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DC MOTOR CONTROL TECHNOLOGY
PRODUCT CATALOGUE

THREE PHASE DC DRIVES



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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	SL/X Analogue DC Drives
18-31	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.

Single Phase products

We also manufacture single phase DC motor controllers. Please see our single phase catalogue for details.

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.

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.

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 speed 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.



The PL/X range



5 - 50kW
12 - 123AMPS



65 - 145kW
155 - 330AMPS



185 - 265kW
430 - 630AMPS



275 - 440kW
650 - 1050AMPS



520 - 800kW
1250 - 1850AMPS

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 1850 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 models.
- 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

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

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
- Overload 150% for 25 seconds

FIELD CURRENT

- 8A (12-123A ratings)
- 16A (155-330A ratings)
- 32A (430-630A ratings)
- 64A (1250-1850A 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 480Vac +/- 10% for armature power
- 690Vac option for 650A-1850A

Auxiliary 3 phase 50-60Hz:

- 100 to 480Vac +/- 10% for field power
- 690Vac option for 650A-1850A

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 ranges
- +/- 5/10/20/30V
- All inputs are over voltage protected (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
- 0-50°C (all ratings)
- 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 650-1850Amps

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 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

SAVVY

DESCRIPTION

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

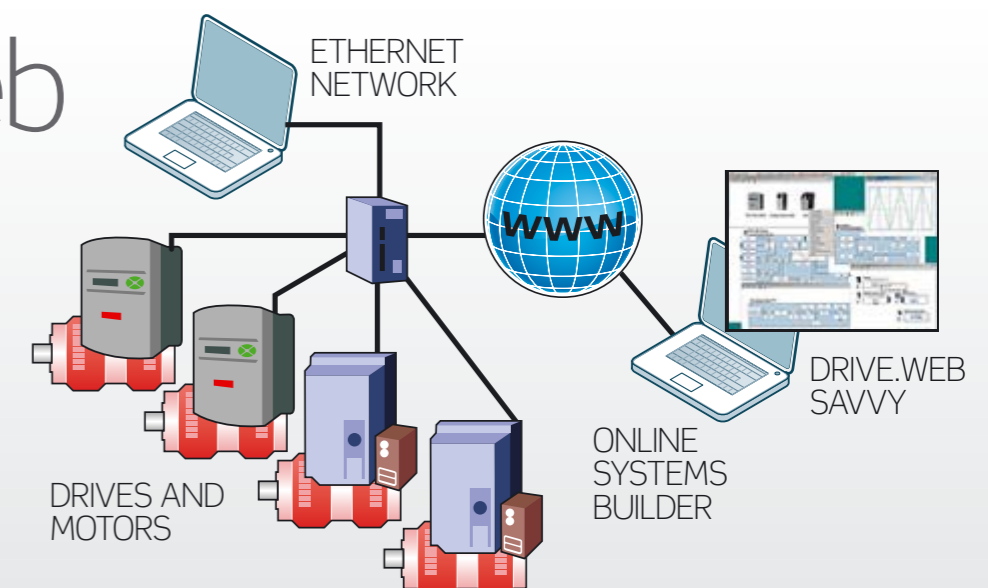
Savvy can be upgraded for a small cost to include a signal flow diagram (SFD) graphical package. This allows the user configured internal block diagram of the PL/X system to be represented as a block diagram on screen and changed by drag and drop connections from PIN to PIN.

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.



