

# SAA1-2 Series



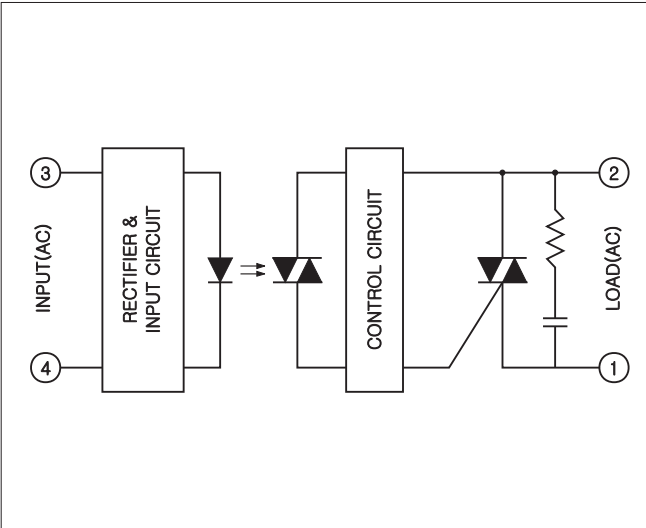
## Input AC/Output AC 1-Phase Mold

- **15 - 80Amp AC240V Output**
- **AC 2500V Isolation**
- **Normally Open**
- **LED Indicator**
- **Panel Mount with Heatsink**
- **Approved by EN 60947-4-1  $\triangle$  and  $\text{C}\epsilon$**

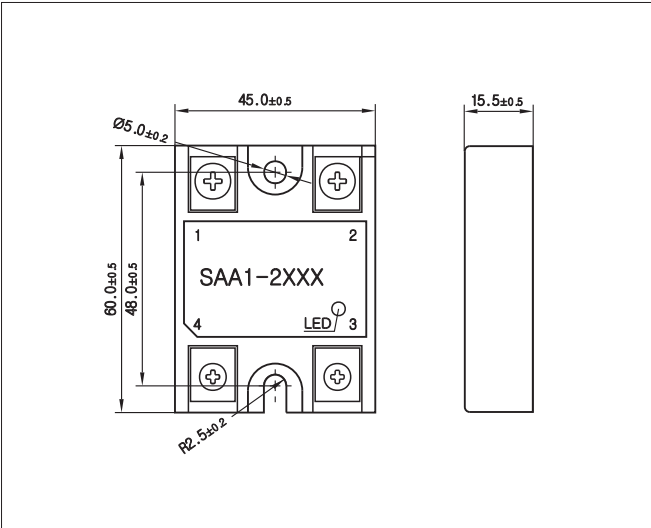
### SPECIFICATIONS

Item		SAA1-215Z	SAA1-225Z	SAA1-240Z	SAA1-250Z	SAA1-260R	SAA1-280R	Unit
OUTPUT	RMS ON-STATE LOAD CURRENT	15	25	40	50	60	80	Arms
	LOAD VOLTAGE RANGE	50 ~ 240						Vrms
	BLOCKING VOLTAGE	600						Vrms
	PEAK 1-CYCLE SURGE CURRENT	170	210	315	450	560	630	Arms
	ON-STATE VOLTAGE DROP	2 Max						Vrms
	OFF-STATE LEAKAGE CURRENT	10 Max						mArms
INPUT	INPUT VOLTAGE RANGE	85 ~ 240						Vrms
	PICK-UP VOLTAGE	85 Max						Vrms
	DROP-OUT VOLTAGE	40 Min						Vrms
GENERAL	ISOLATION VOLTAGE	2,500Vrms between I/O terminals and case for 1 minute						/
	ISOLATION RESISTANCE	500Vdc 100Mohm between I/O terminals and case						/
	OPERATING TEMPERATURE	-30 ~ +80						℃
	STORAGE TEMPERATURE	-30 ~ +100						℃
	TURN-ON TIME	1/2 Cycle Max				1 msec Max		/
	TURN-OFF TIME	1/2 Cycle max						/
	ZERO-CROSS OR RANDOM	Zero-cross				Random		/
	APPROVALS	TUV,CE	TUV,CE	TUV,CE	TUV,CE			/

