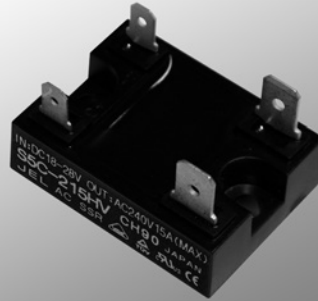


# AC Solid State Relay



# S5 SERIES

Solid State Relay

S5 series

## Features

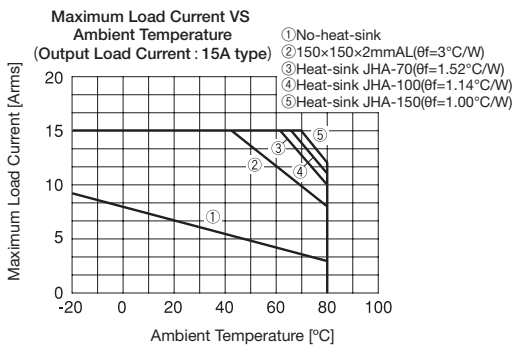
- Small size, medium power SSR
- Max. load current at 15A, 25A
- Dielectric strength between input and output at 3,000V/1 min.
- Wider input voltage (L, M, H)
- UL/C-UL/VDE/TÜV standard approved
- Optional heat-sink available (P75)

## Type Information

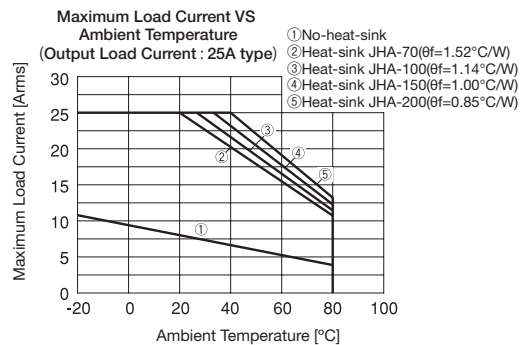
S 5 C - 2 2 5 L V				
<b>Zero-cross-circuit</b>	<b>Standard load voltage</b>	<b>Max. load current</b>	<b>Input voltage range</b>	<b>Approved Standard</b>
C : Built-in N : Not Built-in(*)	2 : 100V, 200V	15 : 15A 25 : 25A	L : DC4 ~ 8V M : DC8 ~ 18V H : DC18 ~ 28V	V : UL, C-UL, VDE, TÜV approved
				* Manufactured to order

## Characteristics

S5C-215V, S5N-215V

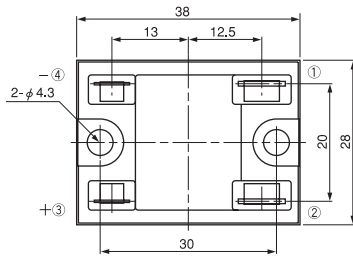


S5C-225V, S5N-225V

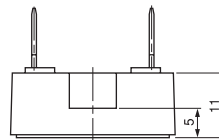
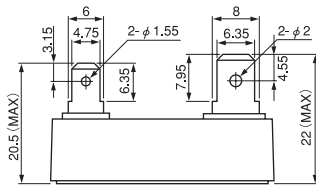


※ Description in the catalogue is subject to change without notice. Please read the specifications thoroughly before using.  
 ※ Please contact JEL SYSTEM for further information.

### Dimensions (mm)

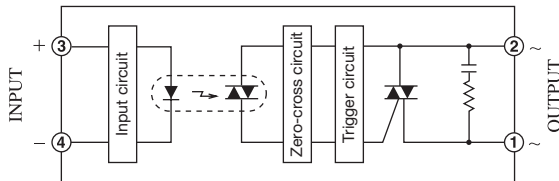


※ Torque range  
Outer case 1.5 N · m (MAX)



( 1, 2 : Faston terminal # 250 t=0.8 Tin plate )  
( 3, 4 : Faston terminal # 187 t=0.5 Tin plate )

### Equivalent Circuit



Model	Zero-cross circuit
S5C-215/225 * *	○
S5N-215/225 * *	×

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## ■ Ratings

(Ta = 25 °C)