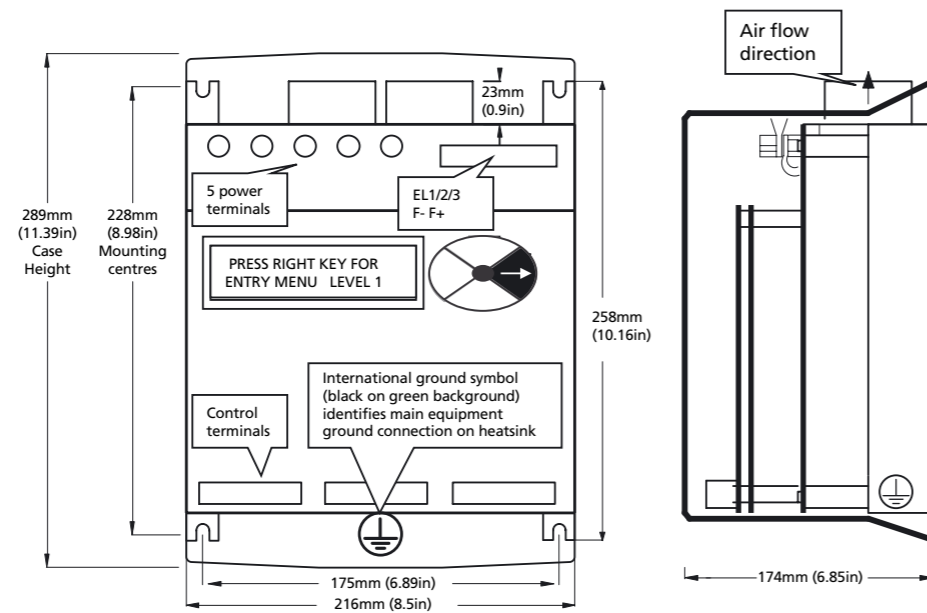


DESCRIPTION

The PLX 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

* PL model has regen stopping facility

FRAME SIZE

H 289 mm
W 216 mm
D 174 mm

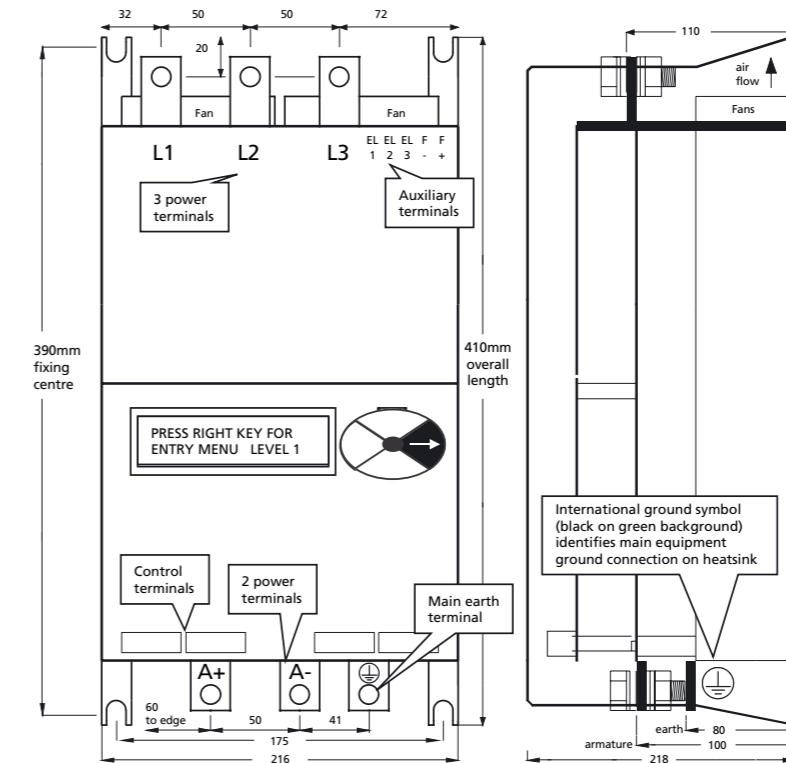
SHIPPING WEIGHT

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

* PL model has regen stopping facility

FRAME SIZE

H 410 mm
W 216 mm