### BLOCK DIAGRAM



### DIMENSIONS(UNIT : MM)

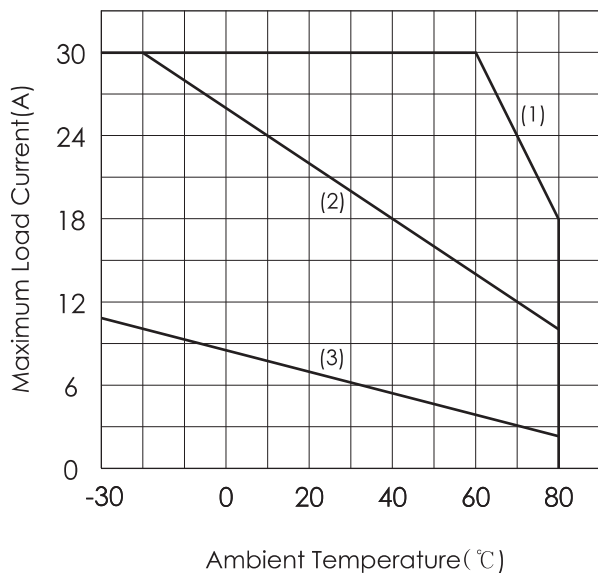


**C. 30Amp S.S.R****S.S.R Model**

SDD0-130N/230N/630N

**Heatsink**

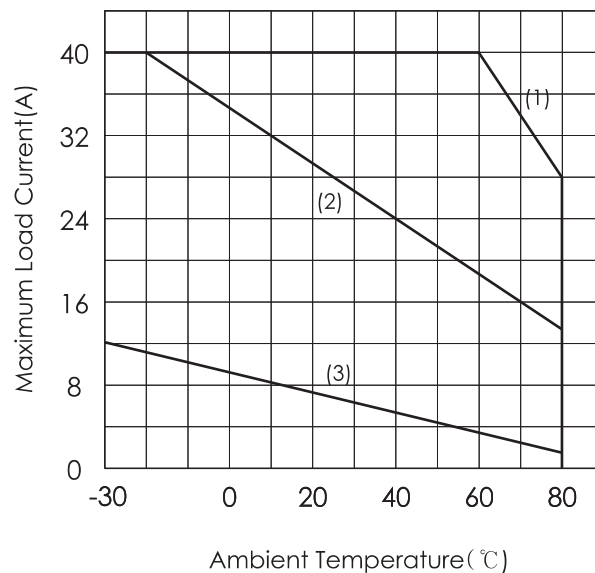
(1) Infinite (2) UHS118-1-80 (3) Non

**D. 40Amp S.S.R****S.S.R Model**

SDD0-140N/240N/640N

**Heatsink**

(1) Infinite (2) UHS118-1-80 (3) Non

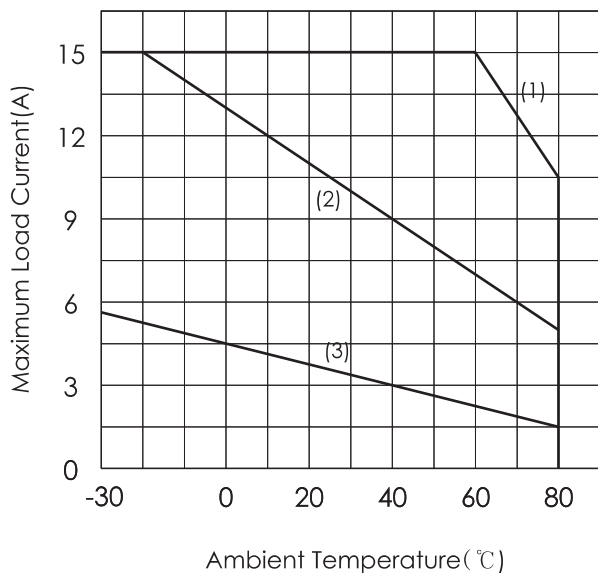
**4) 1-Phase Mold type****A. 15Amp S.S.R****S.S.R Model**

