

World class in design | World beating in function



Find out more: www.sprint-electric.com



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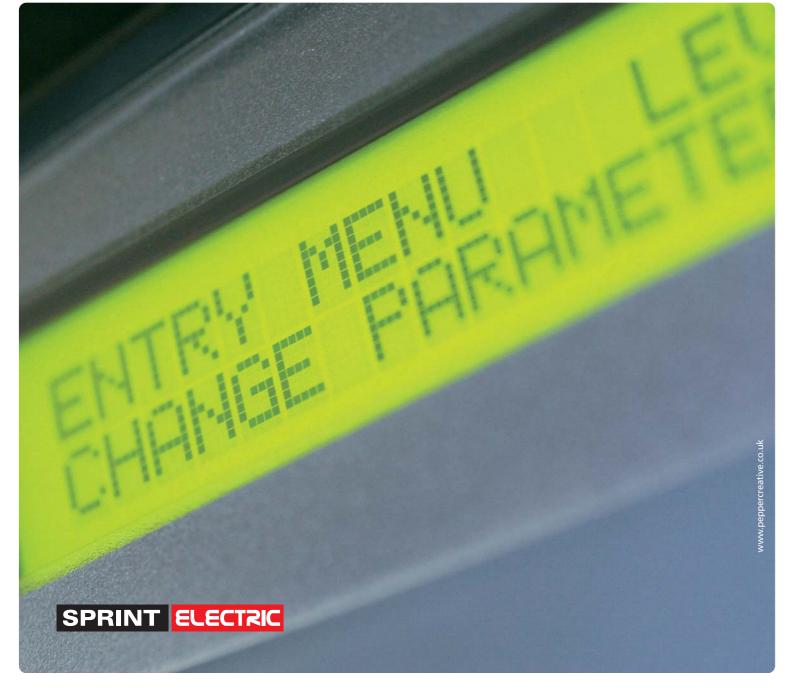
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DC MOTOR CONTROL TECHNOLOGY PRODUCT CATALOGUE

THREE PHASE DC DRIVES









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 achievment in International Trade. Winning this award puts Sprint Electric among the most successful of UK businesses.



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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.

 $rac{02}{1}$

Take control of the most demanding motor control applications.

over the full speed range.

The PL and PLX DC drives give a fast controlled response

The PL/X range



5 - 50kw 12 - 123 AMPS



65 - 145kw 155 - 330 AMPS

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
- 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.
- Savvy. 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 - 630 AMPS



275 - 440kw 650 - 1050 AMPS



520 - 980kw 1250 - 2250 AMPS

- 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 macros 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.
- Unique electronic regenerative stopping facility on selected 2Q
- 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 (some PL models have electronic regenerative stopping facility)
- Fully controlled variable field supply

ARMATURE VOLTAGE

- V armature = Vac x 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 field = 0 to 0.9 x Auxiliary **AC Supply**

AC SUPPLY VOLTAGE (VAC)

Main 3 phase 50-60Hz:

- 12 to 480Vac +/- 10%
- for armature power
- 690Vac option for 650A-2250A

Auxiliary 3 phase 50-60Hz:

- 100 to 480Vac +/- 10% for field power
- 690Vac option 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
- 5mV+sign)
- All configurable - All have programmable thresholds and 4 voltage
- +/- 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)
- All analogue output voltages - 1 armature current output - All digital output states
- 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

Field

(amps)

- Fixed voltage - Field weakening - Delayed quenching

- Fixed current

functions

macros

memory

- Delay timer

- Latch

- Current Profiling

- Dual motor swap

- Linear or S ramp

- Slack take up

- Batch counter

- Draw control

configurations

at power off

Monitoring

- Spindle Orientation

- Jog/Crawl functions

- Full suite of centre winding

- 2x PIDs (undedicated)

- 2x Filters (undedicated)

- 2x Summers (undedicated)

- Auto self-tune current loop

- 3 user programmable drive

Alarm Status

- First fault latched and

automatically displayed.

- Fault automatically saved

- All analogue input voltages

- All digital input states

- Tachogenerator voltage

- Motor armature current

- Motor armature volts

- Output power

- AC supply volts

- Motor field current (amps)

configurations

- Motorised pot simulator with

- Standby field value
- Field economy



Standard software Environment

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

Steady state accurácy

- 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

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

A choice of 2 drive configuration and monitoring packages.

Minimise your setup and commissioning time.

DESCRIPTION

PRODUCT NAME

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.

PL/X configuration and monitoring tools

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

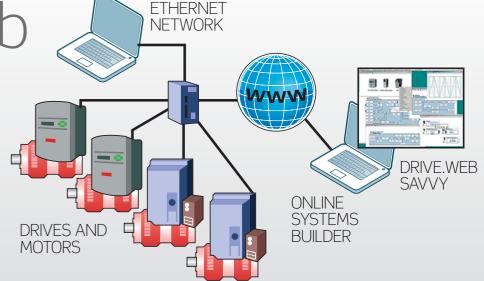
Savvy can be upgraded for a small cost to include a signal flow diagram (SFD) graphical package. This allows the user configured internal block diagram of the PL/X system to be represented as a block diagram on screen and changed by drag and drop connections from PIN to PIN.

When used in conjunction with the drive.web distributed control products the Savvy 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.





