

Bardac

dc drive technology

MODEL PLXD

SEPARATE SCR STACK CONTROLLER

A great retrofit solution for:

- LARGE 4-Q REGEN DC DRIVES
- HIGH CURRENT ELECTROLYSIS SYSTEMS
- WOUND ROTOR MOTOR STACK CONTROL

Based on the successful PL/X Series, totally digital DC drives, the PLXD controller is engineered to provide a reliable solution for refurbishing and upgrading large SCR stack controls. The unit comes complete with a built-in programmable field controller, a separate, isolated SCR gate drive interface and low hysteresis current transformers. Replacement of old main contactors is strongly recommended and these can also be supplied with the upgrade kit.



KEY FEATURES

- Built-in field controller up to 32 amps with optional 50 amps
- **savvy** drive configuration & systems integration tools
- Total digital control
- Peer-to-peer communications
- 40 character backlit display
- Friendly, easy menu structure
- Function blocks for PID, winders, orientation, etc.
- Modern, compact packaging
- Extensive, flexible i/o
- Built in programmable control functions
- RS232 serial port
- Easy configuration saving & cloning
- Tach, encoder & arm volts feedback standard
- Easy, reliable autotune
- Easy, detailed integration manual
- UL, C-UL, CE



OPTIONAL FEATURES

- Peer-to-peer Ethernet communications
- **drive.web** programmable control
- ModbusTCP over Ethernet
- ModbusRTU RS485 serial port, Devicenet, Profibus

KEY PLXD FEATURES

Analog Inputs & outputs

8 analog in (up to +/-30V), 4 analog out (12 bits)
Short circuit and overvolts protected up to 50V

Digital Inputs & Outputs

17 digital inputs, 7 digital outputs
Short circuit and overvolts protected up to 50V

Standard Speed Feedback Selections

Analog Tach, encoder, armature voltage with armature
IR compensation, encoder + armature voltage or ana-
log tach.

Field Configurations

Constant current, constant voltage, automatic field
weakening, delayed field quench, standby field setting,
field economy.

Ratings

150% rating for 25 secs at 50°C (except as noted)
Re-ratings for higher overloads & longer durations

Diagnostic Monitoring

Scope terminal monitors selected parameters
All analog & digital i/o volts & states
Tach volts
Motor arm volts & amps and field current
Output power
AC supply volts

Basic User Configurable Function Blocks

PID, Profiler, winder diameter calculator, taper tension,
torque/inertia/friction compensator, preset speeds,
summers, MOP, timer, spindle orientation, jog/crawl,
filters, dual motor swap, latch, sample & hold, linear &
S-ramps, slack take up, batch counter, draw control.

Protection

Inverse time overcurrent, field fail & overcurrent, motor
over temp, SCR over temp, phase loss, arm over volts,
over speed, speed f/b mismatch, stall, standstill logic,
SCR trigger fail, digital output short circuit.

RS232 Serial Communications Port

Parameter upload/download to save & print
Drive-to-drive parameter link & set up cloning

OPTIONS

drive.web peer-to-peer distributed control over Ethernet
drive.web Signal Flow Diagram systems integrator
drive.web IP addressing & Internet access
ModbusTCP Ethernet
ModbusRTU RS485
Allen Bradley PCCC Ethernet
Profibus DP
Devicenet

SMARTER DRIVES WITH *drive.web*

By adding a *drive.web* option to the PL/X series DC drives you gain both Ethernet communications and powerful programmable systems integration capability without the need for an external PLC or supervisory computer. You get ...

- Peer-to-peer networking of drives over Ethernet
- Programmable control with graphical function blocks
- Internet access and IP addressing
- *savvy* intuitive, graphical, system design software
- Powerful system navigation tools
- Simple drag & drop parameter connections
- Application packs for winders, phase lock, line master, registration and more.

Download *savvy* **FREE** from www.driveweb.com
Learn more at one of our **FREE** weekly online seminars



Quickly build clear graphical signal flow diagrams for drives and complete systems. Store this documentation in the drives for reliable access in the field.

CONCEIVE

DESIGN

OPERATE

MANAGE



Bardac

drive technology

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