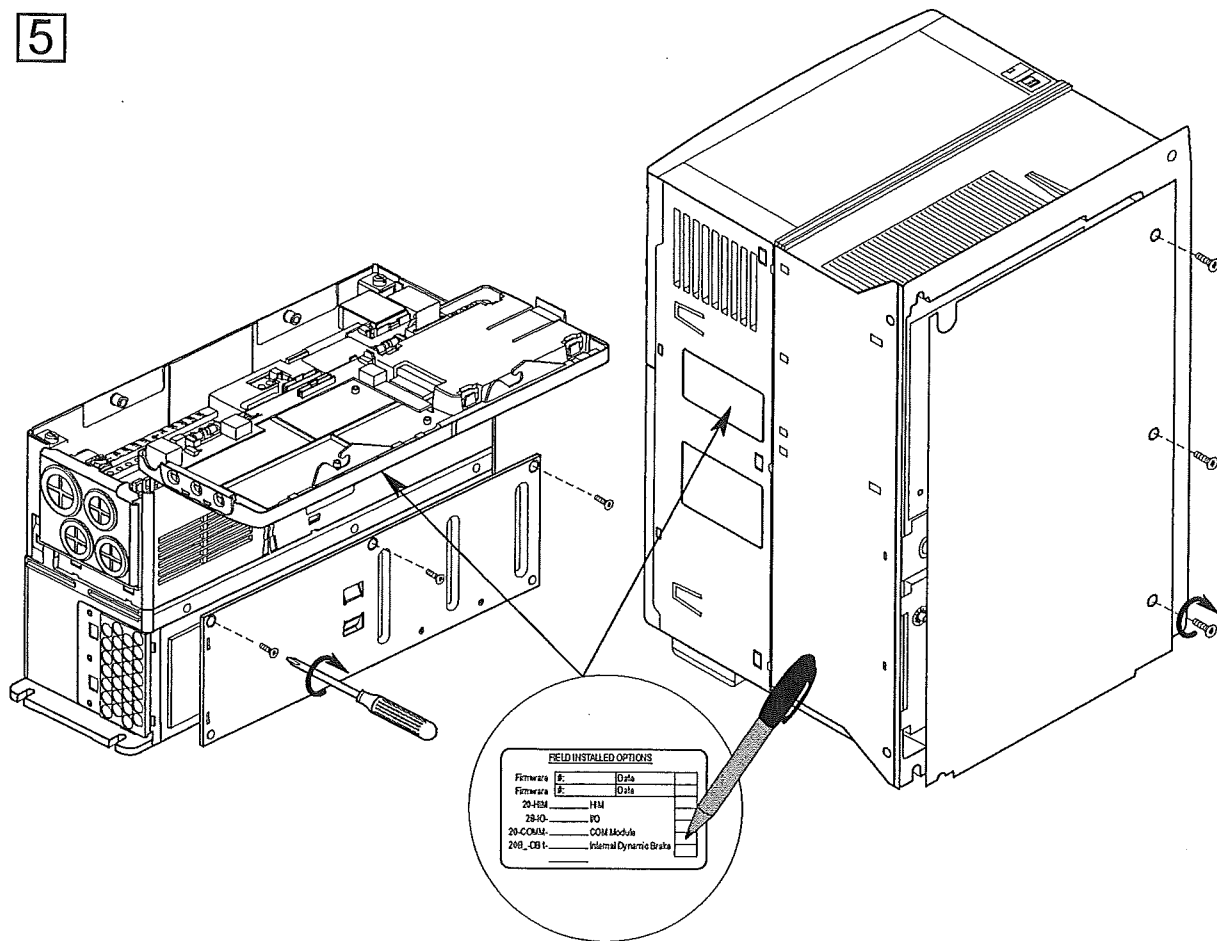
Frame 1
 Baugröße 1
 Taille 1
 Quadro 1
 Tamaño 1
 Frame 1
 Gabinete 1



Frame 2
Baugröße 2
Taille 2
Quadro 2
Tamaño 2
Frame 2
Gabinete 2

**4C**

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PowerFlex 700 Standard/Vector Control I/O Wiring Differences

E/A-Verdrahtungsunterschiede zwischen der Standard- und Vektorsteuerungsoption des PowerFlex 700

Différences de câblage des E/S pour le PowerFlex 700 Standard/Contrôle vectoriel

Differenze di cablaggio tra PowerFlex 700 standard e I/O di controllo vettoriale

Diferencias de Cableado de E/S de Control Estándar/Vectorial del PowerFlex 700

I/O bedradingsverschillen standaard/vectorbesturing PowerFlex 700

Diferenças de fiação de E/S entre o controle padrão/vetorial do Powerflex 700

| Input/Output | Standard | Vector | Parameter |
|--------------------|----------|--------|--|
| Analog In Voltage | | | 320 Bit 0/1 = "0" (Volts) |
| Analog In Current | | | 320 Bit 0/1 = "1" (Current) |
| Analog Out Voltage | | | 342/345 340 Bit 0/1 = "0" (Volts) |
| Analog Out Current | | | 342/345 340 Bit 0/1 = "1" (Current) |
| Hardware Enable | | | 366 J10 |
| 24V Digital In | | | 361-366 |
| Digital Out | | | Standard 380, 384 Vector 380, 384, 388 |



