

## **PC222 3 PHASE BURST FIRING THYRISTOR UNIT** **For 3 Wire Star or Delta Loads**

### **Features**

- \*\* Low cost, compact unit
- \*\* Users selectable & adjustable input range
- \*\* 50 - 60Hz operation
- \*\* Fuses fitted from 40A to 500A units
- \*\* Zero volts and complete cycle burst firing
- \*\* Adjustable cycle time

PC222 offers a low cost solution to control the energy of a three phase resistive heater.

A PC222 accepts most industrial standard signals, 0 to 5V, 0 to 10V and 4 to 20mA signal inputs, for remote control applications, for example, oven temperature control. Also, a pot (potentiometer) can be used to provide manual energy control. SPAN and ZERO pots allow users to adjust to any other input signal ranges.

The PC222 regulates the power delivered to the load by altering the number of ON/OFF complete mains supply to the loads. For example, by conducting 10 complete cycles of the mains supply to the load, then followed by 10 off cycles of mains supply, the mean output power is 50%.

The PC222 only allows complete mains cycle turn on or off which eliminates half cycle turn on and hence disturbance to the mains supply and the other users.

### **Dimensions**

#### Height (H):-

- 15 & 25A: 152mm
- 40 & 55A: 250mm
- 65 & 75A: 300mm
- 100A: 350mm
- 125 to 300A: 385mm
- 400A: 435mm
- 500A: 485mm

#### Width (W):-

- 15 & 25A: 232mm
- 40 to 500A: 300mm

#### Depth (D):-

- 15 & 25A: 120mm
- 40 to 100A: 180mm
- 125 to 400A: 255mm
- 500A: 300mm



**Ordering Information** You are welcome to order by description or product code. For non-standard units, please contact our sales office.

**PC222 - INPUT - SUPPLY VOLTAGE - OUTPUT CURRENT -  
FAN SUPPLY VOLTAGE - LOAD CONFIGURATION - OPTION - 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
Logic dc		30	55A		55
			75A		75
			100A		100
			150A		150
			200A **		200
			250A **		250
			300A **		300
			400A **		400
			500A **		500
<u>SUPPLY VOLTAGE</u>		<u>CODE</u>	<u>FAN SUPPLY</u>		<u>CODE</u>
*** Line to Line			(** FOR FAN COOLING UNIT ONLY)		
220V		22	110/120Vac		10
240V		24	220/240Vac		20
380V		38			
415V		41			
440V		44			
480V		48			
500V		50			
600V		60			
<u>LOAD TYPE</u>		<u>CODE</u>			
3 WIRE STAR/DELTA		30			
<u>OPTION</u>		<u>CODE</u>			
HEATSINK OVER-TEMPERATURE OUTPUT		TT			

**@@** For 15A & 25A units, fuses and fuse holders are supplied separately  
**##** For 4 wire star with neutral or 6 wire open delta loads, please refer to PC223 controllers

<u>FUSE HOLDER AND FUSE</u>	<u>ORDER CODE</u>	
For 15A PC223, up to 600V	SF+H 15	** 2 per unit
For 25A PC223, up to 600V	SF+H25	** 2 per unit

## **Specification**

Supply voltage	as stated in the ordering code, +/- 10%
Load current	as stated in the ordering code
Input signal	0-5V, 0-10V; 47 Kilo-ohms min., 4-20mA; 300 ohms max. Logic dc; >5V - ON, <1V - OFF
Cycle time at half power, for unit's up to 100A	fast cycle: 200mS to 600mS slow cycle: 0.8 sec. to 5 sec.
Cycle time at half power, for unit's from 100A onward	fast cycle: 0.8 sec. to 5 sec. slow cycle: 10 sec. to 2 min.
Isolation	control inputs are completely isolated from the load supplies, 2500Vrms
Operating temperature	0 to 50 deg. C for natural cooling units 0 to 45 deg. C for fan cooling units
Storage temperature	-10 to 80 deg.C

### **Powerlink Electronics Ltd.**

Powerlink House, Ivy Arch Road, Worthing, W Sussex BN14 8BX  
 Tel: 01903 209550 Fax: 01903 213526