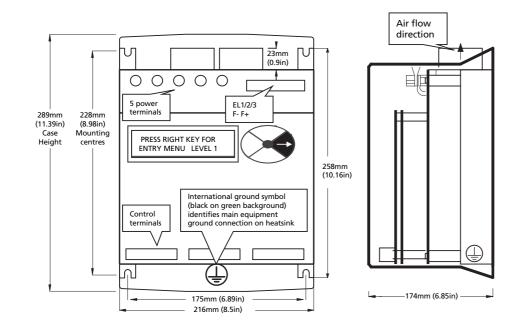
DESCRIPTION

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	Ω		NICIO.	NIC.
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TO THE COOK DIT LET COOK O						
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		

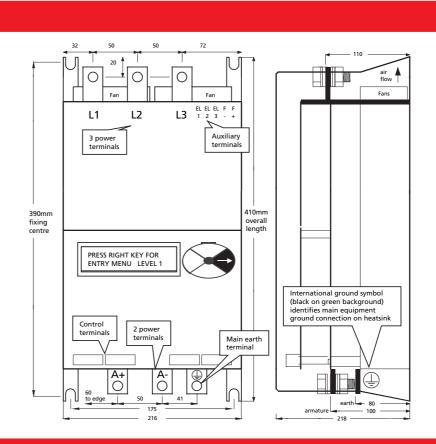
FRAME SIZE

н	289 mm					
w	216 mm					
D	174 mm					
SHIPPING WEIGHT						
8kg	g					

* PL model has regen stopping facility

PRODUCT NAME

PL/X65-145



RATINGS & DIMENSIONS

155	16
205	16
270	16
330	16
	270

^{*} PL model has regen stopping facility

FRAME SIZE

Н	410 mm
w	216 mm
D	218 mm
	PPING

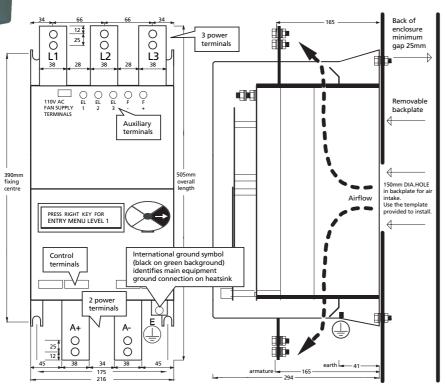
WEIGHT

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

* PL model has regen stopping facility 50 Amp field option

FRAME SIZE

Н	505 mm
w	216 mm
D	294 mm

SHIPPING WEIGHT

24kg

DESCRIPTION

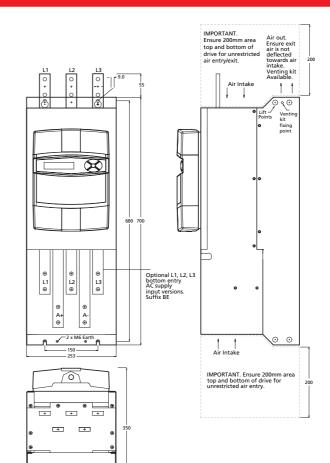
These models have all the functionality of the smaller units, but with added flexibility on the supply voltage and input port.

As well as standard voltages up to 480V AC, they have the option of being supplied 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/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

* PL model has regen stopping facility

** PLX 440 no overload

50 Amp field option

FRAME SIZE Venting kit for units PL/X275-440

H 700 mm

W 253 mm

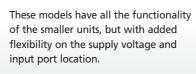
D 350 mm

SHIPPING

WEIGHT

45kg

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.



As well as standard voltages up to 480V AC, they have the option of being supplied as HV units that are able to accept voltages up to 690 volts for motors with armatures of up to 750 volts DC.

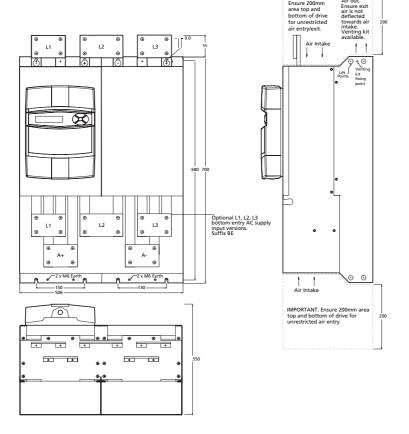
All models are also available with the high current 3 phase supply terminals in standard top entry, or bottom entry as an option.

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

TO THE TOTAL OF TH							
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			

* PL model has regen stopping facility

** PLX 980 no overload

FRAME SIZE

H 700 mm (755 mm top entry) W 506 mm D 350 mm

SHIPPING WEIGHT

90kg

PRODUCT NAME

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 480v 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.



KEY FEATURES

PRODUCT NAME

5kw to 50kw

Available in 2 and 4 Quadrant versions

SL 2 Quadrant

SLX 4 Quadrant

Available from 5kw to 145kw

Built in field weakener for extended speed range

Extra 50% peak torque for rapid acceleration or shock loads

Zero reference interlock facility ideal for extruder applications

240v and 480v

50/60нz AC operation

Numerous alarms for enhanced drive and motor protection

High accuracy armature voltage feedback mode eliminates the need for additional tacho in most applications

Automatic economy field mode protects motors in cold climates

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

Many additional input and output signals, ideal for system applications

For users who prefer or require analogue control loops.

The SL 2 Quadrant and SLX 4 Quadrant models are compact, reliable and efficient DC motor controllers.





MODEL COMP	MODEL COMPARISON DIMENSIONS						
MODEL	AC SUPPLY RANGE	TYPICAL ARMATURE VOLTAGE	MAX CONTINUOUS ARMATURE CURRENT	NOMINAL POWER	H 2	250 mm	
SL* and SLX 5			12a	5ĸw	W 2	.04 mm	
SL* and SLX 10		460v	24A	10kw	D 1	43 mm	
SL* and SLX 15			36A	15ĸw			
SL* and SLX 20	200-240v 380-480v		48 A	20kw	CI IIDE		
SL* and SLX 30			72A	30kw	SHIPP WEIGH		
SL* and SLX 40			96A	40kw	VVLIOI		
SL* and SLX 50			120A	50kw	8kg		
* SL model has reg	en stopping fa	cility					

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

PRODUCT NAME

65kw to 145kw

The 4Q models 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. No dissipation of energy in wasteful braking resistors.

With fully isolated control electronics and a wealth of I/O, the SL/X is easy for you to integrate with other drives and equipment. To allow you greater control of high motor speed applications, the SL/X has a built-in

field weakener for extended speed range.