SDA1-215Z/215R/415Z/415R

SAA1-215Z/415Z

**Heatsink**

(1) Infinite (2) UHS118-1-45 (3) Non

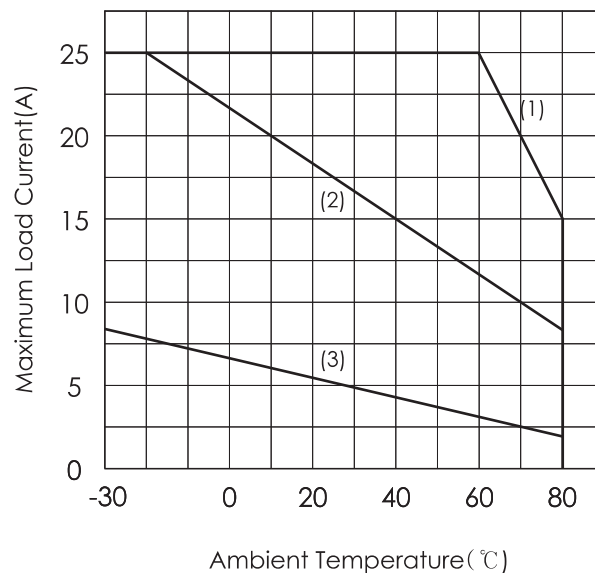
**B. 25Amp S.S.R****S.S.R Model**

SDA1-225Z/225R/425Z/425R

SAA1-225Z/425Z

**Heatsink**

(1) Infinite (2) UHS118-1-60 (3) Non



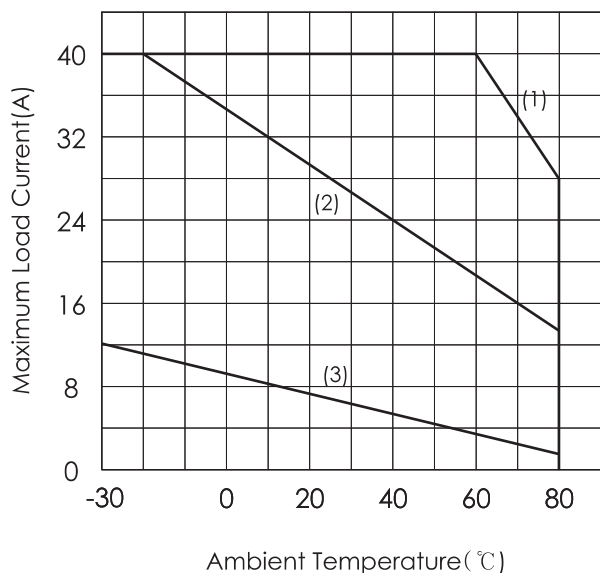
**C. 40Amp S.S.R****S.S.R Model**

SDA1-240Z/240R/440Z/440R

SAA1-240Z/440Z

**Heatsink**

(1) Infinite (2) UHS118-1-80 (3) Non

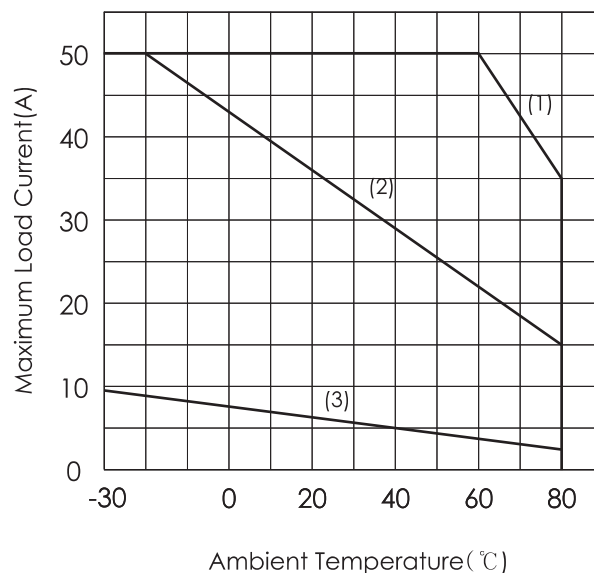
**D. 50Amp S.S.R****S.S.R Model**

SDA1-250Z/250R/450Z/450R

SAA1-250Z/450Z

**Heatsink**

(1) Infinite (2) UHS118-1-80 (3) Non

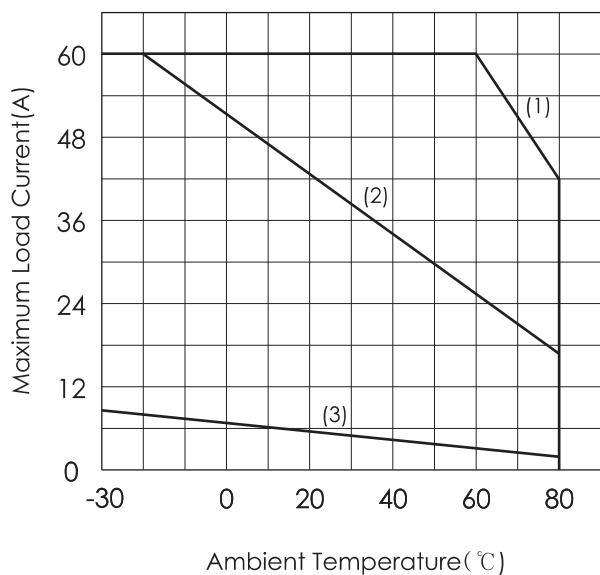
**E. 60Amp S.S.R****S.S.R Model**

SDA1-260R/460R

