

# **Sprint Electric Motor Controllers**

# **BONDY**

INDUSTRIAL EQUIPMENT SUPPLIER

For ordering and questions call

**(+45) 70 15 14 14**

World class in design | World beating in function | Over 30 years of industrial motor control

## DC MOTOR CONTROL TECHNOLOGY PRODUCT CATALOGUE

# SINGLE PHASE DC DRIVES



**SPRINT ELECTRIC**

Sprint Electric, based in England, was formed in 1987 to design and manufacture industrial motor drives. It has specialised in DC drive technology and has been successful in penetrating global markets. This success has been achieved using well trained distributors and direct sales, offering rapid delivery and prompt technical support. Outlets have been established in a wide spread of overseas markets, creating a loyal and varied customer base.

In 2009 Sprint Electric was very proud to become one of an elite group of companies to win a Queen's Award for Enterprise, the most prestigious business award in the UK. The award was made for continuous achievement in International Trade. Winning this award puts Sprint Electric among the most successful of UK businesses.

# Contents:

5 - 9	Single Phase DC Drives - DIN Rail Mounting
10 - 19	Single Phase DC Drives - Panel Mounting
20	Ancillary Products
21	Enclosed DC Drives
22	200XLV
23	400/800/1200XLV
24 - 28	Parts Guide

# DC Motor Control Technology:

Increase your productivity, save energy and reduce downtime.

With an extensive range of DC motor control products, you will find an answer to your industrial automation questions.

## Your Industry - Our Experience.

We've used our renowned industrial automation experience to design a range of DC motor controllers which provide you with solutions to the most demanding motor control applications.

It's now easier than ever to design new DC motor control systems or improve the performance of an existing application by retrofitting with the latest DC technology.

## Save with Compact Designs and Ex-Stock Delivery.

You can save cabinet space in new control systems, or easily upgrade an existing DC motor application. Compact design comes as standard.

Reduce your downtime by relying on our ex-stock delivery. With a global network of partners and all products built for stock, you can quickly get your business moving again.

## Three Phase Products.

We also manufacture three phase DC motor controllers. Please see our Three Phase Product Catalogue for details.



# DIN RAIL MOUNTING OPTIONS

340  
680  
1220

Page 05



340i  
680i  
1220i

Page 06-07



340XRi  
680XRi  
1220XRi

Page 08-09



PRODUCT NAME

# 340

340 0.55kW / 0.75HP  
680 0.75kW / 1.0HP  
1220 1.8kW / 2.0HP

AT A GLANCE  
340, 680, 1220 series

## DESCRIPTION

Ultra compact DC motor control. Non isolated.

Make upgrading your existing control panel easier. Save space in new DC single direction motor control systems. The ultra compact DIN rail mounting package lets you install quickly.

Three options are available for controlling DC motors up to 12.2 Amps. You can use this versatile range of non-isolated controllers for

permanent magnet, shunt wound motors or universal motors.

To make your installation quick and simple, all 340, 680, and 1220 series controllers have easy to access drive adjustments, plug-on screw terminals and a small footprint from just 35mm x 105mm.



**340 controller for DC motors rated up to 3.4 Amps (0.55KW/0.75HP)**

**680 controller for DC motors rated up to 6.8 Amps (0.75KW/1HP)**

**1220 controller for DC motors rated up to 12.2 Amps (1.8KW/2HP)**

**DIN rail mounting**

**Easy to access drive adjustments**

**Plug-on screw terminals**

**Small footprint**

## Technical highlights:

**Switch selectable Tach or Armature voltage feedback**

**Adjustable IR compensation for improved AVF speed regulation**

**Selectable dual voltage AC supply**

**Aux speed trim input available in AVF mode**

## User adjustable:

**Ramp**

**Max motor speed**

**Min motor speed**

**IR comp**

**Max motor current**

## MODEL COMPARISON

MODEL	AC SUPPLY RANGE	TYPICAL ARMATURE VOLTAGE	MAX CONTINUOUS ARMATURE CURRENT	NOMINAL POWER
340	100 to 130v	90v	3.4A	0.25kW (0.35HP)
	200 to 264v	180v	3.4A	0.55kW (0.75HP)
680	100 to 130v	90v	6.8A	0.55kW (0.75HP)
	200 to 264v	180v	6.8A	0.75kW (1.0HP)
1220	100 to 130v	90v	12.2A	0.75kW (1.0HP)
	200 to 264v	180v	12.2A	1.8kW (2.0HP)

## DIMENSIONS 340

<b>H</b>	105 mm
<b>W</b>	35 mm
<b>D</b>	120 mm

## 680 / 1220

<b>H</b>	105 mm
<b>W</b>	45 mm
<b>D</b>	120 mm

See parts list at back for low voltage supply options and fuses.  
Refer to features chart for further details or download product manual for full specification.

## AT A GLANCE

340i, 680i, 1220i series

**Fully isolated control electronics**

**340i controller for DC motors rated up to 3.4 Amps (0.55KW/0.75HP)**

**680i controller for DC motors rated up to 6.8 Amps (0.75KW/1HP)**

**1220i controller for DC motors rated up to 12.2 Amps (1.8KW/2HP)**

**DIN rail mounting**

**Easy to access drive adjustments**

**Plug-on screw terminals**

**Small footprint**

**UL, CuL, CE approved**

PRODUCT NAME

# 340i

**340i** 0.55kW / 0.75HP

**680i** 0.75kW / 1.0HP

**1220i** 1.8kW / 2.0HP

### DESCRIPTION

## Fully isolated DC motor control with compact design

Improving or upgrading your single direction DC motor control system is easier with this series of fully-isolated controllers. The ultra compact DIN rail mounting package lets you quickly integrate the 340i, 680i and 1220i series with your existing motor control equipment.

Three options are available for controlling DC motors up to 12.2 Amps. You can use this

versatile series of fully-isolated controllers for permanent magnet or shunt wound motors.

To make your installation quick and simple, all 340i, 680i and 1220i series controllers have easy to access drive adjustments, plug-on screw terminals and a small footprint from just 60mm x 105mm.



See parts list at back for low voltage supply options and fuses.

340i

340i 0.55kW / 0.75HP

680i 0.75kW / 1.0HP

1220i 1.8kW / 2.0HP

## Technical highlights:

340i, 680i, 1220i series

Switch selectable Tach or Armature voltage feedback

Adjustable IR compensation for improved AVF

Speed or torque control

Selectable dual voltage AC supply

Aux speed input

150% overload with stall protection

## User adjustable:

Max motor speed

Min motor speed

Up ramp

Down ramp

Stability

Imax

IR comp

AVF/Tach switch

Speed range switch

AC voltage selector

Signal level comparator

## Signal terminals:

+10V ref

Min speed

Ramped input +

Output +/-

Common

Input +/-

Pushbutton +

Pushbutton -

Run input

Common

Tach input

Level output

Level input

Overload output

Trip output

Ramp output

Demand output

Speed output

Current output

Speed input

Torque input

## MODEL COMPARISON

MODEL	AC SUPPLY RANGE	TYPICAL ARMATURE VOLTAGE	MAX CONTINUOUS ARMATURE CURRENT	NOMINAL POWER
340i	100 to 130v	90v	3.4A	0.25kW (0.35HP)
	200 to 264v	180v	3.4A	0.55kW (0.75HP)
680i	100 to 130v	90v	6.8A	0.55kW (0.75HP)
	200 to 264v	180v	6.8A	0.75kW (1.0HP)
1220i	100 to 130v	90v	12.2A	0.75kW (1.0HP)
	200 to 264v	180v	12.2A	1.8kW (2.0HP)

## DIMENSIONS 340i

<b>H</b>	105 mm
<b>W</b>	60 mm
<b>D</b>	120 mm

## 680i / 1220i

<b>H</b>	105 mm
<b>W</b>	70 mm
<b>D</b>	120 mm

Refer to features chart for further details or download product manual for full specification.



## AT A GLANCE

340XRi, 680XRi,  
1220XRi series

**4 Quadrant regenerative  
DC motor controller**

**Fully isolated control  
electronics**

**340XRi controller for DC  
motors rated up to 3.4 Amps  
(0.55KW/0.75HP)**

**680XRi controller for DC  
motors rated up to 6.8 Amps  
(0.75KW/1HP)**

**1220XRi controller for DC  
motors rated up to 12.2 Amps  
(1.8KW/2HP)**

**DIN rail mounting**

**Easy to access drive  
adjustments**

**Plug-on screw terminals**

**Small footprint**

**UL, CuL, CE approved**

PRODUCT NAME

# 340XRi

340XRi 0.55kW / 0.75HP

680XRi 0.75kW / 1.0HP

1220XRi 1.8kW / 2.0HP

### DESCRIPTION

Regenerative DC motor control with compact Design. Fully isolated control electronics.

This 4 Quadrant regenerative DC motor controller gives a fast controlled response over the full forward/reverse speed range for motoring and braking.

Improve your energy efficiency by regenerating energy into the mains supply whilst under braking. The energy invested accelerating the load mass is recovered when braking. There is no dissipation of energy in wasteful braking resistors.

The compact DIN rail mounting package uses less panel space so you can save space as well as energy.

Three options are available for controlling DC motors up to 12.2 Amps. You can use this versatile series of fully-isolated controllers for permanent magnet or shunt wound motors.

To make your installation quick and simple, all 340XRi, 680XRi and 1220XRi series controllers have easy to access drive adjustments, plug-on screw terminals and a small footprint from just 60mm x 105mm.



See parts list at back for low voltage supply options and fuses.

340XRi

340XRi 0.55kW / 0.75HP

680XRi 0.75kW / 1.0HP

1220XRi 1.8kW / 2.0HP

## Technical highlights:

Switch selectable Tach or Armature voltage feedback  
 Adjustable IR compensation for improved AVF  
 Speed or torque control  
 Selectable dual voltage AC supply  
 Aux speed input  
 Pushbutton reversing function  
 150% overload with stall protection  
 Built-in current limit protection  
 Full 4 Quadrant operation

## User adjustable:

Max motor speed  
 Min motor speed  
 Up ramp  
 Down ramp  
 Stability  
 I<sub>max</sub>  
 IR comp  
 AVF/Tach switch  
 Speed range switch  
 AC voltage selector  
 Signal level comparator

## Signal terminals:

+10V ref	Level output
Min speed	Level input
Ramped input +	Overload output
Output +/-	Trip output
Common	Ramp output
Input +/-	Demand output
Pushbutton +	Speed output
Pushbutton -	Current output
Run input	+ Speed input
Common	Torque input
Tach input	

## MODEL COMPARISON

MODEL	AC SUPPLY RANGE	TYPICAL ARMATURE VOLTAGE	MAX CONTINUOUS ARMATURE CURRENT	NOMINAL POWER
340XRi	100 to 130v	90v	3.4A	0.25kW (0.35HP)
	200 to 264v	180v	3.4A	0.55kW (0.75HP)
680XRi	100 to 130v	90v	6.8A	0.55kW (0.75HP)
	200 to 264v	180v	6.8A	0.75kW (1.0HP)
1220XRi	100 to 130v	90v	12.2A	0.75kW (1.0HP)
	200 to 264v	180v	12.2A	1.8kW (2.0HP)

## DIMENSIONS 340XRi

<b>H</b>	105 mm
<b>W</b>	60 mm
<b>D</b>	120 mm

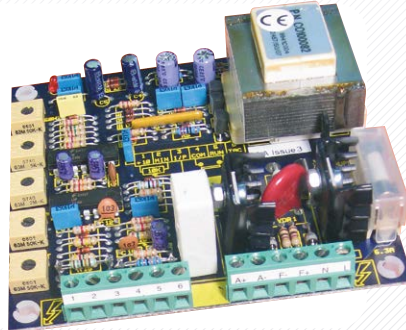
## 680XRi / 1220XRi

<b>H</b>	105 mm
<b>W</b>	70 mm
<b>D</b>	120 mm

# PANEL MOUNTING OPTIONS

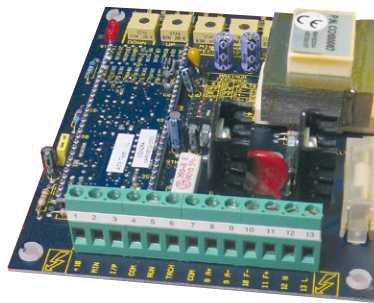
370

Page 11



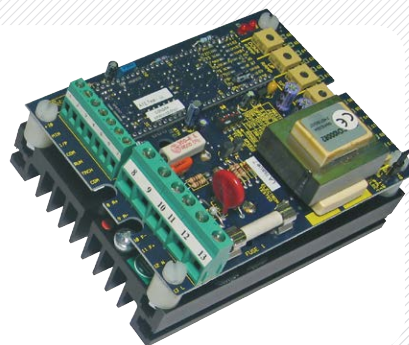
400  
400i

Page 12-13



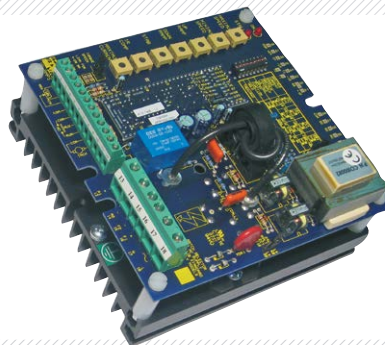
800  
1200

Page 14-15



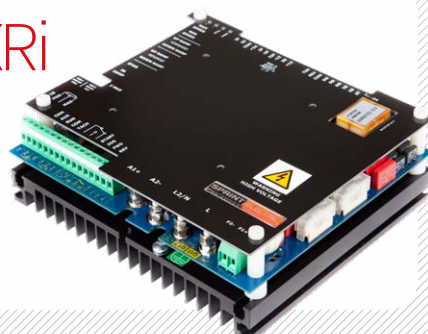
1600i  
3200i

Page 16-17



3600XRi

Page 18-19



PRODUCT NAME

# 370

Non Isolated

0.55kW / 0.75HP

## 370 KEY FEATURES

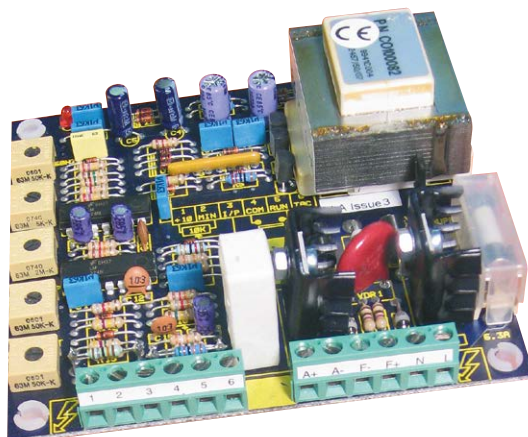
### DESCRIPTION

Small footprint speed controller for permanent magnet or shunt wound motors up to 0.55kW.

