

→ Ready to use SSR for General Purpose 90mm wide Three Phase

- GN technology ready to use
- No heatsink calculation required
- Epoxy-free design
- Relay and contactor configuration
- Internal transient protection by TVS
- UL/cUL recognized, CSA and TUV approved
- CE certified
- EMC compliance level 3
- Non RC snubber filter
- Rated current at 40°C ambient temperature



Part numbers

Type	Current (A)	Input voltage	Output voltage	Output	Switching	Code
90 mm	3x25	4-32 V DC	48-600 V AC	Contactor	Zero	GNR 25DCZ
	3x25	4-32 V DC	48-600 V AC	Contactor	Random	GNR 25DCR
	3x25	90-140 V AC/DC	48-600 V AC	Contactor	Zero	GNR 25BCZ
	3x25	180-280 V AC/DC	48-600 V AC	Contactor	Zero	GNR 25ACZ

Output characteristics

Voltage range (Vrms max)	48-600
Non-rep. peak voltage (Vpeak)	1100
Maximum off-state leakage at Vmax and T = 25 °C (µeff per phase)	120
Current max @ 25°C (A)	25
Current max @ 40°C (A)	25
Minimum current (mArms)	100
On-state voltage drop at I max (Vpeak)	1.20
I ² t (t = 10 ms) (A ² s) (50 - 60 Hz)	1250-1040
HP ratings at 480 V	3
Static (off-state) dv/dt (V/µs)	500
Utilisation category AC 51 (A)	20
Utilization Category AC-53 (A)	5
Max. non-rep. 1 s surge (T=25 °C) (A)	100
Max. non-rep. 1-cycle surge (T=25 °C) (A)	500
Rth junction / ambient air (°C/W)	3.1

Inputs specifications

Input voltage	4-32 VDC	90-140 VAC	180-280 VAC
Turn-off voltage (V)	1	10	10
Max. controlled current (mA)	62	19	24
Min turn-on current (mA)	50	15	19
Turn-on time (ms) (zero voltage relay)	8.33 (60Hz) - 10 (50Hz)	20	20
Turn-on-time (ms) (instantaneous relay)	0.1	-	-
Response time (close) (ms)	8.33 (60Hz) - 10 (50Hz)	30	30

General characteristics

General characteristics

Operating temperature (°C)	-20→+80 -20→+60 (90-140 VAC)
Storage temperature (°C)	-40→+100
Input to ground isolation (Vrms)	4200
Input/output to ground isolation (Vrms)	4000
Frequency (Hz)	47→63
Material housing	Polycarbonate UL-94V0
Heatsink material	Anodized aluminium
Protection (IEC 60529) - Casing	IP 20
Weight (g)	600
Altitude for nominal performance (/sea level)	2000 m
Input terminal capacity (stranded and solid wire)	16 AWG→24 AWG
Input terminal tightening torque (Nm)	0.5
Min. output terminal capacity (IEC 941-1)	16 AWG
Max. output terminal capacity (IEC 941-1) stranded wire	8 AWG
Max. output terminal capacity (IEC 941-1) solid wire	10 AWG
Output terminal tightening torque (Nm)	1.3
Maximum cross section for output wire (mm²)	10

Safety standards

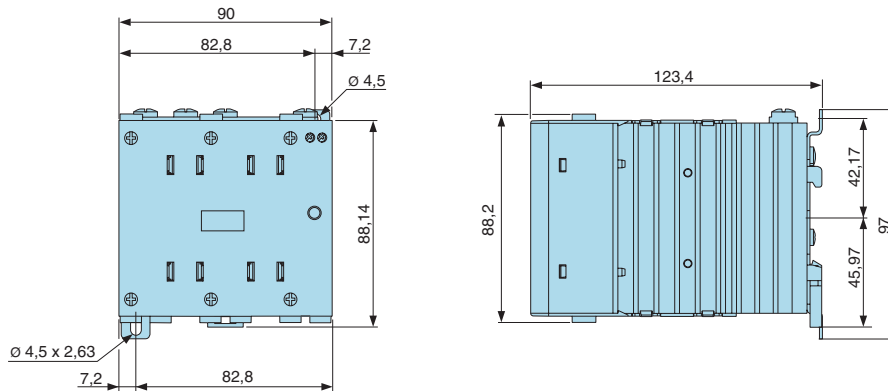
Conformity to standards	IEC 62314 CE compliant with LVD 73/23/EEC TUV certified per EN 60950 UL recognized per UL 508 CSA recognized per C22.2 no 14-95
Vibrations according to IEC/EN60068-2-6	35 mm / 10-55 Hz
Shock test IEC 60068-2-27	15 G / 11 ms
Immunity to electrostatic discharges acc. IEC/EN 61000-4-2	Level 3
Immunity to electrostatic fields acc. ENV 50140/204 (IEC 1000-4-3)	Level 3
Immunity to rapid transient bursts acc. to IEC 1000-4-4	Level 3
Immunity to shock waves according to IEC/EN 61000-4-5	Level 3
Immunity to radio frequency in common mode acc. to ENV (CEI 1000-4-6)	Level 3
Conducted and radiated noise for industrial environments per CISPR 11	Class A
Pollution	Degree 2
Overvoltage	Category III

Comments

For multiple unit configuration consult Technical Notes
LED is not absolute indicator of power being present

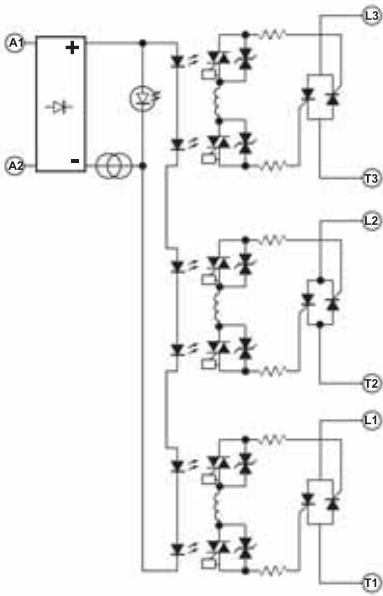
Dimensions

GNR 90 mm contactor termination

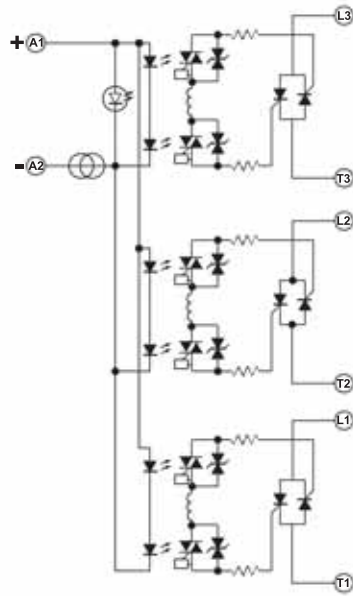


Connections

AC input relay

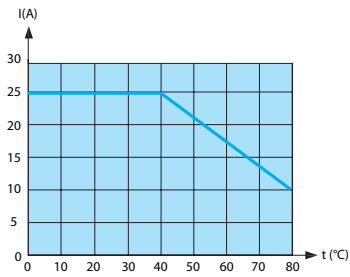


DC input relay



Curves

GNR 25B - GNR 25D



GNR 25A

