

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



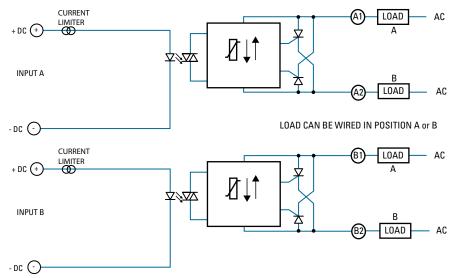
Intput (1)

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

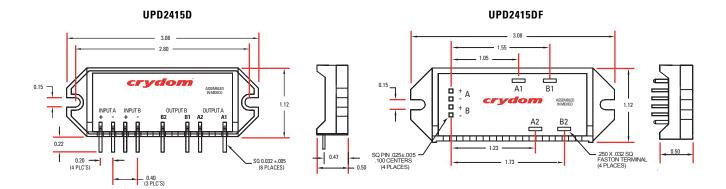
Description	Parameters
Dielectric Strength, Input/Output/Base (50/60 Hz)	2500 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10 ⁹ Ohms
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125°C
Weight (typical)	1.44 oz (4 g)

EQUIVALENT CIRCUIT BLOCK DIAGRAM/WIRING DIAGRAM

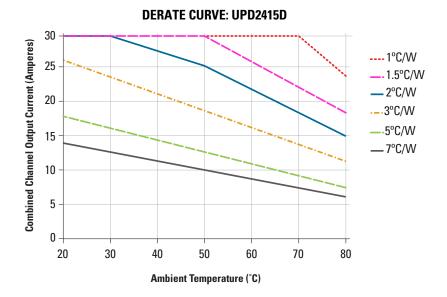


MECHANICAL SPECIFICATIONS

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



THERMAL DERATE INFORMATION



ORDERING OPTIONS Example: UPD2415DF-10 UPD -10 24 15 D Series HPD **Operating Voltage** 24: 24-280 VAC **Rated Load Current 15:** 15 Amps Output D: Dual Channel **Terminals Type** Blank: Pins for PCB mount F: Quick Connect Terminal Switching Mode Required for valid part number Blank: Zero Voltage turn-on For options only and not required for valid part -10: InstantaneousTurn-On



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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