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Product Update



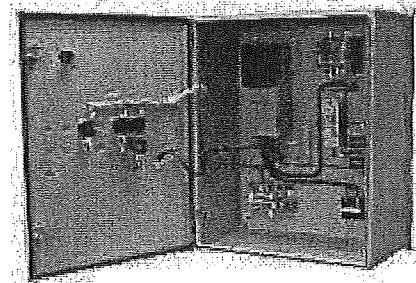
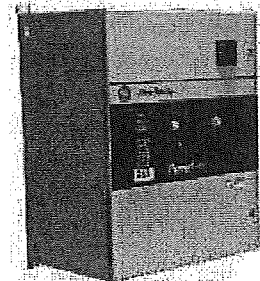
Allen-Bradley

PowerFlex[®] 700 Standard Packaged AC Drives

Bulletin Numbers 21B and 21X

15 Horsepower PowerFlex 700

- NEMA Type 1 Enclosure (IP20) [A – position 8]
- Full Numeric LCD HIM – Door Mounted [6 – position 9]
- Standard Drive User Manual [A – position 10]
- With Brake IGBT (Frames 0 – 3) [Y – position 11]
- No Brake Resistor [N – position 12]
- Filter with Common Mode Choke [A – position 13]
- No Communication Module [N – position 14]
- Standard 115V AC I/O [B position 15]
- No Feedback [0 – position 16]
- Quick Ship Option [QS – positions 19 & 20]
- Normal Duty [-ND]
- No Bypass [-B0]
- Drive Fault Control Relay [-J2]
- Drive Run Control Relay [-J4]
- 115V AC Control Power Transformer [-C1]
- Fused Disconnect Switch [-P6]
- Hand/Off/Auto Selector Switch [-S1]
- Drive Fault Pilot Light [-S10]
- Control Power On Pilot Light [-S13]
- Drive Run Pilot Light [-S9]



Product Description

PowerFlex 700 AC Standard Packaged Drives are ideal for global Original Equipment Manufacturers (OEM) and end users with special installation needs. This program simplifies installation and start-up by allowing users to order drive packages that combine operator interface, control, communications and power options in pre-configured assemblies. Designed to meet customer demands for space savings, application flexibility and reliability, PowerFlex 700 AC Standard Packaged Drives offer a number of commonly requested pre-engineered options

Benefits

- Simplified installation and start-up by use of common options assembled at the factory.
- Drive functionality exceeds options offered with a standard drive.
- Multiple packaging options specific to customer needs.
- Pre-engineered options for easy order entry, consistent manufacturing, high quality and reduced deliveries.
- Selectable configurations to meet application requirements.

Features

- Standard PowerFlex 700 AC drives and drive related options
- Six pulse and multi-pulse
- Enclosure options: NEMA Type 1, NEMA Type 12 (fan and filter)
- Pre-engineered options
- UL panel recognition from the factory for pre-engineered options

Please contact your local distributor or sales office for product availability.

Options

- Drive Input Protection
- Input/Output Contactors
- Input/Output Line Reactors
- Bypass
- Control Power
- Control Interface and Feedback
- Communication
- Human Interface Module (HIM)
- Motor Interface
- Door Mounted Operator Device

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DeviceNet is a trademark of the Open DeviceNet Vendor Association.

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Publication 21B-PP001C-EN-P – March 2003

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Allen-Bradley PowerFlex® Standard Packaged Drives Quick Ship Program

Program Overview

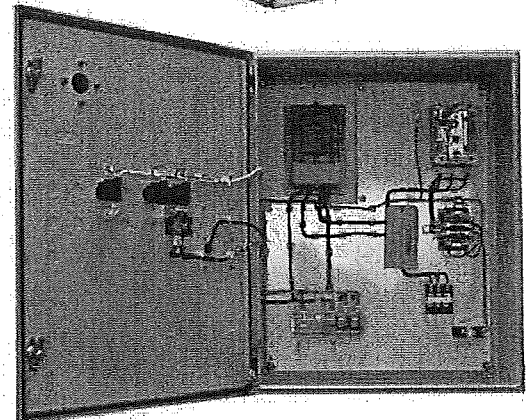
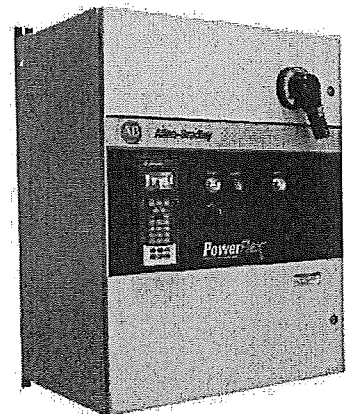
The Allen-Bradley PowerFlex® Standard Packaged Drives Quick Ship Program is intended to build select catalog strings for shipment within **one to three business days** of order entry for the PowerFlex® 4, PowerFlex® 70 and PowerFlex® 700 wall mount standard packaged drive programs. Additionally, the program offers the ability to add additional options with minimal impact to lead-time / delivery. For select catalog strings, the order entry system has been simplified minimizing the time required to place your order (see the Quick Ship Catalog Entry details below). The program is designed to supply 480V "wall mount top of frame" drive packages.

