

powerSL Series

Analog DC drives - up to 75 hp

The **powerSL** Series of dc drives incorporate the well proven SLX, SL & SLE 3-phase basic OEM chassis drives into a compact package, complete with high speed 3-phase power fuses, armature fuses (SLX & SL models only), control power fuses, contactor, and other features.

Easy access to all internal power components and terminals is achieved in a compact, elegant package which, at 75hp is as small as a 8¹/₂" x 11" note pad and is less than 10¹/₂" deep!

powerSLX Series ... 4-Q regenerative, reversing DC systems drive with field controller

powerSL Series ... Non-reversing DC systems drive with field controller

powerSLE Series ... Non-reversing DC OEM drive.

Standard Features

SL SLX SLE

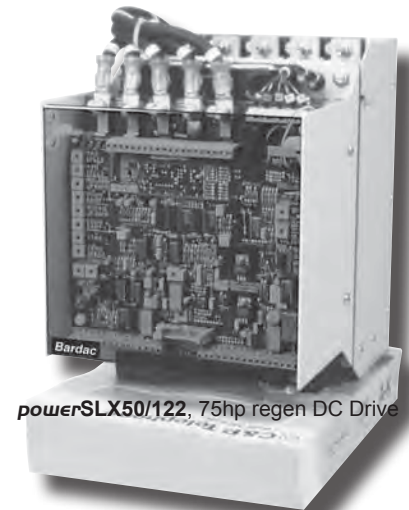
- • • Field controller with automatic field weakening
- • • Configurable field bridge
- • • Heat sink thermostat protection
- • • Diagnostic test socket
- • • 50/60Hz autoranging
- • • Power supply range: 208-240 or 380-480 volts +/-10%
- • • Auxiliary control power input: 115 volts 50/60Hz.
- • • Phase rotation insensitivity
- • • Linear torque control
- • • Armature voltage or tach feedback
- • • Calibration range switches (no component change)
- • • Speed reference +/-10V or 4-20mA
- • • Speed trim input
- • • Maximum and minimum speed settings
- • • Adjustable up & down ramps
- • • Adjustable current limit
- • • Current range selectable for multiple horsepower's
- • • Torque control
- • • 150% overload capacity with 30 second stall timer
- • • Relay outputs: Stall, Zero speed, Overload
- • • Regen stop (SLX 4-quadr. regen drive)
- • • Setpoint ramp reset
- • • Start inhibit after power loss
- • • LED indicators:
 - • • Stall
 - • • +/- Current
 - • • Tach Loss
 - • • Ext. Trip
 - • • 25%, 50%, 95%
 - • • Speed signal output
 - • • Current signal output
 - • • Ramp & Total demand signal outputs
 - • • Shunt wound or permanent magnet motors
 - • • Stability adjustment
 - • • Current reduction for low power test
- • • Stall Timer
- • • Field Loss
- • • Peak Amps
- • • Power On
- • • Field Volts

Protection & Control

- • • Control fuses
- • • 3-Phase high speed semiconductor fuses
- • • Armature high speed semiconductor fuse
- • • Main AC line contactor



SLE44/106, 60hp DC Drive



powerSLX50/122, 75hp regen DC Drive

SL Series Non-Regen DC Drives & SLX Series 4Q Regen DC Drives

powerDRIVE Model	basicDRIVE Model	500VDC Arm	240VDC Arm	Armature Current	Line reactor	Drive Isolation Transformer
powerSL & SLX15	SL & SLX15	20hp	10hp	36 amps	LM37	DIT27**
powerSL & SLX20	SL & SLX20	30hp	13hp	51 amps	LM52	DIT40**
powerSL & SLX40	SL & SLX40	60hp	25hp	99 amps	LM120	DIT75**
powerSL & SLX50	SL & SLX50	75hp	35hp	122 amps	LM120	DIT93**

Field current controlled up to 5 amps

Dimensions: basicDRIVE 9.8" high x 8" wide x 5.6" deep (248mm x 203mm x 143mm)

Dimensions: powerDRIVE 11" high x 8" wide x 10.4" deep (280mm x 203mm x 265mm)

