TECHNICAL SPECIFICATION

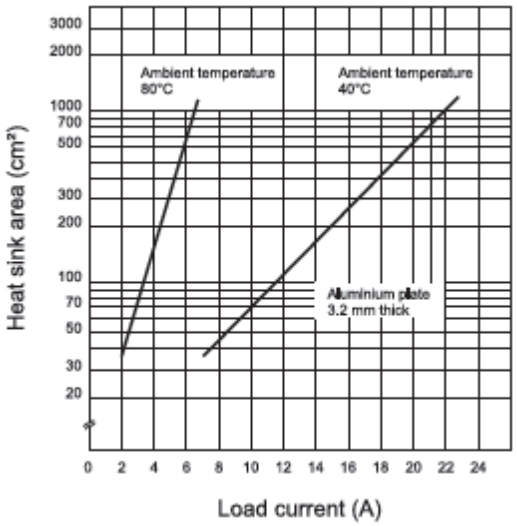
Industrial Solid State Relays (SSR)

Industrial SSR are intended for mounting in power and control cabinets as an output switch devices with reliable ON/ OFF performance. The SSR are based on the CMOS technology. The non-contact electronic switch is optically separated from the input signal by a photoelectric coupler. This allows use of switch currents of up to 50A despite of the devices small overall size. Another important feature of the relay is that output load can be regulated depending on the input signal value. The relay is mainly used to transmit control signals to actuating mechanisms since it can work at comparatively high currents making it possible to directly control actuators. SSR have transparent plastic covers to additionally improve their safety level. The SSR use is connected with considerable heat emissions, so measures must be taken to dispense the excessive thermal energy in the atmosphere. This is achieved through application of specially designed radiators. The correct definition of radiator parameters is of critical importance. It is made by calculating the heat generation capacity with the formula: Heat generation = active load current x 3.0 W/A.

Technical data:

- Load/output voltage: 30/400V 50 Hz or the solid state voltage regulators
- Rated output current: from 10A to 60A
- Insulating voltage: 1000 MΩ /min (500V)
- Impulse voltage stability: 2000V, 50Hz
- Dielectric Strength: < 2500VAC / 1 min

- Leakage current: <2mA
- Turn-on time: <10ms
- Operating temperature: -5°C + 65°C
- Relative Humidity: 35 - 85%RH
- The heat removal surface is estimated with the help of the following graphic:



Type	Relay Type	Control voltage (V)	Output Voltage (V)	Number of phases	Output current (A)	Packing / Box (pcs)	Catalogue number
ZG3NC-2-10B	SSR	3-32VDC	230VAC	1	10	10 / 100	57710
ZG3NC-2-20B	SSR	3-32VDC	230VAC	1	20	10 / 100	57720
ZG3NC-2-25B	SSR	3-32VDC	230VAC	1	25	10 / 100	57725
ZG3NC-2-40B	SSR	3-32VDC	230VAC	1	40	10 / 100	57740
ZG3NC-2-60B	SSR	3-32VDC	230VAC	1	60	10 / 100	57760
ZG3NC-3-10B	SSR	3-32VDC	400VAC	2	10	10 / 100	57713
ZG3NC-3-20B	SSR	3-32VDC	400VAC	2	20	10 / 100	57723
ZG3NC-3-25B	SSR	3-32VDC	400VAC	2	25	10 / 100	57735
ZG3NC-3-40B	SSR	3-32VDC	400VAC	2	40	10 / 100	57743
ZG3NC-3-60B	SSR	3-32VDC	400VAC	2	60	10 / 100	57763

Type	Relay Type	Control voltage (V)	Output Voltage (V)	Number of phases	Output current (A)	Packing / Box (pcs)	Catalogue number
ZG1NC-2-10D	SS voltage regulator	1-10VDC	0-230VAC	1	10	10/100	57810
ZG1NC-2-20D	SS voltage regulator	1-10VDC	0-230VAC	1	20	10/100	57820
ZG1NC-2-25D	SS voltage regulator	1-10VDC	0-230VAC	1	25	10/100	57825
ZG1NC-2-40D	SS voltage regulator	1-10VDC	0-230VAC	1	40	10/100	57840
ZG1NC-3-10D	SS voltage regulator	1-10VDC	0-400VAC	2	10	10/100	57813
ZG1NC-3-20D	SS voltage regulator	1-10VDC	0-400VAC	2	20	10/100	57823
ZG1NC-3-25D	SS voltage regulator	1-10VDC	0-400VAC	2	25	10/100	57835
ZG1NC-3-40D	SS voltage regulator	1-10VDC	0-400VAC	2	40	10/100	57843

Type	Relay Type	Control voltage (V)	Output Voltage (V)	Number of phases	Output current (A)	Packing / Box (pcs)	Catalogue number
ZG33-3-10B	SSR	3-32VDC	400VAC	3	10	1 / 30	57831
ZG33-3-20B	SSR	3-32VDC	400VAC	3	20	1 / 30	57832
ZG33-3-25B	SSR	3-32VCD	400VAC	3	25	1 / 30	57833
ZG33-3-40B	SSR	3-32VDC	400VAC	3	40	1 / 30	57834

Note: The relay output must be supplied with a varistor to ensure its over-voltage protection, whenever RRS is used to control inductive loads.

Type of radiator	Overall dimension (L/W/H)	Approximate load (A)	Packing / Box (pcs)	Catalogue number
QW-A 50	60X50X50	15	1 / 50	57906
QW-B 72	72X100X50	20	1 / 50	57907
QW-B 100	100X100X50	25	1 / 50	57908
QW-C 115	115X100X50	40	1 / 50	57909
QW-E 50	150X88X35	75	1 / 40	57910

Standards:

EN 60947-5-1:2004;

EN 61810-1:2008