ENGLISH

Solid State Relays

Datasheet 9225087

Features	
Switching	Zero cross
Output	Back-to-back SCR with internal snubber
Input	DC with constant current control
Applications	Resistive and inductive loads with cosϕ > 0,85 (Z-Type) inductive load with cosϕ > 0,65 (R-Type)

Technical data

Input circuit	
Control voltage range	3...32 VDC
Control current max.	22 mA
Turn-off voltage min.	1 VDC
Input resistance	Constant current
Output circuit	
Load voltage range	24...480 VAC
Peak-off-state voltage	1200 V_{drm}
Off-state leakage current	10 mA eff.
Load current range	0,4...90 A
Surge current 1 half wave	1090 A_{peak}
I^2t for fusing	5980 A^2s
On-state voltage	1,6 V_{peak}
Off-state (static) dv/dt	1000 V/µs
Snubber	47 Ω / 22nF
General data	
Turn-on time max.	11 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
Approvals	cULus, VDE

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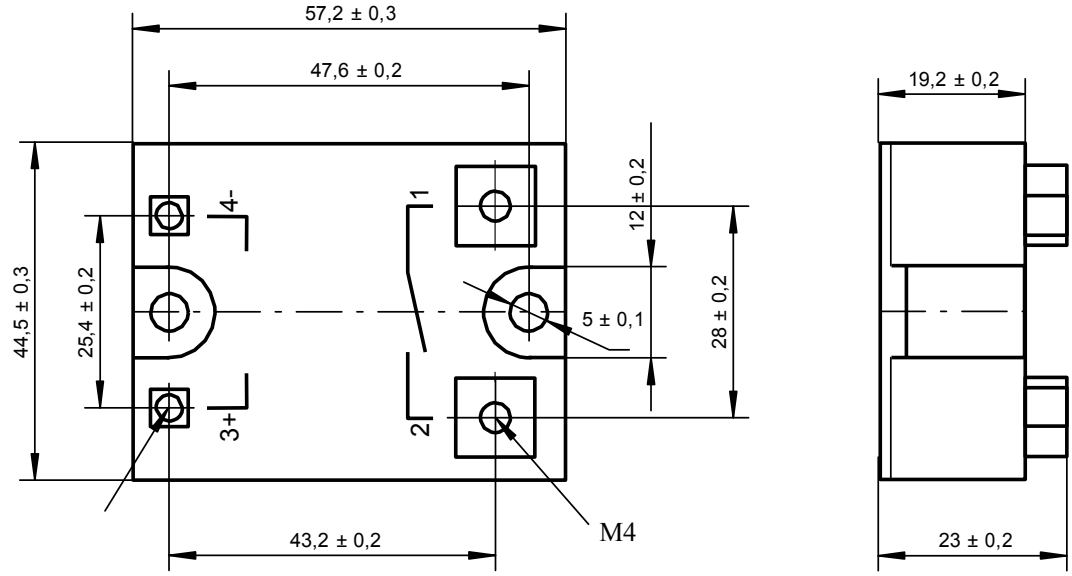
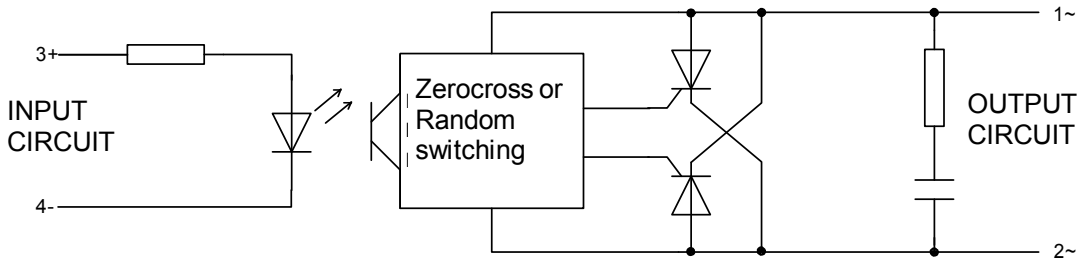
Housing specification

Weight	Approx. 80 gr unpotted , 100 gr potted (optional)
Housing material	Glass filled polyester
Potting compound (optional)	UL recognized Epoxy
Base plate	10 ... 45 A : Aluminium 50 ... 125A : Aluminium, nickel plated
Terminals	Input : M4-screws Output : M3,5-screws

