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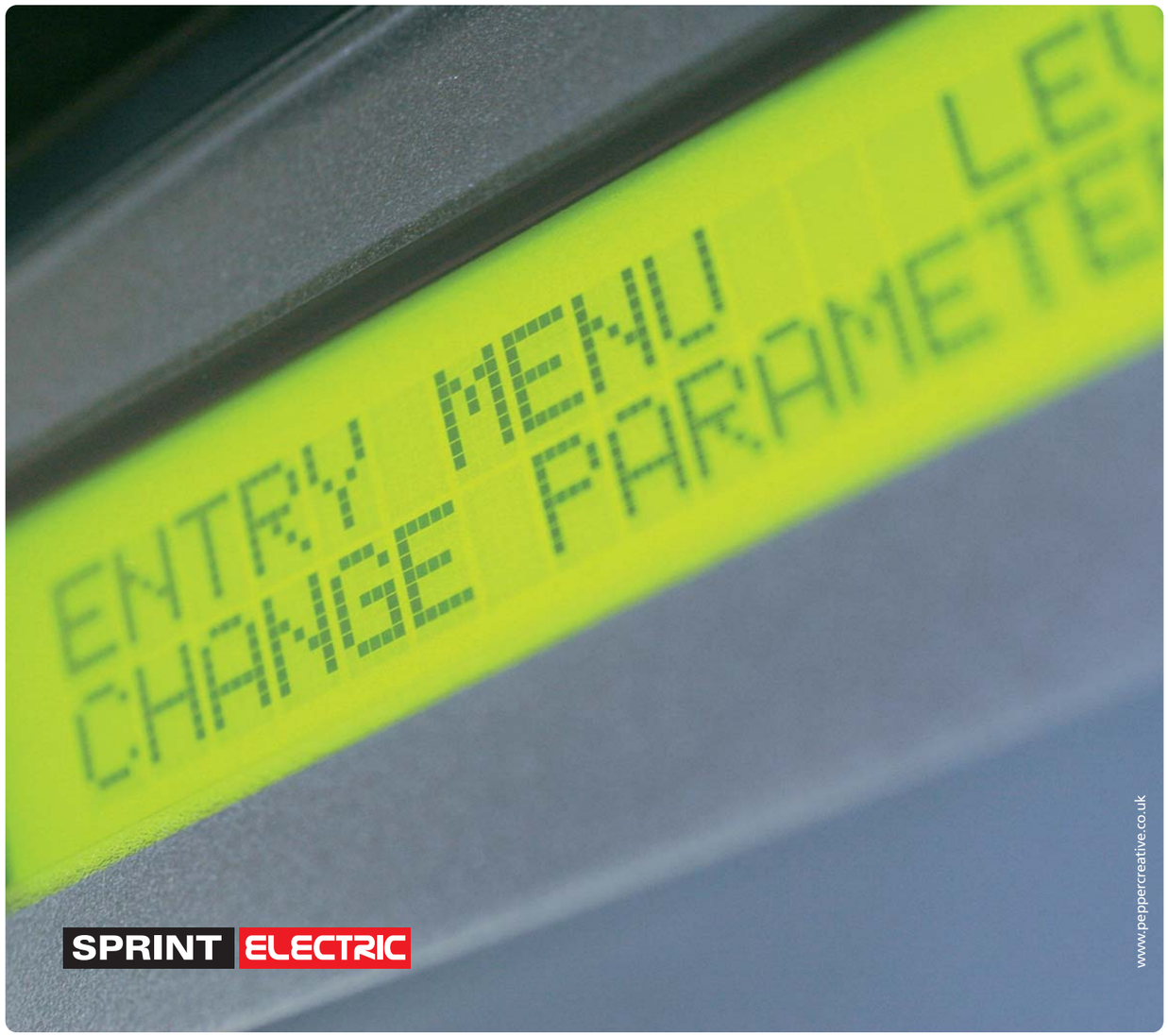
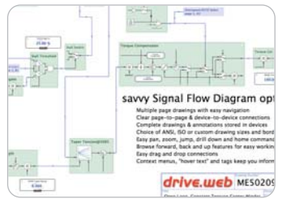


World class in design | World beating in function | 25 years of industrial motor control

THE QUEEN'S AWARDS FOR ENTERPRISE: INTERNATIONAL TRADE 2009

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

THE QUEEN'S AWARDS FOR ENTERPRISE: INTERNATIONAL TRADE 2009

Contents:

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.