D 218 mm

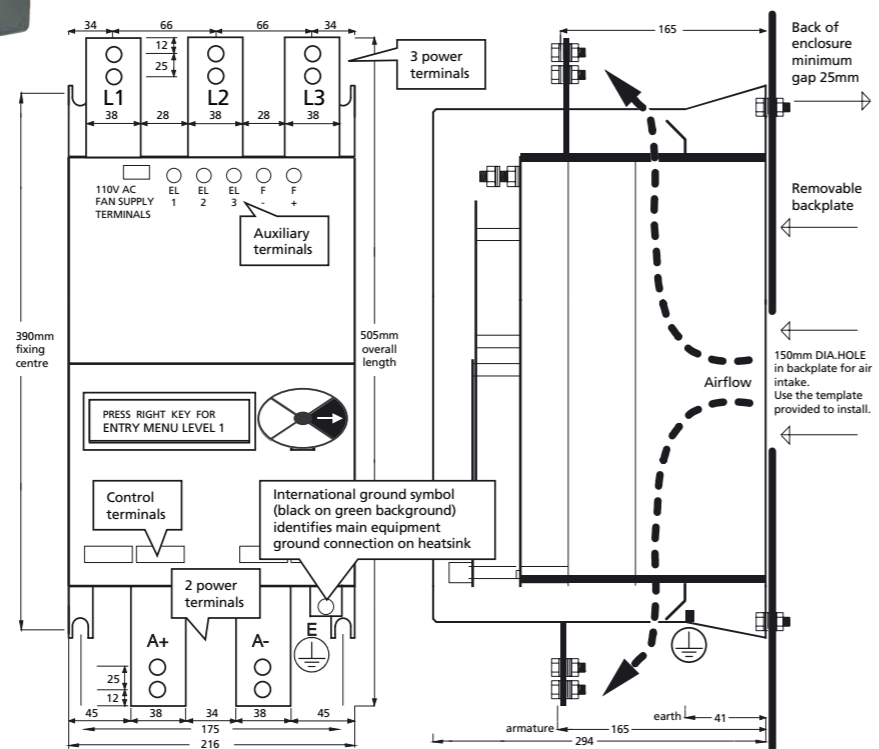
SHIPPING WEIGHT

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

* PL model has regen stopping facility

FRAME SIZE

H 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.

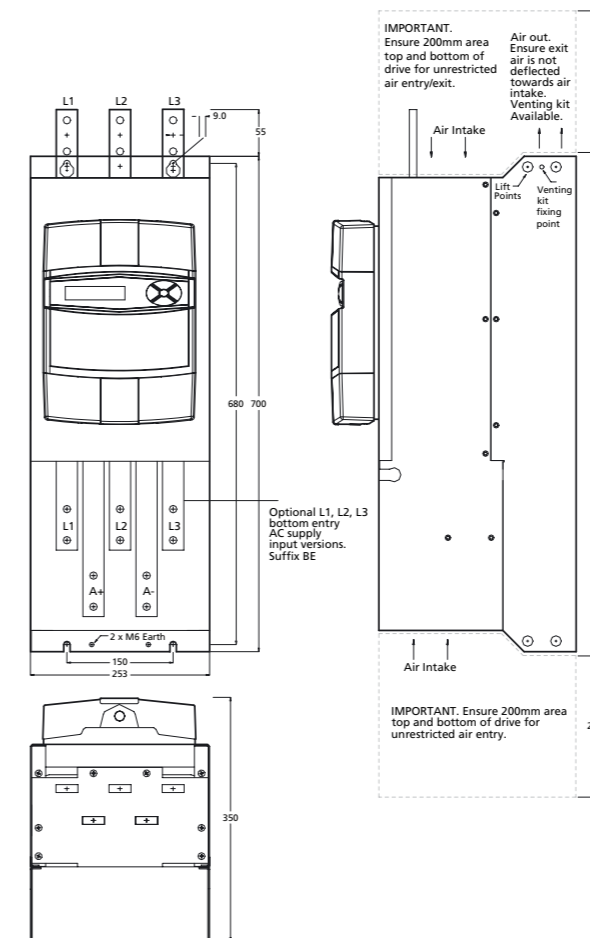
As well as standard voltages up to 480V AC, they have the option of being supplied as HV units that are able to

