

RELÈ STATICI SERIE SSR01 / SSR02 / SSR05
 SSR01 / SSR02 / SSR05 SERIES SOLID STATE RELAYS


- * Misure ridotte 28x15x5mm
- * Alta velocità commutazione
- * Basso assorbimento ingresso
- * Uscita 2A-24VDC o 100mA 48VDC e 2A-240VAC

- * Very slim design 28x15x5mm
- * High switching speed
- * Low control power
- * 2A-24VDC or 100mA-48VDC output and 2A-240VAC output

TABELLA SELEZIONE RELÈ - RELAY SELECTION TABLE

Corrente di uscita Output current	Tens. nominale uscita Nominal output voltage	Tensione di ingresso Input voltage	Modello Model
2A (Ta=60°C) Mos-Fet	24 VDC	3-12 VDC	SSR05D-224
		15-30 VDC	SSR01D-224
		35-72 VDC	SSR02D-224
100mA (Ta=60°C) Transistor	48 VDC	3-12 VDC	SSR05D-0148
		15-30 VDC	SSR01D-0148
		35-72 VDC	SSR02D-0148
2A (Ta=60°C) Triac	240 VAC	3-10 VDC	SSR05A-2240
		15-30 VDC	SSR01A-2240
		35-72 VDC	SSR02A-2240

 CONFORMI ALLE NORMATIVE EC/ EC REFERENCE STANDARDS
 CERTIFICAZIONI UL-CSA / UL-CSA CERTIFICATION
 File N. E234472 (Temperatura ambiente 60°C / Surrounding air 60°C)

**DATI TECNICI USCITA MODELLI SSR01D/02D/05D
SSR01D/02D/05D MODEL OUTPUT TECHNICAL DATA**

Tensione nominale Nominal voltage	24VDC	48VDC
Corrente uscita Output current	2A (TA 60°C) 3A (TA 20°C)	100mA (TA60°)
Range tensione di carico Load voltage range	0...24VDC	0...48VDC
Tensione di blocco Maximum block voltage	33VDC	60VDC
Caduta tensione in uscita Output voltage drop	<120 mV DC	<1V DC
Corrente minima di funzionamento Minimum working current	50microA	50microA

**DATI TECNICI ENTRATA MODELLI SSR01D/02D/05D
SSR01D/02D/05D MODEL INPUT TECHNICAL DATA**

Tensione nominale ingresso Nominal control voltage	3-12 VDC	15-30 VDC	35-72 VDC
Corrente di pilotaggio Control current range	3,6 ÷ 22 mA ±10%	4,3 ÷ 9mA ±10%	2,2 ÷ 4,6mA ±10%
Corrente di pilotaggio nominale Nominal control current	7,5mA ±10% Vin=5Vdc	7mA ±10% Vin=24Vdc	3,5mA ±10% Vin=60Vdc
Tensione di innesco Control pick-up voltage	3Vdc	15Vdc	35Vdc
Tensione di disinnesco Control drop-out voltage	<3 VDC	<15VDC	<35 VDC

**DATI TECNICI ENTRATA/USCITA MODELLI SSR01D/02D/05D
SSR01D/02D/05D MODEL INPUT/OUTPUT TECHNICAL DATA**

Tempo di innesco Turn on time	Mod. SSR01D/02D/05D-224	< 60us
	Mod. SSR01D/02D/05D-0148	< 40us
Tempo di disinnesco Turn off time	Mod. SSR01D/02D/05D-224	< 600us
	Mod. SSR01D/02D/05D-0148	< 600us
Isolamento Isolation voltage		2,5kV

DATI TECNICI USCITA PER MOD.SSR01A/02A/05A OUTPUT TECHNICAL DATA FOR MOD.SSR01A/02A/05A	
Tensione nominale Nominal voltage	240
Corrente uscita Output current	2A (Ta=60°C)
Range tensione di carico Load voltage range	12-275VAC
Picco ripetitivo allo stato di OFF Ripetitive peak off-state voltage	600 VAC
Corrente di spunto non ripetitiva Non repetitive surge peak on state current	40A t=20ms-60Hz
I ² t per scelta fusibile I ² t rating	t=10ms 6,6A ² /S
Tempo critico salita tensione allo stato di off critical rate of rise of off-state voltage	dv/dt 500V / μs
Caduta tensione in uscita Output voltage drop	<1,6VAC
Perdita di corrente allo stato di off Off-state leakage current	<1,5mA
Corrente minima di fuzionamento Minimum working current	22mA

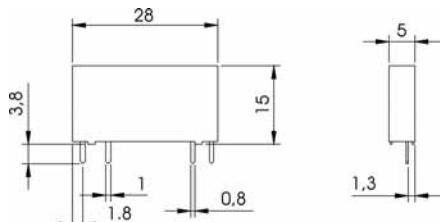
DATI TECNICI ENTRATA MODELLI SSR01A/02A/05A SSR01A/02A/05A MODEL INPUT TECHNICAL DATA			
Tensione nominale ingresso Nominal control voltage	3-10 Vdc	15-30 Vdc	35-72 Vdc
Corrente di pilotaggio Control current range	5,6 ÷ 27,5mA ±10%	4,3 ÷ 9mA ±10%	2,6 ÷ 5,5mA ±10%
Corrente di pilotaggio nominale Nominal control current	12mA ±10% Vin=5Vdc	7mA ±10% Vin=24Vdc	4,5mA ±10% Vin=60Vdc
Tensione di innesco Control pick-up voltage	3Vdc	15Vdc	35Vdc
Tensione di disinnesco Control drop-out voltage	<3 VDC	<15VDC	<35 VDC

