

UPD SERIES | DUAL CHANNEL

PCB OR PANEL MOUNT SOLID STATE RELAYS



Features

- 2 Relays in one package with independent 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
3-15 VDC	UPD2415D	UPD2415D-10

SPECIFICATIONS

Output ⁽¹⁾

Description	UPD2415D	UPD2415D-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]	115/120	115/120
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.4	1.4
Thermal Resistance Junction to Case [°C/W]	1.2	1.2
Maximum I ² t for fusing (50/60 Hz, 1/2 cycle) [A ² sec]	66/60	66/60
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

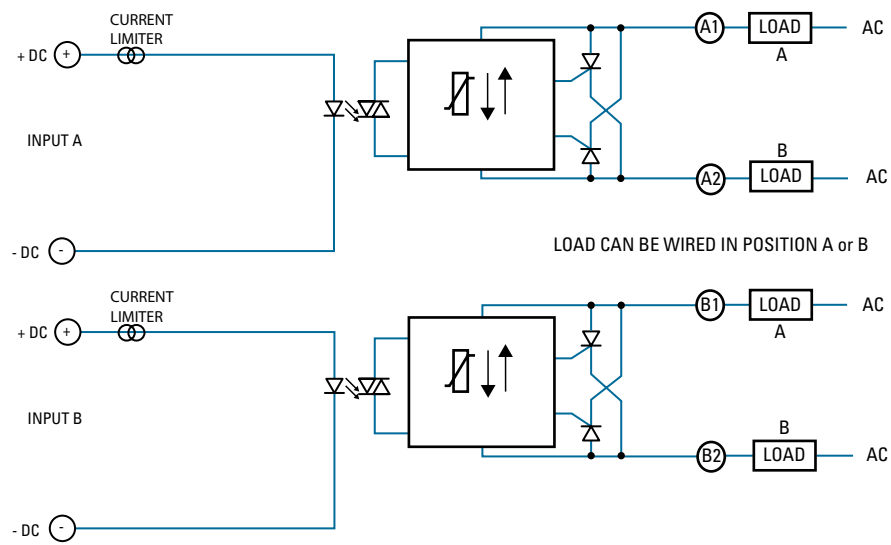
Input ⁽¹⁾

Description	UPD2415D	UPD2415D-10
Control Voltage Range	3-15 VDC	3-15 VDC
Must Turn-On Voltage	3.0 VDC	3.0 VDC
Must Turn-Off Voltage	1.0 VDC	1.0 VAC
Typical Input Current @ 12 VDC	36 mAdc	36 mAdc
Nominal Input Impedance	300 Ohms	300 Ohms
Maximum Turn-On Time [msec]	1/2 cycle	0.02
Maximum Turn-Off Time [msec]	1/2 Cycle	1/2 Cycle

General

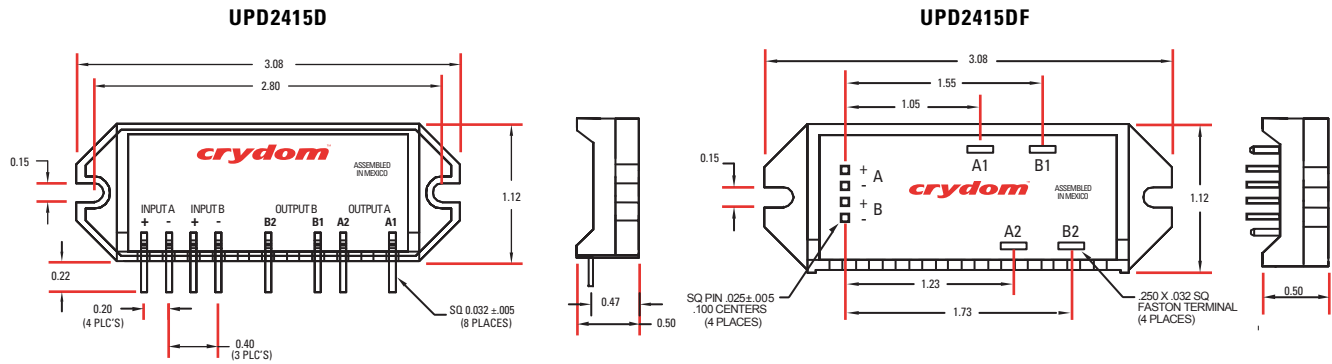
Description	Parameters
Dielectric Strength, Input/Output/Base (50/60 Hz)	2500 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10 ⁹ Ohms
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125°C
Weight (typical)	1.44 oz (4 g)

EQUIVALENT CIRCUIT BLOCK DIAGRAM/WIRING DIAGRAM

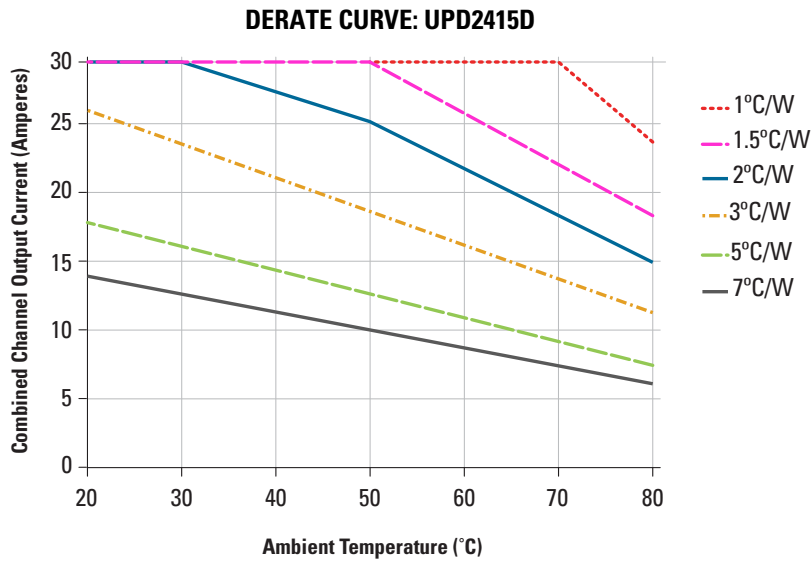


MECHANICAL SPECIFICATIONS

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



THERMAL DERATE INFORMATION



ORDERING OPTIONS

Example : UPD2415DF-10

	UPD	24	15	D	F	-10
Series	UPD					
Operating Voltage		24: 24-280 VAC				
Rated Load Current			15: 15 Amps			
Output				D: Dual Channel		
Terminals Type					F: Quick Connect Terminal	
Blank: Pins for PCB mount F: Quick Connect Terminal						
Switching Mode						-10: Instantaneous Turn-On
Blank: Zero Voltage turn-on -10: Instantaneous Turn-On						

— Required for valid part number
□ For options only and not required for valid part number

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.
(4) Input circuit incorporates active current limiter.

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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