Program Note: Initially, each customer ID will be limited to three units per week, per catalog string.

Standard Packaged Drives – PowerFlex 70 Quick Ship Program

Standard Features Include:

- Top of frame 480V PowerFlex 70 Flange Drive
- NEMA Type (IP20) [-AA] or NEMA Type 4/12 Indoor Enclosure (IP 65) [-AF]
- Full Numeric LCD HIM – Door Mounted [-C3]
- Circuit Breaker [-CB] or Fused Disconnect Switch [-DS]
- 115V AC Control Power Transformer [-CF]
- Hand/Off/Auto Selector Switch [-D1A]
- Drive Run Pilot Light [-D2A]
- Drive Fault Pilot Light [-D2B]
- Control Power On Pilot Light [-D3A]
- Drive Fault Control Relay [-JF]
- Drive Run Control Relay [-JR]



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Quick Ship Catalog Entry:

| | Frame | Normal Duty HP | Heavy Duty HP | Type In Catalog Number | Name Plated Catalog Number | Dimensions (in inches) |
|------------------|-------|----------------|---------------|------------------------|--|------------------------|
| Type 1 (P20) | A | 2 | 1.5 | 21AQD3P4-AA-DS | 21AQD3P4-AA-DS-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 32 h x 24 w x 16 d |
| | B | 5 | 3 | 21AQD8P0-AA-DS | 21AQD8P0-AA-DS-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 32 h x 24 w x 16 d |
| | C | 10 | 7.5 | 21AQD014-AA-DS | 21AQD014-AA-DS-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 32 h x 24 w x 16 d |
| | D | 20 | 15 | 21AQD027-AA-DS | 21AQD027-AA-DS-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 38 h x 24 w x 16 d |
| | A | 2 | 1.5 | 21AQD3P4-AA-CB | 21AQD3P4-AA-CB-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 32 h x 24 w x 16 d |
| | B | 5 | 3 | 21AQD8P0-AA-CB | 21AQD8P0-AA-CB-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 32 h x 24 w x 16 d |
| | C | 10 | 7.5 | 21AQD014-AA-CB | 21AQD014-AA-CB-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 32 h x 24 w x 16 d |
| | D | 20 | 15 | 21AQD027-AA-CB | 21AQD027-AA-CB-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 38 h x 24 w x 16 d |
| Type 4/12 (IP65) | A | 2 | 1.5 | 21AQD3P4-AF-DS | 21AQD3P4-AF-DS-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 32 h x 24 w x 16 d |
| | B | 5 | 3 | 21AQD8P0-AF-DS | 21AQD8P0-AF-DS-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 32 h x 24 w x 16 d |
| | C | 10 | 7.5 | 21AQD014-AF-DS | 21AQD014-AF-DS-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 32 h x 24 w x 16 d |
| | D | 20 | 15 | 21AQD027-AF-DS | 21AQD027-AF-DS-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 38 h x 24 w x 16 d |
| | A | 2 | 1.5 | 21AQD3P4-AF-CB | 21AQD3P4-AF-CB-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 32 h x 24 w x 16 d |
| | B | 5 | 3 | 21AQD8P0-AF-CB | 21AQD8P0-AF-CB-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 32 h x 24 w x 16 d |
| | C | 10 | 7.5 | 21AQD014-AF-CB | 21AQD014-AF-CB-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 32 h x 24 w x 16 d |
| | D | 20 | 15 | 21AQD027-AF-CB | 21AQD027-AF-CB-C3-CF-D1A-D2A-D2B-D3A-JF-JR | 38 h x 24 w x 16 d |

Additional Options:

Drive Mounted Brake [-BR]
 Drive Mounted ControlNet™ Communications Module [-GC]
 Drive Mounted DeviceNet™ Communications Module [-GD]
 Drive Mounted Profibus Communications Module [-GP]
 Drive Mounted RIO Communications Module [-GR]
 Panel Mounted Analog Input Isolator, 0-10V [-N1]
 Panel Mounted Analog Input Isolator, 4-20ma [-N2]
 Panel Mounted Analog Output Isolator, 0-10V [-N3]

Option Notes:

1. Catalog strings with additional options use bulletin number 21A.
2. Lead-time increases from 3 business days to 5 business days.
3. Orders requiring additional options should be entered as follows:
21AD3P4-AF-BR-C3-CB-CF-D1A-D2A-D3A-JF-JR-N1



