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Data Sheet

August 15, 2026

ENERPRO

Enerpro FCOG6100-01-0-5/6-2-0-48-1-1-1-R 3-Phase SixSCR Firing Board

The Enerpro FCOG6100-01-0-5/6-2-0-48-1-1-1-R is a 3-Phase SixSCR Firing Board designed for precise control of three-phase SCR power converters. It offers reliable and efficient firing of six silicon-controlled rectifiers in various industrial applications.

**MODEL****Enerpro
FCOG6100-01-0-
5/6-2-0-48-1-1-1-
R****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****FCOG6100-01-0-
5/6-2-0-48-1-1-1-
R****LISTING**[https://aumictechlabs.c
om/products/fcog6100-
01-0-5-6-2-0-48-1-1-1-
r-2/](https://aumictechlabs.com/products/fcog6100-01-0-5-6-2-0-48-1-1-1-r-2/)

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SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Enerpro FCOG6100-01-0-5/6-2-0-48-1-1-1-R is a 3-phase six-SCR firing board that delivers precise phase-angle control for SCR power converters and AC controllers. This board generates high-current gate drive pulses to independently fire six silicon-controlled rectifiers in industrial power control systems. It operates across 45–65 Hz line frequencies with configurable 50/60 Hz tuning, and revision R incorporates enhanced compensation circuitry that reduces delay angle variance - approximately 5° shift from 60 to 50 Hz operation. The board accepts analog delay angle command inputs and produces isolated gate drives with high current pulse capability, making it suitable for demanding three-phase AC/DC conversion applications. Technical

Specifications Mains Frequency: 45–65 Hz; configurable for 50/60 Hz. Revision R gate drive angle shift: $\sim 5^\circ$ for 60→50 Hz transition Mains Voltage: 480 V SCR configuration On-Board Transformer: 120–240 Vac primary; external power source Board Supply Options: 30 VDC or 24 VAC external; 120/240/380/480 V via on-board transformer; SCR cathode connections Regulated Outputs: +12 VDC $\pm 5\%$ at J3-6 (20 mA max); +5 VDC $\pm 5\%$ at J3-7 (5 mA max) Gate Drive Pulses: High-current picket fence architecture. Initial pulse: 15 V open circuit / 1.8 A short circuit. Sustaining pulses: 7 V open circuit / 0.5 A short circuit Gate Pulse Burst Frequency: $384\times$ mains voltage frequency Pulse Transformer Isolation: 3500 VRMS VCO Control Voltage: ~ 5.0 VDC at TP2 (factory-set) Command Signal Input: Analog delay angle (SIG HI), configurable voltage/current ranges SCR Configuration: Six SCRs, 3-phase, no parallel SCR option Key Features Six independently isolated gate drives for individual SCR control Phase-angle control topology optimized for AC controller and DC converter duty Soft-start/soft-stop inputs (independently configurable) On-board phase references included Low frequency variance drift in revision R Typical Applications Three-phase AC motor controllers SCR-based DC power supply regulation Industrial power conversion and load control systems Compatibility & Integration Part of the CVR600 Firing/Regulator System family. Configuration code -01-0-5/6-2-0-48-1-1-1-R specifies six-SCR AC controller topology, no regulator board connection, and 480 V system voltage.

FCOG6100010562048111R Characteristics / Specifications

PARAMETER	VALUE
Model	FCOG6100-01-0-5/6-2-0-48-1-1-1-R
Base Model	FCOG6100
Instrument Type	three-phase six-SCR firing board
Scr Circuit	01 six-SCR AC controller
Mains Frequency	50/60 Hz (code 5/6)
Command Signal	0.85 to 5.85 V (code 2)
Scr Mains Voltage	480 V (code 48)
Transformer Primary	120 to 240 Vac on-board (code 1)
Ac Mains Maximum	600 Vac
Hipot	3500 Vac, 60 seconds, pulse transformers
Operating Temperature	minus 5 C to 85 C
Board Ac Supply	28 Vac (24 Vac nominal); or 30 VDC external
Delay Angle Range	10 deg to 170 deg
Bandwidth	minus 3 dB at 119 Hz; minus 45 deg at 68 Hz
Phase Balance	plus or minus 1 deg maximum
Delay Variance	0.2 deg per Hz
Lock Time	30 ms typical
Soft Start Stop	0.05 to 20.0 s, independently configurable
Gate Burst Frequency	384 times line frequency
Initial Gate	15 V open circuit, 1.8 to 2.0 A short circuit
Sustaining Gate	7.0 V open circuit, 0.5 A short circuit
Board Dimensions	191 × 152 × 35 mm
Laminate	2.4 mm FR4, conformal coat MIL-1-46058 Type UR
Creepage Onboard	13 mm with on-board phase references
Drive Isolation	600 Vac

PARAMETER	VALUE
Auxiliary Power	10 W from 30 V output
Regulator Outputs	12 V at 20 mA; 5 V reference at 5 mA
Manufacturer	Enerpro, Inc., Goleta California
Literature	Enerpro PD720 FCOG6100 product guide 07-2017
Family	FCOG6100 three-phase firing boards
Form Factor	connectorized firing PCB
System Role	SCR phase-angle gate drive
Frequency Compensation	about 5 deg delay change 60 to 50 Hz versus 12.5 deg on prior configs

General Specifications & Supplementary Characteristics

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Operating temperature	minus 5 C to 85 C
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PARAMETER

VALUE

configurator decode of FCOG6100-01-0-5/6-2-0-48-1-1-1-R.
ExactRsuffix hardware revision is on the board silkscreen.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Model	FC0G6100-01-0-5/6-2-0-48-1-1-1-R
Base Model	FC0G6100
Instrument Type	three-phase six-SCR firing board
Scr Circuit	01 six-SCR AC controller
Mains Frequency	50/60 Hz (code 5/6)
Command Signal	0.85 to 5.85 V (code 2)
Scr Mains Voltage	480 V (code 48)
Transformer Primary	120 to 240 Vac on-board (code 1)
Ac Mains Maximum	600 Vac
Hipot	3500 Vac, 60 seconds, pulse transformers
Operating Temperature	minus 5 C to 85 C
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PARAMETER	VALUE
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Literature	Enerpro PD720 FCOG6100 product guide 07-2017
Family	FCOG6100 three-phase firing boards
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Notes

From Enerpro PD720 FCOG6100 product guide (600 Vac, 3500 Vac hipot, 10 to 170 deg, plus or minus 1 deg, 191 x 152 x 35 mm) and configurator decode of FCOG6100-01-0-5/6-2-0-48-1-1-1-R. ExactRsuffix hardware revision is on the board silkscreen.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.