MODEL COMPARISON

MODEL	AC SUPPLY RANGE	TYPICAL ARMATURE VOLTAGE	MAX CONTINUOUS ARMATURE CURRENT	NOMINAL POWER
SL and SLX 65	200-240v 380-480v	470	155A	65ĸw
SL and SLX 85			205A	85кw
SL and SLX 115		460v	270A	115ĸw
SL* and SLX 145			330a	145ĸw

^{*} SL model has regen stopping facility

DIMENSIONS

H 410 mm W 204 mm **D** 187 mm

SHIPPING WEIGHT

15kg

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

Switched maximum current ranges for easy matching to motor current rating

PLC compatible input and output signals

Field current input for constant horsepower applications

Delayed field quench for secure emergency stopping

Features Sprint Electric micro analog processor

Compact size, saves panel space and makes for easy retrofitting

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

Output signals for easy display of motor speed and load

On board relay indicates zero speed and/or motor overload

Isolated control electronics for easy connection to other drives/equipment

Switch selectable feedback calibration no component changes

Adjustable field output for easy motor matching

14kw to 44kw

KEY FEATURES

2 Quadrant three phase controller

Four models: 14kw 24kw 34kw

44kw

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

Extra 50% peak torque for rapid acceleration or shock loads

Isolated control electronics for easy connection to other drives/equipment

Configurable field bridge for easy motor field voltage matching

Wide AC supply range, 380 - 480v or 200-240v, user selectable

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

Switch selectable feedback calibration no component changes

Switch selectable Tach or Armature voltage feedback

Numerous alarms for enhanced drive and motor protection

Single direction 2 quadrant analogue DC Motor controller.

The SLE drive has been specifically designed at a cost and size to benefit OEMS, and yet without any compromise in specification, reliability or performance.

Its compact footprint (250mm x 204mm) enables additional savings and ensures easy integration within new designs or trouble free installation when retrofitting





PLY TYPICAL ARMATI E VOLTAGE	MAX CONTINUOU ARMATURE CURRE	NT POWER
	34A	44
		14kw
)v	58A	24ĸw
460v	82A	34ĸw
	106A	44kw
		ðZA

DIMENSIONS H 250 mm W 204 mm D 115 mm SHIPPING WEIGHT

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

SPECIFICATION

14kw to 44kw

Zero reference interlock facility ideal for extruder applications

Numerous inputs and outputs for complex system applications

S shaped ramp facility

User adjustable: - Acceleration

- Deceleration

- Max motor speed

- Min motor speed - Max motor current

- IR compensation

- Stability

- Jog speed

Relay outputs for stall, zero speed and motor overload

Switched maximum current ranges for easy matching to motor current rating

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

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

Output signals for easy display of motor speed and load

Features Sprint Electric micro analog processor

Fully isolated control electronics

Control action: **Dual loop Proportional and Integral**

Speed regulation: 0.1% Tachogenerator,

2% Armature voltage feedback

Armature: Four models: 34, 58, 82 and 106 Amps continuous

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

trip operation

Field output: 2 phase or 3 phase bridge

1/2 or full wave

Customer presets: Max speed: 12v - 500v 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 · jog speed Max armature current 0-100%

Switches: Maximum current - 2 ranges

Feedback voltage - 4 ranges

Relay Function - zero speed and/or stall,

and/or overload

Ramp connect · Tach/AVF selection

Inputs: Speed · Torque

Auxiliary speed inputs +ve and -ve 4-20mA and 0-20mA Drive Run · TachoGenerator Push Button stop/start

Outputs: Speed · Current · Setpoint Ramp Total Demand · AVF signal

Zero speed, and stall & overload relay driver

+/-12V, +/- 24V rails

Relay: Volt free change over

Contacts for zero speed and/or stall, and/or overload

Other features: Overspeed limit

Over torque limit Inverse time overload 50% stall threshold option Precision reference Precision tach rectifier option

Zero reference interlock

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

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

PL5



5 KW~12 A this model has regenerative stopping capability as standard

Controller	PL5
Line reactor	LR48
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for holder, 6 required	FE101969
Main Semiconductor Fuse, 3 required 6 x 32	CH00612A
Main Fuseholder, 3 required 6 x 32	CP102071
Pot kit including graduated dial & knob	POTKIT





$10 \text{KW}\ 24 \text{A}$ this model has regenerative stopping capability as standard

TOTAL TATALON OF THE STANDARD	(IVD
Controller	PL10
Line reactor	LR48
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required 14 x 51	CH00740A
Main Fuseholder, 3 required 14 x 51	CP102053
Pot kit including graduated dial & knob	POTKIT





15KW 36A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD

Controller	PL15
Line reactor	LR48
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required 14 x 51	CH00740A
Main Fuseholder, 3 required 14 x 51	CP102053
Pot kit including graduated dial & knob	POTKIT

PL20



20 KW 51 A this model has regenerative stopping capability as standard

Controller	PL20
Line reactor	LR48
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 000	CH00850A
Main Fuseholder, 3 required Size 000	CP102054
Pot kit including graduated dial & knob	POTKIT

PL30



30 KW~72 A this model has regenerative stopping capability as standard

Controller	PL30
Line reactor	LR120
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 000	CH00880A
Main Fuseholder, 3 required Size 000	CP102054
Pot kit including graduated dial & knob	POTKIT



40KW 99A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD

Controller	PL40
Line reactor	LR120
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 000	CH008100
Main Fuseholder, 3 required Size 000	CP102054
Pot kit including graduated dial & knob	POTKIT

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

50KW 123A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD Line reactor LR120 Aux Semiconductor Fuse, 3 required 6 x 32 CH00620A Aux Fuseholder, 3 required 6 x 32 CP102071 DIN Rail Clip for Aux Fuseholder, 3 required FE101969 Main Semiconductor Fuse, 3 required Size 000 CH008125 Main Fuseholder, 3 required Size 000 CP102054

PART NO.