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	ARMATURE CURRENT DC AMPS
PL and PLX 275	275	650
PL and PLX 315	315	750
PL and PLX 360	360	850
PL* and PLX 400	400	950
PL and PLX 440	440	1050

* PL model has regen stopping facility

FRAME SIZE

H 700 mm
W 253 mm
D 350 mm

SHIPPING WEIGHT

45kg

Venting kit for units PL/X275-440 and PL/X500-800

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.

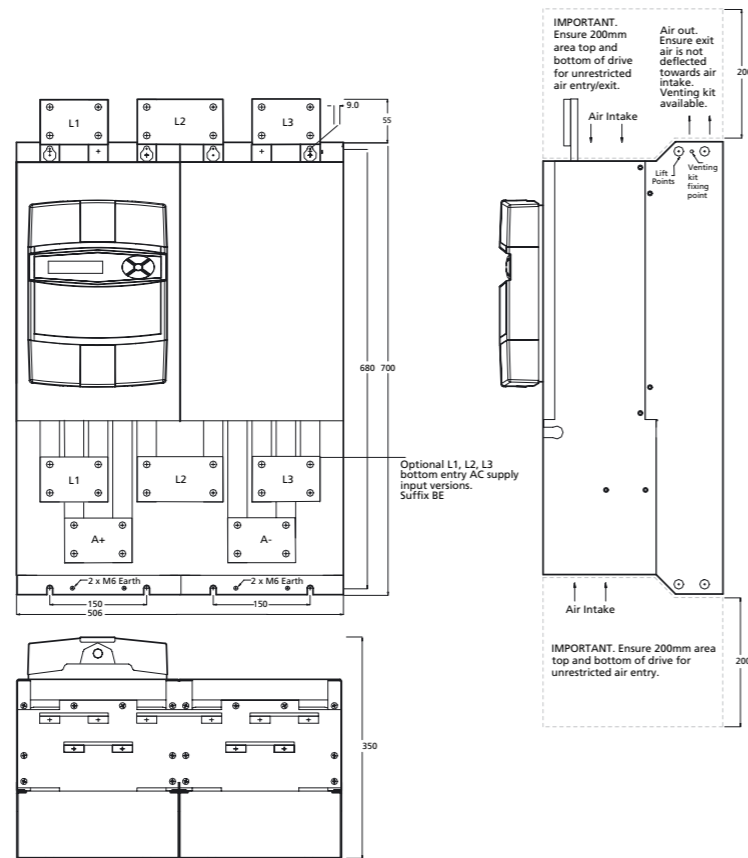
As well as standard voltages up to 480V AC, they have the option of being supplied as HV units that are able to

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/X520-800



RATINGS & DIMENSIONS

PL 2 QUADRANT PLX 4 QUADRANT	KW @ 460v	ARMATURE CURRENT DC AMPS
PL and PLX 520	520	1250
PL and PLX 600	600	1450
PL* and PLX 700	700	1650
PL* and PLX 800	800	1850

* PL model has regen stopping facility

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.



SL/SLX KEY FEATURES

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

50/60Hz AC operation

Numerous alarms for enhanced drive and motor protection

High accuracy armature voltage feedback mode eliminates the need for additional tachometer 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

PRODUCT NAME

SL/X

5kw to 50kw

DESCRIPTION

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 COMPARISON

MODEL	AC SUPPLY RANGE	TYPICAL ARMATURE VOLTAGE	MAX CONTINUOUS ARMATURE CURRENT	NOMINAL POWER
SL* and SLX 5	200-240v 380-480v	460v	12A	5kw
SL* and SLX 10			24A	10kw
SL* and SLX 15			36A	15kw
SL* and SLX 20			48A	20kw
SL* and SLX 30			72A	30kw
SL* and SLX 40			96A	40kw
SL* and SLX 50			120A	50kw

* SL model has regen stopping facility

DIMENSIONS

H 250 mm
W 204 mm
D 143 mm

SHIPPING WEIGHT

8kg

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

PRODUCT NAME

SL/X

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	460v	155A	65kw
SL and SLX 85			205A	85kw
SL and SLX 115			270A	115kw
SL* and SLX 145			330A	145kw

* 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.

