




SDA1-2 Series



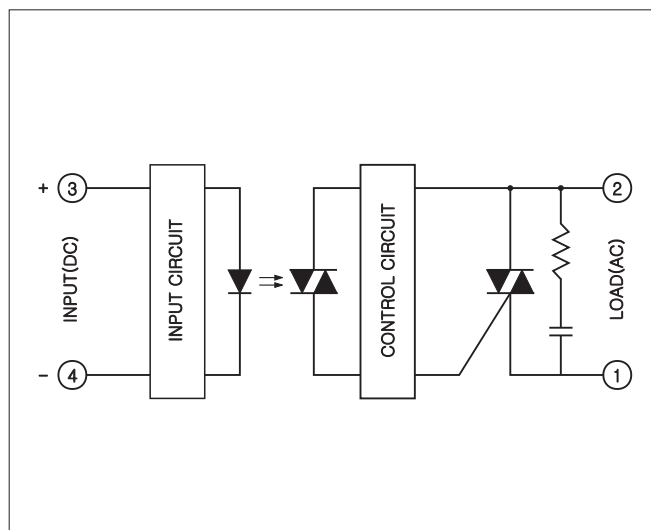
Input DC/Output AC 1-Phase Mold

- **15 - 80Amp AC240V Output**
- **AC 2500V Isolation**
- **Normally Open**
- **LED Indicator**
- **Zero-cross and Random Switching**
- **Panel Mount with Heatsink**
- **Approved by UL508 **
- **Approved by EN 60947-4-1  and **

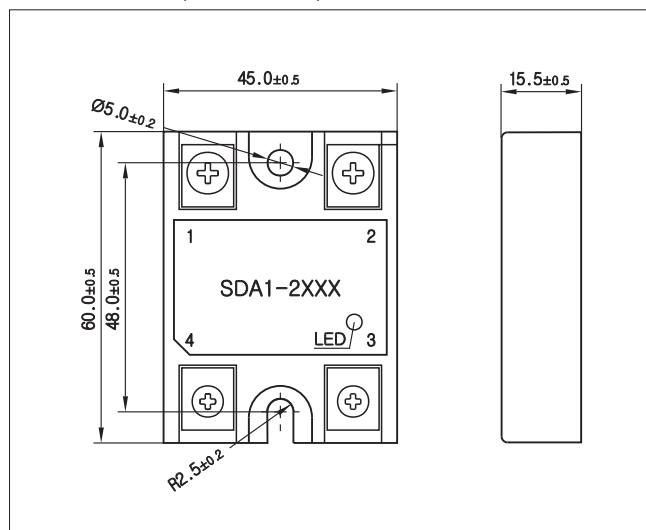
SPECIFICATIONS

Item		SDA1-215Z	SDA1-225Z	SDA1-240Z	SDA1-250Z	SDA1-215R	SDA1-225R	SDA1-240R	SDA1-250R	SDA1-260R	SDA1-280R	Unit
OUTPUT	RMS ON-STATE LOAD CURRENT	15	25	40	50	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	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	4 ~ 32										Vdc
	PICK-UP VOLTAGE	4 Max										Vdc
	DROP-OUT VOLTAGE	1 Min										Vdc
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	UL, TUV, CE	UL, TUV, CE	UL, TUV, CE	TUV, CE	UL, TUV, CE	UL, TUV, CE	UL, TUV, CE	TUV, CE			/

BLOCK DIAGRAM



DIMENSIONS (UNIT : MM)