	Item	Symbols	S5C-215LV	S5C-215MV	S5C-215HV	S5N-215LV	S5N-215MV	S5N-215HV	Units
Output	Rated Load Voltage	—	120、240						V <sub>ACrms</sub>
	Maximum Load Current	I <sub>OMAX</sub>	15						A <sub>ACrms</sub>
	Maximum Load Voltage	V <sub>OMAX</sub>	264						V <sub>ACrms</sub>
	Peak Repetitive Off State Voltage	V <sub>DRM</sub>	600						V
	Peak 1 Cycle Surge Current	I <sub>SURGE</sub>	150 (50Hz)						A
	Frequency	f	50、60						Hz
Input	Maximum Input Voltage	V <sub>IMAX</sub>	8	18	28	8	18	28	V <sub>DC</sub>
	Input Impedance	R <sub>IN</sub>	270 ± 20%	680 ± 20%	1500 ± 20%	270 ± 20%	680 ± 20%	1500 ± 20%	Ω
General	Dielectric Strength	V <sub>ISO</sub>	3,000/1 min. (Between input-output-case)						V <sub>ACrms</sub>
	Isolation Resistance	R <sub>ISO</sub>	10 <sup>8</sup> and above DC500V (Between input-output-case)						Ω
	Operating Temperature Range	T <sub>OPR</sub>	- 20 ~ + 80						°C
	Storage Temperature Range	T <sub>STG</sub>	- 30 ~ + 100						°C

## ■ Electrical Characteristics

(Ta = 25 °C)

	Item	Symbols	S5C-215LV	S5C-215MV	S5C-215HV	S5N-215LV	S5N-215MV	S5N-215HV	Units
Output	Load Voltage Range	V <sub>O</sub>	35 ~ 264						V <sub>ACrms</sub>
	Off State Leakage Current	I <sub>LEK</sub>	5.0 and below (V <sub>O</sub> = 200V)						mA <sub>ACrms</sub>
	On State Voltage Drop	V <sub>SAT</sub>	1.5 and below						V <sub>ACrms</sub>
	Minimum Load Current	I <sub>OMIN</sub>	100						mA
Input	Input Voltage Range	V <sub>I</sub>	4 ~ 8	8 ~ 18	18 ~ 28	4 ~ 8	8 ~ 18	18 ~ 28	V <sub>DC</sub>
	Operate Voltage	V <sub>P</sub>	4 and below	8 and below	18 and below	4 and below	8 and below	18 and below	V <sub>DC</sub>
	Release Voltage	V <sub>D</sub>	1 and above						V <sub>DC</sub>
General	Operate Time	T <sub>ON</sub>	1/2 Cycle + 1 ms and below			1 ms and below			/
	Release Time	T <sub>OFF</sub>	1/2 Cycle + 1 ms and below						/
	Capacitance	C <sub>IO</sub>	80 and below						PF
	Zero Cross Turn On		Built In			Not Built In			/
	Approved Standards		UL、C-UL、VDE、TÜV						/

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※ Please contact JEL SYSTEM for further information.

## ■ Ratings

(Ta = 25 °C)

	Item	Symbols	S5C-225LV	S5C-225MV	S5C-225HV	S5N-225LV	S5N-225MV	S5N-225HV	Units
Output	Rated Load Voltage	—	120, 240						V <sub>ACrms</sub>
	Maximum Load Current	I <sub>OMAX</sub>	25						A <sub>ACrms</sub>
	Maximum Load Voltage	V <sub>OMAX</sub>	264						V <sub>ACrms</sub>
	Peak Repetitive Off State Voltage	V <sub>DRM</sub>	600						V
	Peak 1 Cycle Surge Current	I <sub>SURGE</sub>	225 (50Hz)						A
	Frequency	f	50, 60						Hz
Input	Maximum Input Voltage	V <sub>IMAX</sub>	8	18	28	8	18	28	V <sub>DC</sub>
	Input Impedance	R <sub>IN</sub>	270 ± 20%	680 ± 20%	1500 ± 20%	270 ± 20%	680 ± 20%	1500 ± 20%	Ω
General	Dielectric Strength	V <sub>ISO</sub>	3,000/1 min.(Between input-output-case)						V <sub>ACrms</sub>
	Isolation Resistance	R <sub>ISO</sub>	10 <sup>8</sup> and above DC500V(Between input-output-case)						Ω
	Operating Temperature Range	T <sub>OPR</sub>	- 20 ~ + 80						°C
	Storage Temperature Range	T <sub>STG</sub>	- 30 ~ + 100						°C

