

SKPC340/350 3 PHASE THYRISTOR CONTROLLER

- **Controls a wide range of thyristors**
- **Logic control**
- **Optional current limit, constant voltage or current control**
- **Soft-start/stop, adjustable ramp up/down periods**
- **Fully isolated input from output**
- **Wide selection of supply voltages**
- **Voltage or mA input, user selectable**
- **Span & zero adjust for wide range of different process inputs.**



The SKPC340/350 is designed for either AC/AC or AC/DC control. A SKPC340 controls a B6C AC/DC fully controlled thyristor bridge. A SKPC350 controls a W3C AC/AC full control configuration.

Voltage or mA source input is user selectable. Input span and offset are adjustable to allow flexibility for users to select different applications.

A 'LOGIC CONTROL' function allows to start/stop the output current/voltage. When a SKPC340/350 is started by the 'Logic control' with a pre-set input signal, the output will gradually ramp up from zero to the pre-set level according to the ramp up period setting. However, the 'Logic control' will quench the output to zero instantly when it is at logic zero. Both soft-start (ramp up) and soft-stop (ramp down) are standard features for a SKPC340/350.

Current limit is the optional feature of a SKPC340/350. The output current can be limited to a pre-set safety level to protect the load from over current. This feature should be used for high inrush current loads, such as transformer coupled loads, capacitive loads and short wave infra-red heaters.

Wide ranges of different supply voltage are available as standard units. An isolated relay, volt free output is used for indicating when current limit is in action.

A SKPC340/350 is housed in a protected mild-steel enclosure.

Specification

INPUT

Voltage	0-10V as standard, 0-5V to 0-15V zero & span pots used to set I/P range Impedance 100 K ohm min.		
Max. input current	25Vdc		
Aux 10V output	4-20mA, 270 ohm max, set SW1 to ON (1) position for current input 10V +/-5%, 3mA max.		

SUPPLY

Line/line voltage	specified value, +/-10%	Frequency	47 to 63 Hertz
Power	3 X 3VA		

OUTPUT

Output	6 isolated pulse outputs
Current	350mA peak, refer to fig. 2
Isolation	2500Vrms between I/P & O/P

ENCLOSURE

Material	zinc plated colour passivated steel enclosed
Dimensions	250mm (W), 235mm (D), 75mm (H)
Mounting	see fig. 1

ENVIRONMENT

Operating temp.	0 to 50 Deg. C	Storage temp.	-20 to 70 Deg. C
Relative humidity	0 to 85%		

SOFT-START AND SOFT-STOP

Soft-start & Ramp-up	standard ramp-up period - from 1 to 30sec. Long ramp-up period - from 10 sec. to 4 min.
Separate Ramp-down adjust:	same adjustable range as ramp-up range period.

LOGIC CONTROL (system quench)

Logic low	active low, less than 0.7Vdc or input short-circuit
Logic high	output off, greater than 3.6Vdc (30Vdc max.) or input open-circuit

OPTIONAL FEATURE - CURRENT LIMIT

6A to 65A line current :	use CT-65 current transformer.	
12A to 200A line current :	use CT-150 current transformer. Over 150A, please contact our sales office	
Response time	within 2 seconds	
Indication Red LED;	normally off	Indication output Isolated relay output, 240Vac, 1A rms.
VOLTAGE LIMIT	(only supply as special unit, please contact our sales office)	

Note: Non-isolated, however, the leakage current is less than 1mA, which has no harmful effects to users. For total isolation between input signal and output, signal isolator can be used.

Voltage limit range : 50V to 240Vrms 3 phase, for higher voltage, external voltage divider should be used to limit the feedback voltage to the SKPC340/350.

Dimensions