Easily adjustable parameters include minimum and maximum motor speed, armature current, acceleration rate and IR compensation.

AC supply input selection for international mains voltage compatibility.

This unit is non-isolated.



For DC motors rated up to 3.7 Amps

Integral AC supply fuse

Selectable dual international voltage supply 110/240v AC 50/60Hz

Adjustable current overload protection

Tachogenerator or armature voltage speed feedback

Adjustable acceleration rate between 1 and 20 seconds

Remote stop/start signal input facility

Adjustable IR compensation for improved AVF speed regulation

Sophisticated dual loop control

Infinitely variable speed adjustment via remote potentiometer

Electronic soft start

Drive run input

Suitable for permanent magnet, shunt wound or universal motors

Compact footprint

### SPECIFICATION

Speed range: 0 - 100%

Speed regulator: 0.1% tachogenerator  
2% armature voltage feedback

Armature: 3.7 Amps continuous 200v max

Field: 0.5 Amps at 0.9 x AC supply voltage

Speed loop: Full P + I armature voltage feedback

Current loop: Full P + I current shunt feedback

Customer presets: Max speed, min speed, up ramp, max armature current, IR comp. Adjustment non interactive ensuring ease of adjustment.

### MODEL COMPARISON

MODEL	AC SUPPLY RANGE	TYPICAL ARMATURE VOLTAGE	MAX CONTINUOUS ARMATURE CURRENT	NOMINAL POWER
370	90 to 120v	90v	3.7A	0.25kW (0.38HP)
	200 to 264v	180v	3.7A	0.55kW (0.75HP)

### DIMENSIONS

H	100 mm
W	100 mm
D	42 mm

See parts list at back for low voltage supply options and fuses.  
Refer to features chart for further details or download product manual for full specification.



# 400/400i KEY FEATURES

For DC motors rated  
up to 4 Amps

Single Quadrant operation

Extra 50% peak torque  
for rapid acceleration or  
shock loads

Torque control input for basic  
winding or tension control,  
with overspeed limiting

Ultra stable potentiometer  
reference for optimum long  
term speed and torque  
stability

Compact size

PRODUCT NAME

# 400

Non Isolated

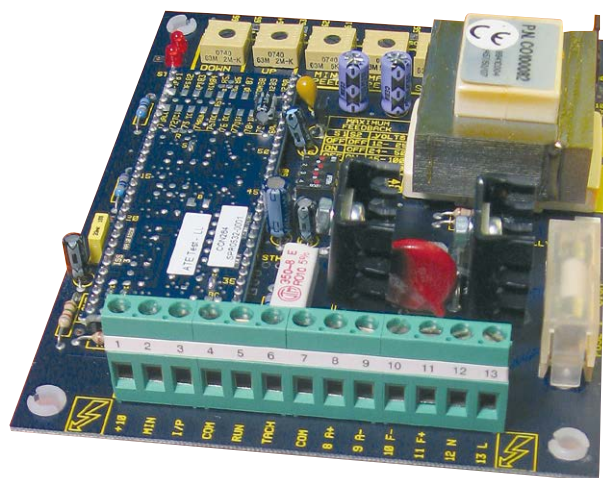
0.55kW / 0.75HP

DESCRIPTION 400 / 400i

For motors rated up to 4 Amps these are the first  
of an extensive range of models featuring the  
Sprint micro analog processor.

The micro analog processor provides many  
user benefits normally only seen in expensive  
"high end" products. This philosophy  
allows for cost saving solutions by  
meeting the users exact requirements  
and enhancing process performance.

As with all Sprint Electric products quality  
and reliability is a paramount part of the  
design process.



400



400i

International dual  
voltage supply compatibility

Switch selectable Tach or  
Armature voltage feedback

Integral AC supply fuse

MODEL COMPARISON

MODEL	AC SUPPLY RANGE	TYPICAL ARMATURE VOLTAGE	MAX CONTINUOUS ARMATURE CURRENT	NOMINAL POWER
400	100 to 130v	90v	4A	0.25kW (0.38HP)
	200 to 264v	180v	4A	0.55kW (0.75HP)
400i	100 to 130v	90v	4A	0.25kW (0.38HP)
	200 to 264v	180v	4A	0.55kW (0.75HP)

DIMENSIONS 400

H 130 mm

W 100 mm

D 40 mm

400i

H 160 mm

W 100 mm

D 50 mm

See parts list at back for low voltage supply options and fuses



PRODUCT NAME

# 400i

Fully Isolated

0.55kW / 0.75HP

## 400/400i KEY FEATURES

### SPECIFICATION 400 / 400i

Control action: Dual Loop Proportional + Integral

Speed regulation: 0.1% Tachogenerator, 2% Armature Voltage

Armature: 4 Amps, continuous 200v max

Overload protection: Extra 50% peak torque for 30 secs prior to stall trip operation

Field output: 0.5 Amps at 0.9 x AC supply voltage

Customer presets:

- Max speed: 12v-200v full scale feedback
- Min speed 0-30% of max speed
- Up ramp (Acceleration) 1-30 secs
- Down ramp (Deceleration) 1-30 secs
- Stability
- IR comp
- Max Armature current 0-100%

Switches:

- Feedback voltage - 4 ranges
- Torque or speed mode
- Tachogenerator or armature voltage feedback

Inputs:

- Speed
- Torque
- Auxiliary speed input
- Auxiliary inverted speed input for trims etc.
- Run command
- Tachogenerator
- 4-20mA or 0-20mA
- Pushbutton stop/start input

Outputs:

- Speed
- Current
- Setpoint ramp
- Total demand
- +/- 12v/-24v rails
- Zero Speed relay driver
- Stall relay driver

400

NON ISOLATED control electronics for single shaft applications

400i

FULLY ISOLATED control electronics allows interfacing with other systems

Output signals for easy display of motor speed and load

Switch selectable feedback calibration - no component changes

Precision tach rectifier

Zero speed signal output

Motor overload output

Remote stop/start input

User adjustable:

- Acceleration
- Deceleration
- Max motor speed
- Min motor speed
- Max motor current
- Stability
- IR comp

Adjustable IR compensation for improved AVF speed regulation

Adjustable stability control for optimum motor response

Easily interfaced with armature reversing module

## 800/1200 KEY FEATURES

**800 controller for DC motors  
rated up to 8 Amps**

**1200 controller for DC motors  
rated up to 12 Amps**

**International dual  
voltage supply compatibility**

**Single Quadrant operation**

**Extra 50% peak torque  
for rapid acceleration or  
shock loads**

**User adjustable:**

- Acceleration
- Deceleration
- Max motor speed
- Min motor speed
- IR comp
- Stability
- Max motor current

**Torque control input for basic  
winding or tension control,  
with overspeed limiting**

**Many additional input  
and output signals**

**Switch selectable Tach  
or armature voltage feedback**

**4-20mA and 0-20mA loop  
input option as standard**

**Easily interfaced with  
armature reversing module**

PRODUCT NAME

# 800 / 1200

Non Isolated

800  
1.1kW / 1.5HP

1200  
1.8kW / 2.0HP

### DESCRIPTION

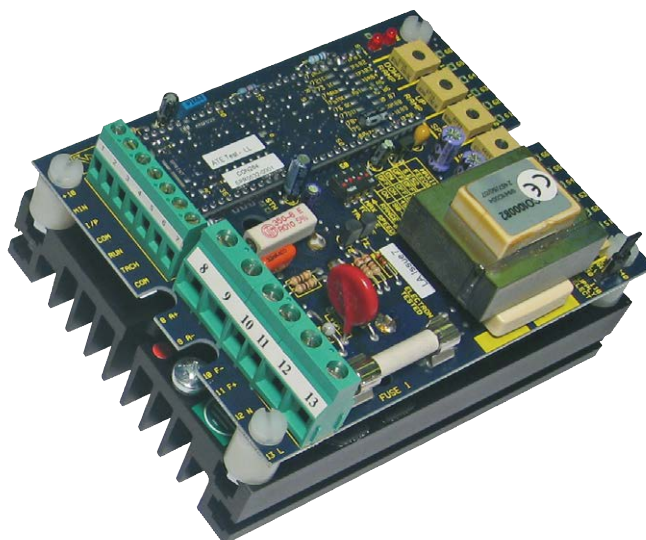
Two models available in 8 Amp and 12 Amp versions allow an easy upgrade path for those applications requiring extra power.

Both models feature the Sprint Electric micro analog processor module providing all the extra features normally associated with expensive "high end" products.

Compact design results in savings in panel space and hence costs.

Robust screw terminals reflect the overall quality and reliability, with overall performance meeting even the most arduous of applications.

Careful design with switch selection of key functions make the 800 and 1200 controllers quick and easy to install.



### MODEL COMPARISON

MODEL	AC SUPPLY RANGE	TYPICAL ARMATURE VOLTAGE	MAX CONTINUOUS ARMATURE CURRENT	NOMINAL POWER
800	100 to 130v	90v	8A	0.55kW (0.75HP)
	200 to 264v	180v	8A	1.1kW (1.5HP)
1200	100 to 130v	90v	12A	0.9kW (1.0HP)
	200 to 264v	180v	12A	2.0kW (2.0HP)

### DIMENSIONS

<b>H</b>	130 mm
<b>W</b>	100 mm
<b>D</b>	70 mm

See parts list at back for low voltage supply options and fuses.

PRODUCT NAME

# 800 / 1200

Non Isolated

800  
1.1kW / 1.5HP  
1200  
1.8kW / 2.0HP

## 800/1200 KEY FEATURES

### SPECIFICATION

Control action:	Dual Loop Proportional + Integral
Speed regulation:	0.1% Tachogenerator 2% Armature Voltage
Armature:	800, 8 Amps 1200, 12 Amps continuous 200v max
Overload protection:	Extra 50% peak torque for 30 secs prior to stall trip operation
Field output:	0.5 Amps at 0.9 x AC supply voltage
Customer presets:	Max speed: 12v-200v full scale feedback Min speed 0-30% of max speed Up ramp (Acceleration) 1-30 secs Down ramp (Deceleration) 1-30 secs Stability IR comp Max Armature current 0-100%
Switches:	Feedback voltage - 4 ranges Torque or speed mode Tachogenerator or Armature Voltage feedback
Inputs:	Speed Torque Auxiliary speed input Auxiliary inverted speed input for trims etc. Run command Tachogenerator 4-20mA or 0-20mA Pushbutton stop/start input
Outputs:	Speed Current Setpoint ramp +/- 12v/-24v rails Zero Speed relay driver Stall relay driver

**Adjustable Stability control**  
for optimum motor response

**Integral AC supply fuse**

**Ultra stable potentiometer**  
reference for optimum  
long term speed and torque  
stability

**Output signals for easy**  
display of motor speed  
and load

**Zero reference interlock**  
facility

**Adjustable IR compensation**  
for improved AVF speed  
regulation

**Switch selectable**  
feedback calibration -  
no component changes

**Precision tach rectifier**

**Zero speed signal output**

**Motor overload output**

**Identical footprint for**  
8 or 12 Amp output

**Remote stop/start input**

**Features Sprint Electric**  
micro analog processor

**Pushbutton input for**  
electronic control of motor  
stop/start

**Compact size, saves panel**  
space and makes for easy  
retrofitting

## 1600i/3200i KEY FEATURES

For DC motors up to 16 Amps

Fully isolated control electronics

On-board relay indicates zero speed and/or motor overload

Features Sprint Electric micro analog processor

Numerous inputs and outputs for complex system applications

PRODUCT NAME

# 1600i/3200i

Fully Isolated

1600i

2.2kW

3200i

2.2kW to 11.0kW

### DESCRIPTION

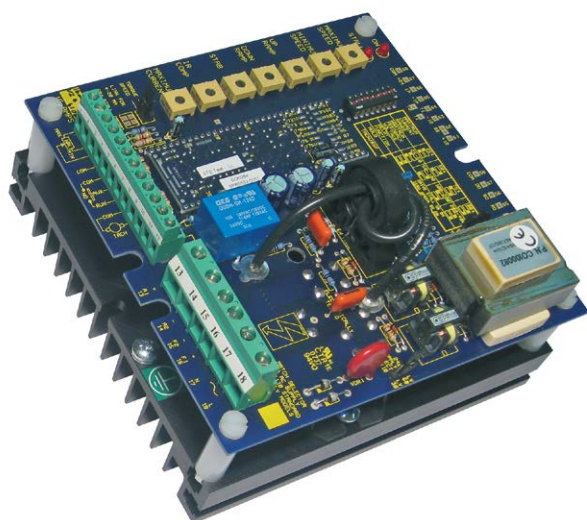
Designed to give the customer the choice.

The 1600i includes an extensive specification with quality, value for money and reliability assured.

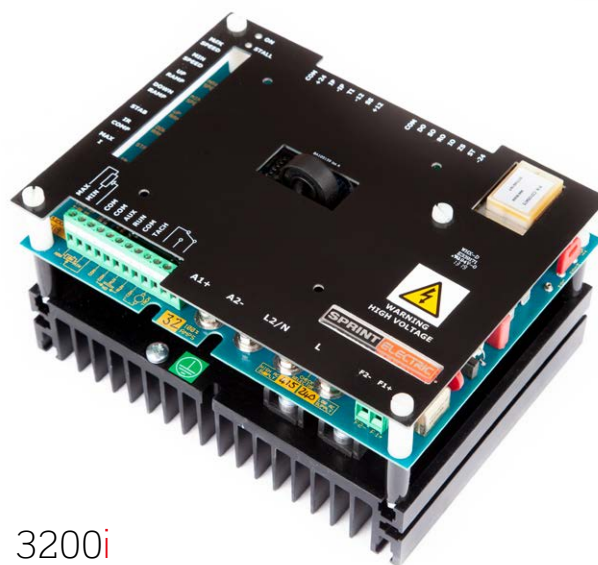
At a full 2.2kW output capability this compact design is easily integrated and provides unparalleled performance.