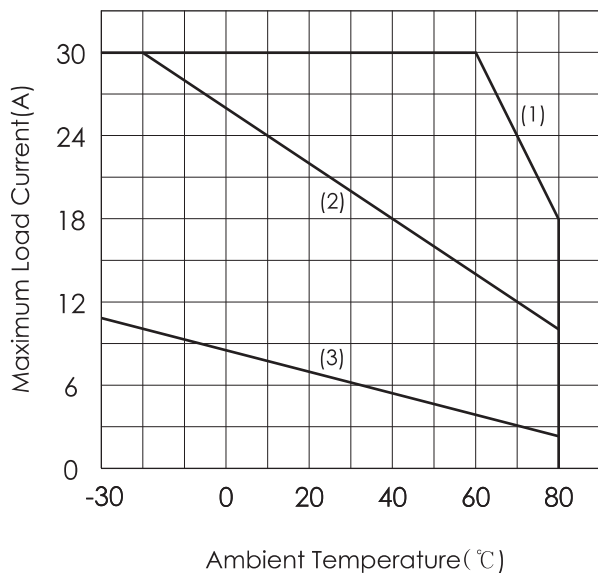


C. 30Amp S.S.R**S.S.R Model**

SDD0-130N/230N/630N

Heatsink

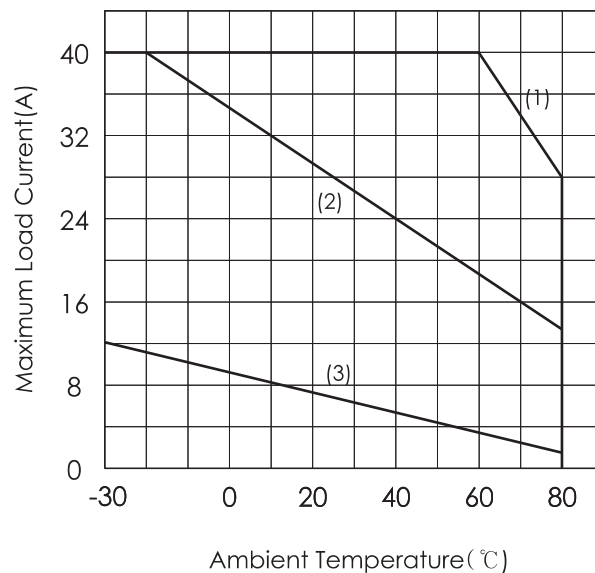
(1) Infinite (2) UHS118-1-80 (3) Non

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

SDD0-140N/240N/640N

Heatsink

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

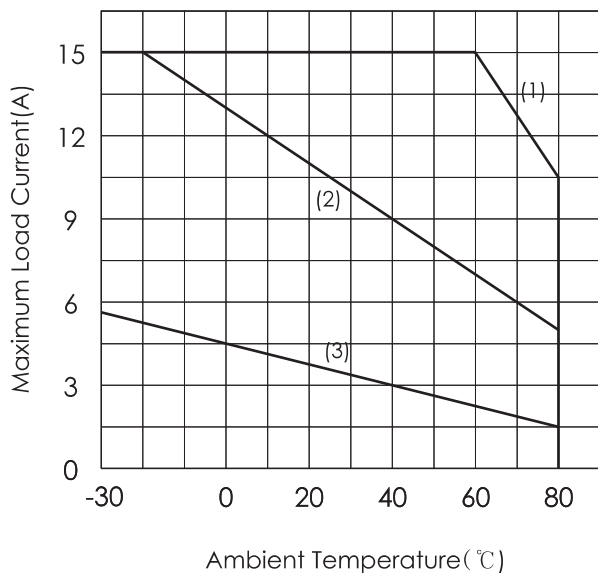
**4) 1-Phase Mold type****A. 15Amp S.S.R****S.S.R Model**