POTKIT

PL50



65KW 155A

Pot kit including graduated dial & knob

Controller	PL65
Line reactor	LR270
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 000	CH008160
Main Fuseholder, 3 required Size 000	CP102054
Pot kit including graduated dial & knob	POTKIT

PL85



85KW 205A

Controller	PL85
Line reactor	LR270
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 1	CH009250
Main 3 pole Fuseholder Size 1	CP102055
Pot kit including graduated dial & knob	POTKIT

PL115



115KW 270A

1101(11 11 01 (
Controller	PL115
Line reactor	LR270
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 1	CH009250
Main 3 pole Fuseholder Size 1	CP102055
Pot kit including graduated dial & knob	POTKIT

PL145



145KW 330A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD

Controller	PL145
Line reactor	LR330
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 3	CH010550
Main 3 pole Fuseholder Size 3	CP102233
Pot kit including graduated dial & knob	POTKIT

PL185



185KW 430A

Controller	PL185
50 Amp option on field output	
Line reactor	LR430
Aux Semiconductor Fuse Size 000, 3 required	CH00850A
Aux Fuseholder Size 000, 3 required	CP102054
Main Semiconductor Fuse, 3 required Size 3	CH010550
Main 3 pole Fuseholder Size 3	CP102233
Pot kit including graduated dial & knob	POTKIT

PART PRODUCT NAME PART NO. PL225 225KW 530A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD Controller PL225 50 Amp option on field output LR530 Line reactor CH00850A Aux Semiconductor Fuse Size 000, 3 required Aux Fuseholder Size 000, 3 required CP102054 Main Semiconductor Fuse, 3 required Size 3 CH010550 CP102233 Main 3 pole Fuseholder Size 3 Pot kit including graduated dial & knob POTKIT 8 8 PI 265 265KW 630A Controller PL265 50 Amp option on field output LR630 Line reactor Aux Semiconductor Fuse Size 000, 3 required CH00850A Aux Fuseholder Size 000, 3 required CP102054 Main Semiconductor Fuse, 3 required Size 3 CH010700 Main 3 pole Fuseholder Size 3 CP102233 Pot kit including graduated dial & knob POTKIT PL275 275KW 650A PL275 Options Controller LR650 TE - top entry (standard) Line Reactor BE - bottom entry (no cost option) Main Semiconductor Fuse, 3 required CH103301 50 Amp field (extra cost option) Aux Semiconductor Fuse, 3 required CH103361 HV - 690VAC (extra cost option) Aux Fuseholder, 3 required CP103371 Refer to supplier for information Pot kit inc. graduated dial and knob POTKIT PL315 315KW 750A Options Controller PL315 LR750 TE - top entry (standard) Line Reactor BE - bottom entry (no cost option) Main Semiconductor Fuse, 3 required CH103302 50 Amp field (extra cost option) Aux Semiconductor Fuse, 3 required CH103361 HV - 690VAC (extra cost option) Aux Fuseholder, 3 required CP103371 Refer to supplier for information Pot kit inc. graduated dial and knob POTKIT PI 360 360KW 850A **Options** Controller PL360 I R850 TE - top entry (standard) Line Reactor CH103303 BE - bottom entry (no cost option) Main Semiconductor Fuse, 3 required 50 Amp field (extra cost option) Aux Semiconductor Fuse, 3 required CH103361 HV - 690VAC (extra cost option) Aux Fuseholder, 3 required CP103371 Refer to supplier for information Pot kit inc. graduated dial and knob POTKIT PI 400 400KW 950A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD Options Controller PL400 LR950 TE - top entry (standard) Line Reactor CH103304 BE - bottom entry (no cost option) Main Semiconductor Fuse, 3 required 50 Amp field (extra cost option) CH103361 Aux Semiconductor Fuse, 3 required HV - 690VAC (extra cost option) Aux Fuseholder, 3 required CP103371 Refer to supplier for information Pot kit inc. graduated dial and knob POTKIT PI 440 440KW 1050A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD PL440 Options Controller LR1050 Line Reactor TE - top entry (standard) Main Semiconductor Fuse, 3 required CH103305 BE - bottom entry (no cost option) 50 Amp field (extra cost option) Aux Semiconductor Fuse, 3 required CH103361 HV - 690VAC (extra cost option) Aux Fuseholder, 3 required CP103371 POTKIT Refer to supplier for information Pot kit inc. graduated dial and knob

PART PRODUCT NAME PART NO.



520KW 1250A Options TE - top entry (standard)

BE - bottom entry (no cost option) HV - 690VAC (extra cost option) Refer to supplier for information

PL520 Controller Line Reactor LR1250 CH103306 Main Semiconductor Fuse, 3 required Aux Semiconductor Fuse, 3 required CH103363 Aux Fuseholder, 3 required CP103373 Pot kit inc. graduated dial and knob POTKIT





600KW 1450A

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

Controller PL600 Line Reactor LR1450 Main Semiconductor Fuse, 3 required CH103307 Aux Semiconductor Fuse, 3 required CH103363 Aux Fuseholder, 3 required CP103373 Pot kit inc. graduated dial and knob POTKIT

PL700



$700 \text{KW}\ 1650 \text{A}$ this model has regenerative stopping capability as standard

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

Controller PI 700 Line Reactor LR1650 Main Semiconductor Fuse, 3 required CH103308 Aux Semiconductor Fuse, 3 required CH103363 Aux Fuseholder, 3 required CP103373 Pot kit inc. graduated dial and knob POTKIT



$800 KW\ 1850 A$ this model has regenerative stopping capability as standard

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Options	Controller
E - top entry (standard)	Line Reactor
E - bottom entry (no cost option)	Main Semiconductor
IV - 690VAC (extra cost option)	Aux Semiconductor F
efer to supplier for information	Aux Fuseholder, 3 re-
	Pot kit inc. graduate

PI 800 LR1850 r Fuse, 3 required CH103309 Fuse, 3 required CH103363 equired CP103373 ed dial and knob POTKIT