Slip Ring Motor Drives

We also manufacture the JLX range of digital slip ring motor drives, see www.sprint-electric.com

Take control of the most demanding motor control applications.

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

Key Features:

- Friendly easy-to-use menu structure with descriptive parameter names.
- Extremely flexible block diagram including unique "Configuration Checker", detects conflicts in user programmed configurations.
- Failsafe automatic "Revert to AVF" on tach feedback failure.
- A choice of two drive configuration and monitoring packages.
  - PL Pilot. Free with PL/X.
  - 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 - 980KW
1250 - 2250AMPS

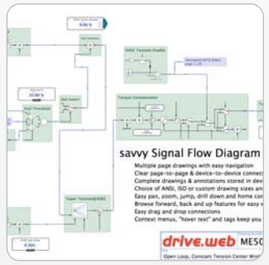
The 4Q PLX can motor and brake in forward and reverse and regenerate energy into the mains supply when braking.

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.

- Five feedback transducer options as standard.
- Non-volatile trip alarm memory, even after power-down.
- Real language parameter description eliminates need for look-up tables.
- Built-in "Oscilloscope" output for full parameter monitoring.
- Three fully independent, user programmable drive configurations.
- Full suite of centre winding Apps included.
- Extensive, multi-function programmable I/O, with over 36 digital and analogue input/output combinations.
- Built-in system application blocks with descriptive connection points.
- 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 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
- 600/690Vac options for 650A-2250A

Auxiliary 3 phase 50-60Hz:
- 100 to 480Vac +/- 10% for field power
- 600/690Vac options for 650A-2250A

Control 1 phase 50-60Hz:
- 110 to 240Vac +/- 10% for control power

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

Inputs/Outputs

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

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

DIGITAL INPUTS
- 17 total
- All configurable

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

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

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

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

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

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

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

Standards
CE marked to EN50178
- (low voltage directive)

EN50082-2:1995
- Immunity industrial environment

EN50082-1:1997
- Immunity residential commercial and light industry

EN50081-2:1993
- Emissions industrial environment (EN55011 Class A)

EN50081-1:1992
- Emissions industrial environment (EN55022 Class B)

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

PL/X configuration and monitoring tools

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

PRODUCT NAME

PL PILOT

DESCRIPTION

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

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

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

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

PRODUCT NAME

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.

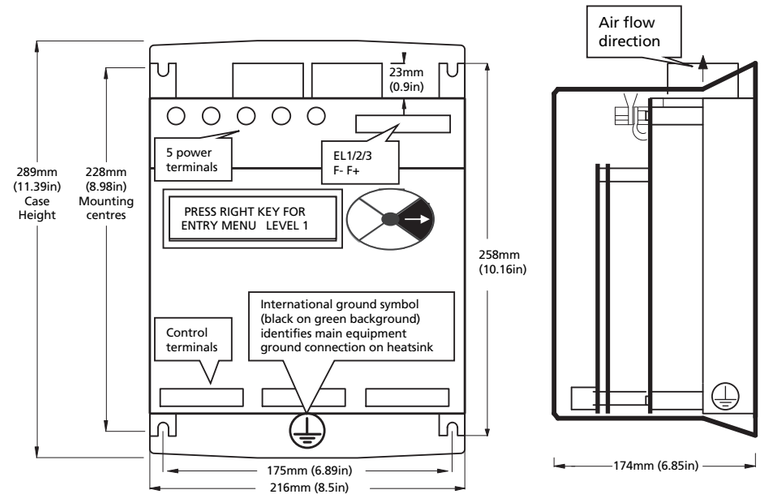
The drive.web technology is infinitely scalable and cost effective for systems of any size or complexity. For typical motor control systems, drive.web beats using any PLC on cost, performance and ease of use.