## ■ Electrical Characteristics

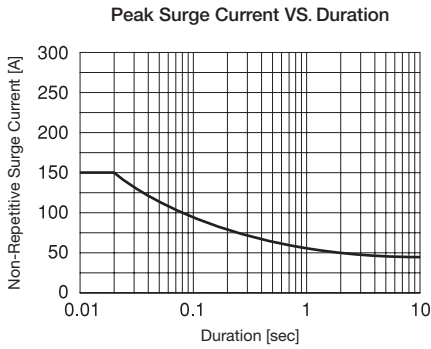
(Ta = 25 °C)

	Item	Symbols	S5C-225LV	S5C-225MV	S5C-225HV	S5N-225LV	S5N-225MV	S5N-225HV	Units
Output	Load Voltage Range	V <sub>O</sub>	35 ~ 264						V <sub>ACrms</sub>
	Off State Leakage Current	I <sub>LEK</sub>	5.0 and below (V <sub>O</sub> = 200V)						mA <sub>ACrms</sub>
	On State Voltage Drop	V <sub>SAT</sub>	1.5 and below						V <sub>ACrms</sub>
	Minimum Load Current	I <sub>OMIN</sub>	100						mA
Input	Input Voltage Range	V <sub>I</sub>	4 ~ 8	8 ~ 18	18 ~ 28	4 ~ 8	8 ~ 18	18 ~ 28	V <sub>DC</sub>
	Operate Voltage	V <sub>P</sub>	4 and below	8 and below	18 and below	4 and below	8 and below	18 and below	V <sub>DC</sub>
	Release Voltage	V <sub>D</sub>	1 and above						V <sub>DC</sub>
General	Operate Time	T <sub>ON</sub>	1/2 Cycle + 1 ms and below			1 ms and below			/
	Release Time	T <sub>OFF</sub>	1/2 Cycle + 1 ms and below						/
	Capacitance	C <sub>IO</sub>	80 and below						PF
	Zero Cross Turn On		Built In			Not Built In			/
	Approved Standards		UL, C-UL, VDE, TÜV						/

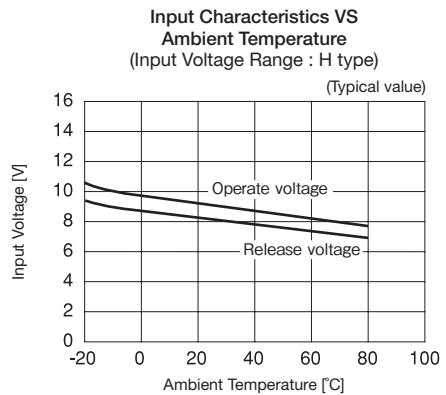
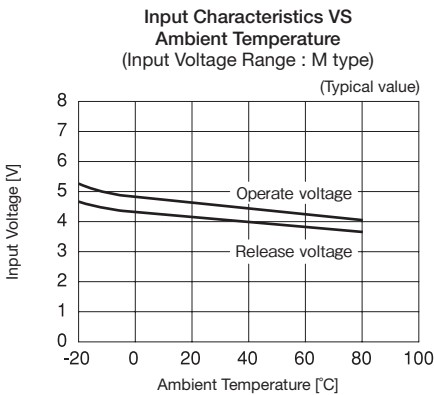
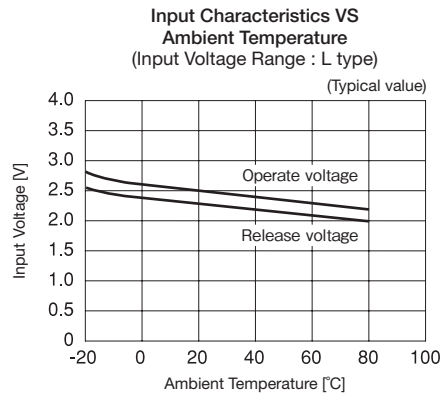
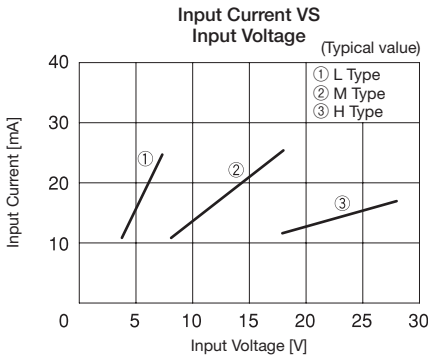
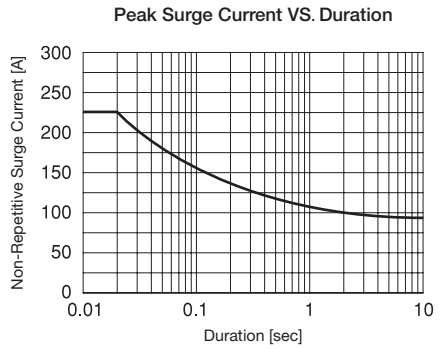
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※ Please contact JEL SYSTEM for further information.