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

SAA1-215Z/415Z

Heatsink

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

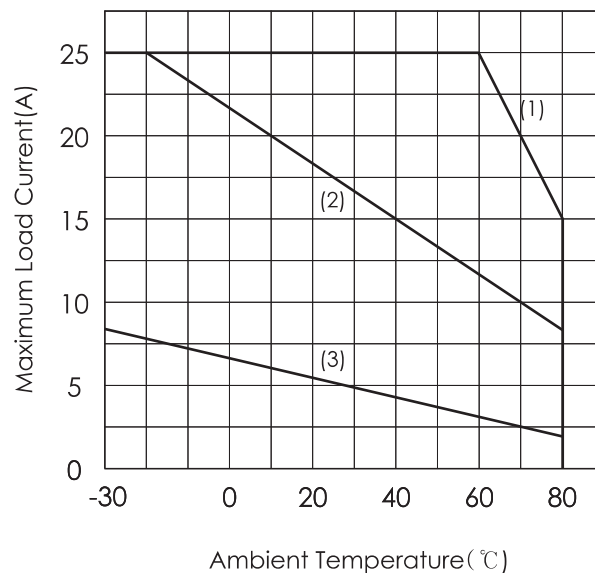
**B. 25Amp S.S.R****S.S.R Model**

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

SAA1-225Z/425Z

Heatsink

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



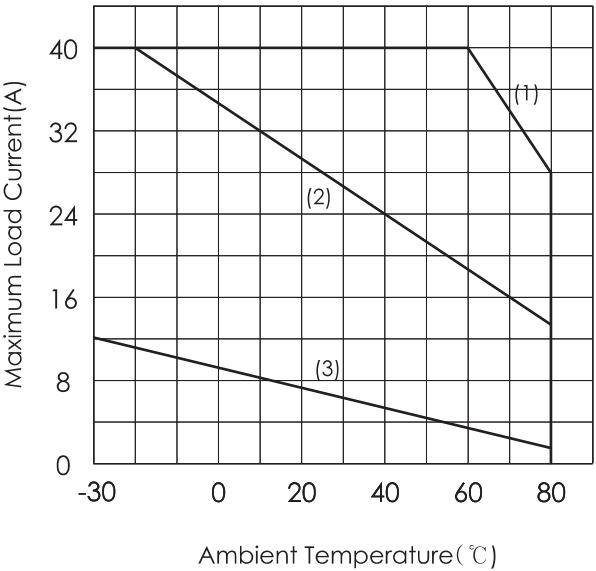
C. 40Amp S.S.R

S.S.R Model

SDA1-240Z/240R/440Z/440R
SAA1-240Z/440Z

Heatsink

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



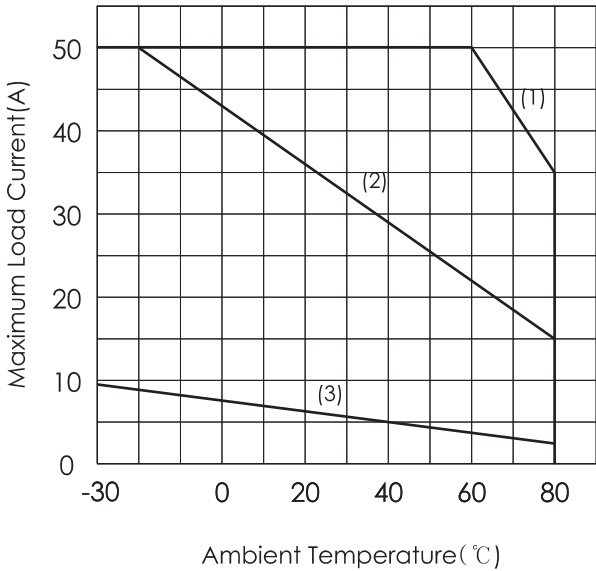
D. 50Amp S.S.R

S.S.R Model

SDA1-250Z/250R/450Z/450R
SAA1-250Z/450Z

Heatsink

