

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50138320

Blatt *Page*
0001

Ihr Zeichen *Client Reference*
C.C.G

Unser Zeichen *Our Reference*
01-KSH- 15029024 001

Ausstellungsdatum
14.11.2008

Date of Issue
(day/mo/yr)

Genehmigungsinhaber *License Holder*
Dongguan Sanyou Electrical
Appliances Co., Ltd.
Bolan Road, Xitou Industrial Zone
Houjie Town
Dongguan City, Guangdong 523952
P.R. China

Fertigungsstätte *Manufacturing Plant*
Dongguan Sanyou Electrical
Appliances Co., Ltd.
Bolan Road, Xitou Industrial Zone
Houjie Town
Dongguan City, Guangdong 523952
P.R. China

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*
EN 61810-1:2004



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Relais (Electromechanical Elementary Relays)

Type Designation : SRB-x-lyDMv-w-t
x,y,v,w,t = See appendix 1

Rated Coil Voltage : DC 5V;6V;9V;12V;18V or 24V
Rated Coil Power : 0,2W
Ambient Temperature : -40°C to +85°C
Contact Loads : 5A 277VAC
Electrical Endurance : 100 000
Mechanical Endurance : 10 000 000
Type of Interruption : Micro-Disconnection
Insulation System between
Coil and Contact : Reinforced Insulation

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ANLAGE (Appendix): 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product 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



Zertifikat

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Zertifikat Nr. Certificate No.
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0002

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Ausstellungsdatum
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Relais (Electromechanical Elementary Relays)

Continuation from page 0001

Endurance test in accordance with clause 17 of IEC 60730-1:

Rated Voltage : AC 277V
Rated Current : 5A
Electrical Endurance: 100 000

Remark:

The labelling requirements acc. to EU Directive 2001/95 have to be observed for distribution within the EEA.

ANLAGE (Appendix): 1.

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Zertifizierungsstelle



Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
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Blatt *Page*
0003

Ihr Zeichen *Client Reference*
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Unser Zeichen *Our Reference*
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14.11.2008

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Fertigungsstätte *Manufacturing Plant*
Dongguan Sanyou Electrical
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Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Relais (Electromechanical Elementary Relays)

as page 0001

Addition

Name of Factory : See above

Address of Factory : See above

ANLAGE (Appendix) : 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
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Zertifikat

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Zertifikat Nr. *Certificate No.*
R 50138320

Blatt *Page*
0004

Ihr Zeichen *Client Reference*
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Unser Zeichen *Our Reference*
01-KSH- 15029024 003

Ausstellungsdatum
09.07.2009

Date of Issue
(day/mo/yr)

Genehmigungsinhaber *License Holder*
Dongguan Sanyou Electrical
Appliances Co., Ltd.
Bolan Road, Xitou Industrial Zone
Houjie Town
Dongguan City, Guangdong 523952
P.R. China

Fertigungsstätte *Manufacturing Plant*
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P.R. China

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*
EN 61810-1:2004



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Relais (Electromechanical Elementary Relays)

as page 0001-0003

Addition

Type Designation : SRB-x-lyHMv-w-t 2
x,y,v,w,t = See appendix 1.1 5

Rated Coil Power : 0,36W

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ANLAGE (Appendix): 1.1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.

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Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety

Dipl.-Ing. F. He

Certificate No. R50138320 0001-0003 **Our Reference** 01-KSH-15029024 001 **Appendix No.** 1

Constructional Data Form (CDF) All-or-Nothing Electromechanical Relays Page 1 of 4

License holder: Dongguan Sanyou Electrical Appliances Co., Ltd.
Bolan Road, Xitou Industrial Zone, Houjie Town, Dongguan City, Guangdong 523952
P.R. China



Factory1: Dongguan Sanyou Electrical Appliances Co., Ltd.
(full address) Bolan Road, Xitou Industrial Zone, Houjie Town, Dongguan City, Guangdong 523952
P.R. China

Factory2: Dongguan Sanyou Electrical Appliances Co., Ltd.
(full address) Erhuan Road, Xitou Industrial Zone, Houjie Town, Dongguan City, Guangdong 523952
P.R. China

Type or Model Number: SRB-x-1yDMv-w-t

Kind of device: Electromechanical Elementary Relay

Specification (contact-circuit)

Contact material	AgSnO ₂ or AgCdO	
Contact configuration	1a	
Rated contact voltage	277VAC	
Rated contact current	5A	
cos φ	1,0	
L/R	-	
Frequency (Hz)	50/60	
Schematics for contact loading <small>*according to Tab 13 of EN 61810-1: 2004</small>	Single-pole: a	
Kind of contacts		
Number of cycles for electrical endurance / Frequency of operation	100,000 1200Cycles/h	
Number of cycles for mechanical endurance / Frequency of operation	10,000,000 18,000Cycles/h	
Duty factor	50%	
Type of interruption	Micro-disconnection	
Insulation resistance	≥ 1,000M Ω (500VDC)	

TÜV Rheinland Group

25.09.2008

Kenny Shi

Date

Name

Signature

Constructional Data Form (CDF) All-or-Nothing Electromechanical Relays Page 2 of 4

* Endurance according to IEC 60730-1 (ratings, number of cycles, frequency of operation)

Above Electrical ratings are also tested in accordance with clause 17- endurance of IEC 60730-1:1999

Specification (coil-circuit)

