Power Control Assembly Selection Guide
Enerpro Types PCM, PCA, and PCP

Enerpro open-frame SCR power control assemblies are fully engineered for high performance in hundreds of open-loop and regulated power control applications, including battery chargers, reversing electrocoagulation rectifiers, wind turbine controllers, industrial plating rectifiers, welding equipment, and motor soft-starters.

To better serve your SCR power control application needs, please specify your exact requirements on the second page of this document. Submit this form along with your RFQ and any additional specifications or documentation.

Features:

Isolated Base SCR Modules

Industry-Standard Digital LSI-Based Firing Circuits

Fully Connectorized, DIN-Rail Terminal Strips and Relays

Soft-Start and Soft-Stop Circuitry

Snubber Boards for Transient Suppression

Open Loop or Closed Loop Control (with Enerpro Regulator Boards)

Enable Status and Fault Read-Backs

Automatic Over-Temperature Protection

Open Frame, With or Without Mounting Panels

NEMA Style Enclosures Available

Single Phase, Three Phase, or Six Phase Operation

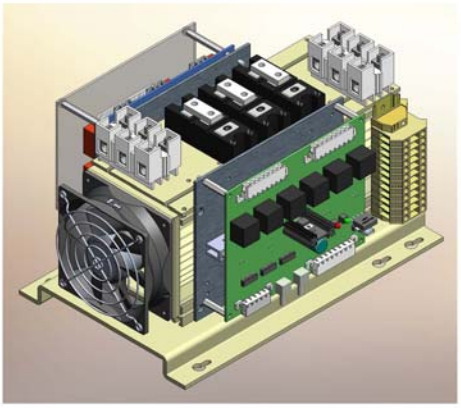
3D CAD Models Available for Easier Systems Integration

Customized to Your Application

ENERPRO
99 Aero Camino
Goleta, CA 93117

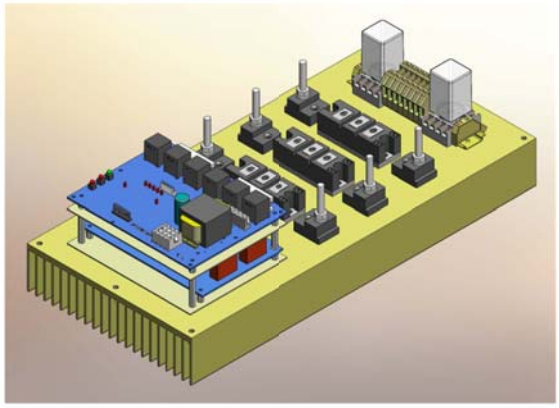
Tel: (805) 683-2114
(877) 648-2114
Fax: (805) 964-0798

info@enerpro-inc.com
www.enerpro-inc.com



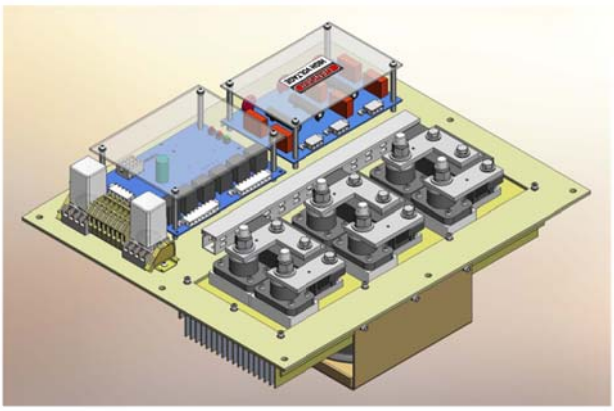
PCM Series
Power Control Module

- Assembled on Wakefield #392 extrusion
- Compact power control at output currents to 225 A_{RMS}
- Depicted with optional fan and mounting plate



PCA Series
Power Control Assembly

- Assembled on low-profile heatsink
- Terminal block or stud line connections
- Typical controller configuration depicted



PCP Series
Power Control Panel

- PCA or PCM styles on mounting panel
- High current capability to 1600 A_{RMS}
- Ideal for forced air plenums or mounting through electrical cabinet walls
- Typical controller configuration depicted with optional cooling fan and bracket

Assembly Type

- ☐ PCM, Power Control Module
- ☐ PCA, Power Control Assembly
- ☐ PCP, Power Control Panel

Circuit Type

- ☐ AC Controller
- ☐ DC Converter, Two-Quadrant
- ☐ DC Converter, Four-Quadrant

Voltage and Current

AC Input Voltage:_____ VAC ☐ 1-Phase ☐ 3-Phase ☐ 6-Phase

Mains Frequency: 50/60 Hz Specify:_____

Output Voltage:_____ Max Output Current:_____ Duty Cycle:_____%

Firing Circuit Regulation

- ☐ Open Loop (Delay angle command)
- ☐ Voltage Regulation
- ☐ Current Regulation

Environmental and Physical Specifications

Desired maximum envelope size: _____ x _____ x _____ (H x W x L) ☐ inches ☐ cm

Assembly mounting orientation (along long axis): ☐ Horizontal ☐ Vertical* *If Vertical, please choose line or load connection @ the top.

Mounting Plate: ☐ No ☐ Yes ☐ LINE CONNECTION @ TOP ☐ LOAD CONNECTION @ TOP

Severe environment (shock, vibration, humidity) ☐ No ☐ Yes (If yes, describe in "Additional Requirements" below)

Maximum ambient temperature:_____° C

Cooling: ☐ Natural Convection (Low current) ☐ Cooling Fan (On assembly)

☐ Forced Air (Customer-supplied) Minimum air flow available:_____ CFM

Control and Feedback Signals

Delay Angle Command (open loop): ☐ 0-5 VDC ☐ 0-10 VDC ☐ 4-20 mA ☐ Other, specify:_____

Instant Enable/Inhibit: ☐ Customer-provided contact closure ☐ Relay (Coil voltage:_____ ☐ AC ☐ DC)

Soft Enable/Inhibit: ☐ Customer-provided contact closure ☐ Relay (Coil voltage:_____ ☐ AC ☐ DC)

Soft-start time: _____ ms Soft-stop time:_____ ms

Enable Status Signal: ☐ Current-limited open drain transistor ☐ Relay Contacts (Dry contacts, ☐ NC ☐ NO)

- ☐ Fan over-temperature switch (Automatically enables fans at 60 C heat sink temperature if installed)
- ☐ Over-temperature instant inhibit (Instantly inhibits SCR firing at 93 C heat sink temperature if installed)
- ☐ Heat sink temperature sensor assembly (100-ohm platinum element RTD for external temperature monitoring)

Application Description

Additional Requirements

© 2009-10 ENERPRO, Inc.