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



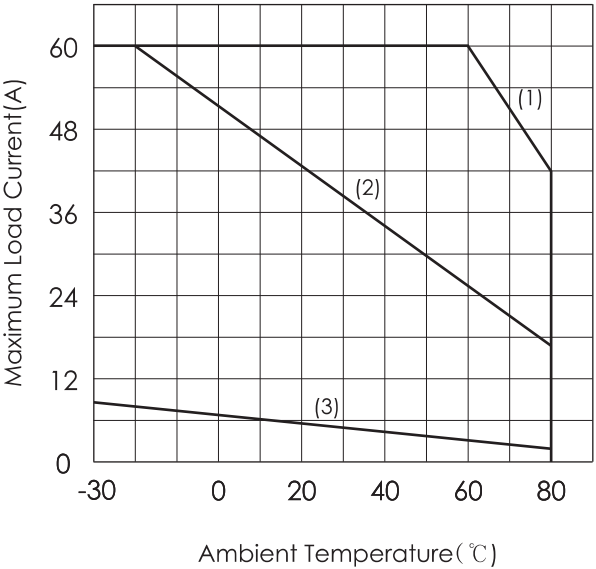
E. 60Amp S.S.R

S.S.R Model

SDA1-260R/460R
SAA1-260R/460R

Heatsink

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



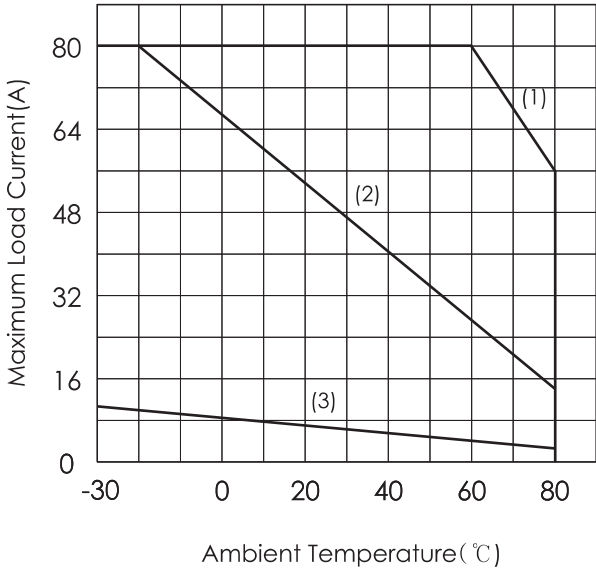
F. 80Amp S.S.R

S.S.R Model

SDA1-280R/480R
SAA1-280R/480R

Heatsink

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



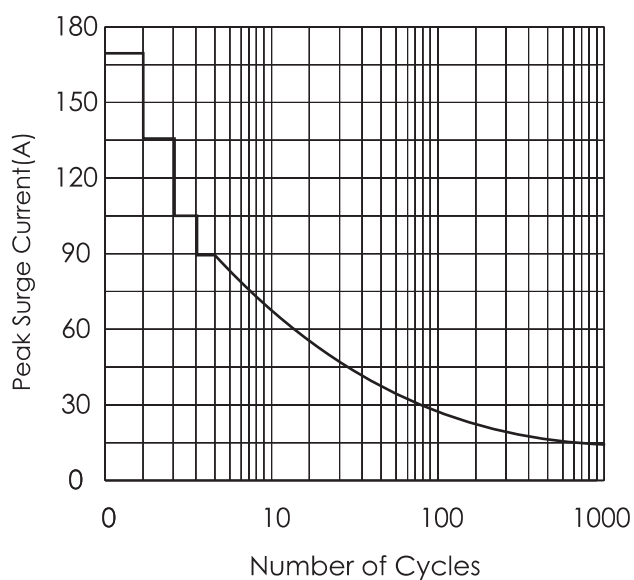
5) 15A240VAC S.S.R**S.S.R Model**

PDA1-215ZHL/215ZHS

SDA1-215Z/215R SAA1-215Z

SDA2-215Z SAA2-215Z

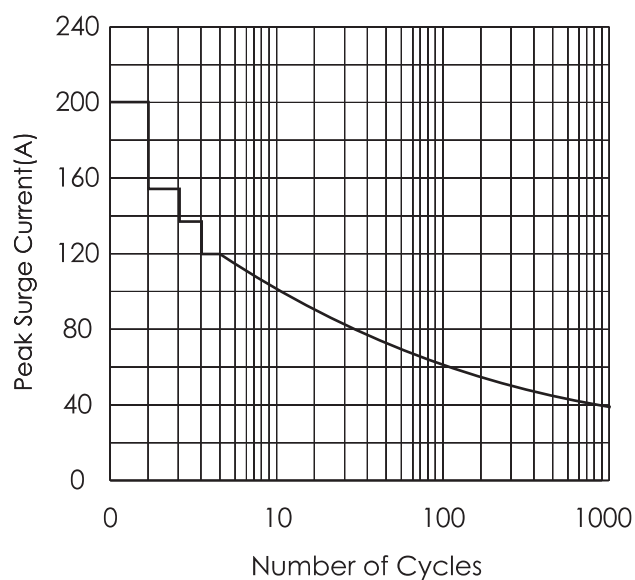
SDA3-215Z SAA3-215Z

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

SDA1-415Z/415R SAA1-415Z

SDA2-415Z SAA2-415Z

