

s. Switch AC Power Loads up to 36 KW. AC Input Control Models. DC Input Control Models.

ELECTRICAL SPECIFICATIONS

OUTPUT CHARACTERISTICS

| MODEL NUMBERS | AC Control | |
|---|---------------------|-------------------------------|
| | DC Control | |
| | Phase Controllable | |
| Operating Voltage Range 47-63 Hz | Standard | Phase Controllable -10 Models |
| Max. Load Current (See derating curves) ① | 2.5 | 10, 25, 40 |
| Min. Load Current (-10 25 watt lamp) | 40 | |
| Transient Overvoltage ② | 400 | |
| Max. Surge Current 16.6 ms (Non-Repetitive) (See surge curves) | 22.5 | 120, 250, 625 |
| Max. Over Current (Non-Repetitive) 1 sec. | 5 | 22, 40, 80 |
| Max. On-State Voltage Drop @ Rated Current | 3.5 | 1.6 |
| Max. I ² T for Fusing (8.3 ms) | 2.1 | 60, 260, 1620 |
| Thermal Resistance Junction-to-Case R _{θJC} (T _J Max = 115°C) | 8.5 | 1.48, 1.02, 0.63 |
| Power Dissipation @ Max. Current (See dissipation curves) | 6.3 | 12, 29, 46 |
| Max. Zero Voltage Turn-on | Zero Switching Only | |
| Max. Peak Repetitive Turn-on Voltage | 15 | |
| Max. Off-State Leakage Current @ Rated Voltage (-30°C ≤ T _A ≤ 80°C) | 10 | |
| Min. Off-State dv/dt Static @ Max. Rated Voltage ③ | 8 | |
| | 500 | |

| 120 VAC | | | |
|---------|----------|----------|----------|
| A120Z | A1210 | A1225 | A1240 |
| D120Z | D1210 | D1225 | D1240 |
| — | D1210-10 | D1225-10 | D1240-10 |
| 24-140 | | | |
| 45-140 | | | |
| 2.5 | 10 | 25 | 40 |
| 40 | | | |
| 400 | | | |
| 22.5 | 120 | 250 | 625 |
| 5 | 22 | 40 | 80 |
| 3.5 | 1.6 | | |
| 2.1 | 60 | 260 | 1620 |
| 8.5 | 1.48 | 1.02 | 0.63 |
| 6.3 | 12 | 29 | 46 |
| 15 | | | |
| 10 | | | |
| 8 | | | |
| 500 | | | |

| 240 VAC | | | | |
|---------|----------|----------|----------|----------|
| A240Z | A2410 | A2425 | A2440 | A2450 |
| D240Z | D2410 | D2425 | D2440 | D2450 |
| — | D2410-10 | D2425-10 | D2440-10 | D2450-10 |
| 48-280 | | | | |
| 90-280 | | | | |
| 2.5 | 10 | 25 | 40 | 50 |
| 40 | | | | |
| 600 | | | | |
| 22.5 | 120 | 250 | 625 | 625 |
| 5 | 22 | 40 | 80 | 80 |
| 3.5 | 1.6 | | | |
| 2.1 | 60 | 260 | 1620 | 1620 |
| 8.5 | 1.48 | 1.02 | 0.63 | 0.63 |
| 6.3 | 12 | 29 | 46 | 55 |
| 30 | | | | |
| 12 | | | | |
| 10 | | | | |
| 500 | | | | |

INPUT CHARACTERISTICS

| | |
|--|--|
| Control Voltage Range | |
| Max. Reverse Voltage | |
| Max. Turn-On Voltage (-30°C ≤ T _A ≤ 80°C) | |
| Min. Turn-Off Voltage (-30°C ≤ T _A ≤ 80°C) | |
| Min. Input Impedance | |
| Max. Input Current | |
| Max. Turn-On Time (at 60 Hz) | |
| Max. Turn-Off Time (at 60 Hz) | |
| Min. Input Pulse Width | |
| Minimum Pulse Termination Lead Time, T _{PT} See Figure 10 | |
| Minimum Pulse Initiation Lead Time, T _{PI} See Figure 10 | |

DC INPUT MODELS (WITH "D" PREFIX)

| |
|---------------------------------|
| 3 to 32 VDC |
| -32 VDC |
| 3.0 VDC |
| 1.0 VDC |
| 1500 OHMS |
| 3.4mA (@ 5 VDC) 20mA (@ 28 VDC) |
| 8.3 msec |
| 8.3 msec |
| — |
| — |
| — |

AC INPUT MODELS (V)

| |
|-------------------------------|
| 90 to 280 V _{RMS} (6 |
| — |
| 90 V _{RMS} |
| 10 V _{RMS} |
| 60K OHMS |
| 2mA (@ 120 VAC) 4mA |
| 10 msec |
| 40 msec |
| — |
| — |
| — |

GENERAL CHARACTERISTICS

| | |
|--|-----------|
| Dielectric Strength ④ ⑤ 50/60 Hz Input/Output/Base | |
| Insulation Resistance @ 500 VDC ⑥ | |
| Max. Capacitance Input Output | |
| Ambient Temperature Range | Operating |
| | Storage |

| |
|-----------------------|
| 4000 V _{RMS} |
| 10 ¹⁰ OHMS |
| 8 pF |
| 30°C to 80°C |
| -30°C to 80°C |
| -40°C to 120°C |