DESCRIPTION

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

PRODUCT NAME

PL/X5-50



RATINGS & DIMENSIONS

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

* PL model has regen stopping facility

FRAME SIZE

H 289 mm

W 216 mm

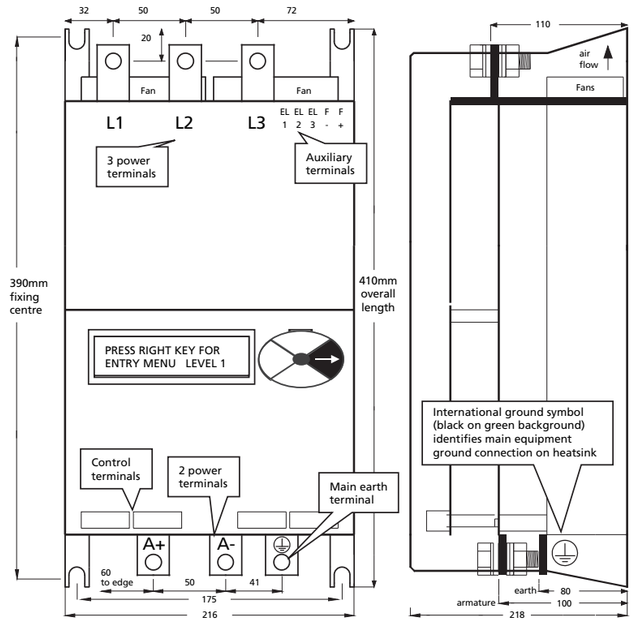
D 174 mm

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

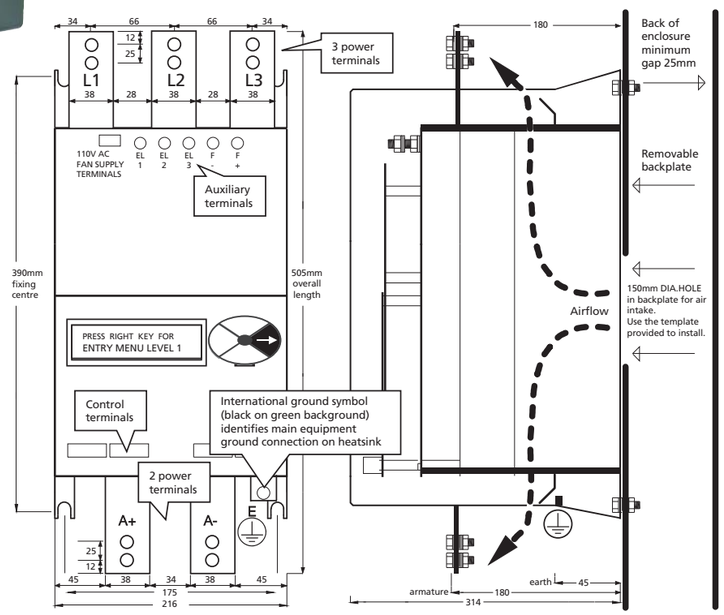
D 218 mm

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
50 Amp field option

FRAME SIZE

H	505 mm
W	216 mm
D	314 mm

SHIPPING WEIGHT

24kg

DESCRIPTION

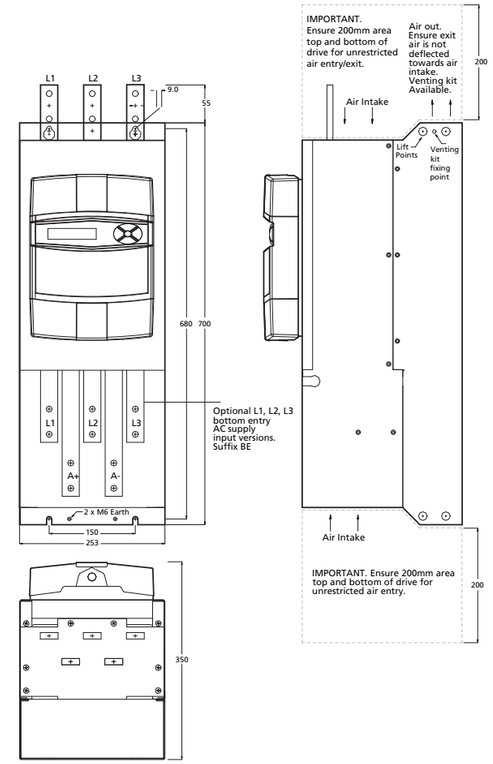
These models have all the functionality of the smaller units, but with added flexibility on the supply voltage and input port.

As well as standard voltages up to 480V AC, they have the option of being supplied as MV units that are able to accept voltages of up to 600 volts and HV units that are able to accept voltages up to 690 volts for motors with armatures of up to 750 volts DC.