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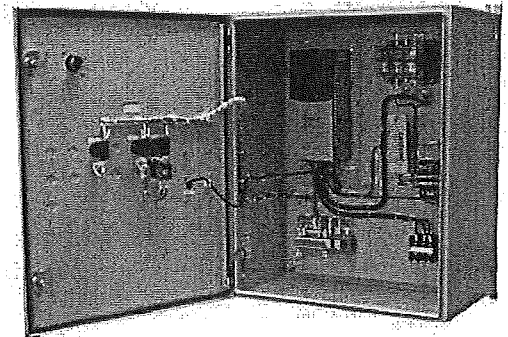
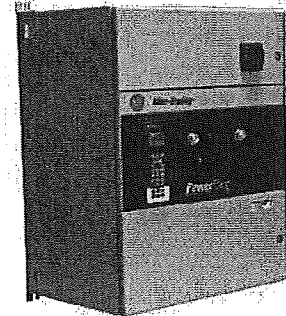
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Standard Packaged Drives – PowerFlex 700 Quick Ship Program

Standard Features Include:

Top of frame 480V PowerFlex 700 Drive (Frames 0 – 3)
 NEMA Type 1 Enclosure (IP20) [A – position 8]
 Full Numeric LCD HIM – Door Mounted [6 – position 9]
 Standard Drive User Manual [A – position 10]
 With Brake IGBT (Frames 0 – 3) [Y – position 11]
 No Brake Resistor [N – position 12]
 Filter with Common Mode Choke [A – position 13]
 No Communication Module [N – position 14]
 Standard 115V AC I/O [B position 15]
 No Feedback [0 – position 16]
 Quick Ship Option [QS – positions 19 & 20]
 Normal Duty [-ND]
 No Bypass [-B0]
 Drive Fault Control Relay [-J2]
 Drive Run Control Relay [-J4]
 115V AC Control Power Transformer [-C1]
 Fused Disconnect Switch [-P6]
 Hand/Off/Auto Selector Switch [-S1]
 Drive Fault Pilot Light [-S10]
 Control Power On Pilot Light [-S13]
 Drive Run Pilot Light [-S9]



Quick Ship Catalog Entry:

| | Frame | Normal Duty HP | Heavy Duty HP | Type in Catalog Number | Name Plated Catalog Number | Dimensions H x W x D |
|---------------|-------|-------------------|---------------------|------------------------|--|---------------------------------------|
| Type 1 (IP20) | 0 | 7.5 | 5 | 21BD011A6AYNANB0NNQS | 21BD011A6AYNANB0NNQS-ND-B0-C1-J2-J4-P6-S1-S10-S13-S9 | 813x610x422 mm (32 x 24 x 16.6 in) |
| | 1 | 15 | 10 | 21BD022A6AYNANB0NNQS | 21BD022A6AYNANB0NNQSND-B0-C1-J2-J4-P6-S1-S10-S13-S9 | 813x610x422 mm (32 x 24 x 16.6 in) |
| | 2 | 25 | 20 | 21BD034A6AYNANB0NNQS | 21BD034A6AYNANB0NNQSND-B0-C1-J2-J4-P6-S1-S10-S13-S9 | 965x610x422 mm (38 x 24 x 16.6 in) |
| | 3 | 50 | 40 | 21BD065A6AYNANB0NNQS | 21BD065A6AYNANB0NNQSND-B0-C1-J2-J4-P6-S1-S10-S13-S9 | 965x762x422 mm (38 x 30 x 16.6 in) |

Note: Initially, each customer ID is limited to 3 units per week, per catalog string.



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Additional Options: Drive Mounted ControlNet™ Communication Module [-GC]
Drive Mounted DeviceNet™ Communication Module [-GD]
Drive Mounted Profibus Communication Module [-GP]
Drive Mounted RIO [-GR]
Panel Mounted Analog Input Isolator 0-10V [-N1]
Panel Mounted Analog Input Isolator 4-20 mA [-N2]
Panel Mounted Analog Isolator, 0-10V [-N3]

Option Notes:

1. Lead time increases from 5 business days to 10 business days
2. Orders requiring selection options should be entered the same as a pre-engineered Passport string: 21BD011A6AYNACB0NNNN-ND-B0-C1-J2-J4-N1-P6-S1-S10-S13-S9

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PowerFlex[®] 700

Optimized Flexibility.

PowerFlex[®] 700 AC Drive

The PowerFlex 700 AC drive offers outstanding performance in an easy-to-use drive that you have come to expect from Rockwell Automation. This world-class performance comes in a small and competitively priced package. The PowerFlex 700 AC drive is designed to control three-phase induction motors in applications with requirements ranging from the simplest speed control to the most demanding torque control.

Excellent Performance

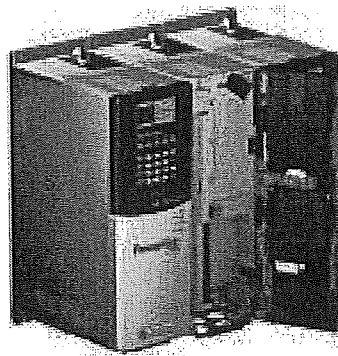
- Three control modes in one drive: Vector Control with Force Technology™, Sensorless Vector and V/Hz control.
- Outstanding open or closed loop speed regulation for applications ranging from fans and pumps to precise control of winders.
- Excellent torque production and tight torque regulation for the most demanding applications like extruders and web processes.
- Fast update times of torque inputs are suitable for high performance applications.