Dimensions in mm





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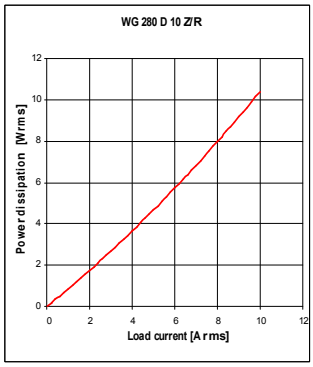
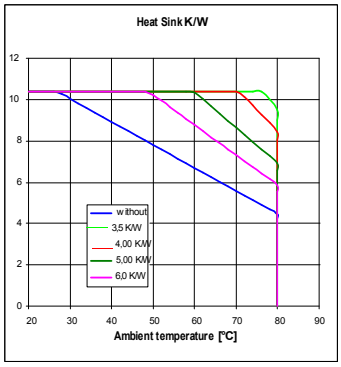
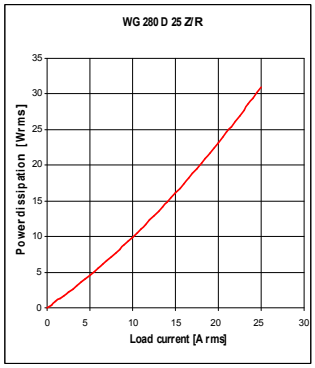
Derating diagrams

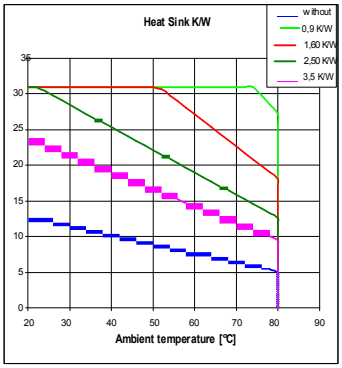




	Number of SSR per Heatsink/ Load current per SSR		
Heat sink	1 SSR	2 SSR	3 SSR
9225227	10 A	10 A	
9225236	10 A	10 A	
9225239	10 A	10 A	10 A
9225233	10 A	10 A	10 A
9225242	10 A		

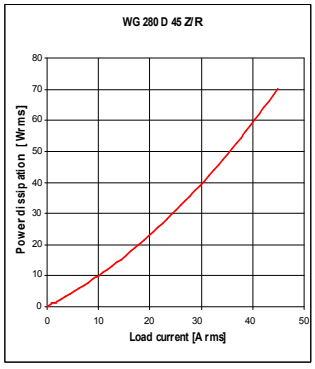
Values for 40°C enclosure-temperature and mounted with conducting paste between the SSR and the heat sink

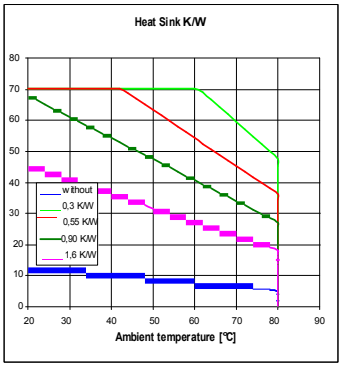




	Number of SSR per Heatsink/ Load current per SSR		
Heat sink	1 SSR	2 SSR	3 SSR
9225227	18 A	12 A	
9225236	23 A	17 A	
9225239	25 A	25 A	23 A
9225233	25 A	25 A	25 A
9225242	25 A		

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





	Number of SSR per Heatsink/ Load current per SSR		
Heat sink	1 SSR	2 SSR	3 SSR
9225227	18 A	12 A	
9225236	23 A	17 A	
9225239	40 A	29 A	23 A
9225233	45 A	45 A	41 A
9225242	34 A		

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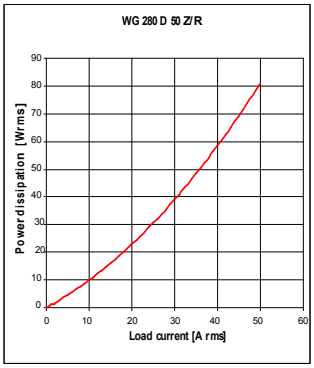
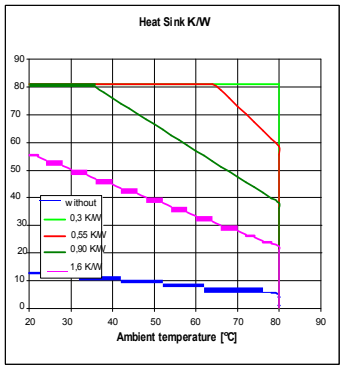
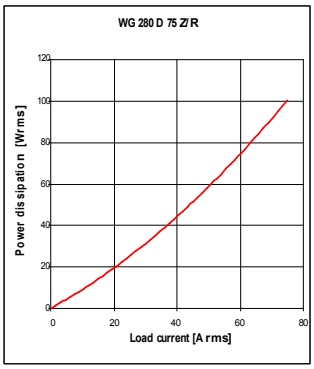
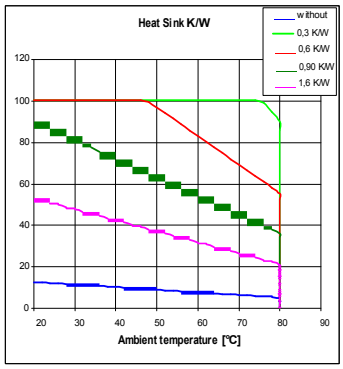




