Rev. 03-2018

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

* Misure ridotte 28x15x5 mm
* Alta velocità commutazione
* Basso assorbimento ingresso
* Uscita 2A-24 VDC o 100mA 48 VDC e 2A-240 VAC

** Very slim design 28x15x5 mm*
** High switching speed*
** Low control power*
** 2A-24 VDC or 100 mA-48 VDC output and 2A-240 VAC 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***
2 A (Ta=60°C) Mos-Fet	24 VDC	3-12 VDC	SSR05D-224
		15-30 VDC	SSR01D-224
		35-72 VDC	SSR02D-224
100 mA (Ta=60°C) Transitor	48 VDC	3-12 VDC	SSR05D-0148
		15-30 VDC	SSR01D-0148
		35-72 VDC	SSR02D-0148
2 A (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)	100 mA (TA60°)
Range tensione di carico *Load voltage range*	0...24 VDC	0...48 VDC
Tensione di blocco *Maximun block voltage*	33 VDC	60 VDC
Caduta tensione in uscita *Output voltage drop*	<120 mV DC	<1V DC
Corrente minima di funzionamento *Minimum working current*	50 µA	50 µA

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

Tensione nominale *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 ÷ 9 mA ±10%	2,2 ÷ 4,6 mA ±10%
Corrente di pilotaggio nominale *Nominal control current*	7,5 mA ±10% Vin=5 VDC	7 mA ±10% Vin=24 VDC	3,5 mA ±10% Vin=60 VDC
Tensione di innesco *Control pick-up voltage*	3 VDC	15 VDC	35 VDC
Tensione di disinnesco *Control drop-out voltge*	<3 VDC	<15 VDC	<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	< 60 µs
	Mod. SSR01D/02D/05D-0148	< 40 µs
Tempo di disinnesco *Turn off time*	Mod. SSR01D/02D/05D-224	< 600 µs
	Mod. SSR01D/02D/05D-0148	< 600 µs
Isolamento AC, 1 min *Isolation voltage AC, 1 min*	Mod. SSR01D/02D/05D-224	2,5 kV
	Mod. SSR01D/02D/05D-0148	3,75 kV

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*		12-275 VAC
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=20 ms-60 Hz
I^2t per scelta fusibile I^2t 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*	500 V/ µS
Caduta tensione in uscita *Output voltage drop*		<1,6 VAC
Perdita di corrente allo stato di off *Off-state leakage current*		<1,5 mA
Corrente minima di fuzionamento *Minimum working current*		22 mA

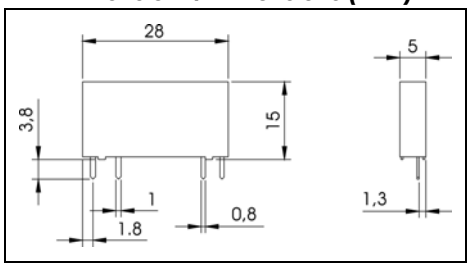
DATI TECNICI ENTRATA MODELLI SSR01A/02A/05A *SSR01A/02A/05A MODEL INPUT TECHNICAL DATA*			
Tensione nominale ingresso *Nominal control voltage*	**3-10 VDC**	**15-30 VDC**	**35-72 v**
Corrente di pilotaggio *Control current range*	5,6÷ 27,5 mA ±10%	4,3 ÷ 9 mA ±10%	2,6 ÷ 5,5 mA ±10%
Corrente di pilotaggio nominale *Nominal control current*	12 mA ±10% Vin=5 VDC	7 mA ±10% Vin=24 VDC	4,5 mA ±10% Vin=60 VDC
Tensione di innesco *Control pick-up voltage*	3Vdc	15Vdc	35 VDC
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 AC, 1 min *Isolation voltage AC, 1 min*	2,5 kV

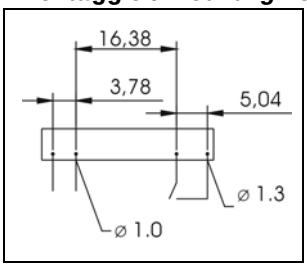
DATI TERMICI (Tuttii modelli) *THERMAL DATA (All models)*	
Temperatura di funzionamento *Operating-temperature*	-30/+80°C
Temperatura di stoccaggio *Storage temperature*	-40/+100°C

ACCESSORI - *ACCESSORIES*
ACCESSORI - ACCESSORIES FOR SOLID STATE RELAYS **pag. 68**
VARISTORI (MOV) - METAL OXIDE VARISTORS (MOV.) **pag. 68**

Dimensioni / *Dimensions* (mm)