PL900



900KW 2050A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD

Options	Con
ΓE - top entry (standard)	Line
BE - bottom entry (no cost option)	Mai
HV - 690VAC (extra cost option)	Aux
Refer to supplier for information	Aux
	Pot

PL900 troller LR2050 e Reactor CH103310 in Semiconductor Fuse, 3 required x Semiconductor Fuse, 3 required CH103363 Fuseholder, 3 required CP103373 Pot kit inc. graduated dial and knob POTKIT

PL980



980KW 2250A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD

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Options	Controller	PL980
TE - top entry (standard)	Line Reactor	LR2250
BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103467
HV - 690VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
Refer to supplier for information	Aux Fuseholder, 3 required	CP103373
	Pot kit inc. graduated dial and knob	POTKIT

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

PLX5



5KW 12A 4Q	
Controller	PLX5
Line reactor	LR48
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for holder, 6 required	FE101969
Main Semiconductor Fuse, 3 required 6 x 32	CH00612A
Main Fuseholder, 3 required 6 x 32	CP102071
Armature fuse size 000	CH00816A
Armature fuseholder size 000	CP102054
Pot kit including graduated dial & knob	POTKIT

PLX10



10KW 24A 40

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00620A
102071
101969
00740A
102053
00832A
102054
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PLX15



15KW 36A 40

1011111011110	
Controller	PLX15
Line reactor	LR48
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required 14 x 51	CH00740A
Main Fuseholder, 3 required 14 x 51	CP102053
Armature fuse size 1	CH00940A
Armature fuseholder size 1	CP102906
Pot kit including graduated dial & knob	POTKIT

PLX20



20KW 51A 40

ZUNW JIA 4Q	
Controller	PLX20
Line reactor	LR48
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 000	CH00850A
Main Fuseholder, 3 required Size 000	CP102054
Armature fuse size 1	CH00963A
Armature fuseholder size 1	CP102906
Pot kit including graduated dial & knob	

PLX30

PART NO.



Aux Fuseholder, 3 required 6 x 32 CP102071 DIN Rail Clip for Aux Fuseholder, 3 required Main Semiconductor Fuse, 3 required Size 000 Main Fuseholder, 3 required Size 000 CP102054	30KW 72A 4Q	
Aux Semiconductor Fuse, 3 required 6 x 32 Aux Fuseholder, 3 required 6 x 32 CP102071 DIN Rail Clip for Aux Fuseholder, 3 required Main Semiconductor Fuse, 3 required Size 000 Main Fuseholder, 3 required Size 000 CP102054 Armature Fuse size 1 CP102906	Controller	PLX30
Aux Fuseholder, 3 required 6 x 32 CP102071 DIN Rail Clip for Aux Fuseholder, 3 required Main Semiconductor Fuse, 3 required Size 000 Main Fuseholder, 3 required Size 000 CP102054 Armature Fuse size 1 CH00980A CP102906	Line reactor	LR120
DIN Rail Clip for Aux Fuseholder, 3 required Main Semiconductor Fuse, 3 required Size 000 Main Fuseholder, 3 required Size 000 CP102054 Armature Fuse size 1 CP102906	Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Main Semiconductor Fuse, 3 required Size 000 Main Fuseholder, 3 required Size 000 CP102054 Armature Fuse size 1 CP102906	Aux Fuseholder, 3 required 6 x 32	CP102071
Main Fuseholder, 3 required Size 000 CP102054 Armature Fuse size 1 CH00980A Armature Fuseholder size 1 CP102906	DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Armature Fuse size 1 CH00980A Armature Fuseholder size 1 CP102906	Main Semiconductor Fuse, 3 required Size 000	CH00880A
Armature Fuseholder size 1 CP102906	Main Fuseholder, 3 required Size 000	CP102054
	Armature Fuse size 1	CH00980A
Pot kit including graduated dial & knob POTKIT	Armature Fuseholder size 1	CP102906
	Pot kit including graduated dial & knob	POTKIT

PLX40



40KW 99A 4Q Controller PLX40 Line reactor LR120 Aux Semiconductor Fuse, 3 required 6 x 32 CH00620A Aux Fuseholder, 3 required 6 x 32 CP102071 DIN Rail Clip for Aux Fuseholder, 3 required FE101969 Main Semiconductor Fuse, 3 required Size 000 CH008100 Main Fuseholder, 3 required Size 000 CP102054

PLX50



50KW 123A 4Q

Armature Fuseholder size 1

Pot kit including graduated dial & knob

Armature Fuse size 1

Controller
Line reactor
Aux Semiconductor Fuse, 3 required 6 x 32
Aux Fuseholder, 3 required 6 x 32
DIN Rail Clip for Aux Fuseholder, 3 required
Main Semiconductor Fuse, 3 required Size 000
Main Fuseholder, 3 required Size 000
Armature Fuse size 1
Armature Fuseholder size 1
Pot kit including graduated dial & knob



65KW 155A 40

00/11/ 100/11/2	
Controller	PLX65
Line reactor	LR270
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 000	CH008160
Main Fuseholder, 3 required Size 000	CP102054
Armature Fuse size 1	CH009200
Armature Fuseholder size 1	CP102906
Pot kit including graduated dial & knob	POTKIT

PLX85



85KW 205A 40

001111 20011 10	
Controller	PLX85
Line reactor	LR270
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 1	CH009250
Main 3 pole Fuseholder Size 1	CP102055
Armature fuse size 1	CH009250
Armature fuseholder size 1	CP102906
Pot kit including graduated dial & knob	POTKIT

CH009125

CP102906

POTKIT

PLX50 LR120 CH00620A

CP102071 FE101969 CH008125 CP102054 CH009160 CP102906 POTKIT

PRODUCT NAME PART PART NO.

