Item # 910-5252-004, D160- 230/460VAC Three-Phase SCR Power Controller 30A



D160-230/460VAC Three-Phase SCR Power Controller 30A

The IPC D160 is a three-phase SCR power controller which offers variable-voltage phase-angle control for a variety of applications. Fully-isolated all-digital firing is immune to AC line distortions, RF and noise. These rugged controllers feature many standard features such as soft-start, voltage or current control input, AC or DC output, open or closed-loop operation and a variety of AC or DC feedback options. 4-20 ma current input with offset and bias adjustments. Adjustable current limit. 30 A continuous output rating. (Higher currents or other voltages on request) Also available as a trigger-only package (uses customer supplied power section).

SPECIFICATIONS DESIGN FEATURES OPERATING FEATURES

SPECIFICATIONS

Input Voltage (AC)	230 V 380 V 480 V 575 V
Phase	Three
Continuous DC Rating	30 A
Full Load Ambient Temperature	0 to 45 °C
Response	16 MSC 0 to 220° conduction-damping specified for closed-loop operation adjustable.
Closed Loop Regulation	\pm 0.5% from \pm 10 volt DC feedback signal. Drift less than 0.1%
Current Limit	Adjustable 50 to 200%. Overcurrent trip set at 500%. Fixed or Adjustable.
Reference In	0 to ± 10 volts DC into 10K ohms input impedence. Regulated 10V 1mA output available for external 10K potentiometer.
Feedback Input	0 to 10 volts DC into 10K ohms input impedence. Input scaling potentiometer with adjustable range from 10V to 100V input.
Gate Outputs	Six isolated outputs to hard-fire up to 6 SCRs. Initial pulse rises to 1 amp in less than 500 nanoseconds with a back porch of 150 ma for the remainder of the cycle. 2500V rms isolation.
Output Ratings	15A, 30A, AC or DC Bridge.

 Input 240/480V± 10% or 380/480/575 3-phase 50/60 Hz Protection DV-DT network Voltage transient network Overcurrent trip Current limit Isolation 2500V rms output to output and output to control potential; control circuit isolated by 2500V rms from incoming power line. Options Current input -Option CI 0-20 ma with offset, gain and bias Offset relay-Option-CR2-Trip Relay- Option-CR1-Nonstandard reference input available.

OPERATING FEATURES

Precision digital design

- 100% integrated circuits for better regulation and control
- Compact single control board, including all options
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- Isolated firing board for all high voltage Regulated reference output +10.0V for 10K external potentiometer ٠
- Reference input 0 to 10V
- Open or closed loop regulation 0.5% better
- Feedback input for closed loop regulation
- Current limit and overcurrent trip circuit
 Hard SCR firing 1 amp PK with 150 ma back porch
 Full range 0 through 220° for 100% output
- · Loss of phase protection