Easy to Use

- Full-featured LCD Human Interface Module (HIM) with multi-line and multi-lingual display simplifies programming.
- S.M.A.R.T Start and Detailed Assisted Start-up routines in the LCD HIM allows for easy configuring and tuning of the drive.
- Pull-apart control terminal blocks allow for easy wiring and quick disconnect!
- Control cassette which houses all control, I/O and encoder options is easy to remove and interchangeable with all PowerFlex 700 drive ratings.
- Optimized global voltage settings designed to worldwide standards allow quick set-up anywhere in the world.
- Excellent PC software tools, such as DriveExplorer™, DriveTools™ 2000 and RSLogix 5000™ make programming, configuration, monitoring and troubleshooting even easier.

Saves Space

- Innovative bookshelf design produce drives that are up to 68% smaller than other global drives.
- Bookshelf design optimizes panel space by allowing Zero Stacking™ or side-by-side mounting of the drives. In many cases, twice as many drives can be packaged in the same panel space as competitive products.



PowerFlex 700 AC Drive
(0.37 to 110 kW; 0.5 to 150 HP)

- Save panel space and wiring time with internal communication options, internal brake transistors, integral EMC filters and integral common mode chokes.

Flexible Packaging Options

The PowerFlex 700 Standard Packaged AC Drives Program simplifies installation and start-up by allowing users to order drive packages that combine operator interface, control, communications and power options in pre-configured assemblies. Offering a number of commonly requested pre-engineered options, as well as more complex packages, Standard Packaged Drives provide a wide range of motor control options.

Communications

The Allen-Bradley PowerFlex family of drives utilizes Rockwell Automation's NetLinx™ Open Network Architecture. This provides the common set of features and services for DeviceNet™, ControlNet™ and EtherNet/IP networks resulting in lower total cost of ownership. Users can easily manage information from shop floor to top floor and seamlessly integrate their complete system as they control, configure and collect data.

- PowerFlex drives offer a dedicated internal communications option helping the user to cost-effectively assemble highly integrated applications that link drives to the manufacturing process through Rockwell Automation NetLinx Open Architecture based networks including: DeviceNet, ControlNet, Universal Remote I/O, and other open communications including PROFIBUS and Interbus-S.
- Status indicators for all internal communications options are visible on the cover for easy set-up and monitoring of drive communications.



Two Control Options One World Class Drive

Standard Control

The Standard Control option provides:

- Sensorless Vector Control & V/Hz Control
- DC Bus Regulation
- Slip Compensation
- Process PI Loop
- Flying Start
- 2 Analog Inputs
- 6 Digital Inputs
- 1 Analog Output
- 2 Digital Outputs

This control is great for applications such as:

- Fans
- Pumps
- Conveyors
- Mixers, Simple Extruders, and more

Vector Control

The Vector Control option includes everything a Standard Control option provides plus:

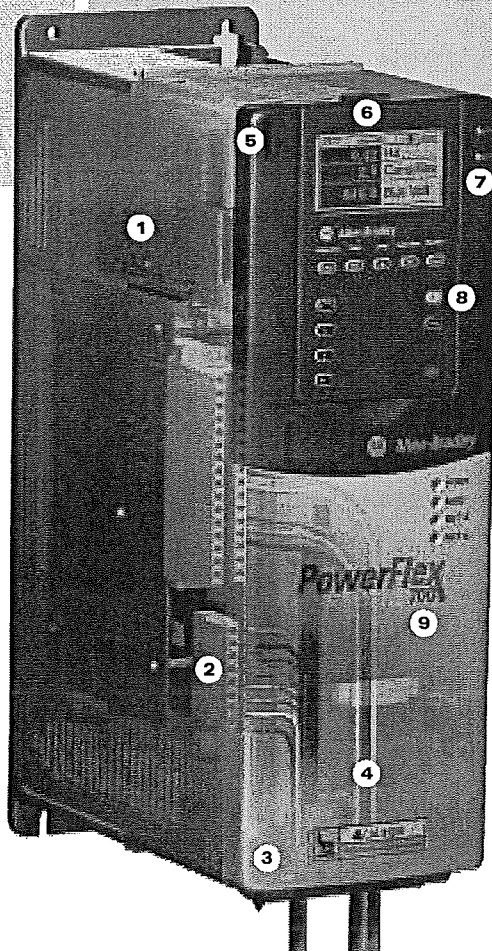
- Accurate Torque Regulation
- Precise Speed Control (open or closed loop)
- Encoder Feedback / Pulse Input (optional)
- Additional Digital and Analog Outputs (1 each)
- High Speed Analog Inputs
- Dedicated Enable Input (selectable)
- Droop Control
- Programming Flexibility (parameter links)

This control which includes three control modes (Vector Control, Sensorless Vector and V/Hz) will easily meet most application needs.

These applications include:

- Fans and Pumps
- Mixers
- Conveyors and Palletizers
- Demanding Extruders
- Web Handling / Tension Control
- Lifts / Hoists
- Centrifuges

force[™]
TECHNOLOGY



1 Two Interchangeable Control Options

Standard Control and Vector Control are the two options available to meet a wide range of applications.