PLX115



115KW 270A 4Q	
Controller	PLX115
Line reactor	LR270
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 1	CH009250
Main 3 pole Fuseholder Size 1	CP102055
Armature fuse size 1	CH009315
Armature Fuseholder size 1	CP102906
Pot kit including graduated dial & knob	POTKIT

PLX145



145KW 330A 4Q	
Controller	PLX145
Line reactor	LR330
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 3	CH010550
Main 3 pole Fuseholder Size 3	CP102233
Armature fuse size 1	CH009400
Armature Fuseholder size 1	CP102906
Pot kit including graduated dial & knob	POTKIT



185KW 430A 4Q	
Controller	PLX185
50 Amp option on field output	
Line reactor	LR430
Aux Semiconductor Fuse Size 000, 3 required	CH00850A
Aux Fuseholder Size 000, 3 required	CP102054
Main Semiconductor Fuse, 3 required Size 3	CH010550
Main 3 pole Fuseholder Size 3	CP102233
Armature fuse size 2	CH013500
Armature Fuseholder size 2	CP102949
Pot kit including graduated dial & knob	POTKIT

PLX225



225KW 530A 4Q	
Controller	PLX225
50 Amp option on field output	
Line reactor	LR530
Aux Semiconductor Fuse Size 000, 3 required	CH00850A
Aux Fuseholder Size 000, 3 required	CP102054
Main Semiconductor Fuse, 3 required Size 3	CH010550
Main 3 pole Fuseholder Size 3	CP102233
Armature Fuse size 2	CH013550
Armature Fuseholder size 2	CP102949
Pot kit including graduated dial & knob	POTKIT

PRODUCT NAME PART PART NO.

PLX275



275KW 650A 4Q		
Options	Controller	PLX275
TE - top entry (standard)	Line Reactor	LR650
BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103311
50 Amp field (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103361
HV - 690VAC (extra cost option)	Aux Fuseholder, 3 required	CP103371
Refer to supplier for information	Armature Fuse, 2 required	CH103321
	Pot kit inc. graduated dial and knob	POTKIT

PLX315



315KW 750A 40 Options PLX315 Controller TE - top entry (standard) Line Reactor BE - bottom entry (no cost option) Main Semiconductor Fuse, 3 required 50 Amp field (extra cost option)

LR750 CH103312 Aux Semiconductor Fuse, 3 required CH103361 Aux Fuseholder, 3 required CP103371 Armature Fuse, 2 required CH103322 Pot kit inc. graduated dial and knob POTKIT

PLX360



360KW 850A 4Q

HV - 690VAC (extra cost option)

Refer to supplier for information

	I .
Options	Controller
TE - top entry (standard)	Line Reactor
BE - bottom entry (no cost option)	Main Semiconductor Fuse
50 Amp field (extra cost option)	Aux Semiconductor Fuse,
HV - 690VAC (extra cost option)	Aux Fuseholder, 3 require
Refer to supplier for information	Armature Fuse, 2 require
	B 4 1 2 4 1 12

PLX360 LR850 se, 3 required CH103313 CH103361 , 3 required CP103371 red CH103323 POTKIT Pot kit inc. graduated dial and knob

PLX400



400KW 950A 4Q

ptions	Controller
E - top entry (standard)	Line Reactor
E - bottom entry (no cost option)	Main Semicond
0 Amp field (extra cost option)	Aux Semicondu
IV - 690VAC (extra cost option)	Aux Fuseholder,
efer to supplier for information	Armature Fuse,
	Pot kit inc grad

PLX400 LR950 ductor Fuse, 3 required CH103314 uctor Fuse, 3 required CH103361 r, 3 required CP103371 , 2 required CH103324 Pot kit inc. graduated dial and knob POTKIT

PLX440



440KW 1050A 40

1 101111 1000/11 10
Options
TE - top entry (standard)
BE - bottom entry (no cost option)
50 Amp field (extra cost option)
HV - 690VAC (extra cost option)
Refer to supplier for information

Controller PLX440 LR1050 Line Reactor Main Semiconductor Fuse, 3 required CH103315 Aux Semiconductor Fuse, 3 required CH103361 Aux Fuseholder, 3 required CP103371 Armature Fuse, 2 required CH103325 Pot kit inc. graduated dial and knob POTKIT



520KW 1250A 4Q

Controller PLX520 Line Reactor LR1250 Main Semiconductor Fuse, 3 required CH103316 Aux Semiconductor Fuse, 3 required CH103363 Aux Fuseholder, 3 required CP103373 Armature Fuse, 2 required CH103326 Pot kit inc. graduated dial and knob POTKIT

PLX600

600KW 1450A 4Q

Options TE - top entry (standard)

PART

BE - bottom entry (no cost option) HV - 690VAC (extra cost option) Refer to supplier for information

Controller	PLX600
Line Reactor	LR1450
Main Semiconductor Fuse, 3 required	CH103317
Aux Semiconductor Fuse, 3 required	CH103363
Aux Fuseholder, 3 required	CP103373
Armature Fuse, 2 required	CH103327
Pot kit inc. graduated dial and knob	POTKIT



700KW 1650A 40

Options

Options

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

Controller	PLX700
Line Reactor	LR1650
Main Semiconductor Fuse, 3 required	CH103318
Aux Semiconductor Fuse, 3 required	CH103363
Aux Fuseholder, 3 required	CP103373
Armature Fuse, 2 required	CH103328
Pot kit inc. graduated dial and knob	POTKIT



800KW 1850A 40

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

Controller	PLX800
Line Reactor	LR1850
Main Semiconductor Fuse, 3 required	CH103319
Aux Semiconductor Fuse, 3 required	CH103363
Aux Fuseholder, 3 required	CP103373
Armature Fuse, 2 required	CH103329
Pot kit inc. graduated dial and knob	POTKIT



900KW 2050A 40

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

Controller	PLX900
Line Reactor	LR2050
Main Semiconductor Fuse, 3 required	CH103320
Aux Semiconductor Fuse, 3 required	CH103363
Aux Fuseholder, 3 required	CP103373
Armature Fuse, 2 required	CH103330
Pot kit inc. graduated dial and knob	POTKIT