SDA3-415Z SAA3-415Z

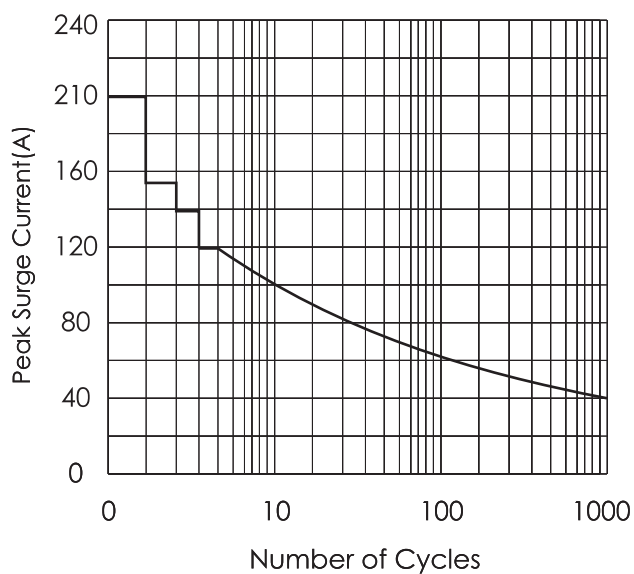
**7) 25A240VAC S.S.R****S.S.R Model**

PDA1-225ZHL/225ZHS

SDA1-225Z/225R SAA1-225Z

SDA2-225Z SAA2-225Z

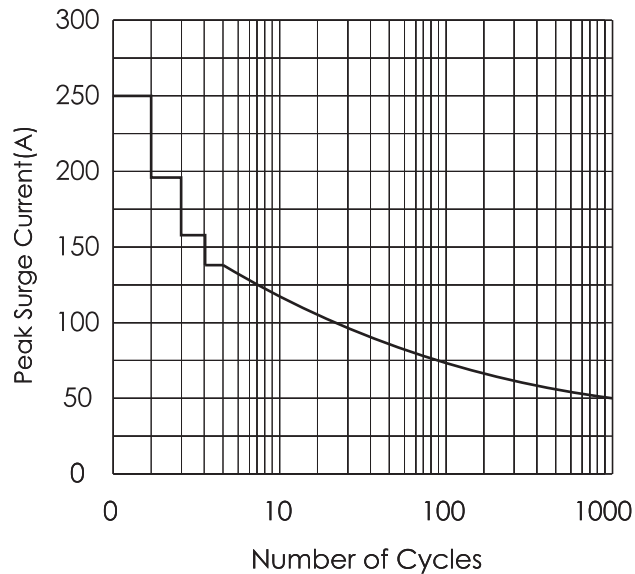
SDA3-225Z SAA3-225Z

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

SDA1-425Z/425R SAA1-425Z

SDA2-425Z SAA2-425Z

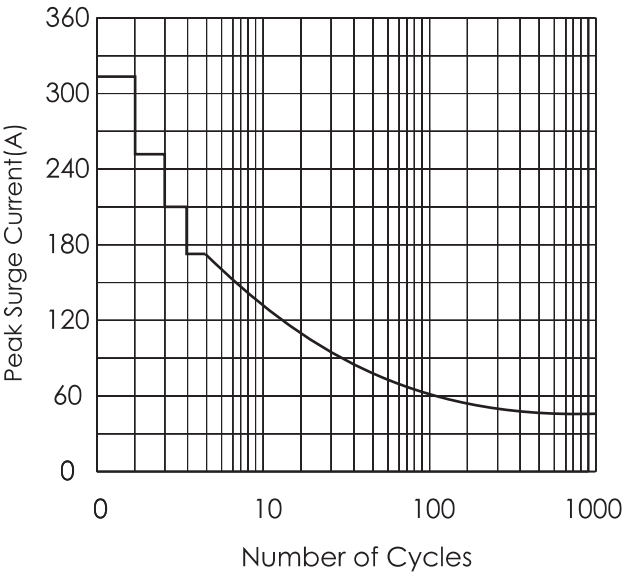
SDA3-425Z SAA3-425Z



9) 40A240VAC S.S.R

S.S.R Model

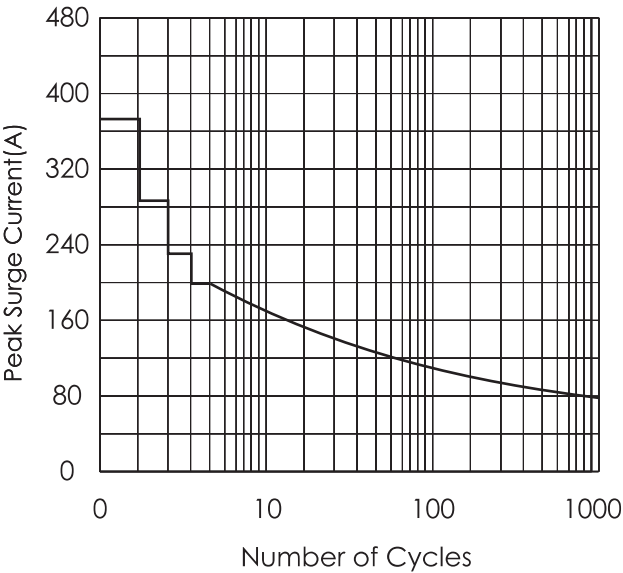
SDA1-240Z/240R	SAA1-240Z
SDA2-240Z	SAA2-240Z
SDA3-240Z	SAA3-240Z



10) 40A460VAC S.S.R

S.S.R Model

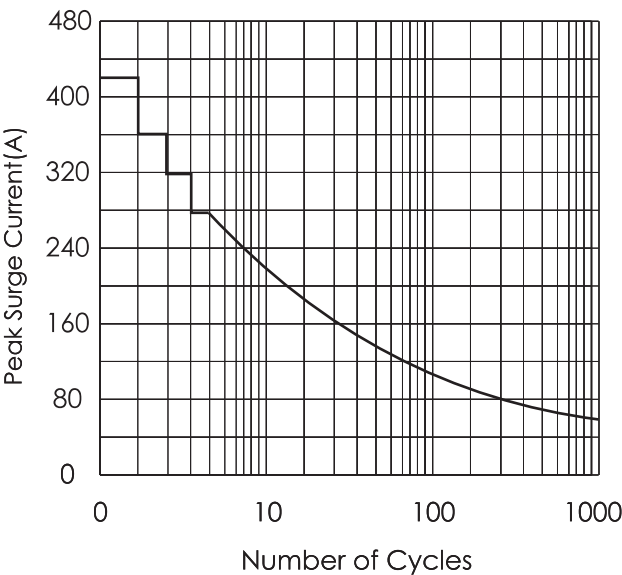
SDA1-440Z/415R	SAA1-440Z
SDA2-440Z	SAA2-440Z
SDA3-440Z	SAA3-440Z