For even higher powers and AC supply voltages. The 3200i is available up to 48 Amps.

Now with additional signal terminals to the top edge.



1600i



3200i

Extra 50% peak torque for rapid acceleration or shock loads

User adjustable:

- Acceleration
- Deceleration
- Max motor speed
- Min motor speed
- IR comp
- Stability
- Max motor current

Switch selectable power up inhibit

Now with additional signal terminals to the top edge

### MODEL COMPARISON

MODEL	AC SUPPLY RANGE	TYPICAL ARMATURE VOLTAGE	MAX CONTINUOUS ARMATURE CURRENT	NOMINAL POWER
1600i	100 to 130v	90v	16A	1.1kW (1.5HP)
	200 to 264v	180v	16A	2.2kW (3HP)
3200i/8	200 to 264v	180v	8A	1.1kW (1.5HP)
	360 to 440v	320v	8A	2.2kW (3HP)
3200i/16	200 to 264v	180v	16A	2.2kW (3HP)
	360 to 440v	320v	16A	4.0kW (5.3HP)
3200i/32	200 to 264v	180v	32A	4.5kW (6.0HP)
	360 to 440v	320v	32A	7.5kW (10.0HP)
3200i/48	200 to 264v	180v	48A	7.0kW (10.0HP)
	360 to 440v	320v	48A	11.0kW (14.6HP)

### DIMENSIONS 1600i

<b>H</b>	150 mm
<b>W</b>	150 mm
<b>D</b>	90 mm

### 3200i

<b>H</b>	150 mm
<b>W</b>	200 mm
<b>D</b>	110 mm

See parts list at back for low voltage supply options and fuses.

PRODUCT NAME

# 1600i/3200i

Fully Isolated

1600i

2.2kW

3200i

2.2kW to 11.0kW

## 1600i/3200i KEY FEATURES

### SPECIFICATION

Control action:	Dual loop Proportional + Integral
Speed regulation:	0.1% Tachogenerator 2% Armature voltage feedback
Armature:	1600i, 16 Amps continuous 3200i, 32 Amps at 0.9 x AC supply voltage
Overload protection:	Extra 50% peak torque for 30 secs prior to stall trip operation
Field output:	1 Amp at 0.9 x AC supply voltage
Customer presets:	Max speed: 25v - 400v full scale feedback Min speed 0 to 30% of max speed Up ramp (Acceleration) 1-30 secs Down ramp (Deceleration) 1-30 secs Stability IR comp Max armature current 0-100%
Switches:	Maximum current - 4 ranges Feedback voltage - 4 ranges Relay function - zero speed and/or stall Power-up Inhibit Tach/AVF selection
Inputs:	Speed Torque 4-20mA and 0-20mA Auxiliary speed inputs +ve and -ve Drive Run Tachogenerator Pushbutton stop/start
Outputs:	Speed Current Setpoint Ramp Total Demand Zero speed and stall relay driver +/- 12v, +/- 24v rails
Relay:	Volt free change over contacts for zero speed and/or stall
Other features:	Overspeed limit Over torque limit Inverse time overload 50% stall threshold Phase angle clamp Precision Reference Precision tach rectifier

Refer to features chart for further details or download product manual for full specification.

Switch selectable feedback calibration - no component changes

Switched maximum current ranges for easy matching to motor current rating

Switch selectable drive relay functions

Ultra stable potentiometer reference for optimum long term speed and torque stability

Adjustable Stability control for optimum motor response

Switch selectable Tach or armature voltage feedback

Torque control input for basic winding or tension control, with overspeed limiting

International dual voltage supply compatibility

4-20mA and 0-20mA loop input option as standard

Output signals for easy display of motor speed and load

Compact size, saves panel space and makes for easy retrofitting

Zero reference interlock facility

Single Quadrant operation

Adjustable IR compensation for improved AVF speed regulation

Precision tach rectifier



## 3600XRi KEY FEATURES

**Four Quadrant forward, reverse and braking operation**

**Five current outputs**

- 4 Amp
- 8 Amp
- 16 Amp
- 32 Amp
- 36 Amp

**Extra 50% peak torque for rapid acceleration or shock load**

**Fully regenerative - no braking energy dissipated as waste heat**

**Isolated control electronics for easy connection to other drives/equipment**

**Extremely compact size, saves panel space and makes for easy retrofitting**

**User adjustable presets for:**

- Forward acceleration
- Reverse acceleration
- Forward deceleration
- Reverse deceleration
- Max motor speed
- Min motor speed
- Motor current limit
- Brake current limit
- Forward current limit
- Reverse current limit
- Positive current limit
- Negative current limit
- IR comp
- Stability

**4Q torque input**

**2Q torque input**

**Regen to zero input**

**Now with additional signal terminals to the top edge**

PRODUCT NAME

# 3600XRi

Fully Isolated

0.55kw to 9.5kw

### DESCRIPTION

A four quadrant regenerative drive providing motoring and braking in both directions of rotation.

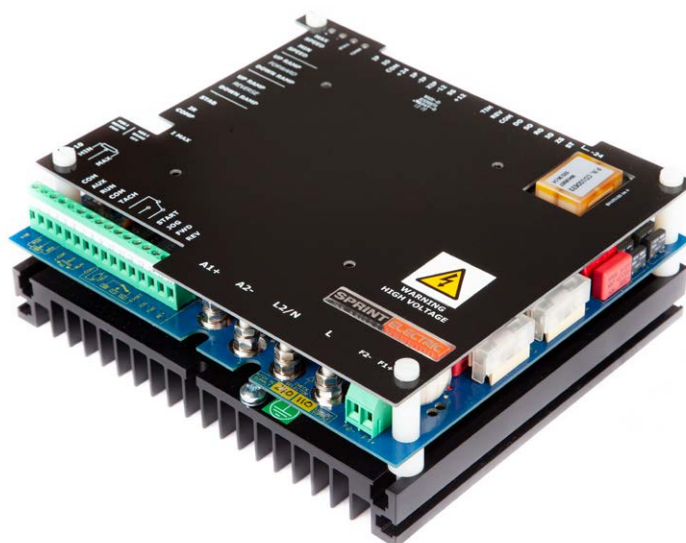
The regenerative ability is fully rated on a continuous basis with braking energy efficiently returned to the AC supply.

This feature sets the 3600XRi apart from AC inverter or vector drives where wasted energy is dissipated in costly resistor banks.

The 3600XRi is designed to meet the most demanding of process line applications where both loads and speeds vary in each direction.

Quality and reliability are assured by the use of advanced manufacturing and testing technologies.

Now with additional signal terminals to the top edge.



### MODEL COMPARISON

MODEL	AC SUPPLY RANGE	TYPICAL ARMATURE VOLTAGE	MAX CONTINUOUS ARMATURE CURRENT	NOMINAL POWER
3600XRi/4/LN	100 to 130v 200 to 264v	90v 180v	4A	0.25kW (0.4HP) 0.55kW (0.75HP)
3600XRi/8/LN			8A	0.55kW (0.75HP) 1.1kW (1.5HP)
3600XRi/16/LN			16A	1.1kW (1.5HP) 2.2kW (3.0HP)
3600XRi/16/LL	200 to 264v 360 to 440v	180v 320v	16A	2.2kW (3.0HP) 4.0kW (5.3HP)
3600XRi/32/LL			32A	5.0kW (6.6HP) 7.5kW (10HP)
3600XRi/36/LL			36A	5.5kW (7HP) 9.5kW (12.6HP)

### DIMENSIONS

<b>H</b>	175 mm
<b>W</b>	200 mm
<b>D</b>	70 mm 36 Amp model 90 mm

See parts list at back for low voltage supply options and fuses.

# 3600XRi

Fully Isolated

0.55kw to 9.5kw

## 3600XRi KEY FEATURES

## SPECIFICATION

Control action:	Dual loop Proportional and Integral
Speed regulation:	0.1% Tachogenerator 2% Armature voltage feedback
Armature:	Six models: 4, 8, 16, 32 and 36 Amps continuous
Overload protection:	Extra 50% peak torque for 30 secs prior to stall trip operation
Field output:	2 Amps at 0.9 x AC supply voltage
Customer presets:	Max speed: 25v - 400v full Scale feedback Min speed 0 to 30% of max speed Up ramp (Acceleration) 1-30 secs Down ramp (Deceleration) 1-30 secs Independent up/down ramp adjustment for forward and reverse direction Stability IR comp Multi option current limit
Switches:	Maximum current - 4 ranges Feedback voltage - 4 ranges Relay function - zero speed and/or stall and/or overload Tach/AVF selection
Inputs:	Speed 2Q/4Q Torque Auxiliary speed inputs +ve and -ve 4-20mA and 0-20mA Drive run Tachogenerator Fast quench Pushbutton stop/start, fwd/rev Regen to zero Jog Direct speed
Outputs:	Speed Current (bipolar & rectified) Setpoint Ramp Total Demand Zero speed and stall relay driver Overload timer relay driver +/-12v, +/- 24v rails
Relay:	Volt free change over contacts for zero speed or stall
Other features:	Overspeed limit Over torque limit Inverse time overload 50% stall threshold Precision Reference Dual setpoint

Refer to features chart for further details or download product manual for full specification.

Features Sprint Electric micro analog processor

Direct pushbutton inputs for control of stop/start, direction and jog functions

Includes all the features of 1600i and 3200i

Relay output indicates motor shaft reversal

Relay output indicates motor load &gt; 105%

Dual setpoint facility for alternate speed e.g. run and crawl toggled speed reference ideal for easy end of travel reversal

Switch selectable Tach or Armature voltage feedback

Switched maximum current ranges for easy matching to motor current rating

Ultra stable potentiometer reference for optimum long term speed and torque stability

International dual voltage supply compatibility

On-board relay indicates zero speed and/or motor overload

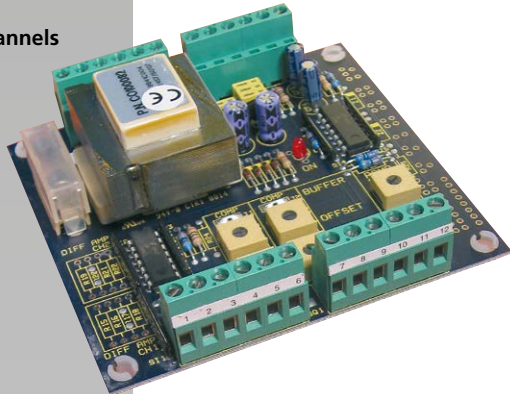
# BUFFER

Versatile analog system signal blocks

Ideal for systems applications

Five independent channels

Mains powered



## BUFFER CARD

The buffer card is a compact self-powered interface product for signal processing and amplification. The card has 5 independent channels with a large variety of uses, e.g multi setpoint systems, closed loop control, field weakening processor, signal buffering.

**CHANNELS 1 AND 2.** High accuracy differential amplifier with adjustable gain. Uses include inverting, non-inverting, amplification, attenuation, buffering, rectifying, filtering, load cell amplifier etc.

**CHANNELS 3 AND 4.** High accuracy summing amplifier

with variable gain, voltage input and zero offset adjustment. Uses include summing, scaling, amplification, subtraction, clamping, comparator, integrator, buffering etc.

**CHANNEL 5.** Linear ramp with variable ramp rate and ramp reset input.

All channels are short circuit protected and can drive upto 10, 10K pots with + or - signals. Also included is a precision power supply with +/-12v and +/-24v outputs, the unit can be powered from 110/240v AC supplies.

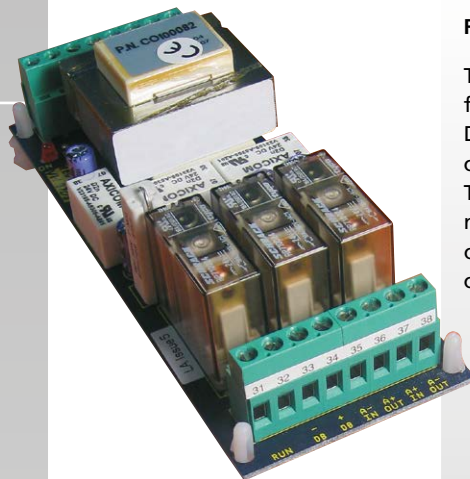
# REV UNIT

Designed for use with Sprint 400, 800 and 1200 drives

Robust design for safe reversal from any speed

No additional contactors or relays required

Suitable for any armature voltage up to 180v DC



## REVERSING UNIT

This compact unit allows for the safe reversal of DC Motors with armature currents up to 12 Amps. The card possesses all the necessary logic and unlike other available units, all the contactors for reversing and

dynamic braking are integral to the unit.

For currents higher than 12 Amps the unit is easily interface with external power contactors.

# DPM

Available in two versions 3 1/2 and 4 1/2 digit

Specifically designed for use with drives

Quick and easy to calibrate in any engineering units

Mains powered

Simple slide-in legend facility for process variable



## DIGITAL PANEL METERS

A range of digital panel meters contained within a DIN size case.

**DPM35S.** Three and a half digit panel meter. Features include slide in legend, plug-in screw terminals, display hold, 110/240v AC supply. Display is 14mm red LED with range +/- 9999 and selectable decimal point. The unit is scaleable in engineering units via customer accessible multitrans preset. Any full

scale voltage from +/-5v to +/-200v can be adjusted to read any display number. Customer accessible offset control. Full ratio facility with automatic "out of limits", 4-20mA loop input facility. Range adjustment to 100mV and an AC voltage measurement input facility.

**DPM35SD.** A four and a half digit version of the DPM35S with display reading to +/-19990. All other features included.

PRODUCT NAME

# ENCLOSURES

Non Isolated

0.37kw to 1.8kw

## SPECIFICATION

### DESCRIPTION

Seven drive models available in high quality aluminium enclosures.

From 0.37kw to 1.8kw in either forward (E) only or reversing (ER) variants. Features include IP40 protection, Mains on/off switch, dual voltage supply, fully fused, zero speed interlocked reversing, dynamic braking, set speed potentiometer with graduated scale.

These enclosures contain the Sprint Electric 370, 400, 800 and 1200 controllers already renowned for their extensive specification and versatility.