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

PRODUCT NAME

PL/X275-440



RATINGS & DIMENSIONS

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

* PL model has regen stopping facility
** PLX 440 no overload
50 Amp field option

FRAME SIZE

H	700 mm
W	253 mm
D	350 mm

SHIPPING WEIGHT

45kg

Venting kit for units PL/X275-440

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

DESCRIPTION

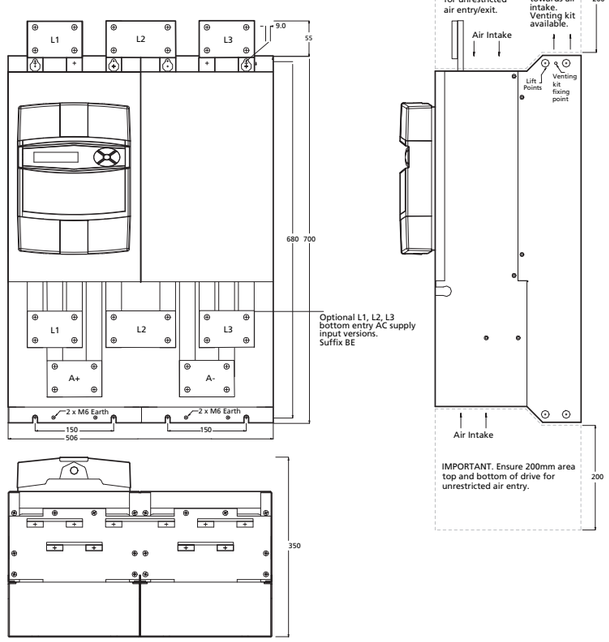
These models have all the functionality of the smaller units, but with added flexibility on the supply voltage and input port location.

As well as standard voltages up to 480V AC, they have the option of being supplied as MV units that are able to accept voltages of up to 600 volts and as HV units that are able to accept voltages up to 690 volts for motors with armatures of up to 750 volts DC.

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

PRODUCT NAME

PL/X520-980



Venting kit for units PL/X520-980

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

RATINGS & DIMENSIONS

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

* 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.

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 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**

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**

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

PRODUCT NAME

SLE

14kw to 44kw

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

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.

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

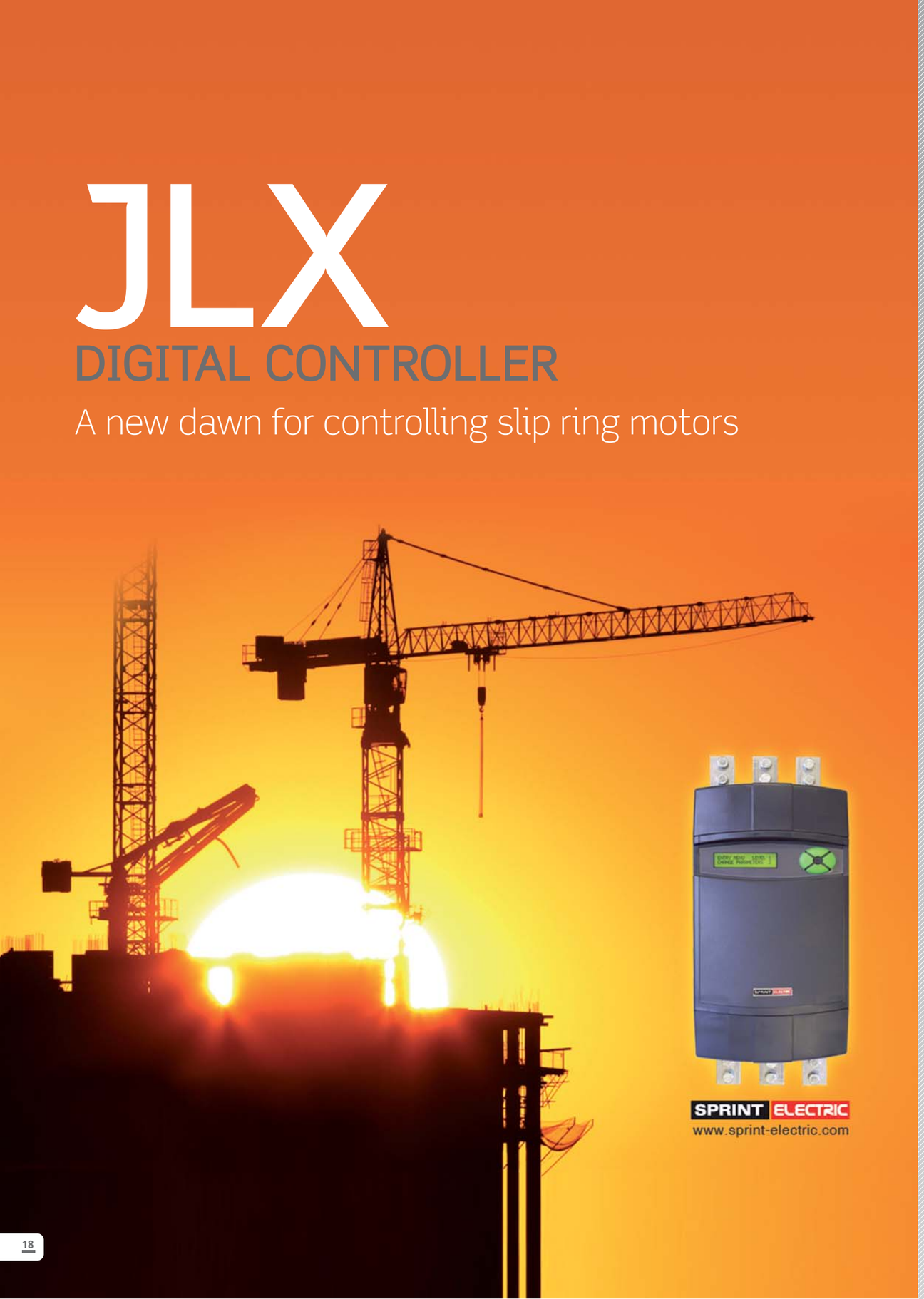
Output signals for easy display of motor speed and load