2 Encoder Interface

This Vector Control option provides an interface for a 12-volt pulse encoder.

3 Internal Common Mode Cores

No additional external cores are required to keep common mode noise from disrupting sensitive electronics. Not having to install external cores also eliminates costly labor while saving panel space.

4 Wiring

Clearly marked, conveniently placed terminal blocks provide direct access for power and control wiring. Control blocks are "pull apart" for added convenience.

5 Integral Dynamic Brake

Standard chopper transistor and available drive-mounted (or separate mounting) braking resistor provide cost-effective dynamic brake options.

6 Internal EMC Filter

Meets environmental standards without requiring additional panel space.

7 Multi-Color LED's

Status indications are visible with all covers installed to simplify diagnostics.

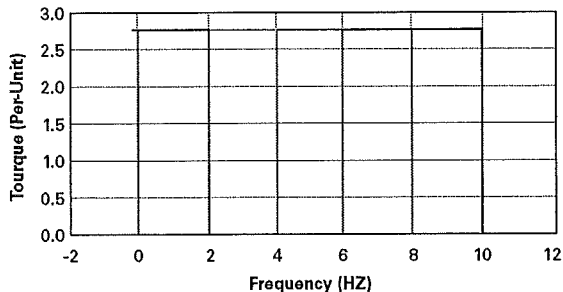
8 Human Interface Module

A flexible LCD Human Interface Module provides exceptional information display and programming ease in a multi-lingual format.

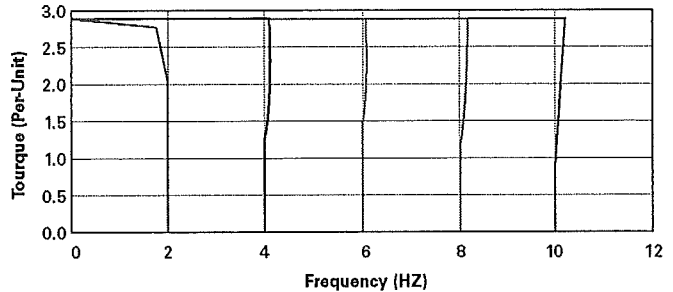
9 Internal Communications

Allows the user to integrate the drive into the manufacturing process. Status indicators for all internal communication options are visible on the cover for easy setup and monitoring of drive communications.

PowerFlex 700 with Vector Control and Encoder



PowerFlex 700 with Vector Control - Encoderless



Outstanding Vector Control

Whether it is operated with encoder feedback or without any feedback, no application is too demanding. Many applications that previously required encoder feedback can be run open loop with performance results exceeding the application's requirements.

Low Noise

The world-class PowerFlex 700 AC drive is designed to meet stringent EMC standards without adding additional filtering. All required filtering to meet CE certification is built into the drive. Not only does this save valuable panel space, but it also eliminates any of the users concerns regarding compliance.

Additionally, PowerFlex 700 drives have internal Common Mode cores on the output leads. This helps reduce common mode noise that can be problematic to other components in the system.

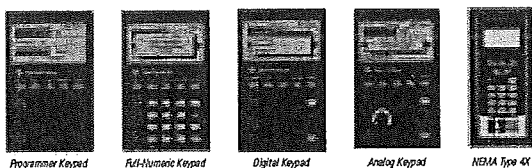
Motor Friendly

The PowerFlex 700 drive is the industry leader in protecting the motor from damage due to reflected wave phenomenon. This phenomenon is the result of voltage spikes that are caused by transistors switching into long motor cables. If these voltages exceed the insulation rating of the motor, failure will occur.

Over the past decade, Rockwell Automation has pioneered the investigation and resolution of this reflected wave phenomenon. This has resulted in proprietary and patented reflected wave reduction algorithms and hardware solutions - both internal to the drive as well as external. No other manufacturer has done more to protect induction motors from premature failures.

Human Interface Modules

The LCD Human Interface Module (HIM) supports full multi-lingual text for grouping, parameter descriptions, programming, troubleshooting and start-up. It also offers keypad options in a variety of combinations that can include digital or analog speed control, programming keys, control keys and a full numeric keypad.



Integrated Software



DriveTools™ 2000 Software Suite

A powerful PC based software suite, for programming, configuring, and troubleshooting.