### Controls:

- On/Off AC supply rocker switch
- Set speed potentiometer
- AC supply fuse
- 400ER, 800ER, 1200ER: toggle switch for forward, stop and reverse



370E/400E/800E/1200E



400ER/800ER/1200ER



### MODEL COMPARISON

MODEL	AC SUPPLY RANGE	TYPICAL ARMATURE VOLTAGE	MAX CONTINUOUS ARMATURE CURRENT	NOMINAL POWER
370E	110/240v	90/180v	3.7A	0.25kw/0.55kw
400E			4A	0.25kw/0.55kw
800E			8A	0.55kw/1.1kw
1200E			12A	0.9kw/1.8kw
400ER	110/240v	90/180v	4A	0.25kw/0.55kw
800ER			8A	0.55kw/1.1kw
1200ER			12A	0.9kw/1.8kw

### DIMENSIONS

H	250 mm
W	175 mm
D	100 mm

See parts list at back for low voltage supply options and fuses.  
Refer to features chart for further details or download product manual for full specification.

## 200XLV KEY FEATURES

**Motors and brakes in both directions**

**Ideal for small DC motors and linear actuators up to 48v**

**Fast response**

**Panel or DIN rail mounting**

**+/- 2A output, with 150% overload capability**

**Single polarity supply with wide supply voltage range up to 48v**

**Suitable for battery or standard unregulated DC supply**

**Precision references for ultra stable operation**

**+ve and -ve differential speed inputs**

**Built in thermal protection with resettable trip**

**Current limit protection**

**3 term PID control action**

**Armature or tach feedback operation**

**Position control facility**

**Setpoint ramp facility**

**Plug on screw terminals for easy wiring**

**Adjustable IR compensation for improved AVF speed regulation**

**CE marked with excellent EMC compliance**

**Comprehensive manual with multi-applications data**

**High bandwidth with superbly linear output**

**Accepts bipolar or unipolar command inputs**

**Direction control by switch or centre zero pot**

**Easily interfaced for limit switch operation**

**Ideal for low inductance, printed motors**

PRODUCT NAME

# 200XLV

## DESCRIPTION

The 200XLV is a fast response, linear DC motor speed controller for driving small low voltage brushed DC motors.

Ideal for positioning and servo type applications.

The 200XLV will motor and brake in both directions of rotation and operates from a single polarity supply, either battery or unregulated DC Source.

Excellent performance allows the 200XLV to meet the most demanding of applications. The extensive specification includes many

standard features not normally associated with a drive the size and cost of the 200XLV.

The compact design has plug in screw terminals and provision for back panel or DIN rail mounting.

The 200XLV is fully EMC compliant and CE marked.



Due to its linear control circuits and linear output stage, this drive is ideal for applications with other highly sensitive low immunity circuits.



# 400/800/1200XLV

## DESCRIPTION

Fast response, linear DC Drives designed for driving small low voltage brushed DC motors.

Ideal for servo-type applications requiring excellent speed control offering either speed or torque (current) control modes.

Three compact models available in 4/8/12A versions giving excellent performance and value. The high specification includes many standard features not normally associated with drives of comparable size and cost.

A fast acting current control loop allows precise speed control of small permanent magnet DC motors. The Drives allow for bi – or unipolar 0 – 10V speed / current reference. For highly dynamic applications, a shaft- mounted DC tachogenerator is

recommended for speed feedback but in less demanding applications, armature voltage feedback (Avf) can be used. The 400/800/1200XLV will motor and brake in both directions of rotation and operate from a single polarity supply, either battery or unregulated DC Source from 12 – 48VDC.

The drives are easy to install with plug in screw terminals for DIN rail mounting and are fully EMC compliant and CE marked.



## 400XLV KEY FEATURES

**Motors and brakes in both directions**

**Ideal for small DC motors and linear actuators up to 48v**

**Fast response**

**DIN rail mounting (Panel/DIN rail mounting options for XLV)**

**4/8/12A output, with 200% overload for one second with inverse time reduction to 100% in 5 seconds**

**Single polarity supply with wide supply voltage range up to 48v**

**Suitable for battery or standard unregulated DC supply**

**Precision references for ultra stable operation**

**Current limit protection**

**Armature or tach feedback operation**

**Plug on screw terminals for easy wiring**

**Adjustable IR compensation for improved AVF speed regulation**

**CE marked with excellent EMC compliance**

**Comprehensive manual with multi-applications data**

**High bandwidth with superbly linear output**

**Accepts bipolar or unipolar command inputs**

**Direction control by switch or centre zero pot**

**Easily interfaced for limit switch operation**

**Ideal for low inductance, printed motors**

## MODEL COMPARISON

MODEL	SUPPLY VOLTAGE	OUTPUT	CURRENT
400XLV	12vdc 24vdc 48vdc	12vdc 24vdc 48vdc	4A
800XLV	12vdc 24vdc 48vdc	12vdc 24vdc 48vdc	8A
1200XLV	12vdc 24vdc 48vdc	12vdc 24vdc 48vdc	12A

## DIMENSIONS 400XLV & 800XLV

**H** 105 mm

**W** 60 mm

**D** 120 mm

## DIMENSIONS 1200XLV

**H** 105 mm

**W** 70 mm

**D** 120 mm

## SINGLE PHASE 1Q DC CONTROLLERS - NON ISOLATED

340



0.55KW 3.4A 240/110Vac 1Q Non Isolated

Controller	340
30/60V AC supply input version	340LV60
Semiconductor Fuse 6 x 32	CH00620A
Fuseholder 6 x 32	CP102071
DIN Rail Clip for Fuseholder	FE101969
Pot kit including graduated dial & knob	POTKIT
Filter (if required)	FRLN16

680



0.75KW 6.8A 240/110Vac 1Q Non Isolated

Controller	680
30/60V AC supply input version	680LV60
Semiconductor Fuse 6 x 32	CH00620A
Fuseholder 6 x 32	CP102071
DIN Rail Clip for Fuseholder	FE101969
Pot kit including graduated dial & knob	POTKIT
Filter (if required)	FRLN16

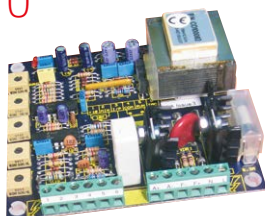
1220



1.8KW 12.2A 240/110Vac 1Q Non Isolated

Controller	1220
30/60V AC supply input version	1220LV60
Semiconductor Fuse 6 x 32	CH00620A
Fuseholder 6 x 32	CP102071
DIN Rail Clip for Fuseholder	FE101969
Pot kit including graduated dial & knob	POTKIT
Filter (if required)	FRLN16

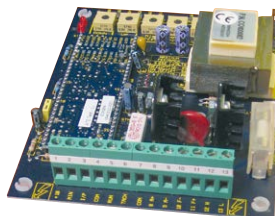
370



0.55KW 3.7A 240/110Vac 1Q Non Isolated

Controller	370
30/60V AC supply input version	370LV60
Semiconductor Fuse 6 x 32	CH00608A
Fuseholder 6 x 32	CP102071
DIN Rail Clip for Fuseholder	FE101969
Pot kit including graduated dial & knob	POTKIT
Filter (if required)	FRLN16

400



0.55KW 4A 240/110Vac 1Q Non Isolated

Controller	400
30/60V AC supply input version	400LV60
Semiconductor Fuse 6 x 32	CH00608A
Fuseholder 6 x 32	CP102071
DIN Rail Clip for Fuseholder	FE101969
Pot kit including graduated dial & knob	POTKIT
Filter (if required)	FRLN16

800



## 1.1KW 8A 240/110Vac 1Q Non Isolated

Controller	800
30/60V AC supply input version	800LV60
Semiconductor Fuse 6 x 32	CH00612A
Fuseholder 6 x 32	CP102071
DIN Rail Clip for Fuseholder	FE101969
Pot kit including graduated dial & knob	POTKIT
Filter (if required)	FRLN16

1200



## 1.8KW 12A 240/110Vac 1Q Non Isolated

Controller	1200
30/60V AC supply input version	1200LV60
Semiconductor Fuse 6 x 32	CH00620A
Fuseholder 6 x 32	CP102071
DIN Rail Clip for Fuseholder	FE101969
Pot kit including graduated dial & knob	POTKIT
Filter (if required)	FRLN16

KW ratings shown are at highest supply voltage.

## SINGLE PHASE 1Q DC CONTROLLERS - ISOLATED

340i



## 0.55KW 3.4A 240/110Vac 1Q Isolated

Controller	340i
30/60V AC supply input version	340iLV60
Semiconductor Fuse 6 x 32	CH00620A
Fuseholder 6 x 32	CP102071
DIN Rail Clip for Fuseholder	FE101969
Pot kit including graduated dial & knob	POTKIT
Filter (if required)	FRLN16

680i



## 0.75kw 6.8A 240/110Vac 1Q Isolated

Controller	680i
30/60V AC supply input version	680iLV60
Semiconductor Fuse 6 x 32	CH00620A
Fuseholder 6 x 32	CP102071
DIN Rail Clip for Fuseholder	FE101969
Pot kit including graduated dial & knob	POTKIT
Filter (if required)	FRLN16

1220i



## 1.8KW 12.2A 240/110Vac 1Q Isolated

Controller	1220i
30/60V AC supply input version	1220iLV60
Semiconductor Fuse 6 x 32	CH00620A
Fuseholder 6 x 32	CP102071
DIN Rail Clip for Fuseholder	FE101969
Pot kit including graduated dial & knob	POTKIT
Filter (if required)	FRLN16

400i



## 0.55KW 4A 240/110Vac 1Q Isolated

Controller	400i
30/60V AC supply input version	400iLV60
Semiconductor Fuse 6 x 32	CH00608A
Fuseholder 6 x 32	CP102071
DIN Rail Clip for Fuseholder	FE101969
Pot kit including graduated dial & knob	POTKIT
Filter (if required)	FRLN16

1600i



## 2.2KW 16A 240/110Vac 1Q Isolated

Controller	1600i
30/60V AC supply input version	1600iLV60
Semiconductor Fuse 14 x 51	CH00730A
Fuseholder 14 x 51	CP102053
Pot kit including graduated dial & knob	POTKIT
Filter (if required)	FRLN16

3200i/8



## 2.2KW 8A 415/240Vac 1Q Isolated

Controller	3200i/8
30/60V AC supply input version	3200i/8LV60
Semiconductor Fuse 6 x 32*	CH00612A
Fuseholder 6 x 32*	CP102071
DIN Rail Clip for Fuseholder*	FE101969
Pot kit including graduated dial & knob	POTKIT
Filter (240V operation, if required)	FRLN16
Filter (415V operation, if required)	FRL16
* Note: Two fuses & holders etc. required for 415V Line to Line operation.	

3200i/16



## 4KW 16A 415/240Vac 1Q Isolated

Controller	3200i/16
30/60V AC supply input version	3200i/16LV60
Semiconductor Fuse 14 x 51*	CH00730A
Fuseholder 14 x 51*	CP102053
Pot kit including graduated dial & knob	POTKIT
Filter (240V operation, if required)	FRLN16
Filter (415V operation, if required)	FRL16
* Note: Two fuses & holders required for 415V Line to Line operation.	

3200i/32



## 7.5KW 32A 415/240Vac 1Q Isolated

Controller	3200i/32
30/60V AC supply input version	3200i/32LV60
Semiconductor Fuse Size 000*	CH00850A
Fuseholder Size 000*	CP102054
Pot kit including graduated dial & knob	POTKIT
Filter (if required)	FRL16
* Note: Two fuses & holders required for 415V Line to Line operation.	

3200i/48



11kW 48A 415/240Vac 1Q Isolated

Controller  
30/60V AC supply input version  
Semiconductor Fuse Size 000\*  
Fuseholder Size 000\*  
Pot kit including graduated dial & knob  
Filter (if required)

3200i/48  
3200i/48LV60  
CH00880A  
CP102054  
POTKIT  
FRL150

\* Note: Two fuses & holders required for 415V Line to Line operation.

## SINGLE PHASE 4Q DC CONTROLLERS - ISOLATED, FULLY REGENERATIVE

340XRi



0.55kW 3.4A 240/110Vac 4Q Regen Isolated

Controller  
30/60V AC supply input version  
Semiconductor Fuse 6 x 32  
Fuseholder 6 x 32  
DIN Rail Clip for Fuseholder  
Pot kit including graduated dial & knob  
Filter (if required)

340XRi  
340XRiLV60  
CH00620A  
CP102071  
FE101969  
POTKIT  
FRLN16

680XRi



0.75KW 6.8A 240/110Vac 4Q Regen Isolated

Controller  
30/60V AC supply input version  
Semiconductor Fuse 6 x 32  
Fuseholder 6 x 32  
DIN Rail Clip for Fuseholder  
Pot kit including graduated dial & knob  
Filter (if required)

680XRi  
680XRiLV60  
CH00620A  
CP102071  
FE101969  
POTKIT  
FRLN16

1220XRi



1.8KW 12.2A 240/110Vac 4Q Regen Isolated

Controller  
30/60V AC supply input version  
Semiconductor Fuse 6 x 32  
Fuseholder 6 x 32  
DIN Rail Clip for Fuseholder  
Pot kit including graduated dial & knob  
Filter (if required)

1220XRi  
1220XRiLV60  
CH00620A  
CP102071  
FE101969  
POTKIT  
FRLN16



## 3600XRi/4



## 0.55KW 4A 240/110Vac 4Q Regen Isolated

Controller	3600XRi/4/LN
30/60V AC supply input version	3600XRi/4/LV60
Filter	FRLN16
Semiconductor Fuse 6 x 32	CH00608A
Fuseholder 6 x 32	CP102071
DIN Rail Clip for Fuseholder	FE101969
Pot kit including graduated dial & knob	POTKIT

## 3600XRi/8



## 1.1KW 8A 240/110Vac 4Q Regen Isolated

Controller	3600XRi/8/LN
30/60V AC supply input version	3600XRi/8/LV60
Filter	FRLN16
Semiconductor Fuse 6 x 32	CH00620A
Fuseholder 6 x 32	CP102071
DIN Rail Clip for Fuseholder	FE101969
Pot kit including graduated dial & knob	POTKIT

## 3600XRi/16



## 2.2KW 16A 240/110Vac 4Q Regen Isolated

Controller	3600XRi/16/LN
30/60V AC supply input version	3600XRi/16/LV60
Filter	FRLN16
Semiconductor Fuse 14 x 51	CH00730A
Fuseholder 14 x 51	CP102053
Pot kit including graduated dial & knob	POTKIT

## 3600XRi/16



## 4KW 16A 415/240Vac 4Q Regen Isolated

Controller	3600XRi/16/LL
Filter	FRLL16
Semiconductor Fuse 14 x 51*	CH00730A
Fuseholder 14 x 51*	CP102053
Pot kit including graduated dial & knob	POTKIT
* Note: Two fuses & holders required for 415V Line to Line operation.	