SLE Series ... Non-reversing OEM drive

powerDRIVE Model	basicDRIVE Model	500VDC Arm	240VDC Arm	Armature Current	Line reactor	Drive Isolation Transformer
powerSLE14	SLE14	20hp	10hp	34 amps	LM37	DIT27**
powerSLE24	SLE24	30hp	15hp	58 amps	LM52	DIT40**
powerSLE34	SLE34	50hp	20hp	82 amps	LM82	DIT63**
powerSLE44	SLE34	60hp	30hp	106 amps	LM120	DIT75**

Field current up to 2.5 amps

Dimensions: basicDRIVE 11.5" high x 8.5" wide x 6.1" deep (290mm x 215mm x 155mm)

Dimensions: powerDRIVE 11.5" high x 8.5" wide x 9.4" deep (290mm x 215mm x 240mm)

Power Quality For DC Drives

Drive Isolation Transformers

Standard specification:

NEMA 1 enclosed for indoor use

K-factor 4

Windings: Delta Primary, Wye Secondary

Aluminum or Copper windings as indicated

Taps at ± 5%

Approvals: UL, C-UL

Options

Outdoor enclosures

Frequencies other than 60Hz

Voltages other than 230/460/575 pri, 230/460 sec

Special Taps

Fungus Proofing

80°C & 115°C Rise

Copper Windings

Electrostatic Shield

K-13, K-20, K-30

Discount Schedule SX-1

Model	Specification
DIT3**	3KVA - Cu (2hp)
DIT6**	6KVA - Cu (5hp)
DIT11**	11KVA - Al (7.5hp)
DIT14**	14KVA - Al (10hp)
DIT20**	20KVA - Al (15hp)
DIT27**	27KVA - Al (20hp)
DIT34**	34KVA - Al (25hp)
DIT40**	40KVA - Al (30hp)
DIT51**	51KVA - Al (40hp)
DIT63**	63KVA - Al (50hp)
DIT75**	75KVA - Al (60hp)
DIT93**	93KVA - Al (75hp)
DIT118**	118KVA - Al (100hp)
DIT145**	145KVA - Al (125hp)
DIT175**	175KVA - Al (150hp)
DIT220**	220KVA - Al (200hp)
DIT275**	275KVA - Al (250hp)
DIT330**	330KVA - Al (300hp)
DIT440**	440KVA - Al (400hp)
DIT550**	550KVA - Al (500hp)
DIT660**	660KVA - Al (600hp)

Line Reactors For 3-Phase DC Drives

Model Number	hp. at 230V	hp. at 460V	Arm Amps	Dimensions W x D x H	Mount Holes H x W	Weight LBS
LM18	5	10	20	6.0"x4.8"x3.1"	2.1"x2.0"	9
LM37	10	20	41	7.2"x5.6"x3.4"	2.3"x3.0"	11
LM52	15	30	58	7.2"x5.6"x3.8"	2.6"x3.0"	14
LM67	20	40	75	9.0"x7.0"x4.8"	3.2"x3.0"	23
LM82	25	50	91	9.0"x7.0"x4.8"	3.2"x3.0"	24
LM120	35	75	133	10.8"x8.2"x5.6"	3.5"x3.6"	43
LM150	40	100	166	10.8"x8.3"x5.6"	3.5"x3.6"	47
LM195	60	125	216	9.0"x7.1"x4.9"	3.2"x3.0"	29
LM240	75	150	266	10.8"x8.4"x5.8"	3.2"x3.6"	40
LM300		200	333	10.8"x8.4"x6.0"	4.2"x3.6"	48
LM375	100	250	416	10.8"x8.2"x7.3"	4.2"x3.6"	68
LM480	150	300	533	14.8"x14.0"x10.2"	5.9"x4.6"	125
LM600		400	666	15.5"x14.0"x11.5"	6.8"x4.6"	155
LM750	200	500	833	15.5"x14.0"x13.0"	6.8"x4.6"	180
LM900		600	1000	15.5"x14.0"x15.5"	9.3"x4.6"	290
LM1125		750	1250	22.0"x20.0"x14.8"	9.5"x7.2"	400

Line Filter



LF3 Line Filter

LF3-FK Line Filter Fuse Kit