SAA1-260R/460R

**Heatsink**

(1) Infinite (2) UHS11-1-80 (3) Non

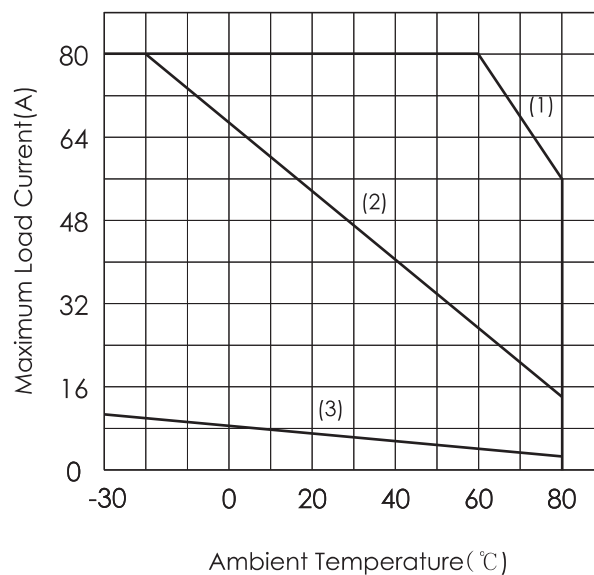
**F. 80Amp S.S.R****S.S.R Model**

SDA1-280R/480R

SAA1-280R/480R

**Heatsink**

(1) Infinite (2) UHS11-1-105 (3) Non



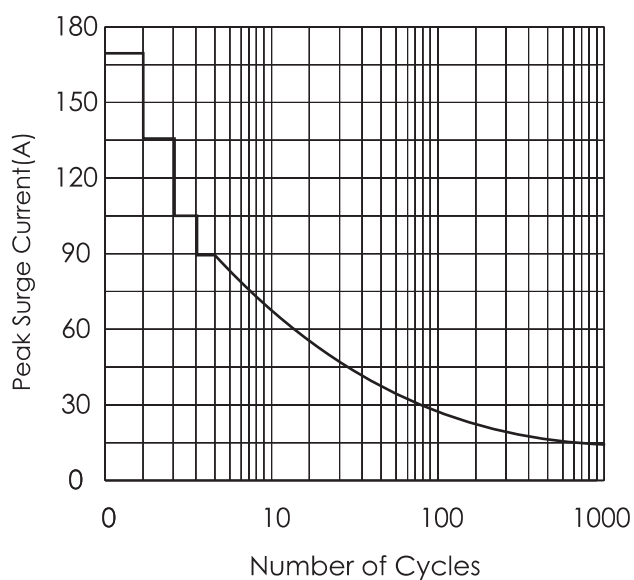
**5) 15A240VAC S.S.R****S.S.R Model**

PDA1-215ZHL/215ZHS

SDA1-215Z/215R SAA1-215Z

SDA2-215Z SAA2-215Z

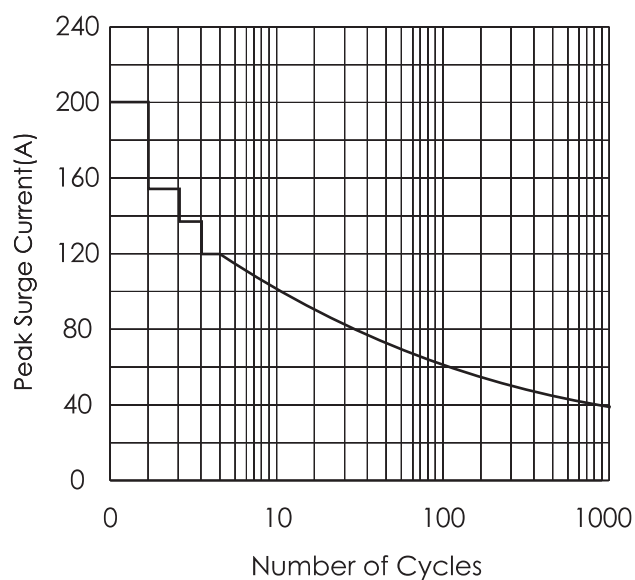
SDA3-215Z SAA3-215Z

**6) 15A460VAC S.S.R****S.S.R Model**

SDA1-415Z/415R SAA1-415Z

SDA2-415Z SAA2-415Z

SDA3-415Z SAA3-415Z

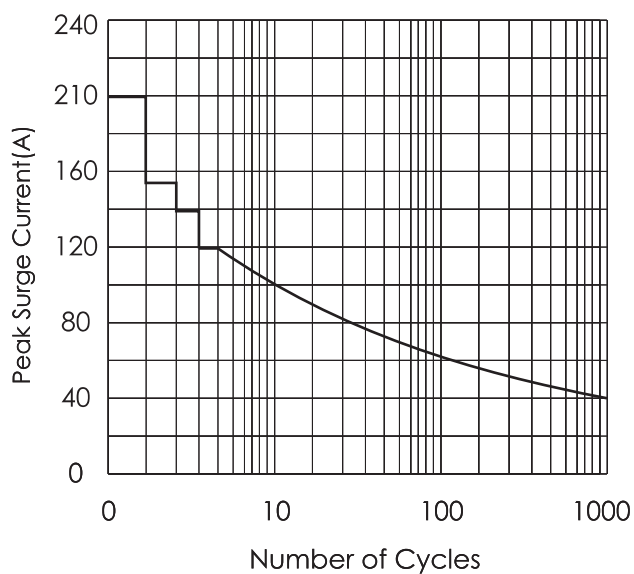
**7) 25A240VAC S.S.R****S.S.R Model**

PDA1-225ZHL/225ZHS

