



# Series FTH

60-120Amp • 240/480 Vac • 3 PHASE



- SCR Output
- LED Status Indicator
- IP20 Cover Included

Three-phase solid state relays switch up to 530 Vrms directly to loads such as motors, transformers, heating elements, etc. Available with either AC or DC input (coil) control in zero-voltage or random turn-on switching versions.

OUTPUT SPECIFICATIONS ①	MODEL NUMBERS			
	FTH6053ZD3 FTH6053ZA4	FTH8053ZD3 FTH8053ZA4	FTH10053ZD3 FTH10053ZA4	FTH12053ZD3 FTH12053ZA4
Operating Voltage (47-63 Hz) [Vrms]	48-530	48-530	48-530	48-530
Load Current Range③ [Arms]	.60-60	.60-80	.60-100	.60-120
Transient Overvoltage [Vpk]	1200	1200	1200	1200
Max. Surge Current, (16.6ms) [Apk]	630	910	1100	1400
Max. On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6	1.6
Thermal Resistance Junction to Case (R <sub>θJC</sub> ) [°C/W]	1.02	.63	1.02	.63
Maximum I <sup>2</sup> t for Fusing, (8.3 msec.) [A <sup>2</sup> sec]	260	1620	2400	3100
Max. Off-State Leakage Current @ Rated Voltage [mArms]	10	10	10	10
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec]②	500	500	500	500
Max. Turn-On Time④	1/2 Cycle	1/2 Cycle	10.0 msec	10.0 msec
Max. Turn-Off Time	1/2 Cycle	1/2 Cycle	40.0 msec	40.0 msec
Power Factor (Min.) with Max. Load	0.5	0.5	0.5	0.5

INPUT SPECIFICATIONS ②	DC CONTROL (D3 SUFFIX)	AC CONTROL (A4 SUFFIX)
Control Voltage Range	3-32 Vdc	90-280 Vrms (60Hz)
Max. Turn-On Voltage	3.0 Vdc	90 Vrms
Min. Turn-Off Voltage	1.0 Vdc	10 Vrms
Nominal Input Impedance	450 Ohms	54.8k Ohms
Typical Input Current	10mA @ 5 Vdc	2.2mA @ 120 Vrms, 4.4mA @ 240 Vrms

## GENERAL NOTES

2018 Fastron Electronics, Specifications subject to change without notice

1. All parameters at 25°C and per section unless otherwise specified.
2. Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1
3. Heat sinking required, for derating curves see page 2.
4. Turn-on time for random turn-on versions is 0.02 msec (DC Control Models).



9B Lakewood Blvd  
Braeside VIC 3195 Australia

- Power Semiconductors
- Electrical Measurement
- Process Control

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## GENERAL SPECIFICATIONS

Dielectric Strength 50/60Hz Input/Output/Base	4000 Vrms
Insulation Resistance (Min.) @ 500 Vdc	10 $\Omega$ Ohm
Max. Capacitance Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125°C

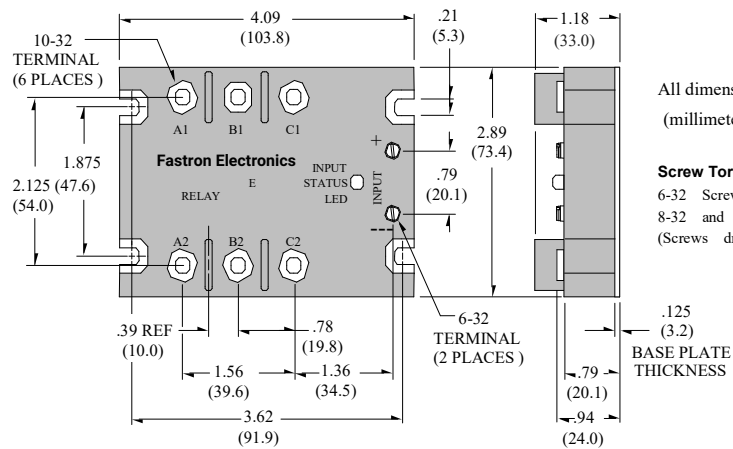
## MECHANICAL SPECIFICATIONS

Weight: (typical)	10.3 oz. (315g)
Encapsulation:	Thermally Conductive Epoxy
Terminals:	Screws and Saddle Clamps Furnished

## AVAILABLE OPTIONS

-10 Non-Zero Cross, FTH.....-10

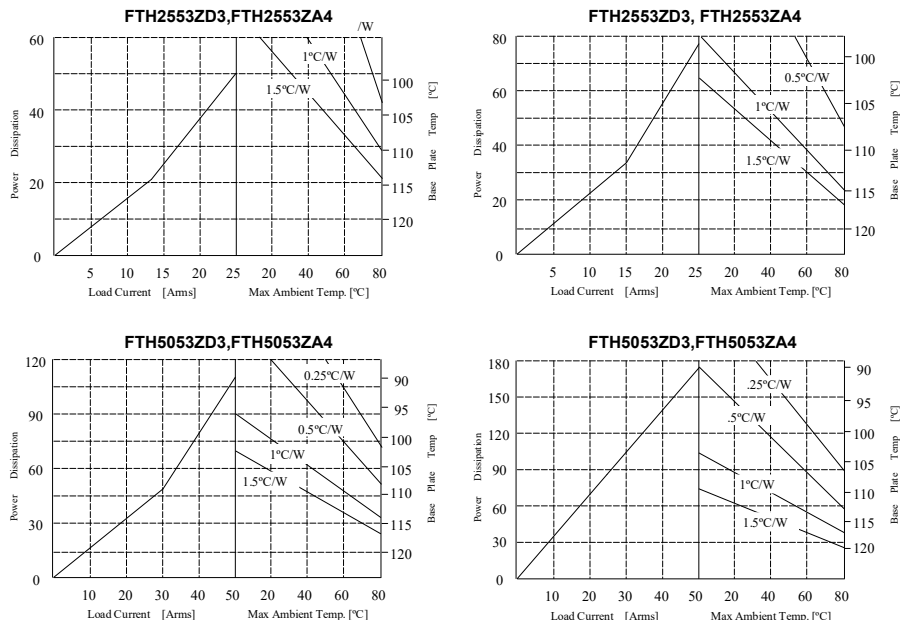
**Heat Sinks** offer excellent thermal management and are perfectly matched to the load current ratings of Trent panel mount solid state relays. Heat sink available.



All dimensions are in inches (millimeters)

**Screw Torque Requirements:**  
 6-32 Screws - 10 in./lbs.,  
 8-32 and 10-32 Screws - 20in./lbs.  
 (Screws dry without grease.)

## CURRENT DERATING CURVES



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