

# POWERLINK

## ***PC335 THREE PHASE THYRISTOR CONTROLLER PHASE ANGLE CONTROL FOR ANY LOADS***

### **Features**

- 15A to 500 Amps O/P rated at 50 deg. C amb.
- Wide range of supply voltage to 660V
- Auto-adjust for 50 or 60Hz supply frequency
- Logic control for ON & OFF operation
- Mean or RMS voltage, current or power feedback
- Optional current limit
- Soft-start/stop, adjustable ramp up/down periods
- Fully isolated input from output
- Voltage or mA input, user selectable
- Span & zero adjust for wide range of inputs.

The PC335 thyristor unit is a high specifications, cost effect, compact, easy to install three phase thyristor unit for controlling the power to a 3 wire STAR or DELTA load, a 4 wire STAR load or a 6 wire open DELTA LOAD.

Output voltage and current can be controlled smoothly from absolutely zero to maximum which is essential for high power transformer coupled loads.

Voltage, mA or resistance (potentiometer) source input is user configurable. Input span and offset are adjustable to allow users to tune for different applications.

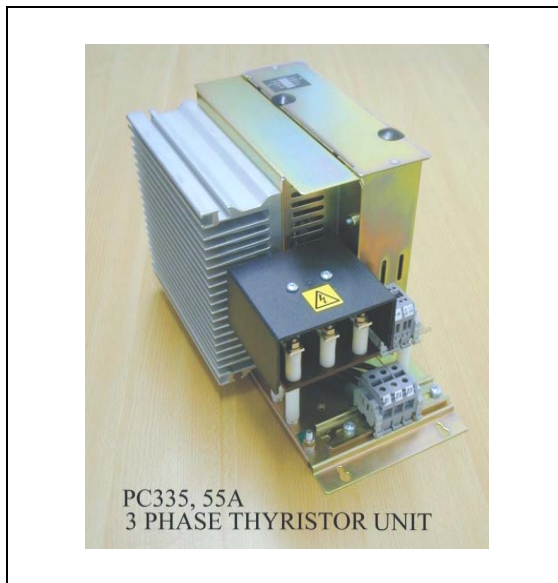
A 'LOGIC CONTROL' function allows to start/stop the output current/voltage. When a PC335 is started by the 'Logic control' with a pre-set input signal, the output will gradually ramp up from zero to the pre-set level according to the ramp up period setting. However, the 'Logic control' will quench the output to zero instantly when it is at logic zero.

Both soft-start (ramp up) and soft-stop (ramp down) are standard features for PC335.

Current limit is the optional feature for a PC335. 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, temperature dependent loads or loads ageing time, such as transformer coupled loads, capacitive loads, silicon carbide heaters, molybdenum, platinum heaters in vacuum furnaces, high frequency induction heaters and short wave infra-red heaters.

### **Dimensions**

<b>Current ratings</b>	<b>15A &amp; 25A</b>	<b>40A &amp; 55A</b>	<b>75A</b>	<b>100A &amp; 125A</b>	<b>150A &amp; 200A</b>	<b>250A to 300A</b>	<b>400A to 600A</b>
<b>Height (H)</b>	380mm	380mm	380mm	430mm	430mm	420mm	520mm
<b>Width (W)</b>	160mm	200mm	230mm	230mm	270mm	385mm	610mm
<b>Depth (D)</b>	245mm	245mm	245mm	245mm	245mm	255mm	320mm
<b>Cooling</b>	Natural	Natural	Natural	Fan cooling	Fan cooling	Fan cooling	Fan cooling



## Ordering Information

You are welcome to order by description or product code.

### **PC335 - INPUT - SUPPLY VOLTAGE - O/P CURRENT - FAN SUPPLY - LOAD TYPE - OPTIONS - 00**

<u>INPUT</u>	<u>CODE</u>	<u>O/P CURRENT</u>	<u>CODE</u>
0-5V	11	15A	15
0-10V	12	25A	25
4-20mA	20	40A	40
		55A	55
		75A	75
<u>SUPPLY VOLTAGE</u>	<u>CODE</u>	100A **	100
** Line to Line		150A **	150
220V	22	200A **	200
240V	24	250A **	250
380V	38	300A **	300
415V	41	400A **	400
440V	44	500A **	500
480V	48		
500V	50		
600V	60		

<u>FAN SUPPLY</u>	<u>CODE</u>
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( \*\* for fan cooling only)

110/120Vac	10
220/240Vac	20

<u>LOAD TYPE</u>	<u>CODE</u>
3 WIRE STAR	3S
3 WIRE DELTA	3D
4 WIRE STAR	40
6 WIRE DELTA	60

\*\* For other supply voltage or current ratings, please contact our sales office.

<u>OPTIONS</u>	<u>CODE</u>
V SQUARE CONTROL	V2C
CONSTANT VOLTAGE CONTROL	AVC
CONSTANT CURRENT CONTROL	AIC
CONSTANT POWER CONTROL	APC
HEATSINK OVER-TEMP. OUTPUT	TT
VOLTAGE LIMIT 20-100%	40
CURRENT LIMIT 20-100%	50
VOLTAGE (rms) TRANSMISSION	VTR
CURRENT (rms) TRANSMISSION	ITR

## Specification

Supply voltage (line to line)	Refer to ordering information +/-10%
Supply frequency	47Hz to 63Hz
Operating temp.	0 to 50 Deg. C
Storage temp.	-10 to 80 Deg. C
Input signal	0-5V, 0-10V, 100K min.; 4-20mA, 300 ohms max.
Aux 10V output	10V +/-5%, 3mA max. For local (manual) control
Soft-start	Standard ramp-up period - from 1 to 30 seconds.
& Ramp-up	Long ramp-up period - from 10 sec. to 4 mins.
Ramp-down adjust	same adjustable range as ramp-up range period.
Isolation	2500Vrms between I/P & O/P
Relative humidity	0 to 85%
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
Current limit indication	Red LED; normally off