SDA1-225Z/225R SAA1-225Z

SDA2-225Z SAA2-225Z

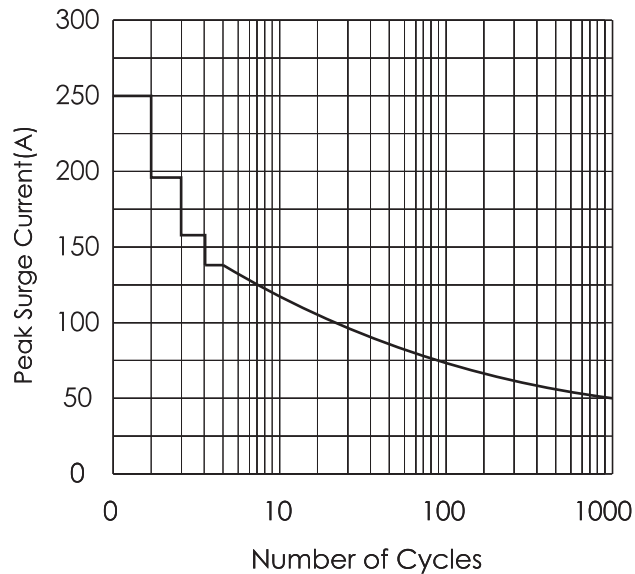
SDA3-225Z SAA3-225Z

**8) 25A460VAC S.S.R****S.S.R Model**

SDA1-425Z/425R SAA1-425Z

SDA2-425Z SAA2-425Z

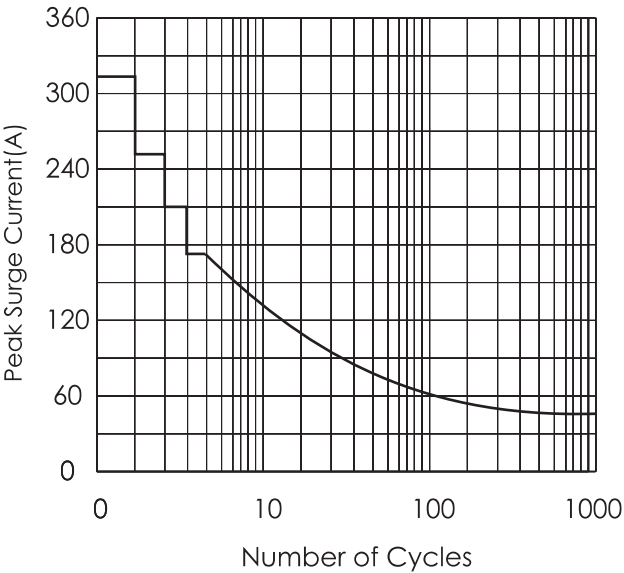
SDA3-425Z SAA3-425Z



9) 40A240VAC S.S.R

S.S.R Model

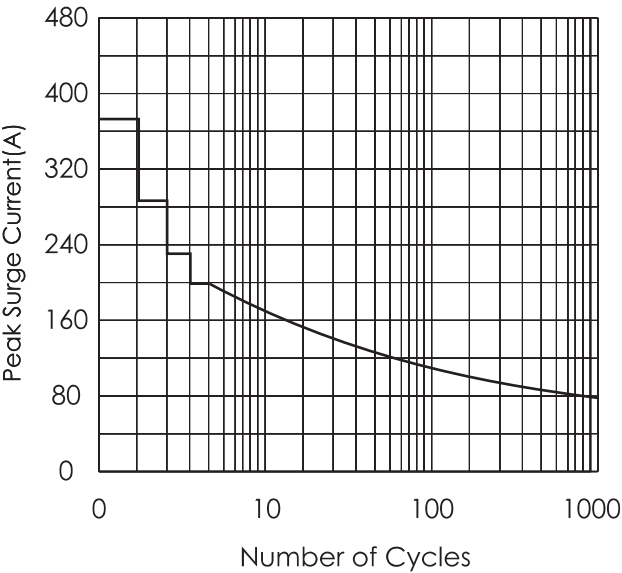
SDA1-240Z/240R	SAA1-240Z
SDA2-240Z	SAA2-240Z
SDA3-240Z	SAA3-240Z



10) 40A460VAC S.S.R

S.S.R Model

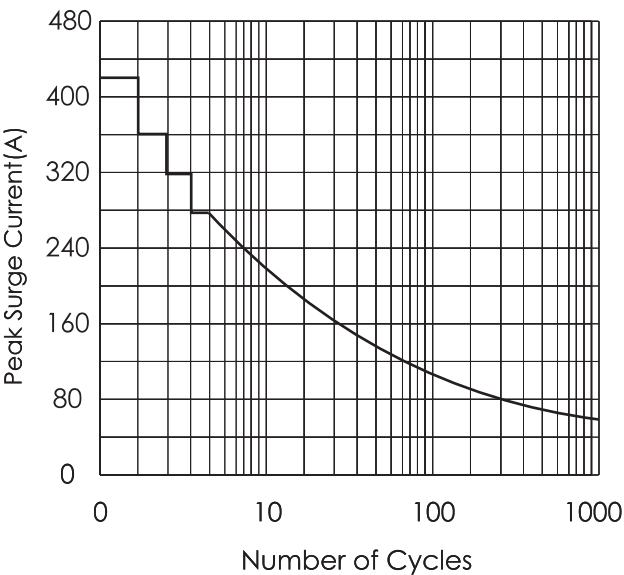
SDA1-440Z/415R	SAA1-440Z
SDA2-440Z	SAA2-440Z
SDA3-440Z	SAA3-440Z



11) 50A240VAC S.S.R

S.S.R Model

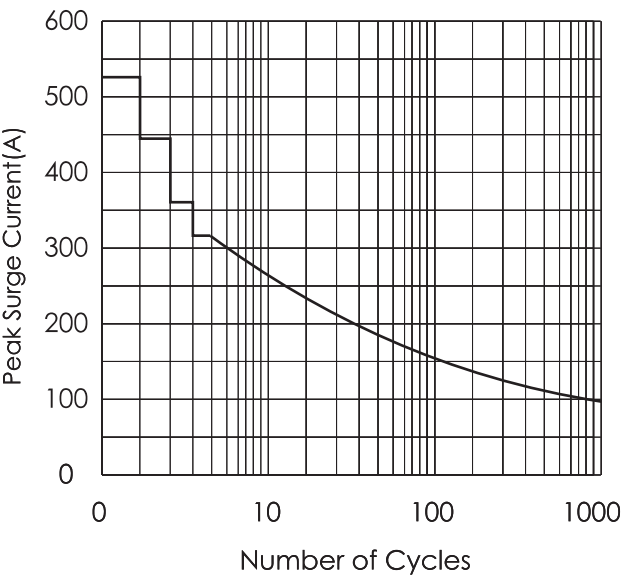
SDA1-250Z/250R	SAA1-250Z
SDA2-250Z	SAA2-250Z
SDA3-250Z	SAA3-250Z