11) 50A240VAC S.S.R

S.S.R Model

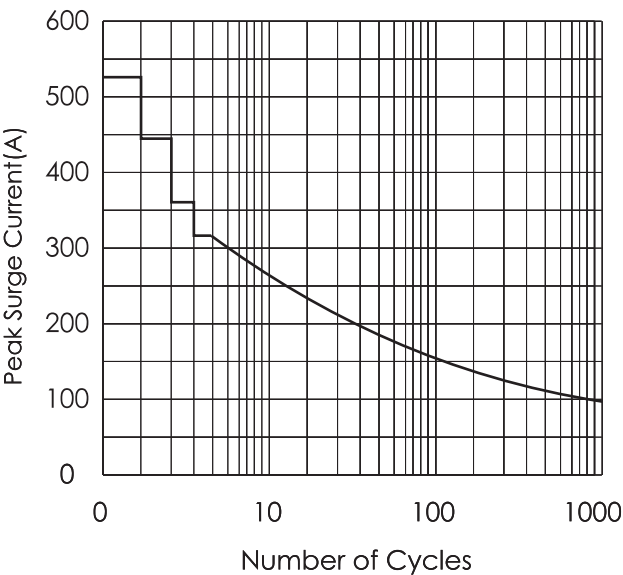
SDA1-250Z/250R	SAA1-250Z
SDA2-250Z	SAA2-250Z
SDA3-250Z	SAA3-250Z