980KW 2250A 40

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

Controller	PLX980
Line Reactor	LR2250
Main Semiconductor Fuse, 3 required	CH103468
Aux Semiconductor Fuse, 3 required	CH103363
Aux Fuseholder, 3 required	CP103373
Armature Fuse, 2 required	CH103469
Pot kit inc. graduated dial and knob	POTKIT

PI/PIX



OPTIONS & ACCESSORIES

OF FIGNS & ACCESSORIES	
Profibus card	Profibus card
Devicenet card	Devicenet card
Mounting board for Profibus/Devicenet card	LA102738
Daisy chain mtg board for Profibus/Devicenet	LA103001
Additional Drive to PC comms cable	LA102595
Drive to drive cable FCC68/FCC68	LA102596
Venting kit for PL/X 275 - 440	LA103392
Venting kit for PL/X 520 - 980	LA103402

SLE RANGE, THREE PHASE 2Q ANALOGUE DC CONTROLLER

SLE14

PRODUCT NAME



14KW 34A

Controller	SLE14
Line reactor	LR48
Aux Semiconductor Fuse, 3 required 6 x 32	CH00608A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required 14 x 51	CH00740A
Main Fuseholder, 3 required 14 x 51	CP102053
Pot kit including graduated dial & knob	POTKIT

SLE24



24KW 58A

2 11 (11 00)	
Controller	SLE24
Line reactor	LR48
Aux Semiconductor Fuse, 3 required 6 x 32	CH00608A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 000	CH00880A
Main Fuseholder, 3 required Size 000	CP102054
Pot kit including graduated dial & knob	POTKIT

SLE34



34KW 82A

J II W OL/ V	
Controller	SLE34
Line reactor	LR120
Aux Semiconductor Fuse, 3 required 6 x 32	CH00608A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 000	CH00880A
Main Fuseholder, 3 required Size 000	CP102054
Pot kit including graduated dial & knob	POTKIT

SLE44



44K\M 106A

44/// 100/	
Controller	SLE44
Line reactor	LR120
Aux Semiconductor Fuse, 3 required 6 x 32	CH00608A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 000	CH008100
Main Fuseholder, 3 required Size 000	CP102054
Pot kit including graduated dial & knob	

SL RANGE, THREE PHASE ANALOGUE 2Q DRIVE WITH INTEGRAL FIELD WEAKENER

SL5



5KW 12A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD Controller SL5 7.5 Amp option on field output Line reactor

LR48 DIN Rail Clip for holder, 3 required FE101969 Main Semiconductor Fuse, 3 required 6 x 32 CH00612A Main Fuseholder, 3 required 6 x 32 CP102071 Pot kit including graduated dial & knob POTKIT

10KW 24A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD Controller SL10 7.5 Amp option on field output LR48 Line reactor Main Semiconductor Fuse, 3 required 14 x 51 CH00740A CP102053 Main Fuseholder, 3 required 14 x 51 Pot kit including graduated dial & knob POTKIT

SL15

15KW 36A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD. Controller SL15 7.5 Amp option on field output LR48 Line reactor Main Semiconductor Fuse, 3 required 14 x 51 CH00740A Main Fuseholder, 3 required 14 x 51 CP102053 Pot kit including graduated dial & knob POTKIT

SL20

20KW 48A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD. 7.5 Amp option on field output LR48 Line reactor CH00850A Main Semiconductor Fuse, 3 required Size 000 Main Fuseholder, 3 required Size 000 CP102054 POTKIT Pot kit including graduated dial & knob



30KW 72A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD Controller SL30 10 Amp option on field output LR120 Line reactor Main Semiconductor Fuse, 3 required Size 000 CH00880A CP102054 Main Fuseholder, 3 required Size 000 POTKIT Pot kit including graduated dial & knob



40KW 96A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD 10 Amp option on field output Line reactor LR120 CH008100 Main Semiconductor Fuse, 3 required Size 000 CP102054 Main Fuseholder, 3 required Size 000 POTKIT Pot kit including graduated dial & knob



50 KW~120 A this model has regenerative stopping capability as standard Controller 10 Amp option on field output Line reactor LR120 Main Semiconductor Fuse, 3 required Size 000 CH008125 Main Fuseholder, 3 required Size 000 CP102054 Pot kit including graduated dial & knob POTKIT

PRODUCT NAME PART NO. PART

SL65



65KW 155A	
Controller	SL65
15 Amp option on field output	
Line reactor	LR270
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 000	CH008160
Main Fuseholder, 3 required Size 000	CP102054
Pot kit including graduated dial & knob	POTKIT

SL85



85KW 205A	
Controller	SL85
15 Amp option on field output	
Line reactor	LR270
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 1	CH009250
Main 3 pole Fuseholder Size 1	CP102055
Pot kit including graduated dial & knob	POTKIT

SL115



115KW 270A	
Controller	SL115
15 Amp option on field output	
Line reactor	LR270
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 1	CH009250
Main 3 pole Fuseholder Size 1	CP102055
Pot kit including graduated dial & knob	POTKIT

SL145



145KW 330A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS ST	
Controller	SL145
15 Amp option on field output	
Line reactor	LR330
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 3	CH010550
Main 3 pole Fuseholder Size 3	CP102233
Pot kit including graduated dial & knob	POTKIT