12) 50A460VAC S.S.R

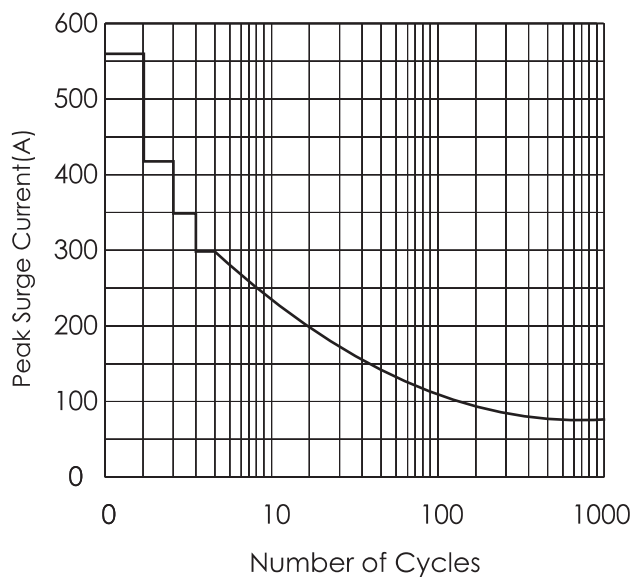
S.S.R Model

SDA1-450Z/450R	SAA1-450Z
SDA2-450Z	SAA2-450Z
SDA3-450Z	SAA3-450Z

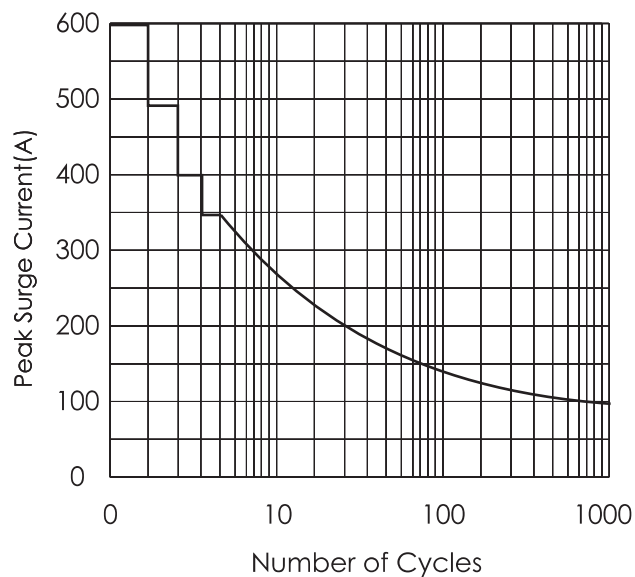


**13) 60A240VAC S.S.R****S.S.R Model**

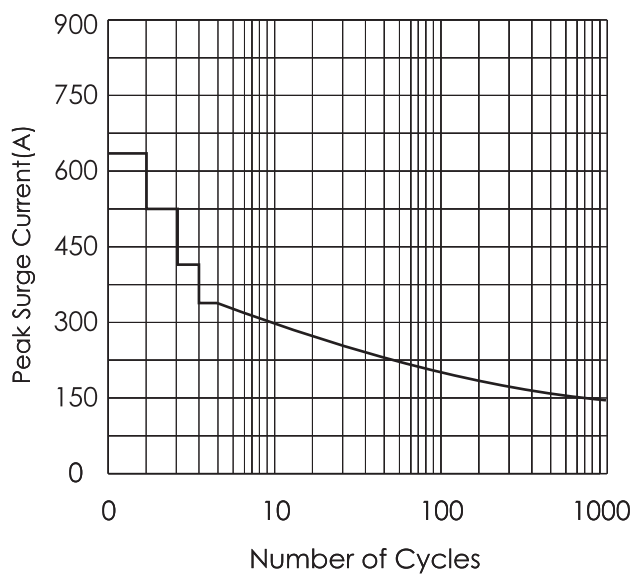
SDA1-260R	SAA1-260R
SDA2-260R	SAA2-260R
SDA3-260R	SAA3-260R

**14) 60A460VAC S.S.R****S.S.R Model**

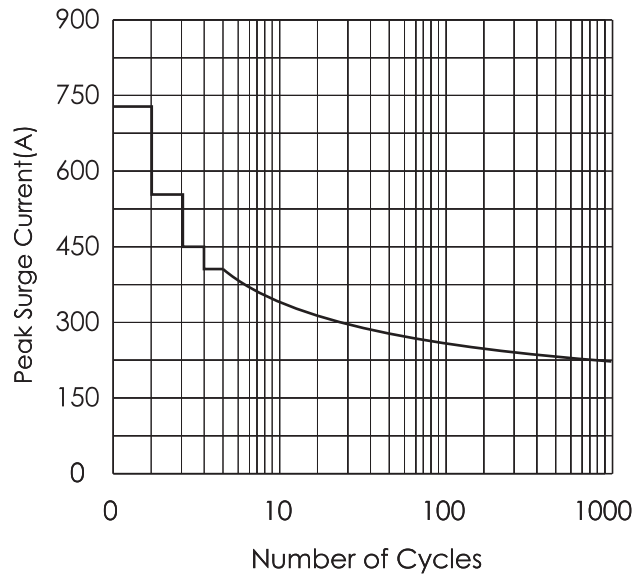
SDA1-460R	SAA1-460R
SDA2-460R	SAA2-460R
SDA3-460R	SAA3-460R

**15) 80A240VAC S.S.R****S.S.R Model**

SDA1-280R	SAA1-280R
SDA2-280R	SAA2-280R
SDA3-280R	SAA3-280R

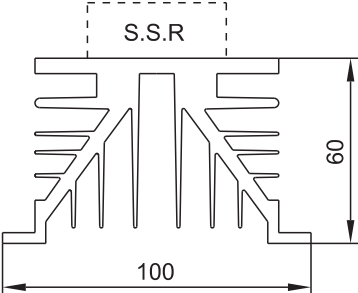
**16) 80A460VAC S.S.R****S.S.R Model**

SDA1-480R	SAA1-480R
SDA2-480R	SAA2-480R
SDA3-480R	SAA3-480R

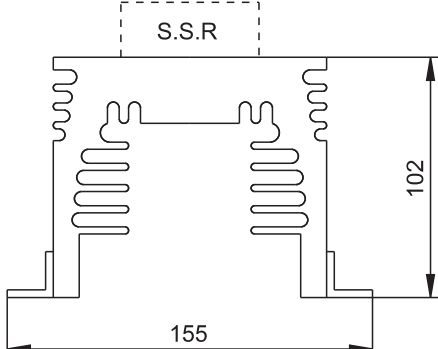


10. STANDARD HEATSINK

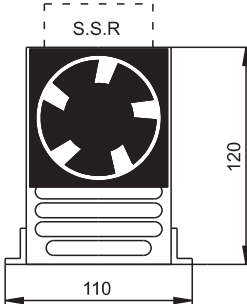
1) UHS118 Series

 <p>unit : mm</p>	MODEL	Length(mm)
	UHS118-1-45	45
	UHS118-1-60	60
	UHS118-1-80	80
	UHS118-3-120	120
	UHS118-3-150	150