## 3600XRi/32



## 7.5KW 32A 415/240Vac 4Q Regen Isolated

Controller	3600XRi/32/LL
30/60V AC supply input version	3600XRi/32/LV60
Filter	FRLL36
Semiconductor Fuse Size 000*	CH00850A
Fuseholder Size 000*	CP102054
Pot kit including graduated dial & knob	POTKIT
* Note: Two fuses & holders required for 415V Line to Line operation.	

## 3600XRi/36



## 9.5KW 36A 415/240Vac 4Q Regen Isolated

Controller	3600XRi/36/LL
30/60V AC supply input version	3600XRi/36/LV60
Filter	FRLL36
Semiconductor Fuse Size 000*	CH00850A
Fuseholder Size 000*	CP102054
Pot kit including graduated dial & knob	POTKIT
* Note: Two fuses & holders required for 415V Line to Line operation.	

KW ratings shown are at high supply voltage.

Please refer to website for further information or product technical manual for full specification.

# INDUSTRIES SERVED

30 Years experience working with motor control applications in your industry



ENTERTAINMENT,  
TRAVEL & LEISURE



LIFTS, CRANES &  
HOISTS



MARINE



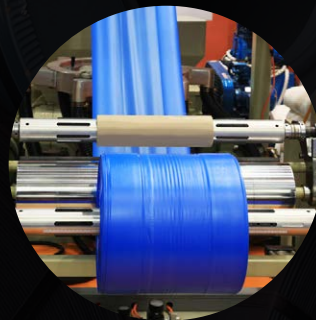
PAPER



PRINTING



METALS



PLASTICS



WIRE & CABLE

ALSO AVAILABLE FROM

# Sprint Electric

World Class Design | World Class Function | 30 Years Expertise In Industrial Motor Control

MOTOR CONTROL TECHNOLOGY PRODUCT CATALOGUE

## THREE PHASE DRIVES: PL/X & JL/X RANGE



**SPRINT** **ELECTRIC**

**SPRINT ELECTRIC**



Find out more:  
[www.sprint-electric.com](http://www.sprint-electric.com)

**Sprint Electric Ltd.**

Peregrine House, Ford Lane  
Ford, Arundel, West Sussex  
BN18 0DF United Kingdom

**Tel:** +44 (0)1243 558080

**Fax:** +44 (0)1243 558099

**Email:** [info@sprint-electric.com](mailto:info@sprint-electric.com)

**SPRINT ELECTRIC**



World Class Design | World Class Function | 30 Years Expertise In Industrial Motor Control

MOTOR CONTROL TECHNOLOGY PRODUCT CATALOGUE

# THREE PHASE DRIVES: PL/X & JL/X RANGE



**SPRINT ELECTRIC**

Sprint Electric, based in England, was formed in 1987 to design and manufacture industrial motor drives. It has specialised in DC drive technology and has been successful in penetrating global markets. This success has been achieved using well trained distributors and direct sales, offering rapid delivery and prompt technical support. Outlets have been established in a wide spread of overseas markets, creating a loyal and varied customer base.

In 2009 Sprint Electric was very proud to become one of an elite group of companies to win a Queen's Award for Enterprise, the most prestigious business award in the UK. The award was made for continuous achievement in International Trade. Winning this award puts Sprint Electric among the most successful of UK businesses.

# Contents:

4-5	PL/X Overview
6	PL/X Digital DC Drives Specification
7	Configuration and Monitoring Software
7	Drive.Web Programmable Peer Control
8-12	PL/X Range Digital DC Drives
13	PLXD Thyristor Stack Driver
13	PLA Applications Module
14-17	JL/X Digital Slip Ring Motor Drives
18-26	Product Parts Guide

# DC Motor Control Technology:

Increase your productivity, save energy and reduce downtime.

With an extensive range of DC motor control products, you will find an answer to your industrial automation questions.

## Your Industry - Our Experience.

We've used our renowned industrial automation experience to design a range of DC motor controllers which provide you with solutions to the most demanding motor control applications.

It's now easier than ever to design new DC motor control systems or improve the performance of an existing application by retrofitting with the latest DC technology.

## Save with Compact Designs and Ex-Stock Delivery.

You can save cabinet space in new control systems, or easily upgrade an existing DC motor application. Compact design comes as standard.

Reduce your downtime by relying on our ex-stock delivery. With a global network of partners and all products built for stock, you can quickly get your business moving again.

## Single Phase products

We also manufacture single phase DC motor controllers. Please see our single phase catalogue for details. Available at [www.sprint-electric.com](http://www.sprint-electric.com).

## Slip Ring Motor Drives

We also manufacture the JLX range of digital slip ring motor drives, see [www.sprint-electric.com](http://www.sprint-electric.com)

# Take control of the most demanding motor control applications.

The PL and PLX DC drives give a fast controlled response over the full speed range.



## The PL/X range



5 - 50kW  
12 - 123AMPS



65 - 145kW  
155 - 330AMPS

The 4Q PLX can motor and brake in forward and reverse and regenerate energy into the mains supply when braking.

All models include 40 character alpha-numeric back-lit display, full set of centre winding blocks and a field weakener for extended speed range. A high quality product from a world beating company.

Available in both 2Q and 4Q versions the range comprises 5 very compact chassis sizes with models rated from 12 to 2250 Amps.

# Key Features:

- Friendly easy-to-use menu structure with descriptive parameter names.
- Extremely flexible block diagram including unique "Configuration Checker", detects conflicts in user programmed configurations.
- Failsafe automatic "Revert to AVF" on tach feedback failure.
- A choice of two drive configuration and monitoring packages.
  - PL Pilot. Free with PL/X.
  - Pilot+. Free and can be upgraded to signal flow diagram.
- Ultra compact sizes offering significant panel space savings over other manufacturers.
- Programming menu is designed for rapid travel to desired parameter using ergonomically designed keys.



185 - 265KW  
430 - 630AMPS



275 - 440KW  
650 - 1050AMPS

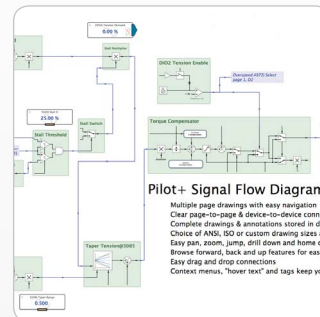
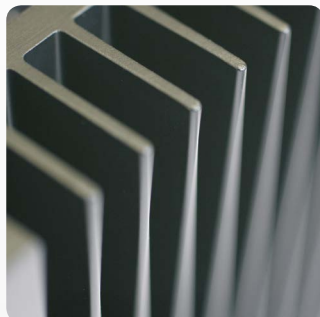


520 - 980KW  
1250 - 2250AMPS

- Five feedback transducer options as standard.
- Non-volatile trip alarm memory, even after power-down.
- Real language parameter description eliminates need for look-up tables.
- Built-in "Oscilloscope" output for full parameter monitoring.
- Three fully independent, user programmable drive configurations.
- Full suite of centre winding Apps included.
- Extensive, multi-function programmable I/O, with over 36 digital and analogue input/output combinations.
- Built-in system application blocks with descriptive connection points.
- In-depth fault monitoring and comprehensive system alarms.
- Serial communications to allow off-site programming and remote diagnostics.
- In-depth diagnostic facility available from on-board display and "in-built meter".
- On board fully controlled field with five operating modes.
- Easy to use product manual with display graphics and block diagrams.
- Full suite of built-in encoder functions as standard.
- Large 40 character backlit alphanumeric LCD display.
- All PL/X models are compatible with drive.web, to provide robust programmable peer control for drives and systems.



# SPECIFICATION



## Ratings

### POWER CONFIGURATION

- PLX Four Quadrant Regenerative
- PL Two Quadrant Non-Regenerative
- Fully controlled variable field supply

### ARMATURE VOLTAGE

- $V_{\text{armature}} = V_{\text{ac}} \times 1.2$

### ARMATURE CURRENT RATINGS (ADC)

- 12, 24, 36, 51, 72, 99, 123, 155, 205, 270, 330, 430, 530, 630, 650, 750, 850, 950, 1050\*, 1250, 1450, 1650, 1850, 2050, 2250\*
- Overload 150% for 25 seconds
- \*No overload

### FIELD CURRENT

- 8A (12-123A ratings)
- 16A (155-330A ratings)
- 32A (430-630A ratings)
- 64A (1250-2250A ratings)

### FIELD VOLTAGE

- $V_{\text{field}} = 0 \text{ to } 0.9 \times \text{Auxiliary AC Supply}$

### AC SUPPLY VOLTAGE (VAC)

#### Main 3 phase 50-60Hz:

- 12 to 500Vac +/- 10% for armature power
- 600/690Vac options for 650A-2250A

#### Auxiliary 3 phase 50-60Hz:

- 100 to 500Vac +/- 10% for field power
- 600/690Vac options for 650A-2250A

#### Control 1 phase 50-60Hz:

- 110 to 240Vac +/- 10% for control power

## Protection

- Interline device networks
- High energy MOV's
- Instantaneous over-current
- Field failure and over-current
- Motor over-temperature
- Thyristor stack over-temperature
- Mains supply phase loss
- Mains synchronisation loss
- Armature over-volts
- Speed feedback failure
- Stall protection
- Standstill logic
- Thyristor 'trigger' failure
- Digital output short circuit

## Inputs/Outputs

### ANALOGUE INPUTS

- 8 total (resolution 2.5mV+sign)
- All configurable
- All have programmable thresholds and 4 voltage ranges
- +/- 5/10/20/30V
- All inputs are over voltage protected and can also be utilised as digital inputs

### ANALOGUE OUTPUTS

- 4 Total (resolution 2.5mV+sign)
- 1 armature current output
- 3 configurable
- All outputs are short circuit protected

### DIGITAL INPUTS

- 17 total
- All configurable

### DIGITAL OUTPUTS

- 7 Total (24V logic 350mA total)
- Short circuit protected
- Over temp and over voltage protected
- All configurable

## Standard software functions

- Full suite of centre winding macros
- Motorised pot simulator with memory
- 2x PIDs (undedicated)
- 2x Summers (undedicated)
- 2x Filters (undedicated)
- Delay timer
- Current Profiling
- Spindle Orientation
- Jog/Crawl functions
- Dual motor swap
- Latch
- Linear or S ramp
- Slack take up
- Batch counter
- Draw control
- Auto self-tune current loop
- 3 user programmable drive configurations

## Alarm Status

- First fault latched and automatically displayed.
- Fault automatically saved at power off

## Monitoring

- All analogue input voltages
- All digital input states
- All analogue output voltages
- All digital output states
- Tachogenerator voltage
- Motor armature current (amps)
- Motor field current (amps)
- Motor armature volts
- Output power
- AC supply volts

## Field configurations

- Fixed current
- Fixed voltage
- Field weakening
- Delayed quenching
- Standby field value
- Field economy

## Environment

- Ambient operating temperature
- 0-40°C (2050A 2250A 35°C)
- 25 to +55°C storage

## Steady state accuracy

- 0.01% Encoder feedback with digital reference.
- 0.1% Analogue tachogenerator feedback
- 2% Armature voltage feedback
- 0.01% Encoder + tach, encoder + AVF or encoder only feedback
- Maximum encoder frequency 100KHz

## Standards

### CE marked to EN50178

- (low voltage directive)

### EN50082-2:1995

- Immunity industrial environment

### EN50082-1:1997

- Immunity residential commercial and light industry

### EN50081-2:1993

- Emissions industrial environment (EN55011 Class A)

### EN50081-1:1992

- Emissions industrial environment (EN55022 Class B)

- UL and cUL listed 12-630Amps
- UL and cUL pending 650-2250Amps

# PL/X configuration and monitoring tools

Minimise your setup and commissioning time.  
A choice of 2 drive configuration and monitoring packages.

## PRODUCT NAME

# PL PILOT

## DESCRIPTION

The PC running the PL PILOT software is connected to the drive via the PC's standard serial port. The package is designed for ease of use and provides a clear, defined and understandable method for accessing all levels of the drives extensive built in functionality.

Unique 'Configuration Checker' automatically scans for user programmed connection faults and highlights the conflicts. Tile and zoom facility allows the user to view and arrange any number of screens simultaneously.

Diagnostic monitoring in engineering units (volts, amps, Kw, RPM, Hz) and percentages for all terminals and block outputs.

Extensive colour dynamics to assist in the detection of important conditions.

## PRODUCT NAME

# PILOT+

## DESCRIPTION

Pilot+ is a sophisticated software tool that can be used to configure the PL/X as an alternative to PL PILOT.

Pilot+ can be upgraded for a small cost to include a signal flow diagram (SFD) graphical package. This allows the user configured internal block diagram of the PL/X system to be represented as a block diagram on screen and changed by drag and drop connections from PIN to PIN.

When used in conjunction with the drive.web distributed control products the Pilot+ software can produce an entire configuration diagram of a multiple drive system.

# drive.web

All PL/X models are compatible with drive.web. The drive.web distributed control technology uses Ethernet and powerful graphical tools to provide robust, Programmable Peer Control (PPC) for drives and systems.

The drive.web technology is infinitely scalable and cost effective for systems of any size or complexity. For typical motor control systems, drive.web beats using any PLC on cost, performance and ease of use.



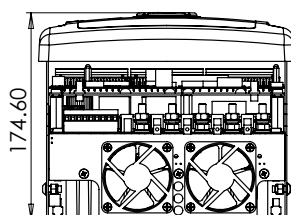
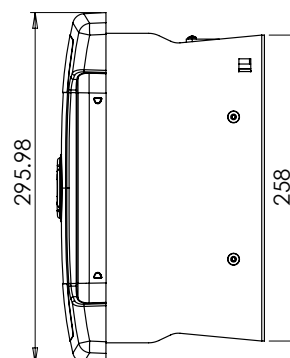
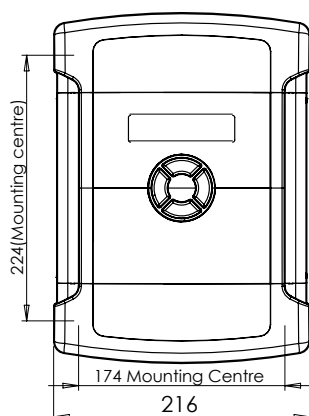


#### DESCRIPTION

The PL/X DC motor controller uses closed loop control of armature current and feedback voltage to give precise control of motor torque and speed. The unit also controls the motor excitation field. The closed loop parameters are programmable by the user and a wealth of inputs and outputs are provided to allow very complex motion control processes to be achieved.