SLX RANGE, THREE PHASE 4Q FULLY REGENERATIVE ANALOGUE CONTROLLER WITH INTEGRAL FIELD WEAKENER

SLX5



5KW 12 AMP 4Q	
Controller	SLX5
7.5 Amp option on field output	
Line reactor	LR48
Main Semiconductor Fuse, 3 required 6 x 32	CH00612A
Main Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for holder, 3 required	FE101969
Armature Fuse	CH00816A
Armature Fuseholder	CP102054
Pot kit including graduated dial & knob	POTKIT

arroller Amp option on field output reactor Semiconductor Fuse, 3 required 14 x 51 Fuseholder, 3 required 14 x 51 ature Fuse ature Fuseholder Amp option on field output reactor Semiconductor Fuse, 3 required 14 x 51 Amp option on field output reactor Semiconductor Fuse, 3 required 14 x 51 Affartable Fuseholder Amp option on field output reactor Semiconductor Fuse, 3 required 14 x 51 Affartable Fuseholder Amp option on field output Fuseholder Amp option on field output Fuseholder Amp option on field output Fuseholder, 3 required Size 000 Fuseholder, 3 required Size 000 Fuseholder, 3 required Size 000	SLX10 LR48 CH00740A CP102053 CH00832A CP102054 POTKIT SLX15 LR48 CH00740A CP102053 CH00940A CP102906 POTKIT SLX20 LR48
Amp option on field output reactor in Semiconductor Fuse, 3 required 14 x 51 in Fuseholder, 3 required 14 x 51 ature Fuse ature Fuseholder kit including graduated dial & knob SKW 36 AMP 4Q croller Amp option on field output reactor in Semiconductor Fuse, 3 required 14 x 51 in Fuseholder, 3 required 14 x 51 in Fuseholder kit including graduated dial & knob SKW 48 AMP 4Q croller Amp option on field output reactor in Semiconductor Fuse, 3 required Size 000	LR48 CH00740A CP102053 CH00832A CP102054 POTKIT SLX15 LR48 CH00740A CP102053 CH00940A CP102906 POTKIT
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ature Fuseholder kit including graduated dial & knob SKW 36 AMP 4Q croller Amp option on field output reactor a Semiconductor Fuse, 3 required 14 x 51 ature Fuse ature Fuse ature Fuseholder kit including graduated dial & knob SKW 48 AMP 4Q croller Amp option on field output reactor a Semiconductor Fuse, 3 required Size 000	CP102054 POTKIT SLX15 LR48 CH00740A CP102053 CH00940A CP102906 POTKIT
iroller Amp option on field output reactor in Semiconductor Fuse, 3 required 14 x 51 in Fuseholder, 3 required 14 x 51 ature Fuse ature Fuseholder kit including graduated dial & knob IKW 48 AMP 4Q iroller Amp option on field output reactor in Semiconductor Fuse, 3 required Size 000	SLX15 LR48 CH00740A CP102053 CH00940A CP102906 POTKIT
Amp option on field output reactor n Semiconductor Fuse, 3 required 14 x 51 n Fuseholder, 3 required 14 x 51 ature Fuse ature Fuseholder kit including graduated dial & knob AMP 4Q croller Amp option on field output reactor n Semiconductor Fuse, 3 required Size 000	LR48 CH00740A CP102053 CH00940A CP102906 POTKIT
Amp option on field output reactor n Semiconductor Fuse, 3 required 14 x 51 n Fuseholder, 3 required 14 x 51 ature Fuse ature Fuseholder kit including graduated dial & knob AMP 4Q croller Amp option on field output reactor n Semiconductor Fuse, 3 required Size 000	LR48 CH00740A CP102053 CH00940A CP102906 POTKIT
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Amp option on field output reactor n Semiconductor Fuse, 3 required Size 000	
Semiconductor Fuse, 3 required Size 000	LR48
	CH00850A CP102054
ature Fuse	CH00963A
ature Fuseholder	CP102906
cit including graduated dial & knob	POTKIT
KW 72 AMP 4Q	
roller	SLX30
	LR120
Semiconductor Fuse, 3 required Size 000	CH00880A
n Fuseholder, 3 required Size 000	CP102054
ature Fuse ature Fuseholder	CH00980A CP102906
xit including graduated dial & knob	POTKIT
KW 96 AMP 40	
roller	SLX40
mp option on field output	1.0420
	LR120 CH008100
r Fuseholder, 3 required Size 000	CP102054
ature Fuse	CH009125
	CP102906 POTKIT
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PRODUCT NAME PART NO.

SLX50



50KW 120 AMP 4Q	
Controller	SLX50
10 Amp option on field output	
Line reactor	LR120
Main Semiconductor Fuse, 3 required Size 000	CH008125
Main Fuseholder, 3 required Size 000	CP102054
Armature Fuse	CH009160
Armature Fuseholder	CP102906
Pot kit including graduated dial & knob	POTKIT

SLX65



65KW 155 AMP 4Q	
Controller	SLX65
15 Amp option on field output	
Line reactor	LR270
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 000	CH008160
Main Fuseholder, 3 required Size 000	CP102054
Armature Fuse	CH009200
Armature Fuseholder	CP102906
Pot kit including graduated dial & knob	POTKIT

SLX85



85KW 205 AMP 4Q	
Controller	SLX85
15 Amp option on field output	
Line reactor	LR270
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 1	CH009250
Main 3 pole Fuseholder Size 1	CP102055
Armature Fuse	CH009250
Armature Fuseholder	CP102906
Pot kit including graduated dial & knob	POTKIT

SLX115



115KW 270 AMP 4Q	
Controller	SLX115
15 Amp option on field output	
Line reactor	LR270
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 1	CH009250
Main 3 pole Fuseholder Size 1	CP102055
Armature Fuse	CH009315
Armature Fuseholder	CP102906
Pot kit including graduated dial & knob	POTKIT

SLX145



145KW 330 AMP 4Q	
Controller	SLX145
15 Amp option on field output	
Line reactor	LR330
Aux Semiconductor Fuse, 3 required 6 x 32	CH00620A
Aux Fuseholder, 3 required 6 x 32	CP102071
DIN Rail Clip for Aux Fuseholder, 3 required	FE101969
Main Semiconductor Fuse, 3 required Size 3	CH010550
Main 3 pole Fuseholder Size 3	CP102233
Armature Fuse	CH009400
Armature Fuseholder	CP102906
Pot kit including graduated dial & knob	POTKIT