

# SDA1 - 60 - 80

## DIN rail 60A & 80A solid-state relays

# DURAKOOL



- High load voltage - up to 480VAC
- 4 ~ 32VDC or 90 ~ 250VAC control voltage
- Single Phase, Zero cross-over switching
- LED control input indicator
- Integrated heatsink
- RoHS Compliant



### Output (load)

Load type	SPST-NO (1 N/O) Resistive	
Load current	60A, 80A	
Load switching voltage	AC V <sub>rms</sub>	40 - 480V
Maximum peak voltage	AC V <sub>pk</sub>	900V
Minimum load current	0.1A	
Inrush Current (max.)	10ms	60A: 650A / 80A: 900A
I <sup>2</sup> t	60A: 2100A <sup>2</sup> s / 80A: 4050A <sup>2</sup> s	
Switch type	Zero Cross (Consult factory for Random)	
On voltage drop	V AC	1.6V
Leakage current off	mA	≤ 10mA

### Input (control)

Control voltage (rated)	V	DC Control: 4 - 32VDC / AC Control: 90 - 250VAC
Control current	mA	< 20mA
Turn-on voltage (min)	V <sub>min</sub>	DC Control: 3.5VDC / AC Control: 80VAC
Turn-on voltage (max)	V <sub>max</sub>	DC Control: 35VDC / AC Control: 280VAC
Turn-off voltage	V	DC Control: 2VDC / AC Control: 40VAC

### Insulation

Insulation resistance	≤ 500MΩ at 500VDC, 50%RH	
Dielectric strength	V AC	≥ 2500V

### General Data

Operating time (typical)	mS	Approximately 1/2 cycle of load frequency + ≤1ms
Release time (typical)	mS	Approximately 1/2 cycle of load frequency + ≤1ms
Dimensions	L x W x H	100 x 110 x 127mm
Weight	approx. 940g	
Ambient temperature	storage	-30 to 100°C (No icing or condensation)
	operating	-30 to 80°C (with derating). (No icing or condensation)
Relative Humidity	45 - 85% RH	

# SDA1 - 60 - 80

## DIN rail 60A & 80A solid-state relays



### Ordering Code

S D A 1 Z - 60 K - D

#### Switch Function

- Z - Zero Crossover
- R - Random

#### Load Current Rating

- 60 - 60A
- 80 - 80A

#### Load Voltage

- K - 40 to 480VAC

#### Control Voltage Input

- A - 90 to 250VAC
- D - 4 to 32VDC

### Dimensions

Fig. 1

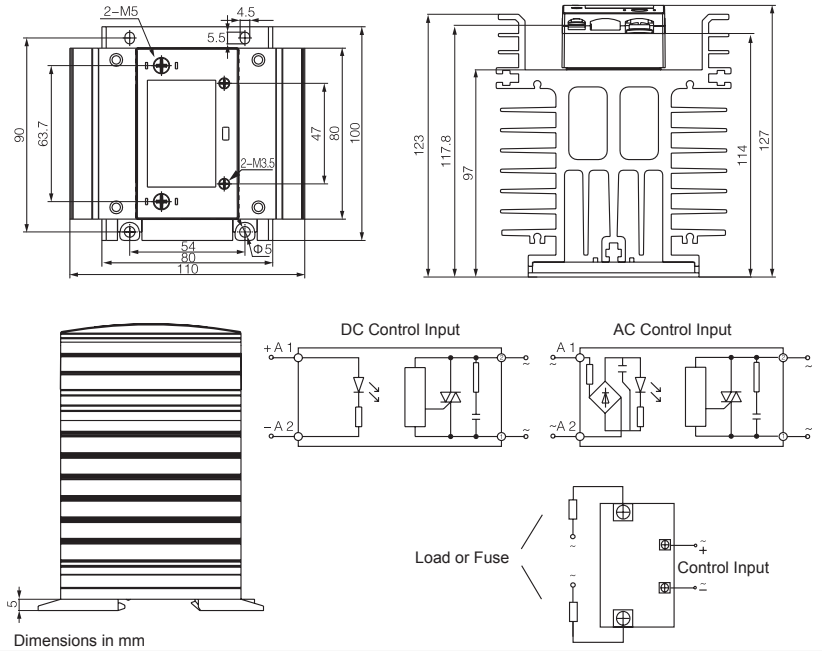
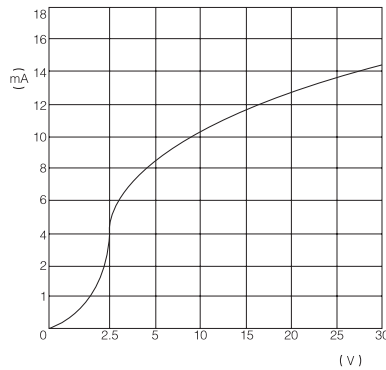
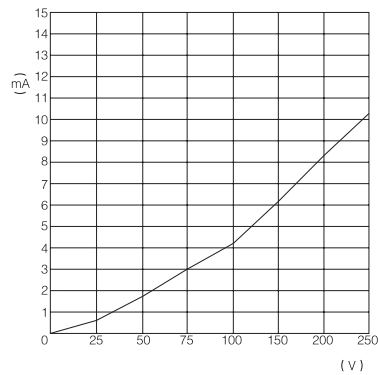


Fig. 2

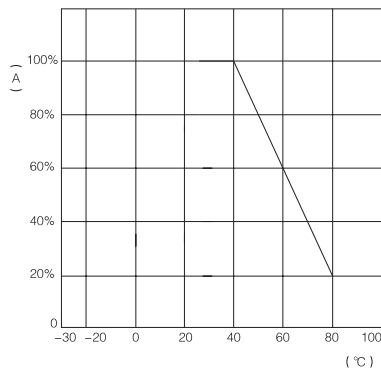
Input Current v. Control Voltage: 4 ~ 32VDC



Input Current v. Control Voltage: 90 ~ 250VAC



Load Current Derating v. Ambient Temperature



Load Output v. Input Control Action (Zero X-over)