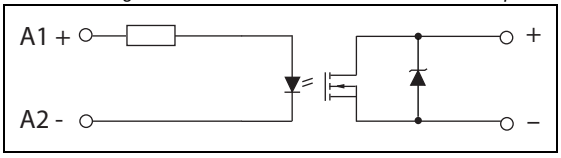


Layout fori montaggio / *Mounting hole Layout*

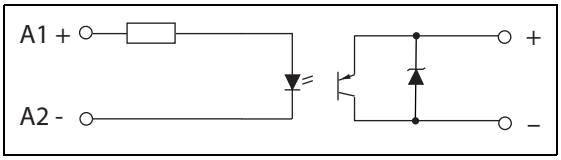


Connessioni / *Connections*

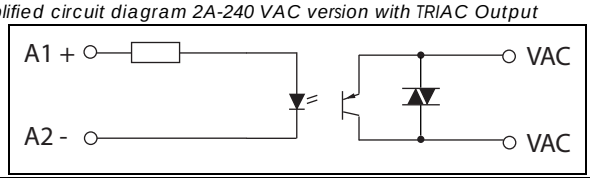
Circuito semplificato 2A - 24 VDC versione con MOS-FET di uscita
Simplified circuit diagram 2A - 2 VDC version whit MOS-FET Output



Circuito semplificato 100 mA 48 VDC versione con transistor di uscita
Semplified circuit diagram 100 mA 48 VDC version with bipolar Transistor Output



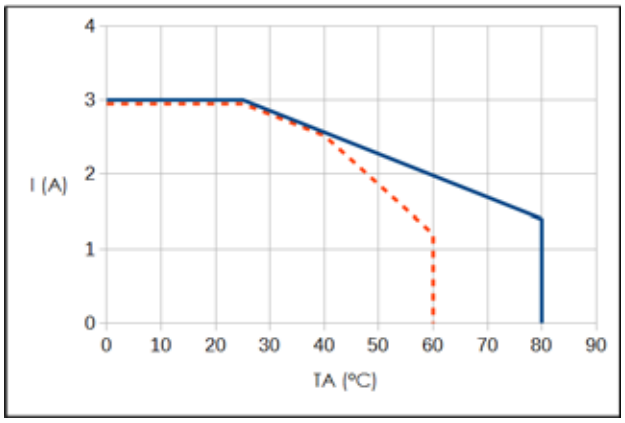
Circuito semplificato 2A - 240 VAC versione con TRIAC di uscita
Simplified circuit diagram 2A-240 VAC version with TRIAC Output



CURVE DI DI DERATING - *DERATING CURVES*

SSR01D/02D/05D-224

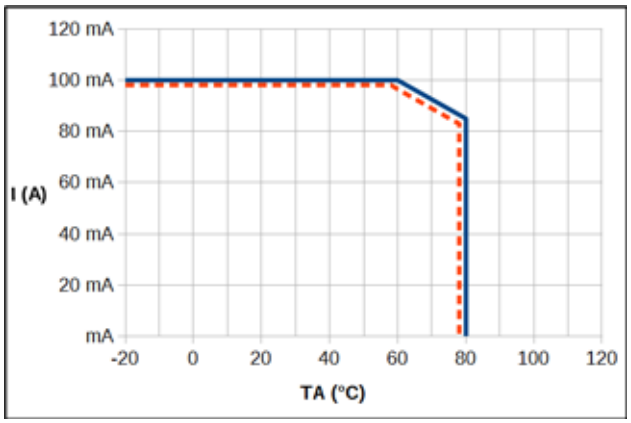
Corrente di carico / Temperatura ambiente
Load current / Ambient temperature



Corrente massima in conduzione continua
Max. continuous load current
___ SSR Installato singolarment / *Stand alone installed SSR*
- - - *SSR Installati fianco a fianco / Side by side installed SSRs*

SSR01D/02D/05D-0148

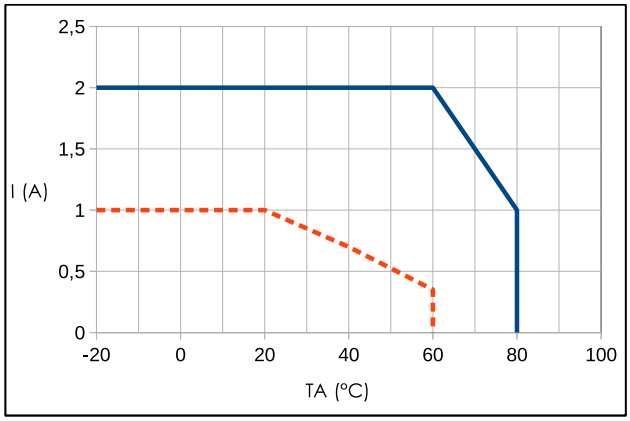
Corrente di carico / Temperatura ambiente
Load current / Ambient temperature



Corrente massima in conduzione continua
Max. continuous load current
___ SSR Installato singolarment / *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 singolarment / *Stand alone installed SSR*
- - - *SSR Installati fianco a fianco / Side by side installed SSRs*