Features Sprint Electric micro analog processor

JLX

DIGITAL CONTROLLER

A new dawn for controlling slip ring motors



PRODUCT NAME

JL/X SLIP RING MOTOR CONTROLLER

DESCRIPTION

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

The JL/X range covers output currents from 100 to 1680 Amps and is available in 3 frame sizes with standard supply voltage inputs up to 480VAC. (Frame 2, 4 and 5). Frame 4 and 5 also have the option of being supplied as MV or HV units that are able to accept AC supply voltages up to 600 or 690 VAC for higher voltage applications. All models have the high current 3 phase supply terminals in standard top entry, with the motor connections at the bottom of the unit. The overload capability of this range is 150% for 25 seconds.

PRODUCT NAME

JL/XHD HIGH DUTY SLIP RING MOTOR CONTROLLER

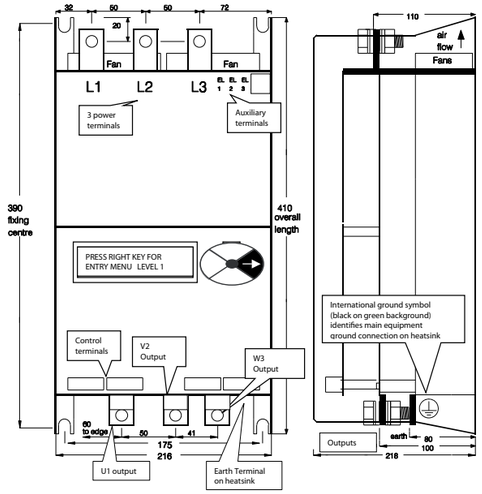
DESCRIPTION

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

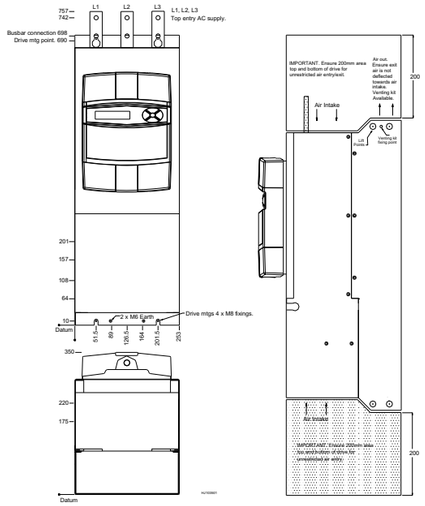
The JL/XHD range covers output currents from 100 to 1010 Amps and is available in 3 frame sizes with standard supply voltage inputs up to 480VAC. (Frame 2, 4 and 5). Frame 4 and 5 also have the option of being supplied as MV or HV units that are able to accept AC supply voltages up to 600 or 690 VAC for higher voltage applications. All models have the high current 3 phase supply terminals in standard top entry, with the motor connections at the bottom of the unit. The overload capability of this high duty range is 250% for 25 seconds.

