ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

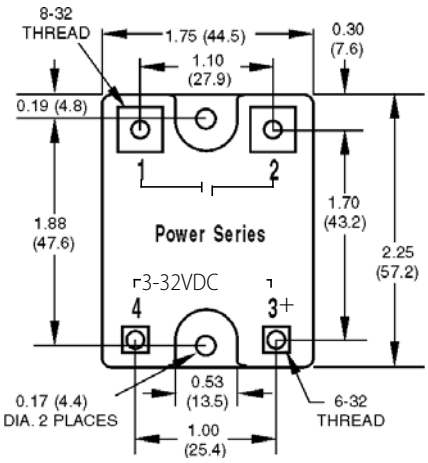
All trademarks, brand names, and brands appearing herein are the property of their respective owners.

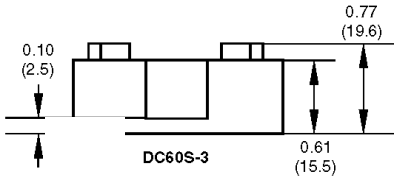
Find the *Opto-22 Z240D10* at our website: *Click HERE*

480/575 Volt (cont)

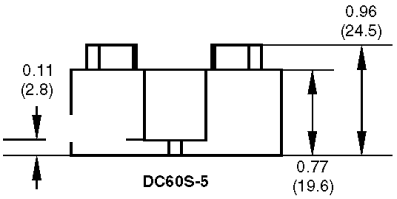
Dimensional Drawings

NOTE: All dimensions are nominal. We do not recommend mounting the terminal side of the SSR to a flat PCB (printed circuit board) or other flat surface, because there may be some variation in terminal height from one terminal to another and from one SSR to another.





Side view: Part numbers DC60S3, 120D3, and 240D3 only



Side view: All other part numbers

Z SERIES SPECIFICATIONS

AC Power: 120/240 Volt

The Z Series employs a unique heat transfer system that makes it possible for Opto 22 to deliver a low-cost, 10-amp, solid-state relay in an all-plastic case. The push-on tool-free quick-connect terminals make the Z Series ideal for high-volume OEM applications. Operating temperature is –40 °C to 100 °C. (Ambient temperature will affect the current rating.)

	Z120D10	Z240D10
Nominal AC Line Voltage Nominal	120	240
Current Rating (Amps)	10*	10*
1 cycle Surge (Amps) Peak	110	110
Nominal Signal Input Resistance (Ohms)	1000	1000
Signal Pick-up Voltage	3VDC (32V allowed)	3VDC (32V allowed)
Signal Drop-out Voltage	1 VDC	1 VDC
Peak Repetitive Voltage Maximum	600	600
Maximum Output Voltage Drop	1.6 volts	1.6 volts
Off-State Leakage (mA) Maximum**	6 mA	12 mA
Operating Voltage Range (Volts AC)	12–140	24–280
I^2t Rating t=8.3 (ms)	50	50
Isolation Voltage	4,000 V_{RMS}	4,000 V_{RMS}
θjc*** (°C/Watt) Dissipation (Watts/Amp)	4	4

Notes: * Ambient temperature will affect the current rating. For details, see the Thermal Ratings chart.
** Operating Frequency: 25 to 65 Hz (operates at 400 Hz with 6 times the offstate leakage).
*** θjc = Thermal resistance from internal junction to base. Maximum internal junction temperature is 110 °C.

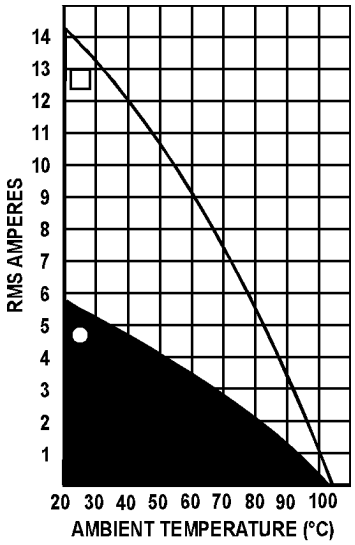
NOTE: Part number Z240D10-17 is a replacement part only. Its specifications are identical to Z240D10.

© 2006–2018 Opto 22. All rights reserved. Dimensions and specifications are subject to change. Brand or product names used herein are trademarks or registered trademarks of their respective companies or organizations.

AC Power: 120/240 Volt (cont.)

Thermal Ratings

Ambient temperature will affect the current rating.