#### PRODUCT NAME

# PL/X5-50



#### RATINGS & DIMENSIONS

PL 2 QUADRANT PLX 4 QUADRANT	KW @ 460v	HP @ 460v	ARMATURE CURRENT DC AMPS	FIELD AMPS
PL and PLX 5	5	6.6	12	8
PL and PLX 10	10	13.3	24	8
PL and PLX 15	15	20	36	8
PL and PLX 20	20	26.6	51	8
PL and PLX 30	30	40	72	8
PL and PLX 40	40	53.3	99	8
PL and PLX 50	50	66.6	123	8

#### FRAME SIZE

<b>H</b>	296 mm
<b>W</b>	216 mm
<b>D</b>	175 mm

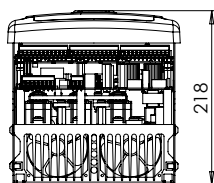
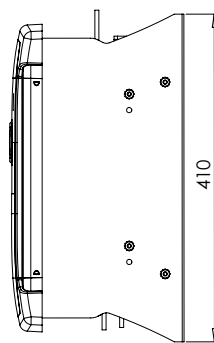
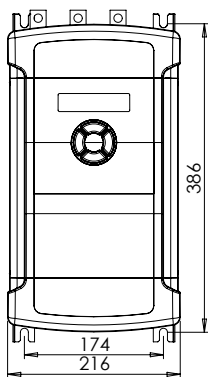
#### SHIPPING WEIGHT

**8kg**



PRODUCT NAME

# PL/X65-145



## RATINGS & DIMENSIONS

PL 2 QUADRANT PLX 4 QUADRANT	KW @ 460v	HP @ 460v	ARMATURE CURRENT DC AMPS	FIELD AMPS
PL and PLX 65	65	90	155	16
PL and PLX 85	85	115	205	16
PL and PLX 115	115	155	270	16
PL and PLX 145	145	190	330	16

## FRAME SIZE

<b>H</b>	<b>410 mm</b>
<b>W</b>	<b>216 mm</b>
<b>D</b>	<b>218 mm</b>

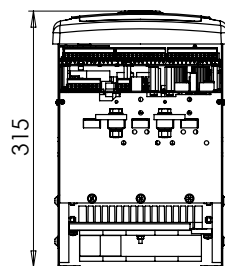
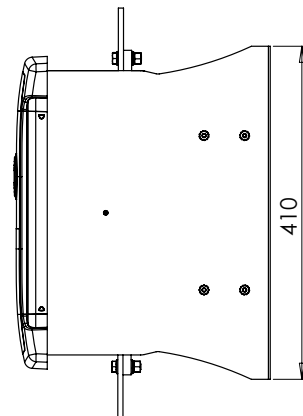
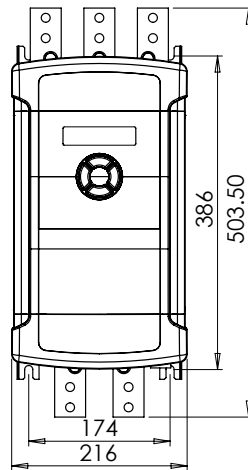
SHIPPING  
WEIGHT

**15kg**



PRODUCT NAME

# PL/X185-265



## RATINGS & DIMENSIONS

PL 2 QUADRANT PLX 4 QUADRANT	KW @ 460v	HP @ 460v	ARMATURE CURRENT DC AMPS	FIELD AMPS
PL and PLX 185	185	250	430	32
PL and PLX 225	225	300	530	32
PL only 265	265	350	630	32

50 Amp field option

## FRAME SIZE

<b>H</b>	504 mm
<b>W</b>	216 mm
<b>D</b>	315 mm

SHIPPING  
WEIGHT

**24kg**



## DESCRIPTION

These models have all the functionality of the smaller units, but with added flexibility on the supply voltage and input port.

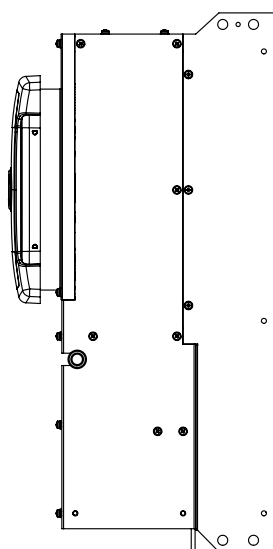
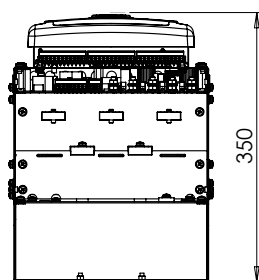
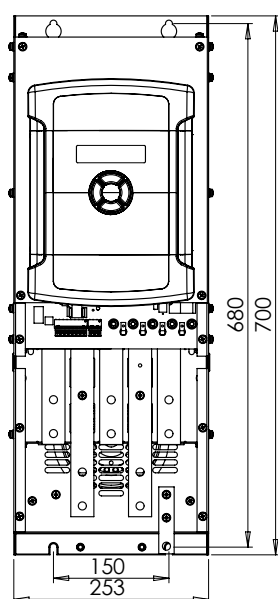
As well as standard voltages up to 500V AC, they have the option of being supplied as MV units that are able to accept voltages of up to 600 volts and HV units that are able to

accept voltages up to 690 volts for motors with armatures of up to 750 volts DC.

All models are also available with the high current 3 phase supply terminals in standard top entry, or bottom entry as an option.

## PRODUCT NAME

# PL/X275-440



## RATINGS & DIMENSIONS

PL 2 QUADRANT PLX 4 QUADRANT	KW @ 460v	HP @ 460v	ARMATURE CURRENT DC AMPS	FIELD AMPS
PL and PLX 275	275	370	650	32
PL and PLX 315	315	425	750	32
PL and PLX 360	360	485	850	32
PL and PLX 400	400	540	950	32
PL and PLX 440*	440	590	1050	32

\* PLX 440 no overload  
50 Amp field option

## FRAME SIZE

H	700 mm
W	253 mm
D	350 mm

## SHIPPING WEIGHT

45kg

## Venting kit for units PL/X275-440

The venting kit comprises two steel ducts which are designed to telescope together. There is also a protective cowl for mounting on the enclosure roof. The duct length from the top of the drive is adjustable between 270mm to 538mm.



#### DESCRIPTION

These models have all the functionality of the smaller units, but with added flexibility on the supply voltage and input port location.

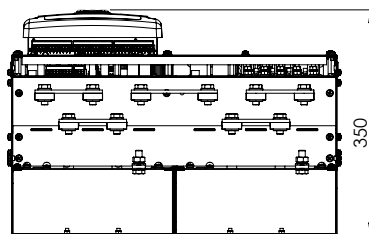
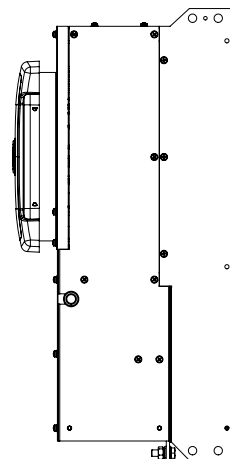
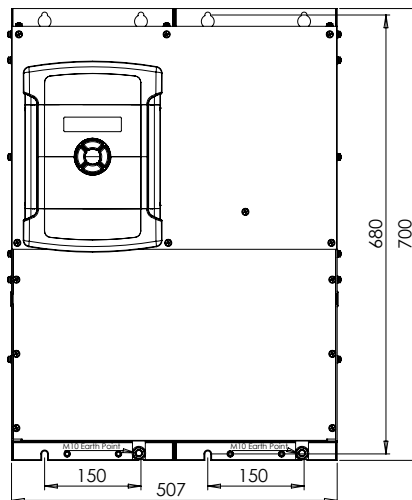
As well as standard voltages up to 500V AC, they have the option of being supplied as MV units that are able to accept voltages of up to 600 volts and as

HV units that are able to accept voltages up to 690 volts for motors with armatures of up to 750 volts DC.

All models are also available with the high current 3 phase supply terminals in standard top entry, or bottom entry as an option.

#### PRODUCT NAME

# PL/X520-980



#### Venting kit for units PL/X520-980

The venting kit comprises two steel ducts which are designed to telescope together. There is also a protective cowl for mounting on the enclosure roof. The duct length from the top of the drive is adjustable between 270mm to 538mm.

#### RATINGS & DIMENSIONS

PL 2 QUADRANT PLX 4 QUADRANT	KW @ 460v	HP @ 460v	ARMATURE CURRENT DC AMPS	FIELD AMPS
PL and PLX 520	520	700	1250	64
PL and PLX 600	600	810	1450	64
PL and PLX 700	700	940	1650	64
PL and PLX 800	800	1080	1850	64
PL and PLX 900	900	1200	2050	64
PL and PLX 980*	980	1320	2250	64

\* PLX 980 no overload

#### FRAME SIZE

<b>H</b> 700 mm (755 mm top entry)
<b>W</b> 507 mm
<b>D</b> 350 mm

#### SHIPPING WEIGHT

**90kg**

# PLXD

## DESCRIPTION

### Thyristor Stack Controller

The PLXD is used for controlling external 3 phase thyristor stacks for DC motors, and possesses all the functionality of the PL/X range. It is in the same package as the PL/X 5 - 50 models.

The PLXD provides gate drive pulses for driving user supplied pulse transformers with primary pulse current up to 1.5 Amp.

There are terminals to accept an externally generated isolated armature current signal, field signal, thermal heatsink sensor switch, and high voltage armature voltage feedback.

The unit also provides a +24v supply for the gate drive pulse transformers that is short circuit protected.

The following stack configurations can be driven by the PLXD:

- 1) 6 pulse 2 Quadrant bridge (6 thyristors), or 2 bridges in parallel (12 thyristors).
- 2) 6 pulse 4 Quadrant regen anti-parallel bridge (12 thyristors).

Extra stacks can be used in parallel within the gate drive capability.

All customer control terminals are the plug-in screw terminal variety.

The PLXD can be used with up to 690v AC on its 3 phase auxiliary supply inputs (EL1/2/3). The external stacks can be of higher voltages if required.

The armature voltage inputs can monitor up to +/-1000 Volts DC.



There is an integral motor field bridge with independent single phase AC supply inputs (EF2/3) for controlling fields up to 32 Amps. The internal field bridge supply input voltage rating is 500v AC.

Provision is made for providing an external field feedback signal and controlling an external field with user supplied primary gate pulse transformer drivers.

There is a pulse transformer unit (Product code LA102800) available at extra cost for users who prefer not to supply their own components. It contains all the external interface components required to combine the PLXD with the thyristor stack and its associated Accts (AC current transformers). It includes 12 pulse transformer networks for 2 or 4 quadrant bridges, an armature burden rectifier network, and 2 pulse transformer networks for an external field bridge. The unit is designed to be mounted on a DIN rail and all the interface connections are via screw terminals.

## PLA APPLICATIONS MODULE

Designed primarily for systems integrators and panel builders, the PLA allows you to enhance and simplify any analogue or digital drive control system. It can reduce or eliminate the need for costly PLC or PC based systems. You can use the PLA to work with a range of industrial applications. Easy to use configurable software blocks offer you a powerful and flexible method of processing analogue and digital signals.



# JLX

## DIGITAL CONTROLLER

A new dawn for controlling slip ring motors



**SPRINT ELECTRIC**  
[www.sprint-electric.com](http://www.sprint-electric.com)

PRODUCT NAME

# JL/X SLIP RING MOTOR CONTROLLER

## DESCRIPTION

The JL/X range of slip ring motor drives is a derivation of the PL/X Digital DC drive product range. It shares the same software and hardware platforms and delivers the same precise digital control functionality enjoyed by users of the established range of DC Drives. The main difference between the PL/X and JL/X range is that the thyristor stack configuration has been designed to provide a firing angle controlled 3 phase output (U, V, W) suitable for controlling slip ring motors in either 2 or 4 Quadrant modes. All the fieldbus options and configuration software packages used with the PL/X are also available for the JL/X range.

The JL/X range covers output currents from 100 to 1680 Amps and is available in 3 frame sizes with standard supply voltage inputs up to 500VAC. (Frame 2, 4 and 5). Frame 4 and 5 also have the option of being supplied as MV or HV units that are able to accept AC supply voltages up to 600 or 690 VAC for higher voltage applications. All models have the high current 3 phase supply terminals in standard top entry, with the motor connections at the bottom of the unit. The overload capability of this range is 150% for 25 seconds.



PRODUCT NAME

# JL/XHD HIGH DUTY SLIP RING MOTOR CONTROLLER

## DESCRIPTION

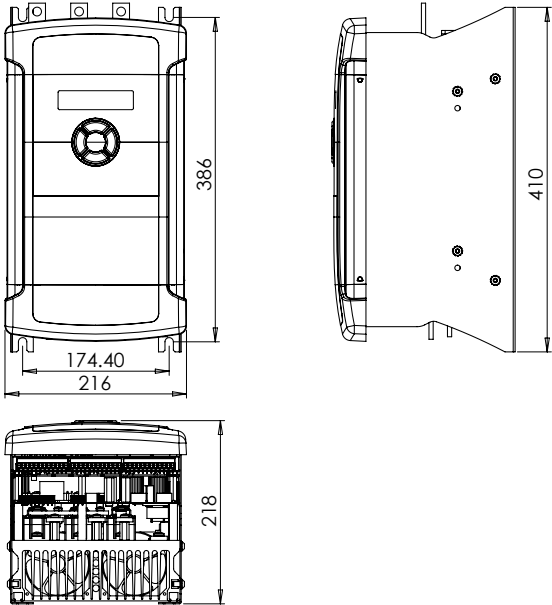
The JL/XHD range of slip ring motor drives is a derivation of the PL/X Digital DC drive product range. It shares the same software and hardware platforms and delivers the same precise digital control functionality enjoyed by users of the established range of DC Drives. The main difference between the PL/X and JL/X range is that the thyristor stack configuration has been designed to provide a firing angle controlled 3 phase output (U, V, W) suitable for controlling slip ring motors in either 2 or 4 Quadrant modes. All the fieldbus options and configuration software packages used with the PL/X are also available for the JL/X range.

