

Solid State Relays

Datasheet 9225191



Features

Switching	Random
Output	Triac with internal snubber
Input	DC with constant current control
Applications	resistive and inductive loads with $\cos\phi > 0,85$ (Z-Type) inductive load with $\cos\phi > 0,65$ (R-Type)

Technical data

Input circuit

Control voltage range	3...32 VDC
Control current max.	10 mA
Turn-off voltage min.	1 VDC
Input resistance	Constant current

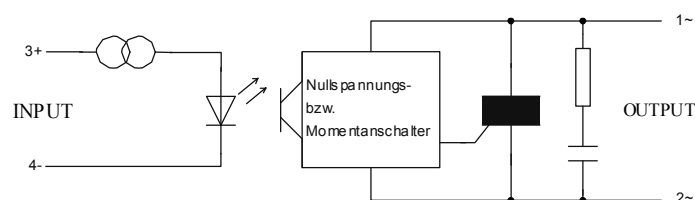
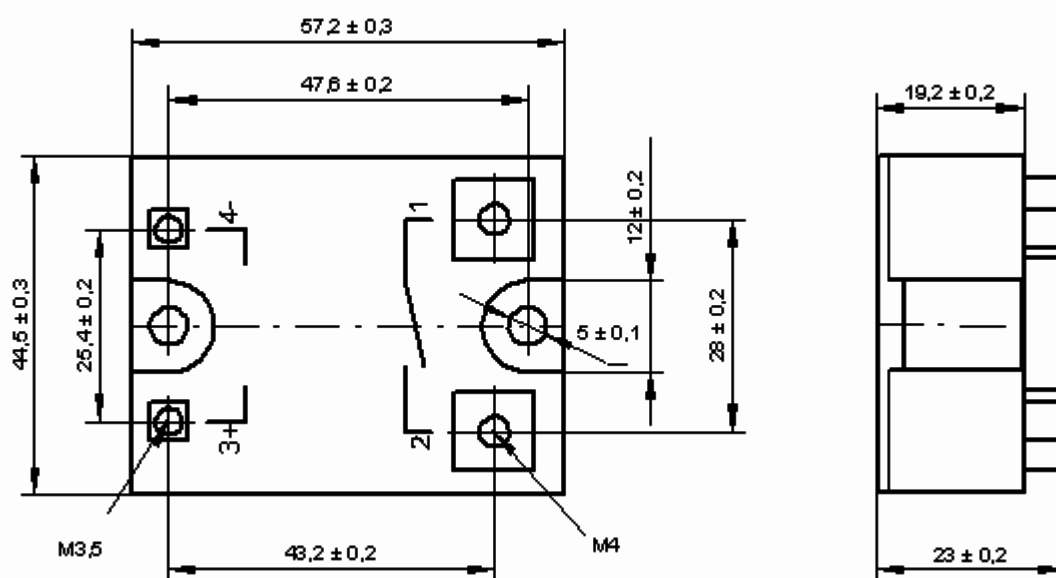
Output circuit

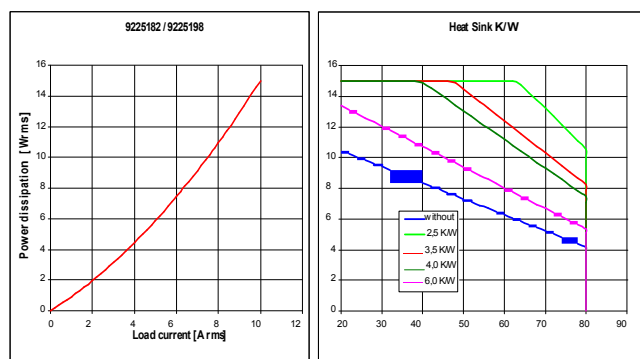
Load voltage range	24...280 VAC
Peak-off-state voltage	600 V _{drm}
Off-state leakage current	12 mA eff.
Load current range	0,1...25 A
Surge current 1 half wave	230 A _{peak}
I ² t for fusing	260 A ² s
On-state voltage	1,85 V _{peak}
Off-state (static) dv/dt	500 V/μs
Snubber	47 Ω / 100 nF

General data

Turn-on time max.	0,1 ms
Turn-off time max.	11 ms
Line frequency range	47...63 Hz
Isolation volt. between input/output	4.000 V
Isolation volt. between input-output/base	2.500 V
Isolation resistance	50 MΩ
Operation temperature	-20...+80 °C
Recommended varistor	SIOV-S20 K230

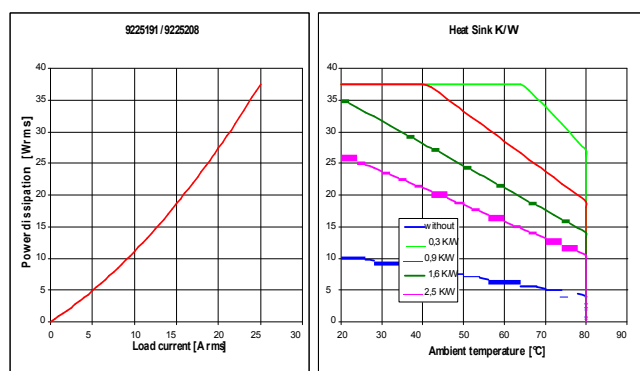
Dimensions in mm



Derating diagrams


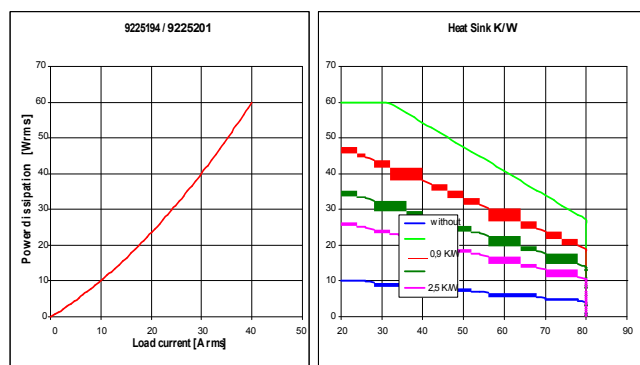
Heat sink	Number of SSR per Heatsink/ Load current per SSR		
	1 SSR	2 SSR	3 SSR
9225227	10 A	8 A	
9225236	10 A	10 A	
9225239	10 A	10 A	10 A
9225233	10 A	10 A	10 A
9225242	10 A		

Values for 40°C enclosure-temperature and mounted with conducting paste between the SSR and the heat sink



Heat sink	Number of SSR per Heatsink/ Load current per SSR		
	1 SSR	2 SSR	3 SSR
9225227	14 A	10 A	
9225236	17 A	14 A	
9225239	25 A	21 A	18 A
9225233	25 A	25 A	25 A
9225242	24 A		

Values for 40°C enclosure-temperature and mounted with conducting paste between the SSR and the heat sink



Heat sink	Number of SSR per Heatsink/ Load current per SSR		
	1 SSR	2 SSR	3 SSR
9225227	16 A	11 A	
9225236	20 A	15 A	
9225239	31 A	24 A	20 A
9225299	40 A	36 A	32 A
9225242	27 A		

Values for 40°C enclosure-temperature and mounted with conducting paste between the SSR and the heat sink