- DriveExecutive™ – for online/offline configuration and management of drives and drive peripherals.
 - DriveObserver™ – for real-time trending of drive information.*
 - DriveExpert™ – for expert-system based troubleshooting assistance.*
- * check for availability

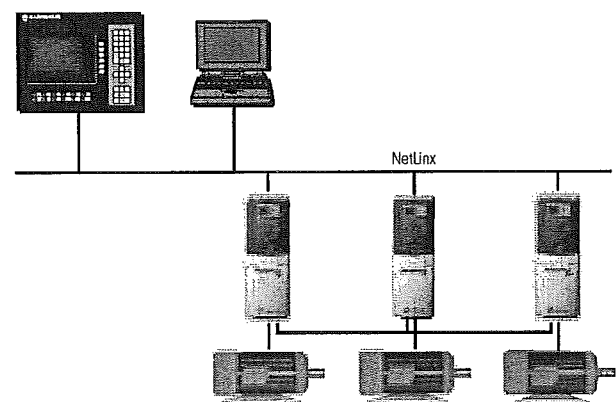


DriveExplorer™ Software

Allen-Bradley DriveExplorer software is an easy-to-use, cost effective online programming tool designed for Microsoft® Windows™ 95/98, Windows NT™ (4.0 or greater) and Windows CE (2.0 or 2.11) operating systems. It provides the user with the means to monitor and configure PowerFlex drive and communication adapter parameters.

Assured Network Connectivity

PowerFlex 700 drives and options are put through an extensive suite of tests to assure compatibility with other Allen-Bradley products from PLCs to PanelViews. Rockwell Automation offers a wide breadth of communication options along with outstanding network reliability unmatched in the industry.



Application Logic

- Process PI loop
- Flying start
- Slip compensation

- DC braking
- Line loss ride through/recovery
- Integral dynamic brake

- DC Bus Regulation
- Reflected wave reduction
- S-Curve Accel & Decel

Operator Interface

- LCD HIM places drive information in a 7-line by 21-character display that supports a variety of languages

Standards

- CSA/cUL
- UL
- C-Tick
- CE
- EMC Low Voltage EN61800-3 EN60204-1 / EN50178

Input Specifications

- 3-Phase Voltage: 200-240V \pm 10%, 380-480V \pm 10%, 500-600V \pm 10%/-5%
- Frequency: 47 to 63 Hz
- Logic Control Ride Through: 0.5 seconds

Output Specifications

- Voltage: Adjustable from 0V to rated motor voltage
- Frequency Range: 0-400Hz
- Instantaneous Over Current Trip: 220-300% based on drive rating

Enclosure and Ambient Operating Temperatures

- Open Type/IP20: 0° - 50° C (32° - 122° F)
- Type 1: 0° - 40° C (32° - 104° F)

Dimensions mm (in) & Ratings

| Output Power | | 200 Volt Class | | | | 240 Volt Class | | | |
|----------------|---------------|------------------|-------------------|-------------------|------------|------------------|-------------------|-------------------|------------|
| | | Output Current | | | Frame Size | Output Current | | | Frame Size |
| KW ND (HD) | HP ND (HD) | Cont. ND (HD) | 1 min. ND (HD) | 3 sec. ND (HD) | | Cont. ND (HD) | 1 min. ND (HD) | 3 sec. ND (HD) | |
| 0.37 (0.37) | 0.5 (0.33) | 2.5 | 2.8 | 3.8 | 0 | 2.2 | 2.4 | 3.3 | 0 |
| 0.75 (0.37) | 1.0 (0.5) | 4.8 | 5.6 | 7.0 | 0 | 4.2 | 4.8 | 6.4 | 0 |
| 1.5 (0.75) | 2.0 (1.0) | 7.8 | 10.4 | 13.8 | 1 | 6.8 | 9.0 | 12.0 | 1 |
| 2.2 (1.5) | 3.0 (2.0) | 11.0 | 12.1 | 17.0 | 1 | 9.6 | 10.8 | 14.4 | 1 |
| 4.0 (2.2) | 5.0 (3.0) | 17.5 | 19.3 | 26.3 | 1 | 15.3 | 16.8 | 23.0 | 1 |
| 5.5 (4.0) | 7.5 (5.0) | 25.3 | 27.8 | 38.0 | 1 | 22.0 | 24.2 | 33.0 | 1 |
| 7.5 (5.5) | 10 (7.5) | 32.2 | 38.0 | 50.6 | 2 | 28.0 | 33.0 | 44.0 | 2 |
| 11 (7.5) | 15 (10) | 48.3 | 53.1 | 72.5 | 3 | 42.0 | 46.2 | 63.0 | 3 |
| 15 (11) | 20 (15) | 56.0 | 64.0 | 88.0 | 3 | 52.0 | 60.0 | 80.0 | 3 |
| NA (NA) | 25 (20) | 78.2 | 86 | 117.3 | 4 | 70 | 78 | 105 | 4 |
| NA (NA) | 30 (25) | 92 | 117.3 | 156.4 | 4 | 80 | 105 | 138 | 4 |
| 30 (30) | 50 (40) | 130 (104) | 143 (156) | 175 (175) | 5 | 130 (104) | 143 (156) | 175 (175) | 5 |
| 30 (30) | 50 (40) | 130 (104) | 143 (156) | 175 (175) | 5 | 130 (104) | 143 (156) | 175 (175) | 5 |

| Dimensions | | | |
|------------|-----------------|----------------|----------------|
| Frame Size | Height mm (in.) | Width mm (in.) | Depth mm (in.) |
| 0 | 336 (13.23) | 110 (4.33) | 200 (7.87) |
| 1 | 336 (13.23) | 135 (5.31) | 200 (7.87) |
| 2 | 342.5 (13.48) | 222 (8.74) | 200 (7.87) |
| 3 | 517.5 (20.37) | 222 (8.74) | 200 (7.87) |
| 4 | 758.9 (29.88) | 219.8 (8.65) | 201.6 (7.94) |
| 5 | 644.5 (25.37) | 308.9 (12.16) | 275.4 (10.84) |
| 6 | 850 (33.46) | 403.9 (15.90) | 275.5 (10.85) |