The JL/XHD range covers output currents from 100 to 1010 Amps and is available in 3 frame sizes with standard supply voltage inputs up to 500VAC. (Frame 2, 4 and 5). Frame 4 and 5 also have the option of being supplied as MV or HV units that are able to accept AC supply voltages up to 600 or 690 VAC for higher voltage applications. All models have the high current 3 phase supply terminals in standard top entry, with the motor connections at the bottom of the unit. The overload capability of this high duty range is 250% for 25 seconds.

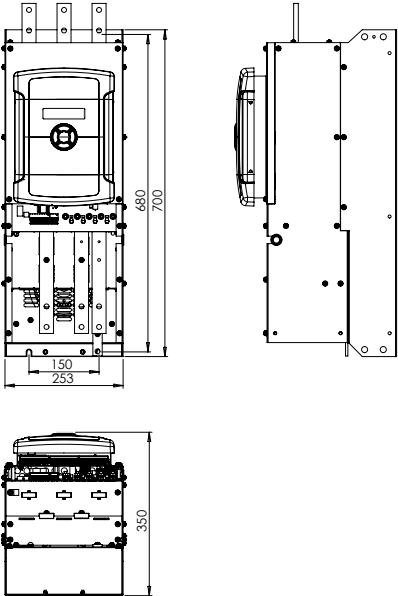


FRAME DIMENSIONS

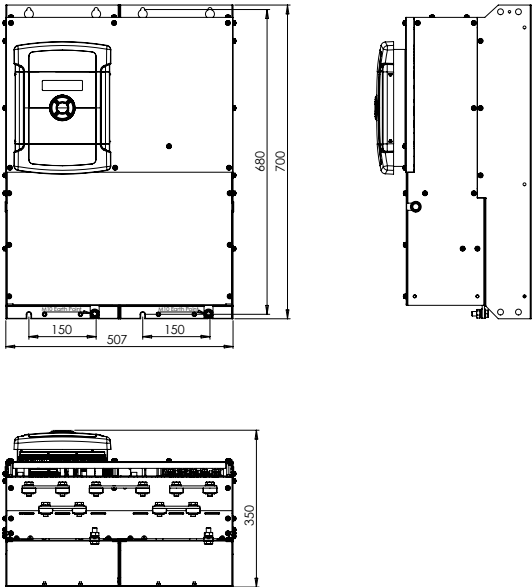
JL/X  
130 - 270



JL/X  
370 - 780



JL/X  
860 - 1680



# RATING TABLE FOR JL/X STANDARD VERSIONS

These models have a 150% overload capability for 25 seconds

Nominal maximum continuous shaft ratings

Model		kW at 415 Volt AC	HP at 415 Volt AC	HP at 480 Volt AC	HP 600V AC MV model	HP 690V AC HV model	100% Output Current	Line reactor type	Cooling air flow and dissipation		Dimensions mm  W x H x D
JL 2 quadrant JLX 4 quadrant Suffix HV for 690 VAC									cfm	watts	
Frame 2	Model										
JL and JLX	130	75	100	115	-	-	130	LR330	365	380	216 x 410 x 218
JL and JLX	170	100	130	150	-	-	170	LR330	365	500	216 x 410 x 218
JL and JLX	220	130	170	200	-	-	220	LR330	365	650	216 x 410 x 218
JL and JLX	270	160	210	240	-	-	270	LR330	365	875	216 x 410 x 218
Frame 4											
JL and JLX	370	215	290	335	415	480	370	LR530	400	1200	253 x 700 x 350
JL and JLX	450	260	350	405	500	580	450	LR530	400	1450	253 x 700 x 350
JL and JLX	530	310	415	480	600	690	530	LR650	400	1700	253 x 700 x 350
JL and JLX	615	360	480	555	690	800	615	LR750	400	2000	253 x 700 x 350
JL and JLX	700	405	550	630	785	915	700	LR850	400	2300	253 x 700 x 350
JL and JLX	780	450	610	705	880	1015	780	LR950	400	2500	253 x 700 x 350
Frame 5											
JL and JLX	860	500	670	775	965	1115	860	LR1050	800	2700	507 x 700 x 350
JL and JLX	1025	595	800	925	1155	1330	1025	LR1250	800	3200	507 x 700 x 350
JL and JLX	1190	690	930	1075	1340	1550	1190	LR1450	800	3700	507 x 700 x 350
JL and JLX	1350	785	1055	1220	1505	1755	1350	LR1650	800	4200	507 x 700 x 350
JL and JLX	1520	880	1190	1375	1715	1980	1520	LR1850	800	4700	507 x 700 x 350
JL and JLX	1680	975	1310	1515	1890	2180	1680	LR2050	800	5200	507 x 700 x 350

# RATING TABLE FOR JL/XHD HIGH DUTY VERSIONS

These models have a 250% overload capability for 25 seconds

Nominal maximum continuous shaft ratings

Model		kW at 415 Volt AC	HP at 415 Volt AC	HP at 480 Volt AC	HP 600V AC MV model	HP 690V AC HV model	100% Output Current	Line reactor type	Cooling air flow and dissipation		Dimensions mm  W x H x D
JLHD 2 quadrant JLXHD 4 quadrant Suffix HV for 690 VAC									cfm	watts	
Frame 2	Model										
JLHD & JLXHD	75	45	60	70	-	-	75	LR330	365	380	216 x 410 x 218
JLHD & JLXHD	100	60	80	90	-	-	100	LR330	365	500	216 x 410 x 218
JLHD & JLXHD	130	75	100	115	-	-	130	LR330	365	650	216 x 410 x 218
JLHD & JLXHD	160	95	125	145	-	-	160	LR330	365	875	216 x 410 x 218
Frame 4											
JLHD & JLXHD	220	130	170	200	250	280	220	LR530	400	1200	253 x 700 x 350
JLHD & JLXHD	270	160	210	240	300	350	270	LR530	400	1450	253 x 700 x 350
JLHD & JLXHD	320	190	250	290	360	415	320	LR650	400	1700	253 x 700 x 350
JLHD & JLXHD	370	215	290	335	420	480	370	LR750	400	2000	253 x 700 x 350
JLHD & JLXHD	420	245	330	380	475	550	420	LR850	400	2300	253 x 700 x 350
JLHD & JLXHD	470	270	370	430	535	615	470	LR950	400	2500	253 x 700 x 350
Frame 5											
JLHD & JLXHD	520	300	405	470	585	670	520	LR1050	800	2700	507 x 700 x 350
JLHD & JLXHD	615	360	480	555	690	800	615	LR1250	800	3200	507 x 700 x 350
JLHD & JLXHD	715	415	560	650	810	930	715	LR1450	800	3700	507 x 700 x 350
JLHD & JLXHD	815	475	640	740	925	1065	815	LR1650	800	4200	507 x 700 x 350
JLHD & JLXHD	910	530	710	820	1025	1180	910	LR1850	800	4700	507 x 700 x 350
JLHD & JLXHD	1010	585	790	915	1140	1310	1010	LR2050	800	5200	507 x 700 x 350

## PL RANGE, DIGITAL THREE PHASE 2Q DRIVE WITH INTEGRAL FIELD WEAKENER

PL5



5KW 12A

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required 10 x 38  
Main Fuseholder, 3 required 10 x 38

PL5  
LR48  
AC FUSEKIT-PL/X5  
CH01610A  
CP105004  
CH01612A  
CP105004

PL10



10KW 24A

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required 14 x 51  
Main Fuseholder, 3 required 14 x 51

PL10  
LR48  
AC FUSEKIT-PL/X10  
CH01610A  
CP105004  
CH00730A  
CP102053

PL15



15KW 36A

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required 14 x 51  
Main Fuseholder, 3 required 14 x 51

PL15  
LR48  
AC FUSEKIT-PL/X15  
CH01610A  
CP105004  
CH00740A  
CP102053

PL20



20KW 51A

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required Size 000  
Main Fuseholder, 3 required Size 000

PL20  
LR48  
AC FUSEKIT-PL/X20  
CH01610A  
CP105004  
CH00850A  
CP102054

PL30



30KW 72A

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required Size 000  
Main Fuseholder, 3 required Size 000

PL30  
LR120  
AC FUSEKIT-PL/X30  
CH01610A  
CP105004  
CH00880A  
CP102054

PL40



40KW 99A

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required Size 000  
Main Fuseholder, 3 required Size 000

PL40  
LR120  
AC FUSEKIT-PL/X40  
CH01610A  
CP105004  
CH008100  
CP102054

## PRODUCT NAME

## PART

## PART NO.

PL50



50KW 123A

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required Size 000  
Main Fuseholder, 3 required Size 000

PL50  
LR120  
AC FUSEKIT-PL/X50  
CH01610A  
CP105004  
CH008125  
CP102054

PL65



65KW 155A

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required Size 000  
Main Fuseholder, 3 required Size 000

PL65  
LR330  
AC FUSEKIT-PL/X65  
CH01620A  
CP105004  
CH008160  
CP102054

PL85



85KW 205A

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required Size 1  
Main 3 pole Fuseholder Size 1

PL85  
LR330  
AC FUSEKIT-PL/X85  
CH01620A  
CP105004  
CH009250  
CP102055

PL115



115KW 270A

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required Size 1  
Main 3 pole Fuseholder Size 1

PL115  
LR330  
AC FUSEKIT-PL/X115  
CH01620A  
CP105004  
CH009250  
CP102055

PL145



145KW 330A

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required Size 3  
Main 3 pole Fuseholder Size 3

PL145  
LR330  
AC FUSEKIT-PL/X145  
CH01620A  
CP105004  
CH010550  
CP102233

PL185



185KW 430A

Controller  
50 Amp option on field output  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse Size 14 x 51, 3 required  
Aux Fuseholder Size 14 x 51, 3 required  
Main Semiconductor Fuse, 3 required Size 3  
Main 3 pole Fuseholder Size 3

PL185  
CON299  
LR530  
AC FUSEKIT-PL/X185  
CH00740A  
CP102053  
CH010550  
CP102233

PL225



225KW 530A

Controller  
50 Amp option on field output  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse Size 14 x 51, 3 required  
Aux Fuseholder Size 14 x 51, 3 required  
Main Semiconductor Fuse, 3 required Size 3  
Main 3 pole Fuseholder Size 3

PL225  
CON299  
LR530  
AC FUSEKIT-PL/X225  
CH00740A  
CP102053  
CH010550  
CP102233

PL265



265KW 630A

Controller  
50 Amp option on field output  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse Size 14 x 51, 3 required  
Aux Fuseholder Size 14 x 51, 3 required  
Main Semiconductor Fuse, 3 required Size 3  
Main 3 pole Fuseholder Size 3

PL265  
CON299  
LR650  
AC FUSEKIT-PL265  
CH00740A  
CP102053  
CH010700  
CP102233

PL275



275KW 650A

Options  
TE - top entry (standard)  
BE - bottom entry (no cost option)  
50 Amp field (extra cost option)  
MV - 600VAC (extra cost option)  
HV - 690VAC (extra cost option)

Controller	PL275
Line Reactor	LR650
AC Fuse Kit	AC FUSEKIT-PL/X275
Main Semiconductor Fuse, 3 required	CH103301
Aux Semiconductor Fuse, 3 required (32A Field)	CH00850A
Aux Fuseholder, 3 required (32A Field)	CP102054

PL315



315KW 750A

Options  
TE - top entry (standard)  
BE - bottom entry (no cost option)  
50 Amp field (extra cost option)  
MV - 600VAC (extra cost option)  
HV - 690VAC (extra cost option)

Controller	PL315
Line Reactor	LR750
AC Fuse Kit	AC FUSEKIT-PL/X315
Main Semiconductor Fuse, 3 required	CH103302
Aux Semiconductor Fuse, 3 required (32A Field)	CH00850A
Aux Fuseholder, 3 required (32A Field)	CP102054

PL360



360KW 850A

Options  
TE - top entry (standard)  
BE - bottom entry (no cost option)  
50 Amp field (extra cost option)  
MV - 600VAC (extra cost option)  
HV - 690VAC (extra cost option)

Controller	PL360
Line Reactor	LR850
AC Fuse Kit	AC FUSEKIT-PL/X360
Main Semiconductor Fuse, 3 required	CH103303
Aux Semiconductor Fuse, 3 required (32A Field)	CH00850A
Aux Fuseholder, 3 required (32A Field)	CP102054

PL400



400KW 950A

Options  
TE - top entry (standard)  
BE - bottom entry (no cost option)  
50 Amp field (extra cost option)  
MV - 600VAC (extra cost option)  
HV - 690VAC (extra cost option)

Controller	PL400
Line Reactor	LR950
AC Fuse Kit	AC FUSEKIT-PL/X400
Main Semiconductor Fuse, 3 required	CH103304
Aux Semiconductor Fuse, 3 required (32A Field)	CH00850A
Aux Fuseholder, 3 required (32A Field)	CP102054

PL440



440KW 1050A

Options  
TE - top entry (standard)  
BE - bottom entry (no cost option)  
50 Amp field (extra cost option)  
MV - 600VAC (extra cost option)  
HV - 690VAC (extra cost option)

Controller	PL440
Line Reactor	LR1050
AC Fuse Kit	AC FUSEKIT-PL/X440
Main Semiconductor Fuse, 3 required	CH103305
Aux Semiconductor Fuse, 3 required (32A Field)	CH00850A
Aux Fuseholder, 3 required (32A Field)	CP102054



PRODUCT NAME

PART

PART NO.