FRAME DIMENSIONS

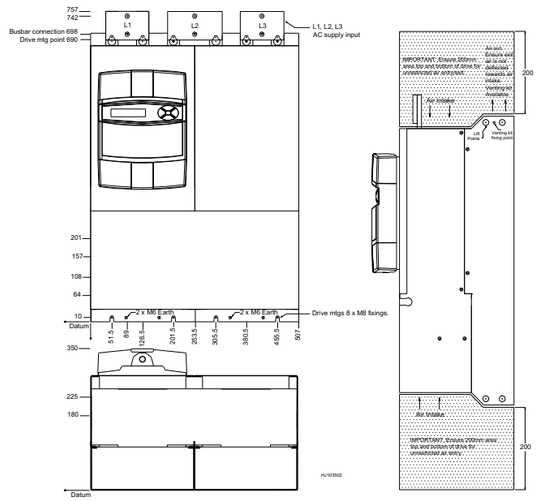
JL/X 130 - 270



JL/X 370 - 780



JL/X 860 - 1680



RATING TABLE FOR JL/X STANDARD VERSIONS

These models have a 150% overload capability for 25 seconds

Nominal maximum continuous shaft ratings

Model JL 2 quadrant JLX 4 quadrant Suffix HV for 690 VAC		kW at 415 Volt AC	HP at 415 Volt AC	HP at 480 Volt AC	HP 600V AC MV model	HP 690V AC HV model	100% Output Current	Line reactor type	Cooling air flow and dissipation cfm	 watts	Dimensions mm W x H x D
Frame 2	Model										
JL and JLX	130	75	100	115	-	-	130	LR270	365	380	216 x 378 x 218
JL and JLX	170	100	130	150	-	-	170	LR270	365	500	216 x 378 x 218
JL and JLX	220	130	170	200	-	-	220	LR270	365	650	216 x 378 x 218
JL and JLX	270	160	210	240	-	-	270	LR330	365	875	216 x 378 x 218
Frame 4											
JL and JLX	370	215	290	335	415	480	370	LR430	400	1200	253 x 700 x 350
JL and JLX	450	260	350	405	500	580	450	LR530	400	1450	253 x 700 x 350
JL and JLX	530	310	415	480	600	690	530	LR650	400	1700	253 x 700 x 350
JL and JLX	615	360	480	555	690	800	615	LR750	400	2000	253 x 700 x 350
JL and JLX	700	405	550	630	785	915	700	LR850	400	2300	253 x 700 x 350
JL and JLX	780	450	610	705	880	1015	780	LR950	400	2500	253 x 700 x 350
Frame 5											
JL and JLX	860	500	670	775	965	1115	860	LR1050	800	2700	506 x 700 x 350
JL and JLX	1025	595	800	925	1155	1330	1025	LR1250	800	3200	506 x 700 x 350
JL and JLX	1190	690	930	1075	1340	1550	1190	LR1450	800	3700	506 x 700 x 350
JL and JLX	1350	785	1055	1220	1505	1755	1350	LR1650	800	4200	506 x 700 x 350
JL and JLX	1520	880	1190	1375	1715	1980	1520	LR1850	800	4700	506 x 700 x 350
JL and JLX	1680	975	1310	1515	1890	2180	1680	LR2050	800	5200	506 x 700 x 350

RATING TABLE FOR JL/XHD HIGH DUTY VERSIONS

These models have a 250% overload capability for 25 seconds

Nominal maximum continuous shaft ratings

Model JLHD 2 quadrant JLXHD 4 quadrant Suffix HV for 690 VAC		kW at 415 Volt AC	HP at 415 Volt AC	HP at 480 Volt AC	HP 600V AC MV model	HP 690V AC HV model	100% Output Current	Line reactor type	Cooling air flow and dissipation cfm	 watts	Dimensions mm W x H x D
Frame 2	Model										
JLHD & JLXHD	75	45	60	70	-	-	75	LR270	365	380	216 x 378 x 218
JLHD & JLXHD	100	60	80	90	-	-	100	LR270	365	500	216 x 378 x 218
JLHD & JLXHD	130	75	100	115	-	-	130	LR270	365	650	216 x 378 x 218
JLHD & JLXHD	160	95	125	145	-	-	160	LR330	365	875	216 x 378 x 218
Frame 4											
JLHD & JLXHD	220	130	170	200	250	280	220	LR430	400	1200	253 x 700 x 350
JLHD & JLXHD	270	160	210	240	300	350	270	LR530	400	1450	253 x 700 x 350
JLHD & JLXHD	320	190	250	290	360	415	320	LR650	400	1700	253 x 700 x 350
JLHD & JLXHD	370	215	290	335	420	480	370	LR750	400	2000	253 x 700 x 350
JLHD & JLXHD	420	245	330	380	475	550	420	LR850	400	2300	253 x 700 x 350
JLHD & JLXHD	470	270	370	430	535	615	470	LR950	400	2500	253 x 700 x 350
Frame 5											
JLHD & JLXHD	520	300	405	470	585	670	520	LR1050	800	2700	506 x 700 x 350
JLHD & JLXHD	615	360	480	555	690	800	615	LR1250	800	3200	506 x 700 x 350
JLHD & JLXHD	715	415	560	650	810	930	715	LR1450	800	3700	506 x 700 x 350
JLHD & JLXHD	815	475	640	740	925	1065	815	LR1650	800	4200	506 x 700 x 350
JLHD & JLXHD	910	530	710	820	1025	1180	910	LR1850	800	4700	506 x 700 x 350
JLHD & JLXHD	1010	585	790	915	1140	1310	1010	LR2050	800	5200	506 x 700 x 350