SL/SLX KEY FEATURES

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

PRODUCT NAME

SLE

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

DESCRIPTION

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



MODEL COMPARISON

MODEL	AC SUPPLY RANGE	TYPICAL ARMATURE VOLTAGE	MAX CONTINUOUS ARMATURE CURRENT	NOMINAL POWER
SLE 14	200-240v 380-480v	460v	34A	14kw
SLE 24			58A	24kw
SLE 34			82A	34kw
SLE 44			106A	44kw

DIMENSIONS

H 250 mm
W 204 mm
D 115 mm

SHIPPING WEIGHT

7kg

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

SLE

14kw to 44kw

KEY FEATURES

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


SPECIFICATION


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		5KW 12A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD	
		Controller Line reactor Aux Semiconductor Fuse, 3 required 6 x 32 Aux Fuseholder, 3 required 6 x 32 DIN Rail Clip for holder, 6 required Main Semiconductor Fuse, 3 required 6 x 32 Main Fuseholder, 3 required 6 x 32 Pot kit including graduated dial & knob	PL5 LR48 CH00620A CP102071 FE101969 CH00612A CP102071 POTKIT


PL10		10KW 24A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD	
		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 14 x 51 Main Fuseholder, 3 required 14 x 51 Pot kit including graduated dial & knob	PL10 LR48 CH00620A CP102071 FE101969 CH00740A CP102053 POTKIT


PL15		15KW 36A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD	
		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 14 x 51 Main Fuseholder, 3 required 14 x 51 Pot kit including graduated dial & knob	PL15 LR48 CH00620A CP102071 FE101969 CH00740A CP102053 POTKIT


PL20		20KW 51A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD	
		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 Pot kit including graduated dial & knob	PL20 LR48 CH00620A CP102071 FE101969 CH00850A CP102054 POTKIT


PL30		30KW 72A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD	
		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 Pot kit including graduated dial & knob	PL30 LR120 CH00620A CP102071 FE101969 CH00880A CP102054 POTKIT


PL40		40KW 99A	
		THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD 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 Pot kit including graduated dial & knob	PL40 LR120 CH00620A CP102071 FE101969 CH008100 CP102054 POTKIT


PL50		50KW 123A	
		THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD 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 Pot kit including graduated dial & knob	PL50 LR120 CH00620A CP102071 FE101969 CH008125 CP102054 POTKIT


PL65		65KW 155A	
		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 Pot kit including graduated dial & knob	PL65 LR270 CH00620A CP102071 FE101969 CH008160 CP102054 POTKIT


PL85		85KW 205A	
		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 1 Main 3 pole Fuseholder Size 1 Pot kit including graduated dial & knob	PL85 LR270 CH00620A CP102071 FE101969 CH009250 CP102055 POTKIT


PL115		115KW 270A	
		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 1 Main 3 pole Fuseholder Size 1 Pot kit including graduated dial & knob	PL115 LR270 CH00620A CP102071 FE101969 CH009250 CP102055 POTKIT


PRODUCT NAME	PART	PART NO.
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


PL225 	225KW 530A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD	
	Controller	PL225
	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
	Pot kit including graduated dial & knob	POTKIT


PL265 	265KW 630A	
	Controller	PL265
	50 Amp option on field output	
	Line reactor	LR630
	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		
	Options	Controller	PL275
	TE - top entry (standard)	Line Reactor	LR650
	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	Potkit inc. graduated dial and knob	POTKIT