PL520



520KW 1250A

Options  
 TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

Controller  
 Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required  
 Aux Semiconductor Fuse, 3 required  
 Aux Fuseholder, 3 required

PL520  
 LR1250  
 AC FUSEKIT-PL/X520  
 CH103306  
 CH008100  
 CP102054

PL600



600KW 1450A

Options  
 TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

Controller  
 Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required  
 Aux Semiconductor Fuse, 3 required  
 Aux Fuseholder, 3 required

PL600  
 LR1450  
 AC FUSEKIT-PL/X600  
 CH103307  
 CH008100  
 CP102054

PL700



700KW 1650A

Options  
 TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

Controller  
 Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required  
 Aux Semiconductor Fuse, 3 required  
 Aux Fuseholder, 3 required

PL700  
 LR1650  
 AC FUSEKIT-PL/X700  
 CH103308  
 CH008100  
 CP102054

PL800



800KW 1850A

Options  
 TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

Controller  
 Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required  
 Aux Semiconductor Fuse, 3 required  
 Aux Fuseholder, 3 required

PL800  
 LR1850  
 AC FUSEKIT-PL/X800  
 CH103309  
 CH008100  
 CP102054

PL900



900KW 2050A

Options  
 TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

Controller  
 Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required  
 Aux Semiconductor Fuse, 3 required  
 Aux Fuseholder, 3 required

PL900  
 LR2050  
 AC FUSEKIT-PL/X900  
 CH103310  
 CH008100  
 CP102054

PL980



980KW 2250A

Options  
 TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

Controller  
 Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required  
 Aux Semiconductor Fuse, 3 required  
 Aux Fuseholder, 3 required

PL980  
 LR2250  
 AC FUSEKIT-PL/X980  
 CH103467  
 CH008100  
 CP102054

# PLX RANGE, DIGITAL THREE PHASE 4Q FULLY REGENERATIVE CONTROLLER WITH INTEGRAL FIELD WEAKENER

## PLX5



### 5KW 12A 4Q

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required 10 x 38  
Main Fuseholder, 3 required 10 x 38  
Armature fuse size 000  
Armature fuseholder size 000

PLX5  
LR48  
AC FUSEKIT-PL/X5  
CH01610A  
CP105004  
CH01612A  
CP105004  
CH00816A  
CP102054

## PLX10



### 10KW 24A 4Q

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required 14 x 51  
Main Fuseholder, 3 required 14 x 51  
Armature fuse size 000  
Armature fuseholder size 000

PLX10  
LR48  
AC FUSEKIT-PL/X10  
CH01610A  
CP105004  
CH00740A  
CP102053  
CH00832A  
CP102054

## PLX15



### 15KW 36A 4Q

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required 14 x 51  
Main Fuseholder, 3 required 14 x 51  
Armature fuse size 1  
Armature fuseholder size 1

PLX15  
LR48  
AC FUSEKIT-PL/X15  
CH01610A  
CP105004  
CH00740A  
CP102053  
CH00940A  
CP102906

## PLX20



### 20KW 51A 4Q

Controller  
Line reactor  
AC Fuse Kit  
Aux Semiconductor Fuse, 3 required 10 x 38  
Aux Fuseholder, 3 required 10 x 38  
Main Semiconductor Fuse, 3 required Size 000  
Main Fuseholder, 3 required Size 000  
Armature fuse size 1  
Armature fuseholder size 1

PLX20  
LR48  
AC FUSEKIT-PL/X20  
CH01610A  
CP105004  
CH00850A  
CP102054  
CH00963A  
CP102906

## PLX30



## 30KW 72A 4Q

Controller  
 Line reactor  
 AC Fuse Kit  
 Aux Semiconductor Fuse, 3 required 10 x 38  
 Aux Fuseholder, 3 required 10 x 38  
 Main Semiconductor Fuse, 3 required Size 000  
 Main Fuseholder, 3 required Size 000  
 Armature Fuse size 1  
 Armature Fuseholder size 1

PLX30  
 LR120  
 AC FUSEKIT-PL/X30  
 CH01610A  
 CP105004  
 CH00880A  
 CP102054  
 CH00980A  
 CP102906

## PLX40



## 40KW 99A 4Q

Controller  
 Line reactor  
 AC Fuse Kit  
 Aux Semiconductor Fuse, 3 required 10 x 38  
 Aux Fuseholder, 3 required 10 x 38  
 Main Semiconductor Fuse, 3 required Size 000  
 Main Fuseholder, 3 required Size 000  
 Armature Fuse size 1  
 Armature Fuseholder size 1

PLX40  
 LR120  
 AC FUSEKIT-PL/X40  
 CH01610A  
 CP105004  
 CH008100  
 CP102054  
 CH009125  
 CP102906

## PLX50



## 50KW 123A 4Q

Controller  
 Line reactor  
 AC Fuse Kit  
 Aux Semiconductor Fuse, 3 required 10 x 38  
 Aux Fuseholder, 3 required 10 x 38  
 Main Semiconductor Fuse, 3 required Size 000  
 Main Fuseholder, 3 required Size 000  
 Armature Fuse size 1  
 Armature Fuseholder size 1

PLX50  
 LR120  
 AC FUSEKIT-PL/X50  
 CH01610A  
 CP105004  
 CH008125  
 CP102054  
 CH009160  
 CP102906

## PLX65



## 65KW 155A 4Q

Controller  
 Line reactor  
 AC Fuse Kit  
 Aux Semiconductor Fuse, 3 required 10 x 38  
 Aux Fuseholder, 3 required 10 x 38  
 Main Semiconductor Fuse, 3 required Size 000  
 Main Fuseholder, 3 required Size 000  
 Armature Fuse size 1  
 Armature Fuseholder size 1

PLX65  
 LR330  
 AC FUSEKIT-PL/X65  
 CH01620A  
 CP105004  
 CH008160  
 CP102054  
 CH009200  
 CP102906

## PLX85



## 85KW 205A 4Q

Controller  
 Line reactor  
 AC Fuse Kit  
 Aux Semiconductor Fuse, 3 required 10 x 38  
 Aux Fuseholder, 3 required 10 x 38  
 Main Semiconductor Fuse, 3 required Size 1  
 Main 3 pole Fuseholder Size 1  
 Armature fuse size 1  
 Armature fuseholder size 1

PLX85  
 LR330  
 AC FUSEKIT-PL/X85  
 CH01620A  
 CP105004  
 CH009250  
 CP102055  
 CH009250  
 CP102906

## PLX115



## 115KW 270A 4Q

Controller  
 Line reactor  
 AC Fuse Kit  
 Aux Semiconductor Fuse, 3 required 10 x 38  
 Aux Fuseholder, 3 required 10 x 38  
 Main Semiconductor Fuse, 3 required Size 1  
 Main 3 pole Fuseholder Size 1  
 Armature fuse size 1  
 Armature Fuseholder size 1

PLX115  
 LR330  
 AC FUSEKIT-PL/X115  
 CH01620A  
 CP105004  
 CH009250  
 CP102055  
 CH009315  
 CP102906

## PLX145



## 145KW 330A 4Q

Controller  
 Line reactor  
 AC Fuse Kit  
 Aux Semiconductor Fuse, 3 required 10 x 38  
 Aux Fuseholder, 3 required 10 x 38  
 Main Semiconductor Fuse, 3 required Size 3  
 Main 3 pole Fuseholder Size 3  
 Armature fuse size 1  
 Armature Fuseholder size 1

PLX145  
 LR330  
 AC FUSEKIT-PL/X145  
 CH01620A  
 CP105004  
 CH010550  
 CP102233  
 CH009400  
 CP102906

## PLX185



## 185KW 430A 4Q

Controller  
 50 Amp option on field output  
 Line reactor  
 AC Fuse Kit  
 Aux Semiconductor Fuse Size 14 x 51, 3 required  
 Aux Fuseholder Size 14 x 51, 3 required  
 Main Semiconductor Fuse, 3 required Size 3  
 Main 3 pole Fuseholder Size 3  
 Armature fuse size 2  
 Armature Fuseholder size 2

PLX185  
 CON299  
 LR530  
 AC FUSEKIT-PL/X185  
 CH00740A  
 CP102053  
 CH010550  
 CP102233  
 CH013500  
 CP102949

## PLX225



## 225KW 530A 4Q

Controller  
 50 Amp option on field output  
 Line reactor  
 AC Fuse Kit  
 Aux Semiconductor Fuse Size 14 x 51, 3 required  
 Aux Fuseholder Size 14 x 51, 3 required  
 Main Semiconductor Fuse, 3 required Size 3  
 Main 3 pole Fuseholder Size 3  
 Armature Fuse size 2  
 Armature Fuseholder size 2

PLX225  
 CON299  
 LR530  
 AC FUSEKIT-PL/X225  
 CH00740A  
 CP102053  
 CH010550  
 CP102233  
 CH013550  
 CP102949

PLX275



275KW 650A 4Q

## Options

TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 50 Amp field (extra cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

## Controller

Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required Size 3  
 Aux Semiconductor Fuse, 3 required (32A Field)  
 Aux Fuseholder, 3 required (32A Field)  
 Armature Fuse, 2 required

## PLX275

LR650  
 AC FUSEKIT-PL/X275  
 CH103301  
 CH00850A  
 CP102054  
 CH103303

PLX315



315KW 750A 4Q

## Options

TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 50 Amp field (extra cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

## Controller

Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required Size 3  
 Aux Semiconductor Fuse, 3 required (32A Field)  
 Aux Fuseholder, 3 required (32A Field)  
 Armature Fuse, 2 required

## PLX315

LR750  
 AC FUSEKIT-PL/X315  
 CH103302  
 CH00850A  
 CP102054  
 CH103304

PLX360



360KW 850A 4Q

## Options

TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 50 Amp field (extra cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

## Controller

Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required Size 3  
 Aux Semiconductor Fuse, 3 required (32A Field)  
 Aux Fuseholder, 3 required (32A Field)  
 Armature Fuse, 2 required

## PLX360

LR850  
 AC FUSEKIT-PL/X360  
 CH103303  
 CH00850A  
 CP102054  
 CH103305

PLX400



400KW 950A 4Q

## Options

TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 50 Amp field (extra cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

## Controller

Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required Size 3  
 Aux Semiconductor Fuse, 3 required (32A Field)  
 Aux Fuseholder, 3 required (32A Field)  
 Armature Fuse, 2 required

## PLX400

LR950  
 AC FUSEKIT-PL/X400  
 CH103304  
 CH00850A  
 CP102054  
 CH103306

PLX440



440KW 1050A 4Q

## Options

TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 50 Amp field (extra cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

## Controller

Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required Size 3  
 Aux Semiconductor Fuse, 3 required (32A Field)  
 Aux Fuseholder, 3 required (32A Field)  
 Armature Fuse, 2 required

## PLX440

LR1050  
 AC FUSEKIT-PL/X440  
 CH103305  
 CH00850A  
 CP102054  
 CH103307

PLX520



520KW 1250A 4Q

## Options

TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

## Controller

Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required  
 Aux Semiconductor Fuse, 3 required  
 Aux Fuseholder, 3 required  
 Armature Fuse, 2 required

## PLX520

LR1250  
 AC FUSEKIT-PL/X520  
 CH103306  
 CH008100  
 CP102054  
 CH103308



## PLX600



## 600KW 1450A 4Q

Options  
 TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

Controller  
 Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required  
 Aux Semiconductor Fuse, 3 required  
 Aux Fuseholder, 3 required  
 Armature Fuse, 2 required

PLX600  
 LR1450  
 AC FUSEKIT-PL/X600  
 CH103307  
 CH008100  
 CP102054  
 CH103309

## PLX700



## 700KW 1650A 4Q

Options  
 TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

Controller  
 Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required  
 Aux Semiconductor Fuse, 3 required  
 Aux Fuseholder, 3 required  
 Armature Fuse, 2 required

PLX700  
 LR1650  
 AC FUSEKIT-PL/X700  
 CH103308  
 CH008100  
 CP102054  
 CH103310

## PLX800



## 800KW 1850A 4Q

Options  
 TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

Controller  
 Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required  
 Aux Semiconductor Fuse, 3 required  
 Aux Fuseholder, 3 required  
 Armature Fuse, 2 required

PLX800  
 LR1850  
 AC FUSEKIT-PL/X800  
 CH103309  
 CH008100  
 CP102054  
 CH103467

## PLX900



## 900KW 2050A 4Q

Options  
 TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

Controller  
 Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required  
 Aux Semiconductor Fuse, 3 required  
 Aux Fuseholder, 3 required  
 Armature Fuse, 2 required

PLX900  
 LR2050  
 AC FUSEKIT-PL/X900  
 CH103310  
 CH008100  
 CP102054  
 CH103330

## PLX980



## 980KW 2250A 4Q

Options  
 TE - top entry (standard)  
 BE - bottom entry (no cost option)  
 MV - 600VAC (extra cost option)  
 HV - 690VAC (extra cost option)  
 Refer to supplier for information

Controller  
 Line Reactor  
 AC Fuse Kit  
 Main Semiconductor Fuse, 3 required  
 Aux Semiconductor Fuse, 3 required  
 Aux Fuseholder, 3 required  
 Armature Fuse, 2 required

PLX980  
 LR2250  
 AC FUSEKIT-PL/X980  
 CH103467  
 CH008100  
 CP102054  
 CH103469

## PL/PLX



## OPTIONS &amp; ACCESSORIES

Profibus card  
 Devicenet card  
 Mounting board for fieldbus cards  
 Daisy chain mtg board for Profibus/Devicenet  
 Additional Drive to PC comms cable  
 Drive to drive cable FCC68/FCC68  
 Venting kit for PL/X 275 - 440  
 Venting kit for PL/X 520 - 980

Profibus card  
 Devicenet card  
 LA103690  
 LA103001  
 LA102595  
 LA102596  
 LA103392  
 LA103402



Find out more:  
[www.sprint-electric.com](http://www.sprint-electric.com)

**Sprint Electric Ltd.**

Peregrine House, Ford Lane  
Ford, Arundel, West Sussex  
BN18 0DF United Kingdom

**Tel:** +44 (0)1243 558080

**Fax:** +44 (0)1243 558099

**Email:** [info@sprint-electric.com](mailto:info@sprint-electric.com)

ENTRY MENU  
CHANGE PARAMETER

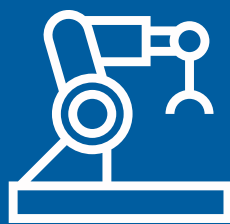
**SPRINT ELECTRIC**

# BONDY

INDUSTRIAL EQUIPMENT SUPPLIER



**Transmission**



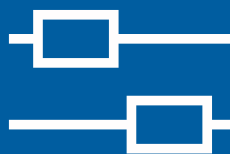
**Handling**



**Motor & Gear**



**Vacuum Conveying**



**Linear**



**Support**

See our products and solutions at

**[www.bondy.dk](http://www.bondy.dk)**

For ordering and questions call (+45) 70 15 14 14