DATI TECNICI ENTRATA/USCITA MODELLI SSR01A/02A/05A SSR01A/02A/05A MODEL INPUT/OUTPUT TECHNICAL DATA	
Massimo ritardo chiusura per commutazione zero crossing Maximum closing delay for zero crossing commutation	1/2 Ciclo
Massimo ritardo apertura per commutazione zero crossing- istantanea Maximum opening delay for zero crossing-instant commutation	1/2 Ciclo
Isolamento Isolation voltage	2,5kV

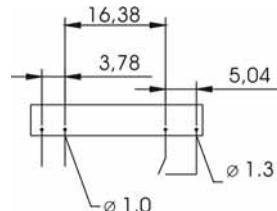
DATI TERMICI (Tutti i modelli) THERMAL DATA (All models)	
Temperatura di funzionamento Operating-temperature	-30/+80°C
Temperatura di stoccaggio Storage temperature	-40/+100°C

ACCESSORI - ACCESSORIES
ACCESSORI - ACCESSORIES FOR SOLID STATE RELAIspag. 55
VARISTORI (MOV) - METAL OXIDE VARISTORS (MOV.)pag. 55

Dimensioni / Dimensions (mm)

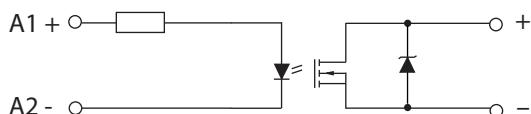


Layout fori montaggio / Mounting hole Layout

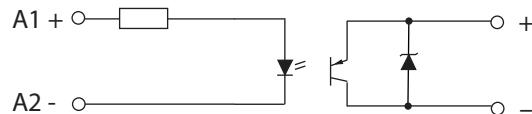


Connessioni / Connections

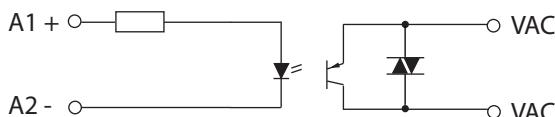
Circuito semplificato 2A - 24 VDC versione con MOS-FET di uscita
Simplified circuit diagram 2A version whit MOS-FET Output



Circuito semplificato 100mA -48 VDC versione con transistor di uscita
Simplified circuit diagram 100mA version whit bipolar Transistor Output

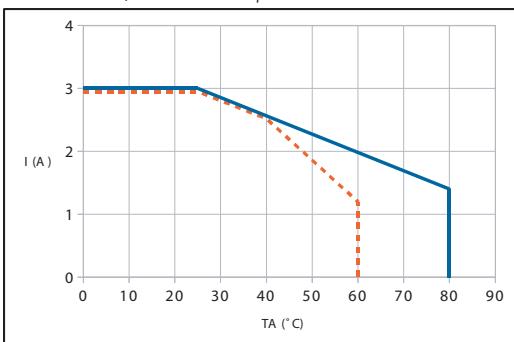


Circuito semplificato 2A - 240 VAC versione con TRIAC di uscita
Simplified circuit diagram 2A-240 VAC version whit TRIAC Output



CURVE DI DERATING - DERATING CURVES

SSR01D/02D/05D-224

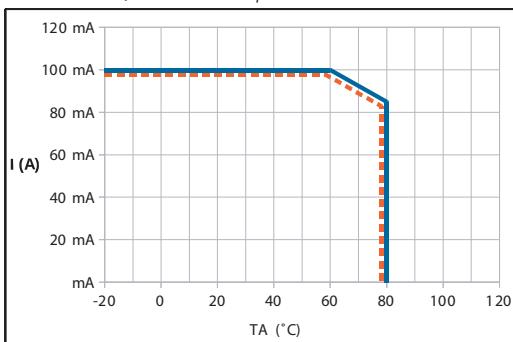
 Corrente di carico / Temperatura ambiente
 Load current / Ambient temperature


Corrente massima in conduzione continua

Max. continuous load current

— SSR Installato singolarmente / Stand alone installed SSR
 - - - SSR Installati fianco a fianco / Side by side installed SSRs

SSR01D/02D/05D-0148

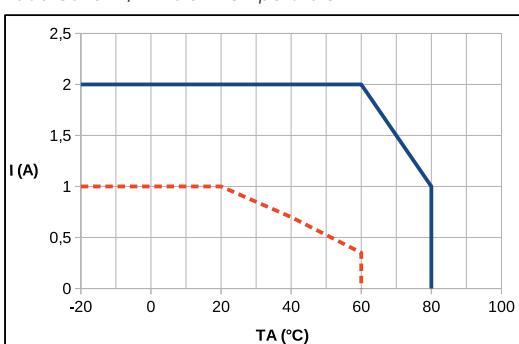
 Corrente di carico / Temperatura ambiente
 Load current / Ambient temperature


Corrente massima in conduzione continua

Max. continuous load current

— SSR Installato singolarmente / Stand alone installed SSR
 - - - SSR Installati fianco a fianco / Side by side installed SSRs

SSR01A/02A/05A-2240

 Corrente di carico / Temperatura ambiente
 Load current / Ambient temperature


Corrente massima in conduzione continua

Max. continuous load current

— SSR Installato singolarmente / Stand alone installed SSR
 - - - SSR Installati fianco a fianco / Side by side installed SSRs