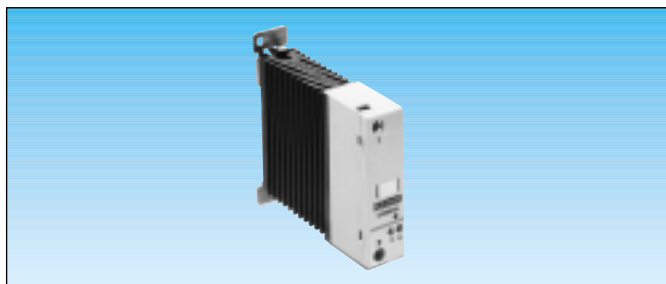


Solid state relays with integrated heatsink, DIN rail mounting - GRD range 22.5mm

- Single phase
- Complete, compact units
- Tailor-made solution to current sinks
- DIN rail and panel mounting
- Rating: 12 and 25 A (Triac) - 25 A (SCR)
- Protection by RC filter
- Optional protection by removable varistor
- LED display of input status
- UL - cUL approval and CE marking



Output specifications

	Triac	SCR
Voltage range (Vrms max)	24-280	48-660
Peak voltage (t=1 min.) (Vpeak)	600	1200
Maximum current (A)	12 - 25	25
Maximum off-state leakage (at Vmax and T = 25 °C)	15	20
Minimum current (mArms)	50	100
Max. 1-cycle surge T=25°C (A peak)	100 - 250	750
Max. 1-second surge T=25°C (A peak)	30 - 75	145
On-state voltage drop at Imax and T=25°C (Vpeak)	1.6	1.6
I ² t (t=10ms) A ² s	312 - 750	1250
Static (off-state) dv/dt (V/us)	200	500
Supply frequency range (Hz)	47 to 80	47 to 80
cos φ (Zero voltage)	> 0.5	> 0.5
Rth junction/ambient air	4.9 - 3.6° C/W	2.5° C/W

Input specifications

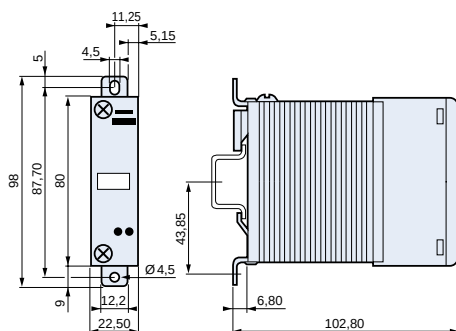
Input voltage (V)	90-280 ~	4-32 ==
Drop-out voltage	10 Vrms	1V ==
Maximum current (at Vmax)	5.5 mArms	12 mA
Nominal input resistance	45 kΩ	3 kΩ
Response time (close)	20 ms	0.5 cycle max.
Response time (open)	30 ms	0.5 cycle max.

For instantaneous switching models, turn-on time is less than 100 μs

Characteristics

Operating temperature (° C)	-20 to +80
Storage temperature (° C)	-40 to +100
Input to output insulation voltage (Vrms)	4000
Breakdown voltage (Vrms)	2500
Input/output capacitance (pF)	8
Material	Casing
	Baseplate
Weight (g)	Self-extinguishing (UL 94 V0)
Terminal capacity	Aluminium
	250
	Ø 2 mm max.

Dimensions



Part numbers

Zero voltage switching

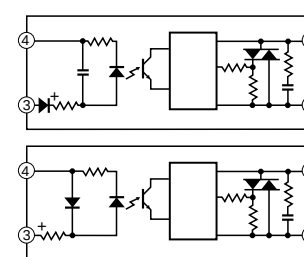
Rating	Output voltage	Input voltage	Triac	SCR
12 A	24-280 V ~	180-280 V ~	84 130 100	
		4-32 V ==	84 130 101	
		90-140 V ~	84 130 150	
25 A	24-280 V ~	180-280 V ~	84 130 102	
		4-32 V ==	84 130 103	
		90-140 V ~	84 130 152	
25 A	48-660 V ~	180-280 V ~		84 130 118
		4-32 V ==		84 130 116
		90-140 V ~		84 130 158

Instantaneous switching

Rating	Output voltage	Input voltage	SCR
25 A	48-660 V ~	4-32 V ==	84 130 117

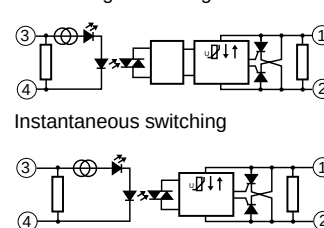
Thermal dissipation curves

GRD range - single-phase with triac



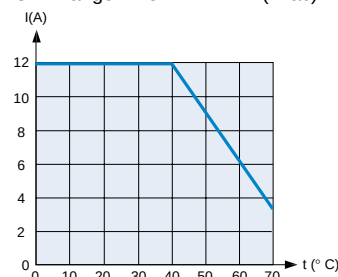
GRD range - single-phase with SCR

Zero voltage switching

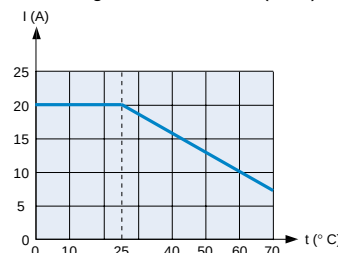


Curves for temperature-dependent derating

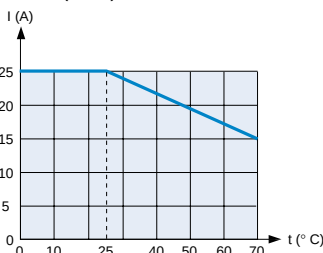
GRD range 22.5 mm - 12 A (Triac)



GRD range 22.5 mm - 25 A (Triac)



25 A (SCR)



To order, specify :

Standard products

Standard products, non stocked

1

Part number
Example: Solid state relay GMS range 22.5 mm - 84 130 100