12) 50A460VAC S.S.R

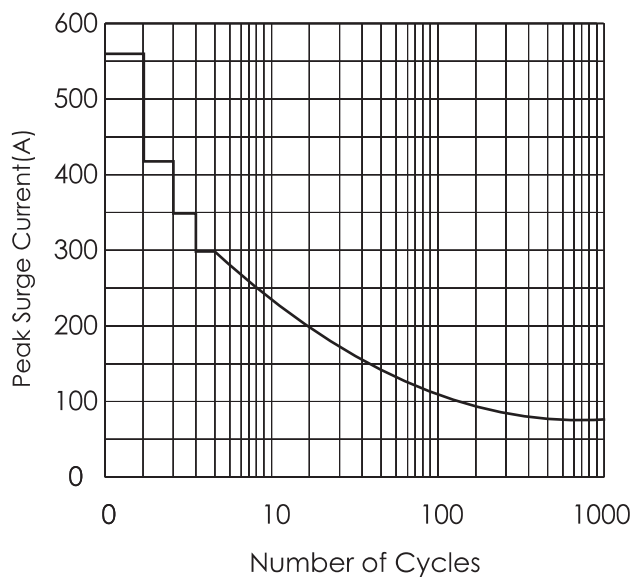
S.S.R Model

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

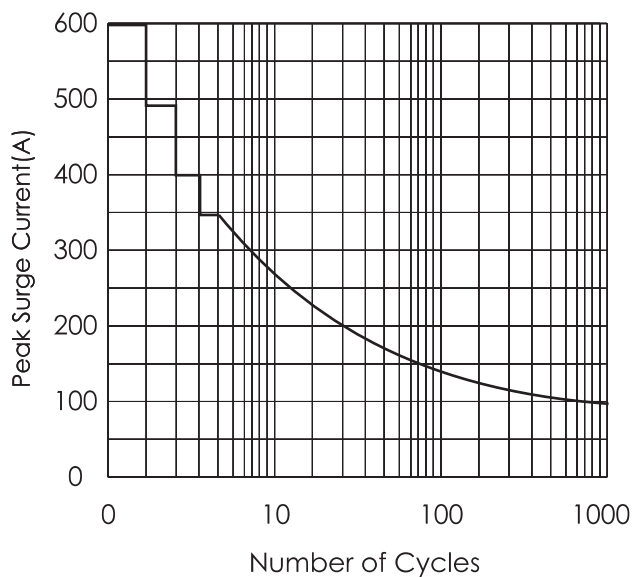


13) 60A240VAC S.S.R**S.S.R Model**

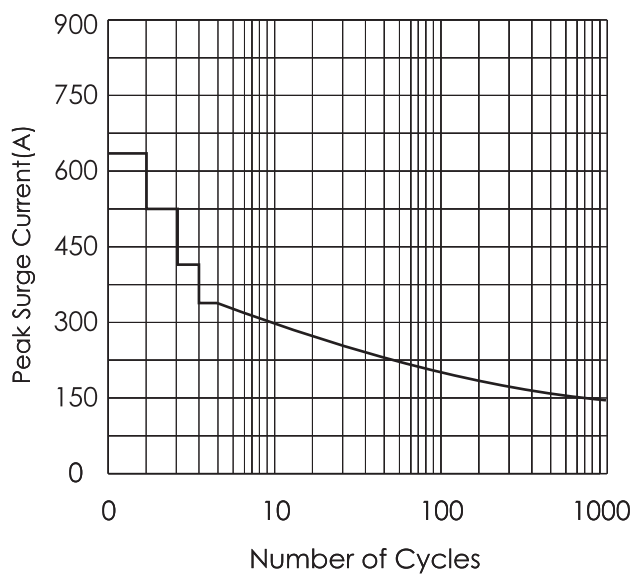
SDA1-260R	SAA1-260R
SDA2-260R	SAA2-260R
SDA3-260R	SAA3-260R

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

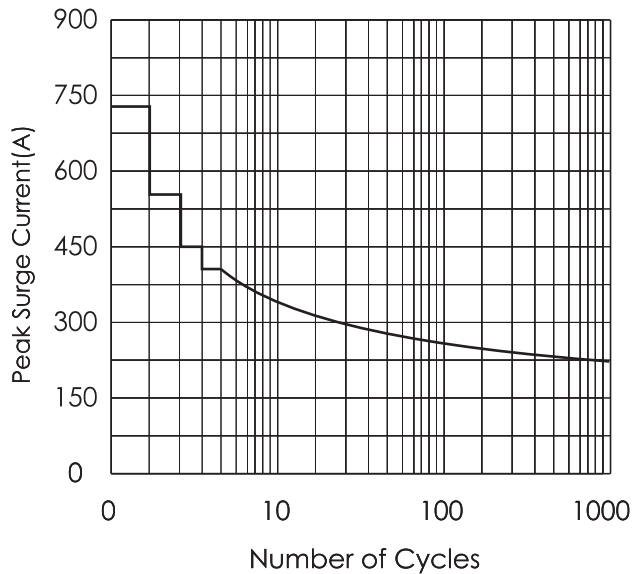
SDA1-460R	SAA1-460R
SDA2-460R	SAA2-460R
SDA3-460R	SAA3-460R