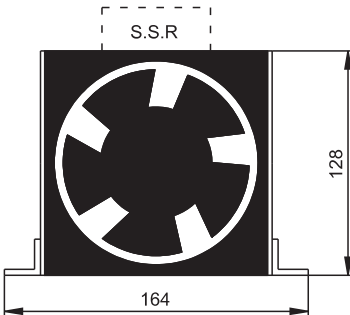
2 )UHS11 Series

 <p>unit : mm</p>	MODEL	Length(mm)
	UHS11-1-80	80
	UHS11-1-105	105
	UHS11-3-80	80
	UHS11-3-105	105
	UHS11-3-150	150

3) UHS120V80-3-110

 <p>unit : mm</p>	Length=110
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4) UHS124V128-3-105

 <p>unit : mm</p>	Length=105
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## 11. 방열판 선정 가이드

S.S.R 모델별로 차이는 있으나 주위온도 상온에서 부하 전류가 S.S.R 출력 전류 정격의 60% 이하 조건하에 선정된 방열판으로 주위온도가 높거나 부하전류가 큰 경우에는 S.S.R 또는 방열판을 변경하여 적용해야 한다.

S.S.R 정격구분	S.S.R모델명	HEATSINK
<b>2A</b>	PDA1-202Z/202R	NON
<b>3A</b>	PDA1-203Z/203R, PDD0-103N	NON
<b>5A</b>	PDA1-205Z/205R, PDD0-105N	NON
<b>8A</b>	PDA1-208Z/208R	NON
	PDA1-208ZHL/208ZHS PDD0-108NHS/208NHS/608NHS	UHS118-1-45
<b>10A</b>	SDD0-110N/210N/610N	UHS118-1-45
<b>15A</b>	PDA1-215ZHL/215ZHS PDD0-115NHS/215NHS/615NHS SDA1-215Z/215R/415Z/415R SAA1-215Z/415Z	UHS118-1-45
	SDA2-215Z/415Z SAA2-215Z/415Z	UHS118-3-120
	SDA3-215Z/415Z SAA3-215Z/415Z	UHS118-3-120
<b>20A</b>	PDD0-220NHS/620NHS SDD0-120N/220N/620N	UHS118-1-60
<b>25A</b>	PDA1-225ZHL/225ZHS SDA1-225Z/225R/425Z/425R SAA1-225Z/425Z	UHS118-1-60
	SDA2-225Z/425Z SAA2-225Z/425Z	UHS118-3-120
	SDA3-225Z/425Z SAA3-225Z/425Z	UHS118-3-150
<b>30A</b>	SDD0-130N/230N/630N	UHS118-1-80



S.S.R 정격구분	S.S.R모델명	HEATSINK
<b>40A</b>	SDD0-140N/240N/640N SDA1-240Z/240R/440Z/440R SAA1-240Z/440Z	UHS118-1-80
	SDA2-240Z/440Z SAA2-240Z/440Z	UHS118-3-150
	SDA3-240Z/440Z SAA3-240Z/440Z	UHS11-3-105 or UHS120V80-3-110 with FAN
	SDA1-250Z/250R/450Z/450R SAA1-250Z/450Z	UHS118-1-80
	SDA2-250Z/450Z SAA2-250Z/450Z	UHS11-3-80
	SDA3-250Z/450Z SAA3-250Z/450Z	UHS11-3-150 or UHS124V128-3-105
<b>60A</b>	SDA1-260R/460R SAA1-260R/460R	UHS11-1-80
	SDA2-260R/460R SAA2-260R/460R	UHS11-3-105
	SDA3-260R/460R SAA3-260R/460R	UHS124V128-3-105 with FAN
	SDA1-280R/480R SAA1-280R/480R	UHS11-1-105
	SDA2-280R/480R SAA2-280R/480R	UHS124V128-3-105
	SDA3-280R/480R SAA3-280R/480R	UHS124V128-3-105 with FAN

# CERTIFICATE

## of Conformity

Low Voltage Directive 73/23/EEC  
as last amended by EEC Directive 93/68/EEC

Registration No.: AN 2137523 01

Report No.: E 2068830 Z 03

Holder: Union Elecom Co., Ltd.  
34-2 Samjung Dong, Ojung Gu  
Bucheon, Gyeonggi Do, 421-150  
R.O.K.

Product: HALBLEITERRELAIS  
(Solid State Relay)

Identification: Type Designation: Suvw-xyyt  
Serial Number: N/A (prototype)

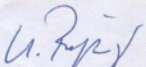
Remark: This license is based on license R 2037941.

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the Licence Holder's disposal. This is to certify that the tested sample is in conformity with all provisions of Annex I of Council Directive 73/23/EEC, in its latest amended version, referred to as the Low Voltage Directive. This certificate does not imply assessment of the series-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex III of the Directive.

