

UPD SERIES | 3-PHASE

PCB OR PANEL MOUNT SOLID STATE RELAYS



Features

- 3 output channels in one package with common control input
- Ratings per channel of 15 A @ 280 VAC
- SIP PCB Mount Package or Panel Mount quick connect terminals (F option)
- SCR output for heavy industrial loads
- Zero voltage (resistive loads) or instantaneous turn-on (inductive loads) output
- Low Leakage (snubberless) output

PRODUCT SELECTION

Control Voltage	15 A	15 A
4.5-8 VDC	UPD2415TP	UPD2415TP-10

SPECIFICATIONS

Output ⁽¹⁾

Description	UPD2415TP	UPD2415TP-10
Operating Voltage (47-440 Hz) [Vrms]	24-280	24-280
Maximum Load Current [Arms] ⁽³⁾	15	15
Minimum Load Current [mArms]	150	150
Transient Overvoltage [Vpk]	600	600
Maximum 1 Cycle Surge Current (50/60 Hz) [Apk]	239/250	239/250
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.4
Thermal Resistance Junction to Case [°C/W]	1.02	1.02
Maximum I ² t for fusing (50/60 Hz, 1/2 cycle) [A ² sec]	285/259	285/259
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	0.1	0.1
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] ⁽²⁾	500	500
Minimum Power Factor (with Maximum Load)	0.5	0.5

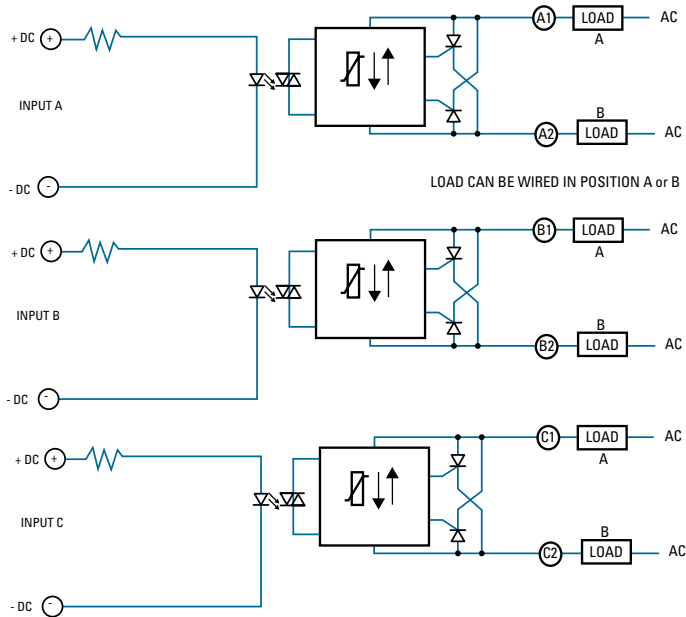
Input

Description	UPD2415TP	UPD2415TP-10
Control Voltage Range	4.5-8 VDC	4.5-8 VDC
Must Turn-On Voltage	4.5 VDC	4.5 VDC
Must Turn-Off Voltage	1.0 VDC	1.0 VAC
Typical Input Current @ 12 VDC	14 mAdc	14 mAdc
Nominal Input Impedance	100 Ohms	100 Ohms
Maximum Turn-On Time [msec]	1/2 cycle	0.02
Maximum Turn-Off Time [msec]	1/2 Cycle	1/2 Cycle

General ⁽¹⁾

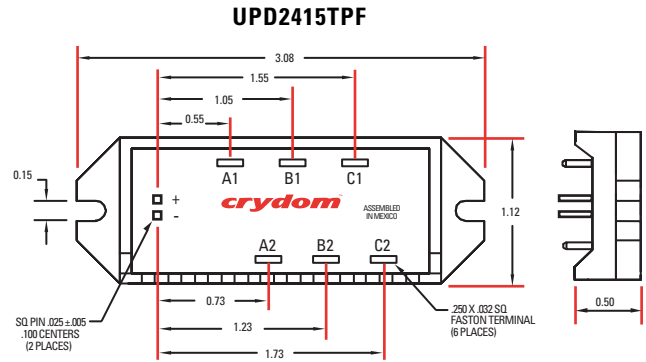
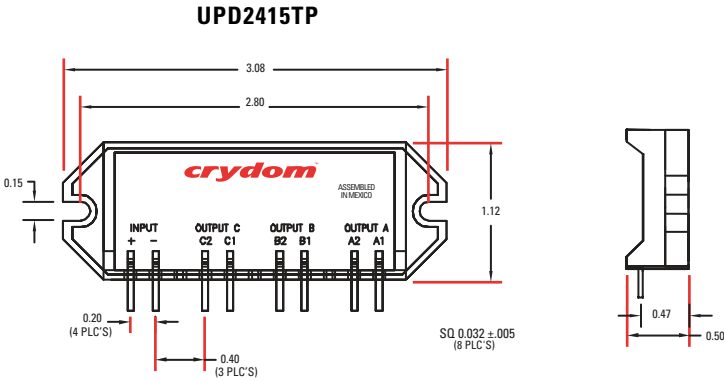
Description	HS501DR-D2425
Dielectric Strength, Input/Output/Base (50/60 Hz)	2500 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10 ⁹ Ohms
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125°C
Weight (typical)	1.53 oz (43.4 g)