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

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

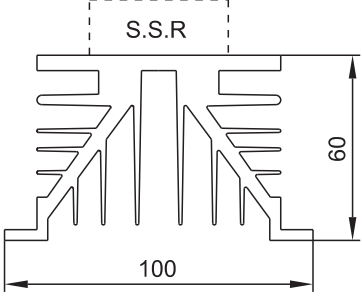
**16) 80A460VAC S.S.R****S.S.R Model**

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

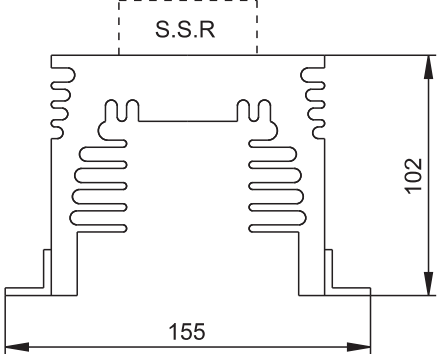


10. STANDARD HEATSINK

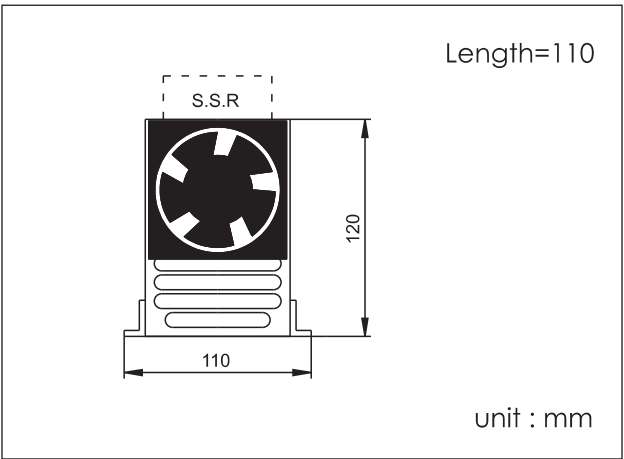
1) UHS118 Series

 <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

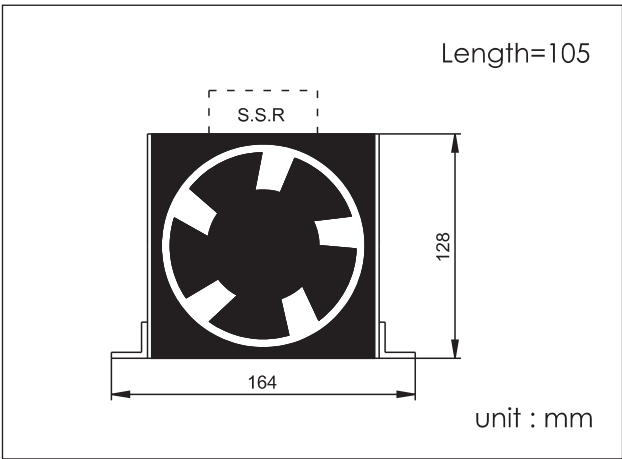
2)UHS11 Series

 <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



4) UHS124V128-3-105



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
2A	PDA1-202Z/202R	NON
3A	PDA1-203Z/203R, PDD0-103N	NON
5A	PDA1-205Z/205R, PDD0-105N	NON
8A	PDA1-208Z/208R	NON
	PDA1-208ZHL/208ZHS PDD0-108NHS/208NHS/608NHS	UHS118-1-45
10A	SDD0-110N/210N/610N	UHS118-1-45
15A	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
20A	PDD0-220NHS/620NHS SDD0-120N/220N/620N	UHS118-1-60
25A	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
30A	SDD0-130N/230N/630N	UHS118-1-80

S.S.R 정격구분	S.S.R모델명	HEATSINK
40A	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
60A	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



**Underwriters
Laboratories Inc.®**

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File E181171

Vol 1

Issued: 1996-02-23
Revised: 2006-04-03

FOLLOW-UP SERVICE PROCEDURE
(TYPE R)

COMPONENT - SWITCHES, INDUSTRIAL CONTROL
(NRNT2)

Manufacturer: UNION ELECOM CO LTD.
(100098-662) 102-1207 CHUNUI TECHNO PARK 1
200-1 CHUNUI-DONG
WONMI-KU
BUCHUN-SI 420-857 KOREA

Applicant: UNION ELECOM CO LTD
(196750-001) 34-2 SAMJUNG-DONG
GJUNG-KU
BUCHUN-SI KYONGGI-DO KOREA

Recognized Company: SAME AS APPLICANT
(196750-001)

This Procedure authorizes the above manufacturer to use the marking specified by Underwriters Laboratories Inc. only on products covered by this Procedure, in accordance with the applicable Follow-Up Service Agreement.

The prescribed Mark or Marking shall be used only at the above manufacturing location on such products which comply with this Procedure and any other applicable requirements.

The Procedure contains information for the use of the above named Manufacturer and representatives of Underwriters Laboratories Inc. and is not to be used for any other purpose. It is lent to the Manufacturer with the understanding that it is not to be copied, either wholly or in part, and that it will be returned to Underwriters Laboratories Inc. upon request.

This PROCEDURE, and any subsequent revisions, is the property of UNDERWRITERS LABORATORIES INC. and is not transferable.

UNDERWRITERS LABORATORIES INC.

Sajeev Jesudas
Chief Operating Officer



*REVISION.

UNDERWRITERS LABORATORIES INC.

MULTIPLE RECOGNITION CORRELATION SHEET NORTHBROOK
(Controlling Office)

ML File No. E165828

Issued: January 21, 1999

Revised: June 24, 2004

MULTIPLE RECOGNITION
of

SWITCHES, INDUSTRIAL CONTROL - COMPONENT
(NRNT2)

for

* [214108008] Automatic Timing & Controls Inc.
*

Basically Recognized for

[196750001] Union Electronics

Basically recognized products covered by Procedure and/or Reports under
File No. E181171, Vol. 1

Products Covered	Report Date	Basic Applicant's (Supplier's) Product Designation	Multiple Listee's Product Designation
Open type, optically isolated solid state switch for use in industrial applications	2/23/96	SDA1-215Z	SDA1-215Z
		SDA1-215R	SDA1-215R
		SDA1-225Z	SDA1-225Z
		SDA1-225R	SDA1-225R
		SDA1-240Z	SDA1-240Z
		SDA1-240R	SDA1-240R

MARKING: Same as that described in Follow-Up Service Procedure and/or Report except for Multiple Listee's name, ML tradename, when applicable, and product designation.

IC: 747

K:/E165828/E181171.1
rk

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)

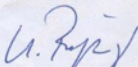
Remark: This license is based on license R 2037941.

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

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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 (Geräteidentifikation)

Certified Product

(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

U. Roessiger

Dipl.-Ing. U. Roessiger



Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 02037941

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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.

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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