FREE AIR

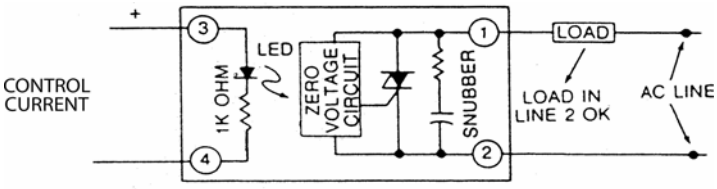
MOUNTED ON A HEATSINK WITH 2°C/WATT RATING

Surge Current Data

Time Second	Time* (Cycles)	Peak Amps
0.017	1	110
0.050	3	85
0.100	6	70
0.200	12	60
0.500	30	50
1	60	40
2	120	33
3	180	32
4	240	31
5	300	30
10	600	28

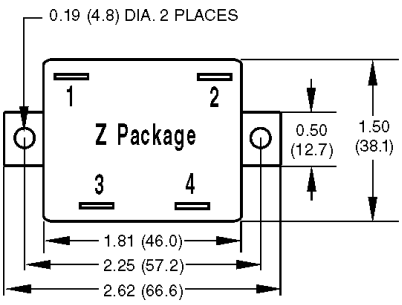
Note: *60 Hz

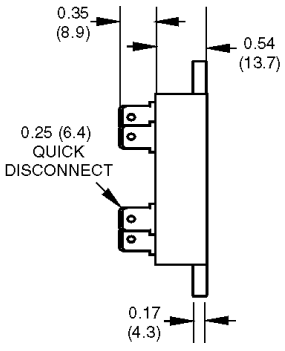
Connection Diagram



Control Current varies with control voltage. For details, see "Control Current Calculation" on page 17.

Dimensional Drawings





NOTE: All dimensions are nominal. We do not recommend mounting the terminal side of the SSR to a flat PCB (printed circuit board) or other flat surface, because there may be some variation in terminal height or alignment from one terminal to another and from one SSR to another.

© 2006–2018 Opto 22. All rights reserved. Dimensions and specifications are subject to change. Brand or product names used herein are trademarks or registered trademarks of their respective companies or organizations.

PRINTED CIRCUIT SERIES SPECIFICATIONS

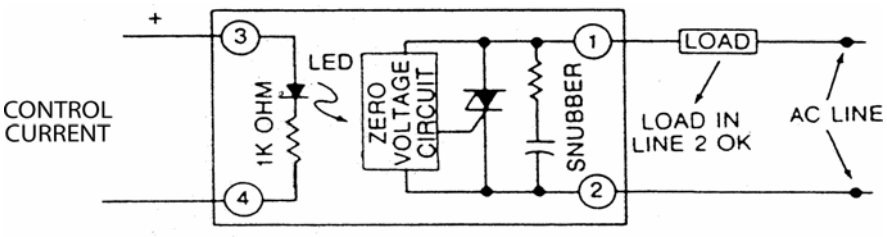
AC Power: MP and P Series

The MP Series packaging is designed with a minimum footprint to allow maximum relay density on the printed circuit board.
The P Series power relays provide low-profile for 0.5-inch (12.7 mm) center mounting on printed circuit boards.
Operating temperature: –40 °C to 100 °C. (Ambient temperature will affect the current rating.)

	MP120D2 or P120D2	MP120D4 or P120D4	MP240D2 or P240D2	MP240D4 or P240D4	MP380D4
Nominal AC Line Voltage	120	120	240	240	380
Nominal Current Rating (Amps)	2*	4*	2*	4*	4*
1 cycle Surge (Amps) Peak	20	85	20	85	85
Nominal Signal Input Resistance (Ohms)	1000	1000	1000	1000	1000
Signal Pick-up Voltage	3VDC**** (24V allowed)	3VDC**** (24V allowed)	3VDC**** (24V allowed)	3VDC**** (24V allowed)	3VDC**** (24V allowed)
Signal Drop-out Voltage	1 VDC	1 VDC	1 VDC	1 VDC	1 VDC
Peak Repetitive Voltage Maximum	600	600	600	600	800
Maximum Output Voltage Drop	1.6 volts	1.6 volts	1.6 volts	1.6 volts	1.6 volts
Off-State Leakage mA Maximum**	5 mA	5 mA	5 mA	5 mA	5 mA
Operating Voltage Range (Volts AC)	12–140	12–140	24–280	24–280	24–420
I^2t Rating t=8.3 (ms)	2	30	2	30	30
Isolation Voltage	4,000 V_{RMS}	4,000 V_{RMS}	4,000 V_{RMS}	4,000 V_{RMS}	4,000 V_{RMS}
θjc*** °C/Watt	20	6.5	20	6.5	6.5
Dissipation Watts/Amp	1.2	1.2	1.2	1.2	1.2
Rating (Motor Load)	1 FLA at 120 VAC 6 LRA at 120 VAC	2.5 FLA at 240 VAC 6 LRA at 240 VAC	1 FLA at 120 VAC 15 LRA at 120 VAC	2.5 FLA at 240 VAC 15 LRA at 240 VAC	2.5 FLA at 380 VAC 15 LRA at 380 VAC