Certification Body

Cologne, 24.09.2001



  
Dipl.-Ing. U. Roessiger

TÜV Rheinland Product Safety GmbH - Am Grauen Stein - D-51105 Köln

Ⓒ The CE marking may be used if all relevant and effective EC Directives are complied with. Ⓒ

# Zertifikat Certificate



Zertifikat Nr. Certificate No.  
R 2037941

Blatt Page  
03

Ihr Zeichen Client Reference  
T.W. Kim

Unser Zeichen Our Reference  
00143-KIS/yy- E2068830Z03

Ausstellungsdatum Date of Issue  
24.09.2001 (day/month/yr)

**Genehmigungsinhaber License Holder**  
Union Elecom Co., Ltd.  
34-2 Samjung Dong, Ojung Gu  
Bucheon, Gyeonggi Do, 421-150  
R.O.K.

**Fertigungsstätte Manufacturing Plant**  
Union Elecom Co., Ltd.  
34-2 Samjung Dong, Ojung Gu  
Bucheon, Gyeonggi Do, 421-150  
R.O.K.

**Prüfzeichen Test Mark**



**Geprüft nach Tested acc. to**

IEC 60158-2:1982  
EN 60947-4-1:1992+A1+A2

**Zertifiziertes Produkt (Geräteidentifikation)**  
Certified Product (Product Identification)

**Lizenzentgelte - Einheit**  
License Fee - Unit

HALBLEITERRELAIS (Solid State Relay)

Change

Type designation: Suvw-xyyt

2

u stands for: Input source (D=DC, A=AC)  
v stands for: Output source (D=DC, A=AC)  
w stands for: Number of poles  
(0=DC, 1=1 pole, 2=2 poles,  
3=3 poles)  
x stands for: Output voltage  
(1=120V DC, 2=240V AC, 4=460V AC,  
for SDD0-xyyt only; 2=24V DC,  
6=60V DC)  
yy stands for: Output current  
(10=10A DC, 15=15A AC, 20=20A DC,  
25=25A AC, 30=30A DC, 40=40A AC  
or DC, 50=50A AC)

Continued on page 04

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Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.  
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.  
This certificate is based on our Testing and Certification Regulation. The product  
fulfills above mentioned requirements, the production is subject to surveillance.

Zertifizierungsstelle

Dipl.-Ing. U. Roessiger



TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

# Zertifikat Certificate



Zertifikat Nr. Certificate No.

R 2037941

Blatt Page

04

Ihr Zeichen Client Reference

T.W. Kim

Unser Zeichen Our Reference

00042-KIS/yy- E2068830Z03

Ausstellungsdatum Date of Issue

24.09.2001 (day/mo/yr)

Genehmigungsinhaber License Holder

Union Elecom Co., Ltd.

34-2 Samjung Dong, Ojung Gu

Bucheon, Gyeonggi Do, 421-150

R.O.K.

Fertigungsstätte Manufacturing Plant

Union Elecom Co., Ltd.

34-2 Samjung Dong, Ojung Gu

Bucheon, Gyeonggi Do, 421-150

R.O.K.

Prüfzeichen Test Mark



Geprüft nach Tested acc. to

IEC 60158-2:1982

EN 60947-4-1:1992+A1+A2

Zertifiziertes Produkt

Certified Product

(Geräteidentifikation)

(Product Identification)

Lizenzentgelte - Einheit

License Fee - Unit

HALBLEITERRELAIS (Solid State Relay)

Continuation

t stands for:

Trigger form

(Z=zero cross, R=random cross,  
N=DC)

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.

Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.

This certificate is based on our Testing and Certification Regulation. The product fulfills above mentioned requirements, the production is subject to surveillance.

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

Zertifizierungsstelle

Dipl.-Ing. U. Roessiger





# Zertifikat

# Certificate



Zertifikat Nr. Certificate No.  
R 02037941

Blatt Page  
0005

Ihr Zeichen Client Reference  
J.J. S

Unser Zeichen Our Reference  
ZKR3-KIS- 02068830 004

Ausstellungsdatum  
27.03.2007

Date of Issue  
(day/month/year)

## Genehmigungsinhaber License Holder

Union Elecom Co., Ltd.  
(Chunui Techno Park 1st 1207~1211)  
200-1m Chunui-dong, Wonmi-gu,  
Bucheon, Gyeonggi-do 420-857  
Rep. of Korea

## Fertigungsstätte Manufacturing Plant

Union Elecom Co., Ltd.  
(Chunui Techno Park 1st 1207~1211)  
200-1m Chunui-dong, Wonmi-gu,  
Bucheon, Gyeonggi-do 420-857  
Rep. of Korea

## Prüfzeichen Test Mark

Geprüft nach Tested acc. to  
EN 60947-4-3:2000



Zertifiziertes Produkt (Geräteidentifikation)  
Certified Product (Product Identification)

Lizenzentgelte - Einheit  
License Fee - Unit

Semi Conductor Relay Solid State Relay

Änderung  
(Change)

Prüfgrundlage : IEC 60158-2:1982  
(Test Requirement) EN 60947-4-1:1992+A1+A2

ändert sich in : siehe oben  
(changed to) (see above)

Remark: DC ratings comply with DC-1 of EN 60947-4-1.

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.  
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.  
This certificate is based on our Testing and Certification Regulation. The product  
fulfills above mentioned requirements, the production is subject to surveillance.

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln  
Tel.: (+49/221)8 06 - 13 71 e-mail: cert-validity@de.tuv.com  
Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety

Zertifizierungsstelle



Dipl.-Ing. D. Löffler