EQUIVALENT CIRCUIT BLOCK DIAGRAM/WIRING DIAGRAM

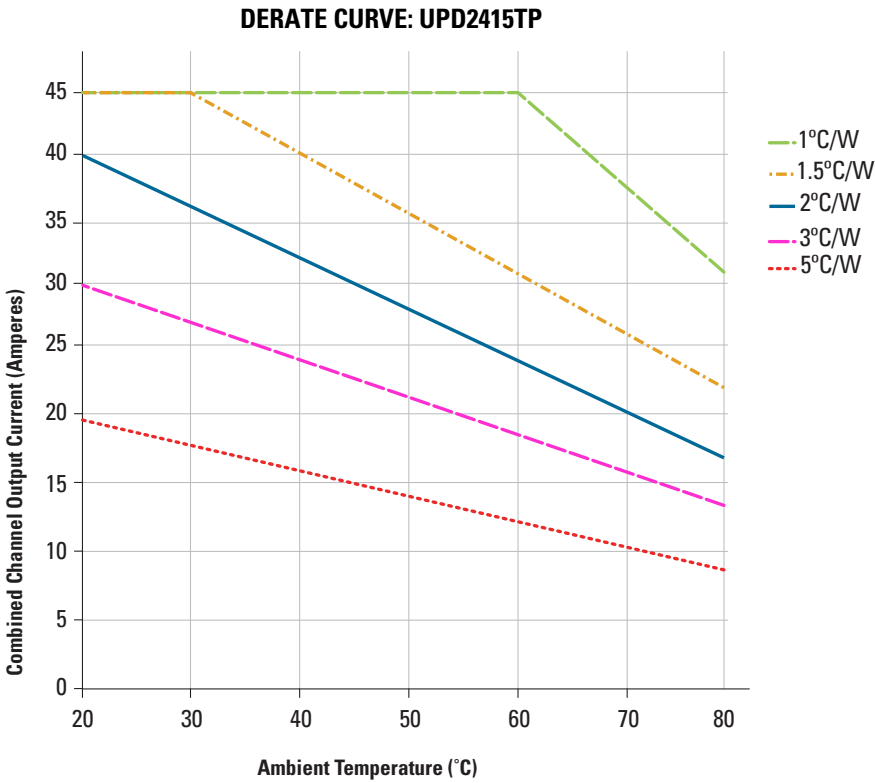


MECHANICAL SPECIFICATIONS

Tolerances: ± 0.02 in / 0.5 mm
All dimensions are in inches [millimeters]

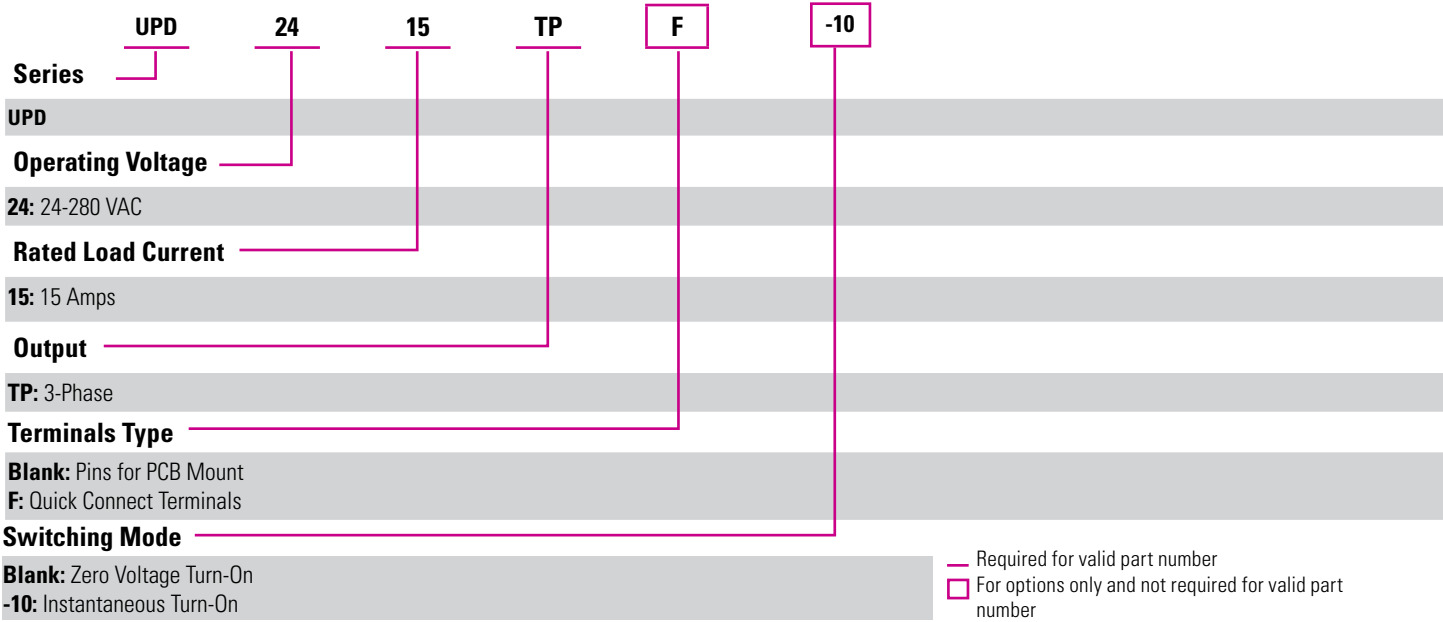


THERMAL DERATE INFORMATION



ORDERING OPTIONS

Example : UPD2415TPF-10



GENERAL NOTES

- (1) All parameters at 25 °C unless otherwise specified
- (2) Off-State dv/dt test method per EIA/NARM standard RS-443. paragraph 13.11.1
- (3) Heat sinking required, see following pages for derating curves.

AGENCY APPROVALS & CERTIFICATIONS

Designed in accordance with the requirements of IEC 62314



WARNINGS



RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

Failure to follow these instructions can result in serious injury, or equipment damage.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

Failure to follow these instructions will result in death or serious injury.

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