Notes: * Ambient temperature will affect the current rating. For details, see the Thermal Ratings chart.
** Operating Frequency: 25 to 65 Hz (operates at 400 Hz with 6 times the offstate leakage)
*** θjc = Thermal resistance from internal junction to base. Maximum internal junction temperature is 110 °C.
**** = P Series 32 volts maximum.

Connection Diagram



NOTE: Part numbers ending in -17 are replacement parts only. Their specifications are identical to the same part number without the -17. For example, P240D4-17 is identical to P240D4.

Control Current varies with control voltage. For details, see "Control Current Calculation" on page 17.

© 2006–2018 Opto 22. All rights reserved. Dimensions and specifications are subject to change. Brand or product names used herein are trademarks or registered trademarks of their respective companies or organizations.

AC Power: MP and P Series (cont.)

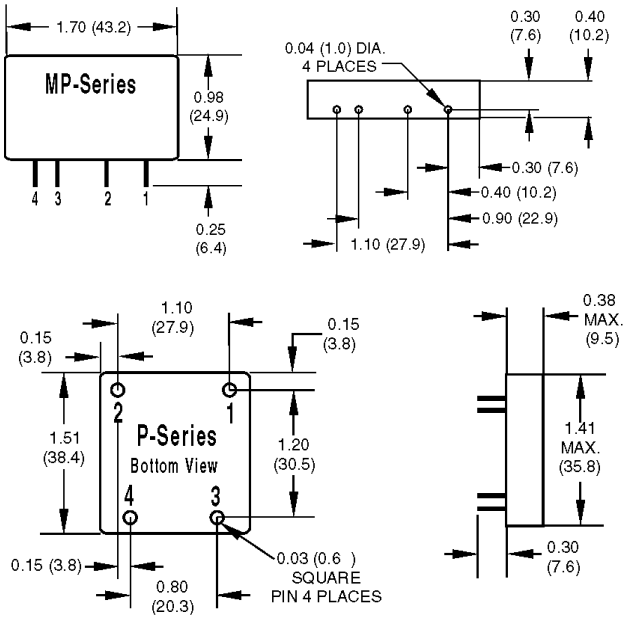
Surge Current Data

Time (Seconds)	Time* (Cycles)	2-Amp Peak Amps	4-Amp Peak Amps
0.017	1	20	85
0.050	3	18	66
0.100	6	15	53
0.200	12	11	45
0.500	30	9	37
1	60	8.5	31
2	120	8	28
3	180	7.5	27
4	240	7	26
5	300	6.5	25
10	600	6	24

Note: *60 Hz

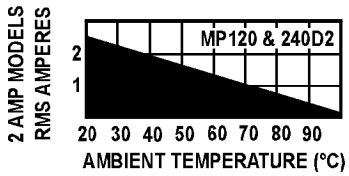
Dimensional Drawings

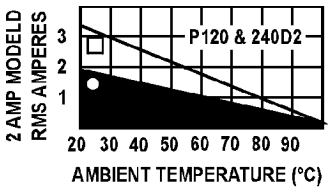
NOTE: All dimensions are nominal.

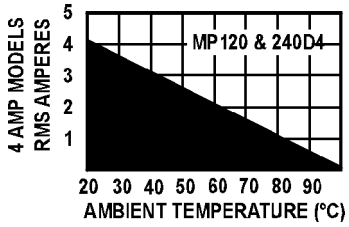


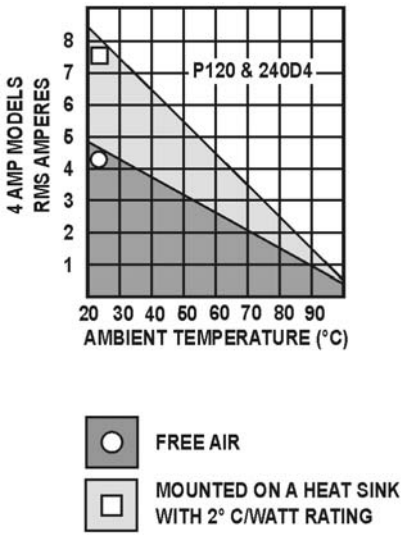
Thermal Ratings

Ambient temperature will affect the current rating.