PRODUCT NAME | PART | PART NO.

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

PL5

5KW 12A 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

PL10

10KW 24A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD

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

PL15

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

20KW 51A 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

30KW 72A 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

PL40

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.

PRODUCT NAME | PART | PART NO.

PL50

50KW 123A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD

Controller	PL50
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
Pot kit including graduated dial & knob	POTKIT

PL65

65KW 155A

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

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

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

PRODUCT NAME | PART | PART NO.

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	
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
MV - 600VAC (extra cost option)	Aux Fuseholder, 3 required	CP103371
HV - 690VAC (extra cost option)	Pot kit inc. graduated dial and knob	POTKIT

PL315

315KW 750A

Options	Controller	
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
MV - 600VAC (extra cost option)	Aux Fuseholder, 3 required	CP103371
HV - 690VAC (extra cost option)	Pot kit inc. graduated dial and knob	POTKIT

PL360

360KW 850A

Options	Controller	
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
MV - 600VAC (extra cost option)	Aux Fuseholder, 3 required	CP103371
HV - 690VAC (extra cost option)	Pot kit inc. graduated dial and knob	POTKIT

PL400

400KW 950A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD

Options	Controller	
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
MV - 600VAC (extra cost option)	Aux Fuseholder, 3 required	CP103371
HV - 690VAC (extra cost option)	Pot kit inc. graduated dial and knob	POTKIT

PL440

440KW 1050A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD

Options	Controller	
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
MV - 600VAC (extra cost option)	Aux Fuseholder, 3 required	CP103371
HV - 690VAC (extra cost option)	Pot kit inc. graduated dial and knob	POTKIT

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

PRODUCT NAME | PART | PART NO.

PL520

520KW 1250A

Options	Controller	
TE - top entry (standard)	Line Reactor	LR1250
BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103306
MV - 600VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
HV - 690VAC (extra cost option)	Aux Fuseholder, 3 required	CP103373
Refer to supplier for information	Pot kit inc. graduated dial and knob	POTKIT

PL600

600KW 1450A

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

PL700

700KW 1650A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD

Options	Controller	
TE - top entry (standard)	Line Reactor	LR1650
BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103308
MV - 600VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
HV - 690VAC (extra cost option)	Aux Fuseholder, 3 required	CP103373
Refer to supplier for information	Pot kit inc. graduated dial and knob	POTKIT

PL800

800KW 1850A THIS MODEL HAS REGENERATIVE STOPPING CAPABILITY AS STANDARD

Options	Controller	
TE - top entry (standard)	Line Reactor	LR1850
BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103309
MV - 600VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
HV - 690VAC (extra cost option)	Aux Fuseholder, 3 required	CP103373
Refer to supplier for information	Pot kit inc. graduated dial and knob	POTKIT

PL900

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

Options	Controller	
TE - top entry (standard)	Line Reactor	LR2050
BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103310
MV - 600VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
HV - 690VAC (extra cost option)	Aux Fuseholder, 3 required	CP103373
Refer to supplier for information	Pot kit inc. graduated dial and knob	POTKIT

PL980

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

Options	Controller	
TE - top entry (standard)	Line Reactor	LR2250
BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103467
MV - 600VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
HV - 690VAC (extra cost option)	Aux Fuseholder, 3 required	CP103373
Refer to supplier for information	Pot kit inc. graduated dial and knob	POTKIT

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

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	POTKIT

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

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

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

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
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
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