S5C-215V, S5N-215V



S5C-225V, S5N-225V



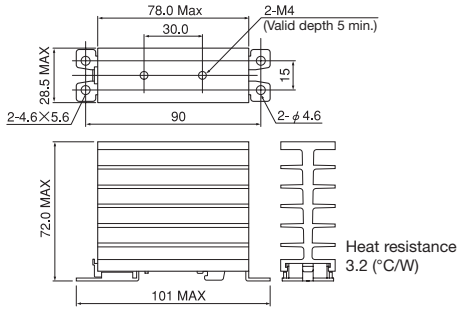
※ Description in the catalogue is subject to change without notice. Please read the specifications thoroughly before using.  
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## Option

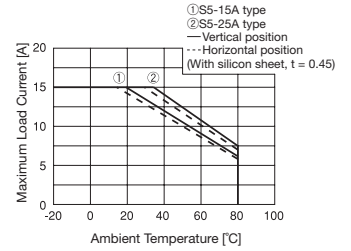
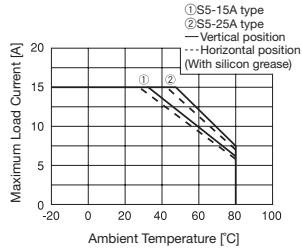
### Heat-sink

Model	JHC-28-1
SUITABLE SSR	S5 Series

#### ● Dimensions

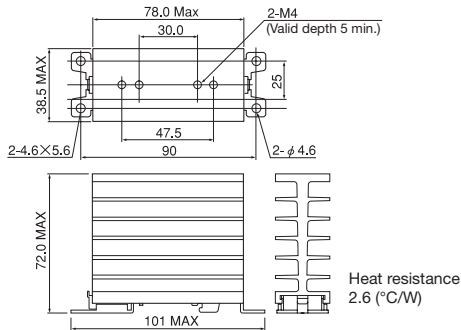


#### ● Maximum Load Current VS Ambient Temperature

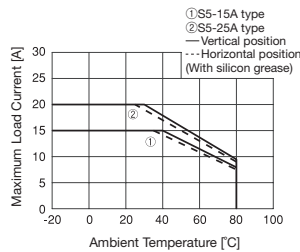


Model	JHC-38-1
SUITABLE SSR	S5C Series

#### ● Dimensions

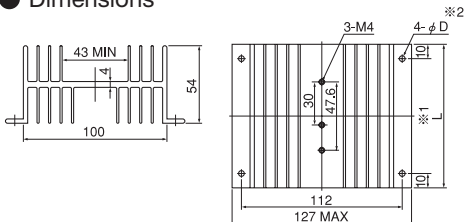


#### ● Maximum Load Current VS Ambient Temperature



Model	JHA-□□□
SUITABLE SSR	S5C Series

#### ● Dimensions



Model	Heat Resistance (°C/W)	※ 1 L (mm) Dimensions	※ 2 D (mm) Dimensions
JHA-70	1.52	70	4
JHA-100	1.14	100	4
JHA-150	1.00	150	4.5
JHA-200	0.85	200	4

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