© 2006–2018 Opto 22. All rights reserved. Dimensions and specifications are subject to change. Brand or product names used herein are trademarks or registered trademarks of their respective companies or organizations.

DC SWITCHING SERIES SPECIFICATIONS

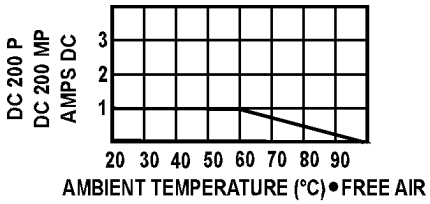
	DC60P or DC60MP	DC200P or DC200MP	DC60S-3	DC60S-5
Operating Voltage Range	5–60 VDC	5–200 VDC	5–60 VDC	5–60 VDC
Forward Voltage Drop	1.5 volts at 3 amps	1.5 volts at 1 amp	1.5 volts at 3 amps	1.5 volts at 5 amps
Nominal Current Rating (Amps)	3*	1*	3*	5*
Off-State Blocking	60 VDC	250 VDC	60 VDC	60 VDC
Signal Pickup Voltage	3 VDC 32 Volts** allowed	3 VDC 32 Volts** allowed	3 VDC 32 Volts allowed	3 VDC 32 Volts allowed
Signal Dropout Voltage	1 VDC	1 VDC	1 VDC	1 VDC
Signal Input Impedance	1,000 ohms	1,000 ohms	1,000 ohms	1,000 ohms
1 Second Surge	5 amps	2 amps	5 amps	10 amps
Operating Temp. Range	–40 °C to 100 °C	–40 °C to 100 °C	–40 °C to 100 °C	–40 °C to 100 °C
Isolation Voltage	4,000 V_{RMS}	4,000 V_{RMS}	4,000 V_{RMS}	4,000 V_{RMS}
Off-State Leakage	1 mA maximum	1 mA maximum	1 mA maximum	1 mA maximum
Package Type	P/MP series	P/MP series	Power series	Power series
Turn-on Time	100 usec	100 usec	100 usec	100 usec
Turn-off Time	750 usec	750 usec	750 usec	750 usec

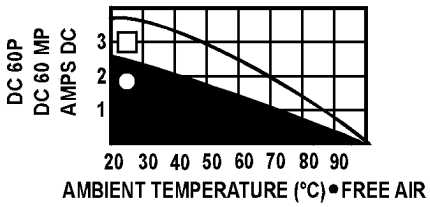
Notes: * Ambient temperature will affect the current rating. For details, see the Thermal Ratings chart.
** MP series maximum allowed control signal is 24 VDC.

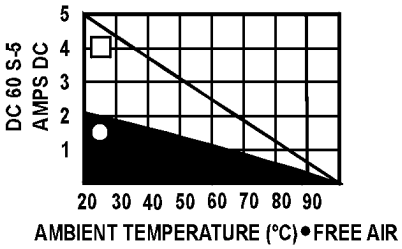
NOTE: When controlling an inductive load, like a solenoid or coil, a commutating diode must be used. Install the commutating diode across the terminals of the load (not the SSR terminals). This will protect the SSR from damage caused by voltage spikes when turning off the load.

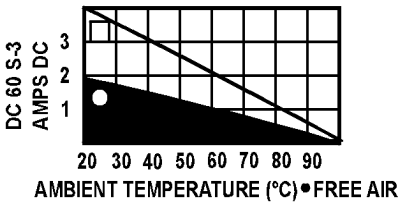
Thermal Ratings

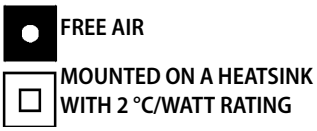
Ambient temperature will affect the current rating.



