

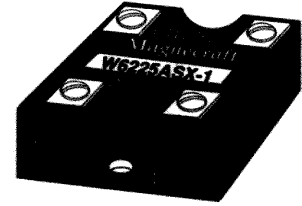
AC CONTROLLED SOLID STATE RELAY

CLASS 6



MEETS UL 1950 (IEC 950) STANDARD FOR USAGE IN SEL V (SAFE EXTRA LOW VOLTAGE) CIRCUITS.

CLASS 6
AC CONTROLLED INPUT
AC SCR OUTPUT
SOLID STATE RELAYS
HIGH RELIABILITY TYPE
90 to 280 VAC INPUT OR
80 TO 140 VDC INPUT
VAC OUTPUT 50/60 Hz



OUTPUT TERMINALS = 1 & 2
INPUT TERMINALS = 3 & 4

High Transient Capability—Single output features back to back SCR's an internal mounted RC (snubber) network for high dv/dt applications.
Photo-Isolated, Zero Switching—Optically coupled for 4000 VAC isolation between input and output and RFI suppression.

Magnecraft PART NUMBERS	W6110 ASX-1	W6125 ASX-1	W6140 ASX-1	W6202 ASX-1	W6210 ASX-1	W6225 ASX-1	W6240 ASX-1			
INPUT CHARACTERISTICS										
Input Voltage Range (over operating temperature range)	90 to 280 VAC (Also can be used with 80 to 140 Volts DC)									
Maximum Pickup Voltage (over operating temperature range)	90 VAC (80 VDC)									
Minimum Dropout Voltage (over operating temperature range)	10VAC (10 VDC)									
Input Impedance	60K ohms minimum									
Reverse Polarity Protected	Not Applicable									
Input Filtered for transients less than one millisecond.	Yes									
Response Time	10 mS Turn on 40 mS Turn Off									
OUTPUT CHARACTERISTICS										
Nominal Off State Voltage V_D (RMS)	120			240						
Maximum Off State Voltage $V_{D MAX}$ (RMS)	140			280						
Minimum Off State Voltage $V_{D MIN}$ (RMS)	20			40						
Non-Repetitive Peak Voltage V_{DSM} (Blocking Voltage)	300			500						
Maximum Rate of Rise of Off State Voltage dv/dt	500 Volts per microsecond			200V	500 Volts per microsecond					
Rated Load Current I_T (RMS)*	10	25.0	40	2.5	10	25.0	40			
U/L Incandescent Lamp Ampere Rating	8.0	16.0	30	2.0	8.0	16.0	30			
U/L Motor Load Ampere Rating	4.5	8.0	14	1.0	4.5	8.0	14			
Minimum Load Current $I_{T MIN}$ (RMS) to maintain "On"	50 ma.									
Non-Repetitive Surge Current $I_{T SM}$ (one Cycle Surge)	120	250	625	22.5	120	250	625			
Maximum RMS Overload current for 1 second	24	24	80	5	24	24	80			
Maximum Off State Leakage current I_D (RMS)	8 ma			10 ma						
Maximum RMS On-State Voltage V_T (RMS) Maximum Voltage drop across relay output @ rated current	1.6	1.6	1.6	3.5	1.6	1.6	1.6			
MISCELLANEOUS CHARACTERISTICS										
Max I ² T For Fusing (8-3ms) A ² sec	60	260	1620	2.1	60	260	1620			
Thermal Resistance Junction To Case (T_J , Max.= 115°C) °C/w	1.48	1.02	0.63	8.5	1.48	1.02	0.63			
Suggested Heat Sink	16-790 or 16-793									
Dielectric Strength V_{ISO} (Input-Output Isolation)	4,000 VAC									
Insulation Resistance R_{ISO} @ 500VDC	10 ¹⁰ Ω									
Operating temperature Range	-30°C to +80°C									
Storage temperature Range	-30°C to +100°C									
Weight	4 oz. (113.4 g)									

*All current ratings are based on use of suitable thermally conductive compound (e.g. silicone grease between the SSR mounting base and mounting surface of suitable heat sink).