

# **Power AC Solid State Relays**

# BSSRT

- Zero-cross output switching
- Double thyristor output switch
- Up to 400 VAC operating voltage
- Up to 200 A switching RMS current
- Three input ranges
- 4000 V input/output insulation

### DESCRIPTION

BSSRT Solid State Relays, are zero-cross operating electronic modules designed to switch single-phase AC power loads up to 200 Arms. The BSSRT modules are non-contact and convenient substitutes of power contact relays thanks to their higher switching frequency and practically complete absence of electromagnetic interference. The life and reliability of the BSSRT modules, compared to these of the contact relays, are much higher because there are no moving parts, noise, shocks, and vibration during the operation. The BSSRT electronic relays can switch active loads up to 200 Arms or inductive loads up to 95 Arms at power voltage up to 400 VAC. The control input is optically isolated from the output and accepts AC or DC voltage signals. An operating LED indicates ON/OFF device status.

# **TECHNICAL SPECIFICATIONS**

Construction	: Panel design to standard DIN
Casing	: Glass-filled plastic
Standard heatsink, length	: Aluminum, 150mm
Isolation	: Input to output 4000V.
	output to casing 2500V
Max. operating AC voltage	: 400VACrms
Min. operating AC voltage	: 24VACrms
Rep. off-state peak voltage	: 1200Vp
Non rep. off-state peak voltage	: 1300Vp
Power factor	: > 0.5
Ambient temp	: -20 to +65°C
Protection class	: IP00
Connection	: M5 screws
Mounting	: For optimized cooling
Indication	: 3mm LED
Weight	: 350g

### INPUT

Control voltage : 4-36VDC, 6-26VAC/DC, 100-240VAC Input current : 5-12mA, 6-12mA Turn on/off voltage : 3VDC, 4VAC/5VDC, 90VAC Reverse voltage protection : -32VDC

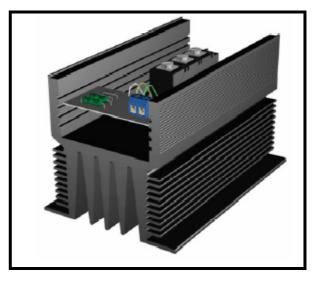
### OUTPUT

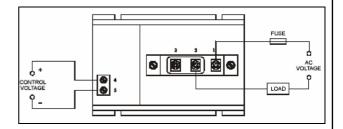
AC switching current at proper heatsink : <200 Arms Minimum holding current : 200mA None rep. surge current at t=10mS : 1700 A Maximum leakage current : 15 mA Critical rate of current rise dl/dt : 150A/uS I<sup>2</sup>t value for fusing at t=10ms : 1125A<sup>2</sup>S On-state voltage at rated current : 1,6Vrms Critical off-state voltage rise dV/dt : 500V/uS Operational frequency : 45-65 Hz Thermal resistance (junction-case) : 0.14 °C/W

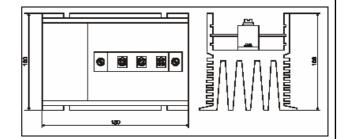
We highly recommend using SSRT at no more than 80% of maximum RMS current! EMC : EN 50081-1. EN 50082-2. EN 6101

: EN 50081-1, EN 50082-2, EN 61010-1 73/23/EEC & 89/336/EEC

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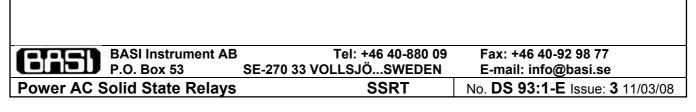


# **ORDER INFORMATION**

BSSRT		
INPUT		
C 100-240VAC		
D 4-36VDC		
P 6-26VAC/DC		

#### HEATSINK X None HS Heatsink (Specif

HS Heatsink (Specify length) ( Standard 150mm)





# **Heatsink specifications**

Max. RMS current →	40 A	60 A	80 A	100 A	120 A
Ambient temperature ↓					
20 °C	430 / 150	1300 / 150	1900 / 180	3800 / 350	5800 / **
40 °C	720 / 150	2100 / 200	3300 / 310	6500 / **	10000 / **
60 °C	1500 / 150	4400 / 410	6900 / **	13500 / **	20400 / **

\* heatsink surface [cm<sub>2</sub>] /BASI model length [mm] (at 105 °C heatsink temperature) \*\* Requires additional forced (fan) cooling!

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