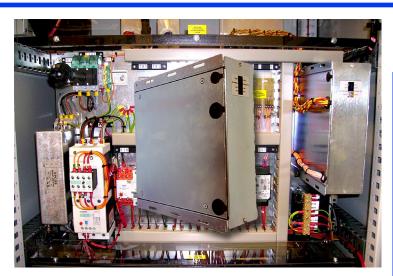


## **DTC352 DUAL CONTROL CHANNEL**

THREE PHASE THYRISTOR CONTROLLER

- Primary or Secondary control available
- Auto-adjust for 50 of 60Hz supply frequency
- Logic control for ON & OFF operation
- Power on & logic on soft-start with adjustable delay
- Fully isolated input from output
- Wide selection of supply voltages
- Span & zero adjust for wide range of different inputs



#### **POWER SUPPLY DESIGN EXCELLENCE**

The DTC352 is a dual channel three phase thyristor controller allowing closed loop control of both output voltage and current on either primary or secondary thyristors. Its robust control circuit allows it to operate from a range of ac supplies including generator supplies.

The DTC352 can be used either as an open loop controller or as a two-channel closed loop controller to control two parameters (feedback signals) simultaneously. For two channel control, when one of the two feedback signals reaches it's pre-set value, the DTC352 will control to this feedback signal at the set value and it will self adjust to compensate for any mains supply and load variation.

'LOGIC CONTROL' functions will start/stop the output current/voltage. When the DTC352 is first powered up (or started by the 'Logic control') with an input signal present, the output will gradually ramp up from zero to the preset level according to the ramp up period setting. However, the 'Logic control' will inhibit the output to zero instantly when this is disabled.

Current limit is an optional feature for the DTC352. The supply current can be limited to a preset safe level to protect the load from over current. This feature is recommended for use with high inrush current loads.

DTC352 can be mounted in any orientation offering maximum flexibility of installation.



# **DTC352 DUAL CONTROL CHANNEL**

**THREE PHASE THYRISTOR CONTROLLER - 2** 

<b>SPECIFICATIONS</b>	
Supply voltage (line to line)	Optional either 415V +/-10% or 480V +/-10%
Supply frequency	47Hz to 63Hz
Operating temp	0 to 50°C
Storage temp	-10 to +80°C
Channel A input signal	Optional either 0 to 75mV or 0 to 100mV, accepting both positive or negative signal
Channel B input signal	Optional either 0 to 5V or 0 to 10V
Auxiliary 10V output	10V +/-5%, 3mA max. For local (manual) control
Power on or logic on/off soft-start	Ramp-up period – from 1 to 30 seconds
SOIL-Start	
Isolation	2500Vrms between I/P & O/P
Relative humidity	0 to 85%
Logic Control	This provides logic on/off control and system 'inhibit' to the thyristor trigger pulses together with automatic soft-start, minimising inrush current.

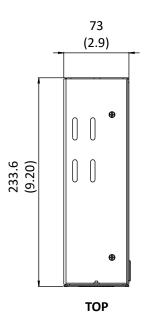
POTENTIOMETER FUNCTIONS	
ZERO (OFFSET)	Trims output to zero power for zero or required input level
SPAN	Trims output to full power for maximum input
RAMP	Adjust the ramp up period
I LIM	Adjust the current limit level
V LIM	Adjust the voltage limit level

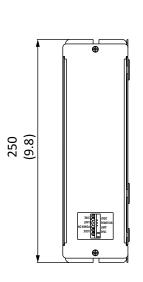
LED INDICATORS	
LOGIC I/P (green)	Logic input status – Logic 1 (output enable) is ON Logic 0 (output disable) is OFF
ON/OFF (yellow)	Power on; normally on
SYN (red)	If one of the 3 phase line supply to the DTC352 is disconnected due to a mains supply fuse trip or DTC352 internal fuse trip, LED SYN illuminates to indicate Phase loss
CH A LIM (red)	When the CH A feedback signal reaches the limit setting, this LED is ON
CH B LIM (red)	When the CH B feedback signal reaches the limit setting, this LED is ON

## **DTC352 DUAL CONTROL CHANNEL**

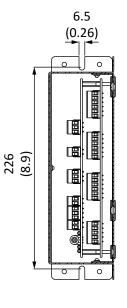
**THREE PHASE THYRISTOR CONTROLLER - 3** 

#### **OUTLINES**

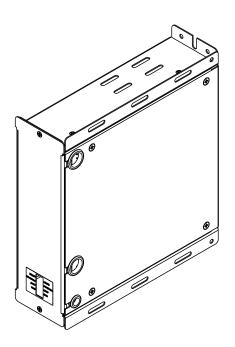


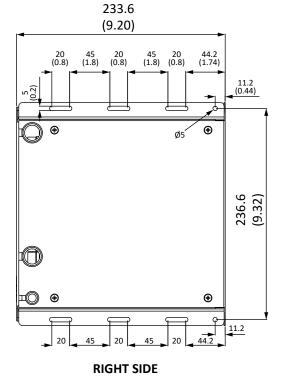


FRONT



ACCESS COVER REMOVED





Dimensions in mm (In)

dtc352-ds-rev1-1115.indd dtc352-ds-rev2-0517.indd

### Powerstax Europe Units 5-6 Heron Avenue

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12804 W. Santa Ynez Drive Sun City West Arizona 85375 USA Information and specifications contained in this data sheet are believed to be correct at the time of publication. However, Powerstax accept no responsibility for consequences arising from printing errors or inaccuracies. Specifications are subject to change without notice.