Notes:
• When using the supplied junction box (100 HP drives Only), add an additional 45.1 mm (1.78 in.) to this dimension.

| Output Power | | 400 Volt Class | | | | 480 Volt Class | | | | Output Power | | 600 Volt Class | | | | |
|---------------|---------------|------------------|-------------------|-------------------|------------|------------------|-------------------|-------------------|------------|---------------|---------------|------------------|-------------------|-------------------|------------|--|
| | | Output Current | | | Frame Size | Output Current | | | Frame Size | | | Output Current | | | Frame Size | |
| kW ND (HD) | HP ND (HD) | Cont. ND (HD) | 1 min. ND (HD) | 3 sec. ND (HD) | | Cont. ND (HD) | 1 min. ND (HD) | 3 sec. ND (HD) | | kW ND (HD) | HP ND (HD) | Cont. ND (HD) | 1 min. ND (HD) | 3 sec. ND (HD) | | |
| 0.37 (0.25) | 0.5 (0.33) | 1.3 | 1.4 | 1.9 | 0 | 1.1 | 1.2 | 1.6 | 0 | | | | | | | |
| 0.75 (0.55) | 1 (0.75) | 2.1 | 2.4 | 3.2 | 0 | 2.1 | 2.4 | 3.2 | 0 | | | | | | | |
| 1.5 (1.1) | 2 (1.5) | 3.5 | 4.5 | 6.0 | 0 | 3.4 | 4.5 | 6.0 | 0 | | | | | | | |
| 2.2 (1.5) | 3 (2) | 5.0 | 5.5 | 7.5 | 0 | 5.0 | 5.5 | 7.5 | 0 | | | | | | | |
| 4 (3) | 5 (3) | 8.7 | 9.9 | 13.2 | 0 | 8.0 | 8.8 | 12.0 | 0 | | | | | | | |
| 5.5 (4) | 7.5 (5) | 11.5 | 13.0 | 17.4 | 0 | 11.0 | 12.1 | 16.5 | 0 | | | | | | | |
| 7.5 (5.5) | 10 (7.5) | 15.4 | 17.2 | 23.1 | 1 | 14.0 | 16.5 | 22.0 | 1 | 9.9 (10.2) | 10 (7.5) | 11 | 13.5 | 18 | | |
| 11 (7.5) | 15 (10) | 22.0 | 24.2 | 33.0 | 1 | 22.0 | 24.2 | 33.0 | 1 | 15.4 (16) | 15 (10) | 17 | 18.7 | 25.5 | | |
| 15 (11) | 20 (15) | 30.0 | 33.0 | 45.0 | 2 | 27.0 | 30.0 | 44.0 | 2 | 20.2 (21) | 20 (15) | 22 | 25.5 | 34 | | |
| 18.5 (15) | 25 (20) | 37.0 | 45.0 | 60.0 | 2 | 34.0 | 40.5 | 54.0 | 2 | 24.8 (25.7) | 25 (20) | 27 | 33 | 44 | | |
| 22 (18.5) | 30 (25) | 43.0 | 55.5 | 74.0 | 3 | 40.0 | 51.0 | 68.0 | 3 | 29.4 (30.3) | 30 (25) | 32 | 40.5 | 54 | | |
| 30 (22) | 40 (30) | 56.0 | 64.5 | 88.0 | 3 | 52.0 | 60.0 | 80.0 | 3 | 37.6 (39.1) | 40 (30) | 41 | 48 | 64 | | |
| 37 (30) | 50 (40) | 72.0 | 84.0 | 112.0 | 3 | 65.0 | 78.0 | 104.0 | 3 | 47.7 (49.6) | 50 (40) | 52 | 61.5 | 82 | | |
| 45 (37) | 60 (50) | 85 (72) | 94 (108) | 128 (144) | 4 | 77 (65) | 85 (98) | 116 (130) | 4 | | | | | | | |
| 55 (45) | 75 (60) | 105 (85) | 116 (128) | 154 (170) | 5 | 96 (77) | 106 (116) | 144 (154) | 5 | | | | | | | |
| 55 (55) | 100 (75) | 125 (96) | 138 (144) | 183 (168) | 5 | 125 (98) | 138 (144) | 183 (168) | 5 | | | | | | | |
| 90 (75) | 125 (100) | 170 (140) | 187 (210) | 255 (280) | 6 | 156 (125) | 172 (188) | 233 (250) | 6 | | | | | | | |
| 110 (90) | 150 (125) | 205 (170) | 220 (255) | 300 (340) | 6 | 180 (156) | 198 (234) | 270 (312) | 6 | | | | | | | |

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