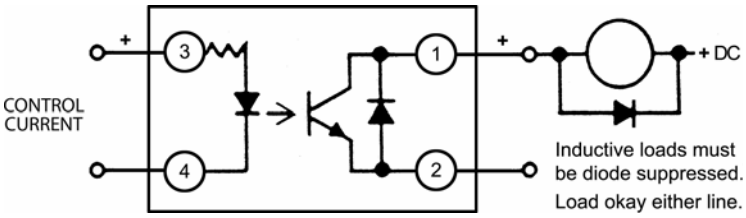








Model DC60MP Basic Schematic (also applies to the other SSRs on this page)

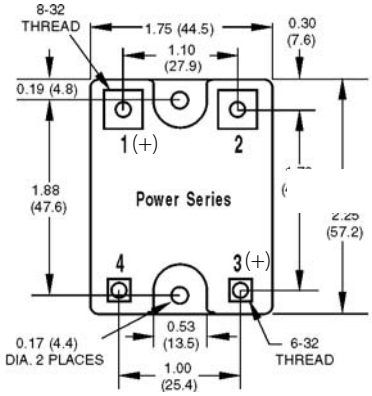


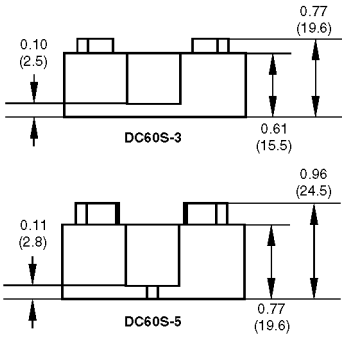
Control Current varies with control voltage. For details, see "Control Current Calculation" on page 17.

© 2006–2018 Opto 22. All rights reserved. Dimensions and specifications are subject to change. Brand or product names used herein are trademarks or registered trademarks of their respective companies or organizations.

Dimensional Drawings

NOTE: All dimensions are nominal. We do not recommend mounting the terminal side of a Power Series or Z series SSR to a flat PCB (printed circuit board) or other flat surface, because there may be some variation in terminal height or alignment from one terminal to another and from one SSR to another. For mounting on PCBs, use the MP series or P series.

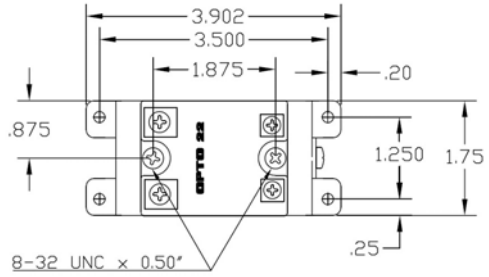




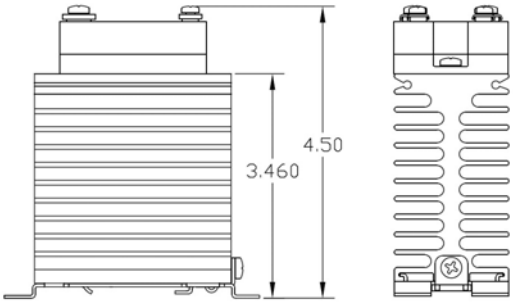
Side view: Part numbers DC60S3, 120D3, and 240D3 only

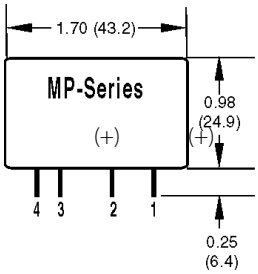
Side view: All other part numbers

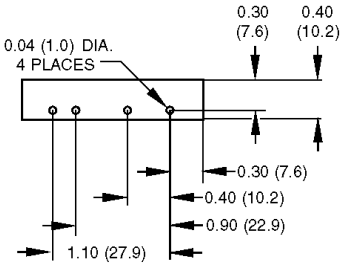
Power Series SSR with SSR-HS Heat Sink, top view

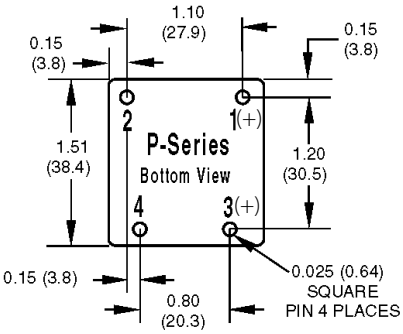


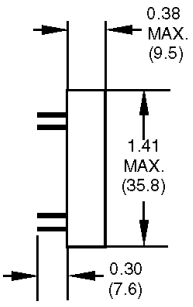
Power Series SSR with SSR-HS Heat Sink, side view











© 2006–2018 Opto 22. All rights reserved. Dimensions and specifications are subject to change. Brand or product names used herein are trademarks or registered trademarks of their respective companies or organizations.

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP