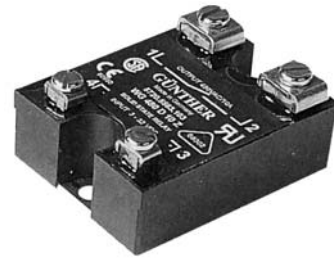


# Solid State Relays

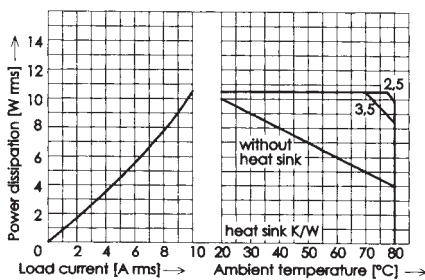
## 1-phase for AC loads and chassis mounting



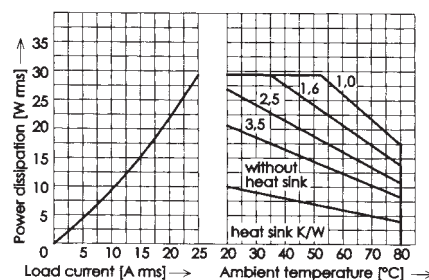
SSR type		WG 480 D 10 Z	WG 480 D 10 R	WG 480 D 25 Z	WG 480 D 25 R	WG 480 D 40 Z	WG 480 D 40 R
Switching type		zero cross	random	zero cross	random	zero cross	random
Approvals		UL, VDE	UL, VDE	UL, VDE	UL, VDE	UL, VDE	UL, VDE
Circuit diagrams, dimensions		page 19	page 19	page 19	page 19	page 19	page 19
Output		thyristor	thyristor	thyristor	thyristor	thyristor	thyristor
Application Fields		Resistive loads Inductive Loads with $\cos\varphi > 0.85$	Inductive loads	Resistive loads Inductive Loads with $\cos\varphi > 0.85$	Inductive loads	Resistive loads Inductive Loads with $\cos\varphi > 0.85$	Inductive loads
<b>Input Circuit</b>							
Control Voltage Range	V	3 - 32 DC	3 - 32 DC	3 - 32 DC	3 - 32 DC	3 - 32 DC	3 - 32 DC
Control Current Max.	mA	22	22	22	22	22	22
Turn-off voltage Min.	V DC	1	1	1	1	1	1
Input Resistance	$\Omega$	constant current	constant current	constant current	constant current	constant current	constant current
<b>Output Circuit</b>							
Load Voltage Range	V rms	24 - 530 AC	48 - 530 AC	24 - 530 AC	48 - 530 AC	24 - 530 AC	48 - 530 AC
Peak-off-stage Voltage	V drms	1.200 (1.000)*	1.200 (1.000)*	1.200 (1.000)*	1.200 (1.000)*	1.200 (1.000)*	1.200 (1.000)*
Off-state Leakage Current	mA <sub>off</sub> max.	10	10	10	10	10	10
Load Current Range	A rms	0.1 - 10	0.1 - 10	0.2 - 25	0.2 - 25	0.4 - 40	0.4 - 40
Surge Current. 1 half wave	A peak	110	110	230	230	500	500
I <sup>2</sup> t for Fusing	A <sup>2</sup> s	60	60	260	260	1.250	1.250
On-state Voltage	V peak	1.6	1.6	1.6	1.6	1.6	1.6
Off-state (static) dv/dt	V/ $\mu$ s	200	200	200	200	200	200
Snubber	$\Omega$ ; nF	47; 22	47; 22	47; 22	47; 22	47; 22	47; 22
<b>General Data</b>							
Turn-on Time Max.	ms	11	0.1	11	0.1	11	0.1
Turn-off Time Max.	ms	11	11	11	11	11	11
Line Frequency Range	Hz	47 - 63	47 - 63	47 - 63	47 - 63	47 - 63	47 - 63
Isolation Volt. Between:							
- input / output	V rms	4.000	4.000	4.000	4.000	4.000	4.000
- input-output / base	V rms	2.500	2.500	2.500	2.500	2.500	2.500
Isolation Resistance	M $\Omega$	50	50	50	50	50	50
Operating Temperature		-20... +80	-20... +80	-20... +80	-20... +80	-20... +80	-20... +80
Recommended Varistor		SIOV-S20 K420	SIOV-S20 K420	SIOV-S20 K420	SIOV-S20 K2420	SIOV-S20 K420	SIOV-S20 K420

UL recognised component: Suitable for a max. surrounding air temperature of 40°C. For use at other ambient temperatures, check the derating diagrams.

Derating diagram WG 480 D 10 Z/R



Derating diagram WG 480 D 25 Z/R



Derating diagram WG 480 D 40 Z/R