PL315 	315KW 750A		
	Options	Controller	PL315
	TE - top entry (standard)	Line Reactor	LR750
	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	Potkit inc. graduated dial and knob	POTKIT


PRODUCT NAME	PART	PART NO.	
PL360 	360KW 850A		
	Options	Controller	PL360
	TE - top entry (standard)	Line Reactor	LR850
	BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103303
	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


PL400 	400KW 950A		
	Options	Controller	PL400
	TE - top entry (standard)	Line Reactor	LR950
	BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103304
	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	Potkit inc. graduated dial and knob	POTKIT

PL440 	440KW 1050A		
	Options	Controller	PL440
	TE - top entry (standard)	Line Reactor	LR1050
	BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103305
	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	Potkit inc. graduated dial and knob	POTKIT

PL520 	520KW 1250A		
	Options	Controller	PL520
	TE - top entry (standard)	Line Reactor	LR1250
	BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103306
	HV - 690VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
	Refer to supplier for information	Aux Fuseholder, 3 required	CP103373
		Potkit inc. graduated dial and knob	POTKIT


PL600 	600KW 1450A		
	Options	Controller	PL600
	TE - top entry (standard)	Line Reactor	LR1450
	BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103307
	HV - 690VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
	Refer to supplier for information	Aux Fuseholder, 3 required	CP103373
		Potkit inc. graduated dial and knob	POTKIT


PL700 	700KW 1650A		
	Options	Controller	PL700
	TE - top entry (standard)	Line Reactor	LR1650
	BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103308
	HV - 690VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
	Refer to supplier for information	Aux Fuseholder, 3 required	CP103373
		Potkit inc. graduated dial and knob	POTKIT


PL800 	800KW 1850A		
	Options	Controller	PL800
	TE - top entry (standard)	Line Reactor	LR1850
	BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103309
	HV - 690VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
	Refer to supplier for information	Aux Fuseholder, 3 required	CP103373
		Potkit inc. graduated dial and knob	POTKIT


PRODUCT NAME PART PART NO.

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 4Q	
	Controller	PLX10
	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 000	CH00832A
	Armature fuseholder size 000	CP102054
Pot kit including graduated dial & knob	POTKIT	


PLX15 	15KW 36A 4Q	
	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 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		


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

PRODUCT NAME PART PART NO.

PLX30 	30KW 72A 4Q	
	Controller	PLX30
	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
	Armature Fuse size 1	CH00980A
	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
	Armature Fuse size 1	CH009125
	Armature Fuseholder size 1	CP102906
Pot kit including graduated dial & knob	POTKIT	


PLX50 	50KW 123A 4Q	
	Controller	PLX50
	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
	Armature Fuse size 1	CH009160
	Armature Fuseholder size 1	CP102906
Pot kit including graduated dial & knob	POTKIT	


PLX65 	65KW 155A 4Q	
	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	


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


PRODUCT NAME	PART	PART NO.
PLX85 	85KW 205A 4Q	
	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

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


PLX185 	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

PRODUCT NAME	PART	PART NO.
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

PLX275 	275KW 650A 4Q	
	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	PLX275
	Line Reactor	LR650
	Main Semiconductor Fuse, 3 required	CH103311
	Aux Semiconductor Fuse, 3 required	CH103361
	Aux Fuseholder, 3 required	CP103371
	Armature Fuse, 2 required	CH103321
Potkit inc. graduated dial and knob	POTKIT	

PLX315 	315KW 750A 4Q	
	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	PLX315
	Line Reactor	LR750
	Main Semiconductor Fuse, 3 required	CH103312
	Aux Semiconductor Fuse, 3 required	CH103361
	Aux Fuseholder, 3 required	CP103371
	Armature Fuse, 2 required	CH103322
Potkit inc. graduated dial and knob	POTKIT	