	Number of SSR per Heatsink/ Load current per SSR		
Heat sink	1 SSR	2 SSR	3 SSR
9225227	20 A	13 A	
9225236	26 A	18 A	
9225239	50 A	34 A	26 A
9225233	50 A	50 A	50 A
9225242	41 A		

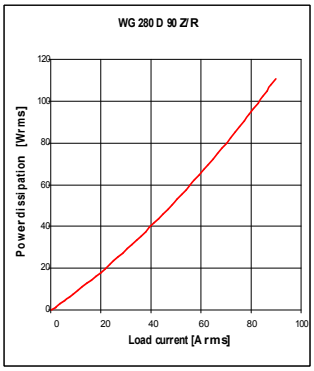
Values for 40°C enclosure-temperature and mounted with conducting paste between the SSR and the heat sink

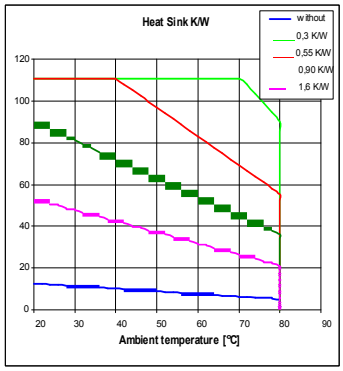




	Number of SSR per Heatsink/ Load current per SSR		
Heat sink	1 SSR	2 SSR	3 SSR
9225227	23 A	14 A	
9225236	31 A	21 A	
9225239	66 A	42 A	31 A
9225233	75 A	75 A	68 A
9225242	51 A		

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





	Number of SSR per Heatsink/ Load current per SSR		
Heat sink	1 SSR	2 SSR	3 SSR
9225227	25 A	15 A	
9225236	33 A	22 A	
9225239	73 A	45 A	33 A
9225233	90 A	90 A	76 A
9225242	56 A		

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

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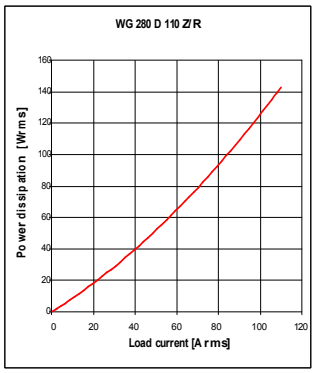
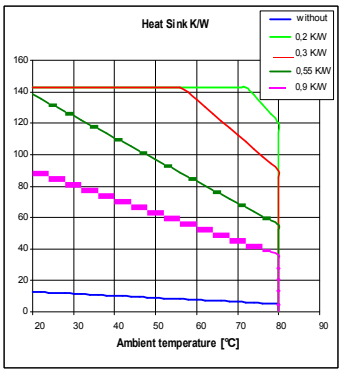
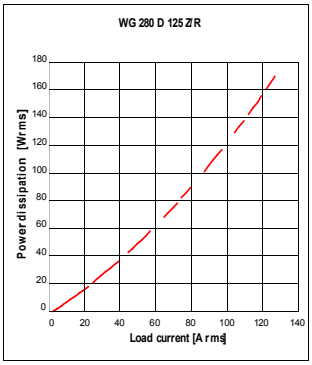
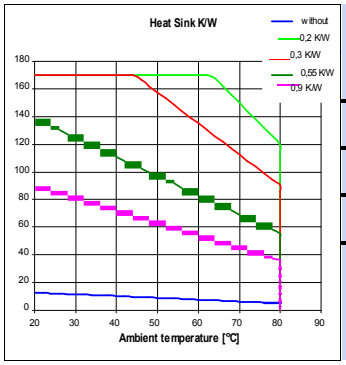




	Number of SSR per Heatsink/ Load current per SSR		
Heat sink	1 SSR	2 SSR	3 SSR
9225227	25 A	15 A	
9225236	33 A	22 A	
9225239	74 A	46 A	33 A
9225233	110 A	103 A	77 A
9225242	56 A		

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





	Number of SSR per Heatsink/ Load current per SSR		
Heat sink	1 SSR	2 SSR	3 SSR
9225227	25 A	15 A	
9225236	33 A	22 A	
9225239	74 A	46 A	33 A
9225233	125 A	103 A	77 A
9225242	57A		

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

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