RELE' STATICI SERIE SSR01 / SSR02 / SSR05
SSR01 / SSR02 / SSR05 SERIES SOLID STATE RELAYS

* Misure ridotte 28x15x5mm
* *Very slim design 28x15x5mm*
* Alta velocità commutazione
* *High switching speed*
* Basso assorbimento ingresso
* *Low control power*
* Uscita 2A-24VDC o 100mA 48VDC e 2A-240VAC
* *2A-24VDC or 100mA-48VDC output and 2A-240VAC output*

TABELLA SELEZIONE RELE' - *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) Transitor	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 *Maximun 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 voltge*	<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

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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 ripetitive surge peak on state current	40A t=20ms-60Hz
I^2t per scelta fusibile t=10ms I^2t rating	6,6A^2/S
Tempo critico salita tensione allo stato di off dv/dt critical rate of rise of off-state voltage	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 voltge	<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

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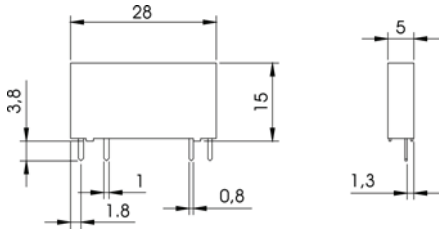
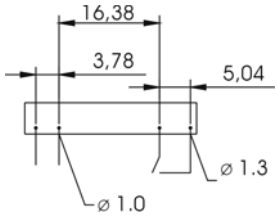
ACCESSORI - *ACCESSORIES pag. 38*
VARISTORI (MOV) - METAL OXIDE VARISTORS (MOV.) pag. 38

Dimensioni (mm)
Dimension (mm)

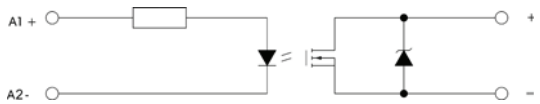


Layout fori montaggio
Mounting hole Layout

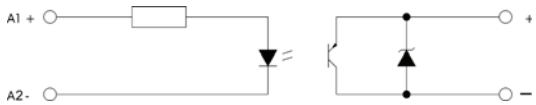


Connessioni
Connectors

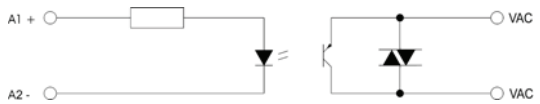
Circuito semplificato 2A - 24 VDC versione con MOS-FET di uscita
Semplified circuit diagram 2A version whit MOS-FET Output



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

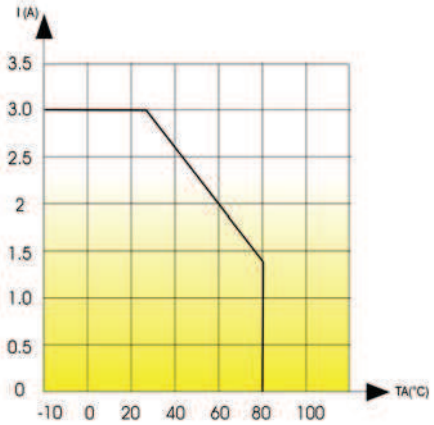


Circuito semplificato 2A - 240 VAC versione con TRIAC di uscita
Semplified circuit diagram 2A-240 VAC version whit TRIAC Output



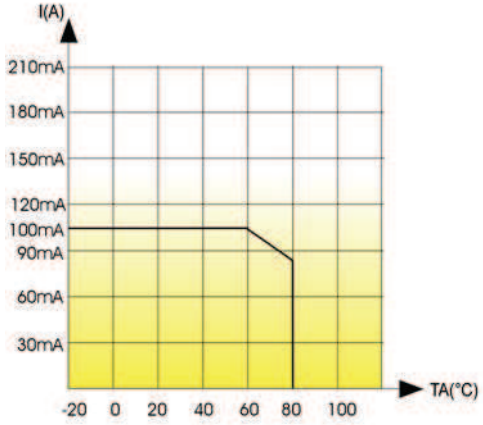
CURVE DI DI DERATING - *DERATING CURVE*

Modello SSR01D/02D/05D-24D
Model SSR01D/02D/05D-24D



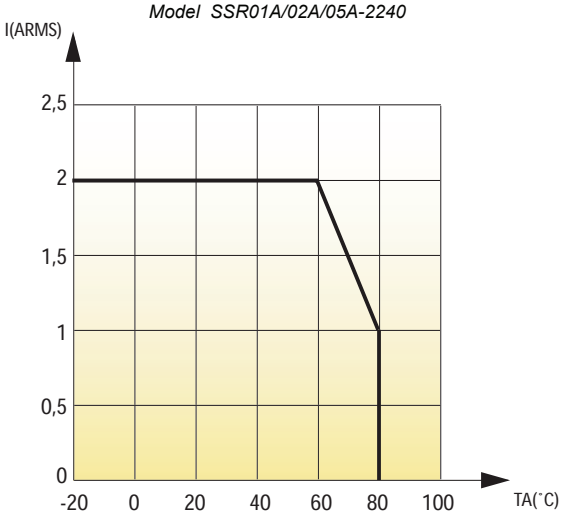
Corrente di carico / Temperatura ambiente
Load current / Ambient temperature

Modello SSR01D/02D/05D-0148
Model SSR01D/02D/05D-0148



Corrente di carico / Temperatura ambiente
Load current / Ambient temperature

Modello SSR01A/02A/05A-2240
Model SSR01A/02A/05A-2240



Corrente di carico / Temperatura ambiente
Load current / Ambient temperature

In caso di più SSR montati fianco a fianco si deve considerare un derating della corrente di uscita.
In case of many SSRs side by side, a derating of output current should be considered.