PLX360 	360KW 850A 4Q	
	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	PLX360
	Line Reactor	LR850
	Main Semiconductor Fuse, 3 required	CH103313
	Aux Semiconductor Fuse, 3 required	CH103361
	Aux Fuseholder, 3 required	CP103371
	Armature Fuse, 2 required	CH103323
Potkit inc. graduated dial and knob	POTKIT	

PLX400 	400KW 950A 4Q	
	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	PLX400
	Line Reactor	LR950
	Main Semiconductor Fuse, 3 required	CH103314
	Aux Semiconductor Fuse, 3 required	CH103361
	Aux Fuseholder, 3 required	CP103371
	Armature Fuse, 2 required	CH103324
Potkit inc. graduated dial and knob	POTKIT	

PRODUCT NAME	PART	PART NO.
PLX440 	440KW 1050A 4Q	
	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 Line Reactor Main Semiconductor Fuse, 3 required Aux Semiconductor Fuse, 3 required Aux Fuseholder, 3 required Armature Fuse, 2 required Potkit inc. graduated dial and knob
PLX520 	520KW 1250A 4Q	
	Options TE - top entry (standard) BE - bottom entry (no cost option) HV - 690VAC (extra cost option) Refer to supplier for information	Controller Line Reactor Main Semiconductor Fuse, 3 required Aux Semiconductor Fuse, 3 required Aux Fuseholder, 3 required Armature Fuse, 2 required Potkit inc. graduated dial and knob
PLX600 	600KW 1450A 4Q	
	Options TE - top entry (standard) BE - bottom entry (no cost option) HV - 690VAC (extra cost option) Refer to supplier for information	Controller Line Reactor Main Semiconductor Fuse, 3 required Aux Semiconductor Fuse, 3 required Aux Fuseholder, 3 required Armature Fuse, 2 required Potkit inc. graduated dial and knob
PLX700 	700KW 1650A 4Q	
	Options TE - top entry (standard) BE - bottom entry (no cost option) HV - 690VAC (extra cost option) Refer to supplier for information	Controller Line Reactor Main Semiconductor Fuse, 3 required Aux Semiconductor Fuse, 3 required Aux Fuseholder, 3 required Armature Fuse, 2 required Potkit inc. graduated dial and knob
PLX800 	800KW 1850A 4Q	
	Options TE - top entry (standard) BE - bottom entry (no cost option) HV - 690VAC (extra cost option) Refer to supplier for information	Controller Line Reactor Main Semiconductor Fuse, 3 required Aux Semiconductor Fuse, 3 required Aux Fuseholder, 3 required Armature Fuse, 2 required Potkit inc. graduated dial and knob
PL/PLX 	OPTIONS & ACCESSORIES	
	Profibus card Devicenet card Mounting board for Profibus/Devicenet 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 - 800	Profibus card Devicenet card LA102738 LA103001 LA102595 LA102596 LA103392 LA103402

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

PRODUCT NAME	PART	PART NO.
SLE RANGE, THREE PHASE 2Q ANALOGUE DC CONTROLLER		
SLE14 	14KW 34A	
	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 14 x 51 Main Fuseholder, 3 required 14 x 51 Pot kit including graduated dial & knob	SLE14 LR48 CH00608A CP102071 FE101969 CH00740A CP102053 POTKIT
SLE24 	24KW 58A	
	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 Pot kit including graduated dial & knob	SLE24 LR48 CH00608A CP102071 FE101969 CH00880A CP102054 POTKIT
SLE34 	34KW 82A	
	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 Pot kit including graduated dial & knob	SLE34 LR120 CH00608A CP102071 FE101969 CH00880A CP102054 POTKIT
SLE44 	44KW 106A	
	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 Pot kit including graduated dial & knob	SLE44 LR120 CH00608A CP102071 FE101969 CH008100 CP102054
SL RANGE, THREE PHASE ANALOGUE 2Q DRIVE WITH INTEGRAL FIELD WEAKENER		
SL5 	5KW 12A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD	
	Controller 7.5 Amp option on field output Line reactor DIN Rail Clip for holder, 3 required Main Semiconductor Fuse, 3 required 6 x 32 Main Fuseholder, 3 required 6 x 32 Pot kit including graduated dial & knob	SL5 LR48 FE101969 CH00612A CP102071 POTKIT