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

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
	MV - 600VAC (extra cost option)	Aux Fuseholder, 3 required	CP103371
	HV - 690VAC (extra cost option)	Armature Fuse, 2 required	CH103321
	Refer to supplier for information	Pot kit inc. graduated dial and knob	POTKIT
PLX315 	315KW 750A 4Q		
	Options	Controller	PLX315
	TE - top entry (standard)	Line Reactor	LR750
	BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103312
	50 Amp field (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103361
	MV - 600VAC (extra cost option)	Aux Fuseholder, 3 required	CP103371
	HV - 690VAC (extra cost option)	Armature Fuse, 2 required	CH103322
	Refer to supplier for information	Pot kit inc. graduated dial and knob	POTKIT
PLX360 	360KW 850A 4Q		
	Options	Controller	PLX360
	TE - top entry (standard)	Line Reactor	LR850
	BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103313
	50 Amp field (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103361
	MV - 600VAC (extra cost option)	Aux Fuseholder, 3 required	CP103371
	HV - 690VAC (extra cost option)	Armature Fuse, 2 required	CH103323
	Refer to supplier for information	Pot kit inc. graduated dial and knob	POTKIT
PLX400 	400KW 950A 4Q		
	Options	Controller	PLX400
	TE - top entry (standard)	Line Reactor	LR950
	BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103314
	50 Amp field (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103361
	MV - 600VAC (extra cost option)	Aux Fuseholder, 3 required	CP103371
	HV - 690VAC (extra cost option)	Armature Fuse, 2 required	CH103324
	Refer to supplier for information	Pot kit inc. graduated dial and knob	POTKIT
PLX440 	440KW 1050A 4Q		
	Options	Controller	PLX440
	TE - top entry (standard)	Line Reactor	LR1050
	BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103315
	50 Amp field (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103361
	MV - 600VAC (extra cost option)	Aux Fuseholder, 3 required	CP103371
	HV - 690VAC (extra cost option)	Armature Fuse, 2 required	CH103325
	Refer to supplier for information	Pot kit inc. graduated dial and knob	POTKIT
PLX520 	520KW 1250A 4Q		
	Options	Controller	PLX520
	TE - top entry (standard)	Line Reactor	LR1250
	BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103316
	MV - 600VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
	HV - 690VAC (extra cost option)	Aux Fuseholder, 3 required	CP103373
	Refer to supplier for information	Armature Fuse, 2 required	CH103326
		Pot kit inc. graduated dial and knob	POTKIT

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

PRODUCT NAME	PART	PART NO.

PLX600

600KW 1450A 4Q

Options	Controller	PLX600
TE - top entry (standard)	Line Reactor	LR1450
BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103317
MV - 600VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
HV - 690VAC (extra cost option)	Aux Fuseholder, 3 required	CP103373
Refer to supplier for information	Armature Fuse, 2 required	CH103327
	Pot kit inc. graduated dial and knob	POTKIT

PLX700

700KW 1650A 4Q

Options	Controller	PLX700
TE - top entry (standard)	Line Reactor	LR1650
BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103318
MV - 600VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
HV - 690VAC (extra cost option)	Aux Fuseholder, 3 required	CP103373
Refer to supplier for information	Armature Fuse, 2 required	CH103328
	Pot kit inc. graduated dial and knob	POTKIT

PLX800

800KW 1850A 4Q

Options	Controller	PLX800
TE - top entry (standard)	Line Reactor	LR1850
BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103319
MV - 600VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
HV - 690VAC (extra cost option)	Aux Fuseholder, 3 required	CP103373
Refer to supplier for information	Armature Fuse, 2 required	CH103329
	Pot kit inc. graduated dial and knob	POTKIT

PLX900

900KW 2050A 4Q

Options	Controller	PLX900
TE - top entry (standard)	Line Reactor	LR2050
BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103320
MV - 600VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
HV - 690VAC (extra cost option)	Aux Fuseholder, 3 required	CP103373
Refer to supplier for information	Armature Fuse, 2 required	CH103330
	Pot kit inc. graduated dial and knob	POTKIT

PLX980

980KW 2250A 4Q

Options	Controller	PLX980
TE - top entry (standard)	Line Reactor	LR2250
BE - bottom entry (no cost option)	Main Semiconductor Fuse, 3 required	CH103468
MV - 600VAC (extra cost option)	Aux Semiconductor Fuse, 3 required	CH103363
HV - 690VAC (extra cost option)	Aux Fuseholder, 3 required	CP103373
Refer to supplier for information	Armature Fuse, 2 required	CH103469
	Pot kit inc. graduated dial and knob	POTKIT

PL/PLX

OPTIONS & 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

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	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

Controller	SLE24
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

SLE34

34KW 82A

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

44KW 106A

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	POTKIT

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