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

PRODUCT NAME	PART	PART NO.
SL10 	10KW 24A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD	
	Controller	SL10
	7.5 Amp option on field output	
	Line reactor	LR48
	Main Semiconductor Fuse, 3 required 14 x 51	CH00740A
	Main Fuseholder, 3 required 14 x 51	CP102053
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	
	Line reactor	LR48
	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	
	Controller	SL20
	7.5 Amp option on field output	
	Line reactor	LR48
	Main Semiconductor Fuse, 3 required Size 000	CH00850A
	Main Fuseholder, 3 required Size 000	CP102054
Pot kit including graduated dial & knob	POTKIT	
SL30 	30KW 72A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD	
	Controller	SL30
	10 Amp option on field output	
	Line reactor	LR120
	Main Semiconductor Fuse, 3 required Size 000	CH00880A
	Main Fuseholder, 3 required Size 000	CP102054
Pot kit including graduated dial & knob	POTKIT	
SL40 	40KW 96A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD	
	Controller	SL40
	10 Amp option on field output	
	Line reactor	LR120
	Main Semiconductor Fuse, 3 required Size 000	CH008100
	Main Fuseholder, 3 required Size 000	CP102054
Pot kit including graduated dial & knob	POTKIT	
SL50 	50KW 120A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD	
	Controller	SL50
	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	

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

PRODUCT NAME	PART	PART NO.
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 STANDARD	
	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

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

PRODUCT NAME	PART	PART NO.
SLX10 	10KW 24 AMP 4Q	
	Controller	SLX10
	7.5 Amp option on field output	
	Line reactor	LR48
	Main Semiconductor Fuse, 3 required 14 x 51	CH00740A
	Main Fuseholder, 3 required 14 x 51	CP102053
	Armature Fuse	CH00832A
Armature Fuseholder	CP102054	
Pot kit including graduated dial & knob	POTKIT	
SLX15 	15KW 36 AMP 4Q	
	Controller	SLX15
	7.5 Amp option on field output	
	Line reactor	LR48
	Main Semiconductor Fuse, 3 required 14 x 51	CH00740A
	Main Fuseholder, 3 required 14 x 51	CP102053
	Armature Fuse	CH00940A
Armature Fuseholder	CP102906	
Pot kit including graduated dial & knob	POTKIT	
SLX20 	20KW 48 AMP 4Q	
	Controller	SLX20
	7.5 Amp option on field output	
	Line reactor	LR48
	Main Semiconductor Fuse, 3 required Size 000	CH00850A
	Main Fuseholder, 3 required Size 000	CP102054
	Armature Fuse	CH00963A
Armature Fuseholder	CP102906	
Pot kit including graduated dial & knob	POTKIT	
SLX30 	30KW 72 AMP 4Q	
	Controller	SLX30
	10 Amp option on field output	
	Line reactor	LR120
	Main Semiconductor Fuse, 3 required Size 000	CH00880A
	Main Fuseholder, 3 required Size 000	CP102054
	Armature Fuse	CH00980A
Armature Fuseholder	CP102906	
Pot kit including graduated dial & knob	POTKIT	
SLX40 	40KW 96 AMP 4Q	
	Controller	SLX40
	10 Amp option on field output	
	Line reactor	LR120
	Main Semiconductor Fuse, 3 required Size 000	CH008100
	Main Fuseholder, 3 required Size 000	CP102054
	Armature Fuse	CH009125
Armature Fuseholder	CP102906	
Pot kit including graduated dial & knob	POTKIT	

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

PRODUCT NAME	PART	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	

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