Rated coil voltage (Rated coil voltage) <input checked="" type="checkbox"/> DC <input type="checkbox"/> AC	05	06	09	12	18	24
Coil resistance (at 20°C) (Ω) ± 10%	125	180	405	720	1,620	2,800
Frequency for AC (Hz)	---					
Rated power	0,20W					
Operative range	<input checked="" type="checkbox"/> class 1: 80% to 110% of rated coil voltage <input type="checkbox"/> class 2: 85% to 110% of rated coil voltage <input type="checkbox"/> other:					
Thermal insulation class	F					

Specification (general)

Overvoltage category	II		
Pollution degree	2		
Test voltages	coil-contact	: 4,000VAC(50/60Hz) for 1min	
	contact - contact	: ---	
	across open contact	: 750VAC(50/60Hz) for 1min	
	live parts - outside	: ---	
Minimum creepage distances	coil-contact	: 7,0mm	
	contact - contact	: ---	
	across open contact	: 3,0mm	
	live parts - outside	: ---	
Minimum clearances	coil-contact	: 8,5mm	
	contact - contact	: ---	
	across open contact	: 0,25mm	
	live parts - outside	: ---	
Insulation: <i>U_i = 277V, OV-cat. II Material gr. IIIa, Poll. deg. 2</i>	coil-contact	<input type="checkbox"/> basic	<input checked="" type="checkbox"/> reinforced
	contact - contact	<input type="checkbox"/> basic	<input type="checkbox"/> reinforced
	across open contact	<input checked="" type="checkbox"/> micro	<input type="checkbox"/> full
	live parts - outside	<input type="checkbox"/> basic	<input type="checkbox"/> reinforced
			<input type="checkbox"/> NA
			<input checked="" type="checkbox"/> NA
			<input type="checkbox"/> NA
			<input checked="" type="checkbox"/> NA

TÜV Rheinland Group

25.09.2008

Kenny Shi

Date

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Signature



Certificate No. R50138320 0001-0003 Our Reference 01-KSH-15029024 001 Appendix No. 1

Constructional Data Form (CDF) All-or-Nothing Electromechanical Relays Page 3 of 4

Ambient temperature	-40°C ~ +85°C
Minimum mounting distance	H: 3mm V: 3mm
Relay technology category	<input type="checkbox"/> RT 0 <input type="checkbox"/> RT I <input checked="" type="checkbox"/> RT II <input type="checkbox"/> RT III <input type="checkbox"/> RT IV <input type="checkbox"/> RT V

Terminals

Terminal designation	N/A
Type of terminals	<input type="checkbox"/> Screw terminals and screwless terminals <input type="checkbox"/> Flat quick-connect terminations <input checked="" type="checkbox"/> Solder terminals PCB solder pin Maximum permissible steady-state temperature indicated by manufacturer: 160°C <input type="checkbox"/> Sockets <input type="checkbox"/> Alternative termination types
Material/plating of the terminal	Nickel plated copper alloy
Required preparation of the conductor	1

Plastic Parts

Part	Material name	Type designation	RTI (minimum)	Material Group
Cover	PBT	CRN7030	140	IIIa
Bobbin	PBT	CRN7030	140	IIIa
Base	PBT	CRN7030	140	IIIa

Type Nomenclature:

SRB-x-1yDMv-w-t

Basic designation: SRB

x stands for S or SH(S means sealed type, SH means sealed type washable)

1 stands for number of poles: 1 pole;

y stands for rated coil voltage(VDC):05;06;09;12;18;24;

D stands for rated coil power: 0,2W;

M stands for contact type: Make contact;

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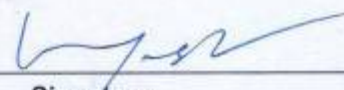
25.09.2008

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Certificate No. R50138320 0001-0003 Our Reference 01-KSH-15029024 001 Appendix No. 1

Constructional Data Form (CDF) All-or-Nothing Electromechanical Relays Page 4 of 4

v stands for contact material: blank means AgSnO₂ type, 1 means AgCdO type;

w stands for insulation (system)class: F means class F ; B means class B; blank means general type(standard type)

t means special parameter: blank means standard type; letter or number 10 means 3A standard product, others are special requirement which not effect constructions.

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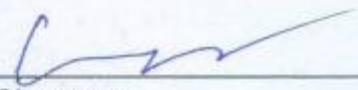
25.09.2008

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Name

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TÜVRheinland®
DIN CERTCO



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Certificate No. R50138320 0004 Our Reference 01-KSH-15029024 003 Appendix No. 1.1

Constructional Data Form (CDF) All-or-Nothing Electromechanical Relays Page 1 of 4

License holder: Dongguan Sanyou Electrical Appliances Co., Ltd.
Bolan Road, Xitou Industrial Zone, Houjie Town, Dongguan City, Guangdong 523952
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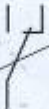
Factory1: Dongguan Sanyou Electrical Appliances Co., Ltd.
(full address) Bolan Road, Xitou Industrial Zone, Houjie Town, Dongguan City, Guangdong 523952
P.R. China

Factory2: Dongguan Sanyou Electrical Appliances Co., Ltd.
(full address) Erhuan Road, Xitou Industrial Zone, Houjie Town, Dongguan City, Guangdong 523952
P.R. China

Type or Model Number: SRB-x-1yHMv-w-t

Kind of device: Electromechanical Elementary Relay

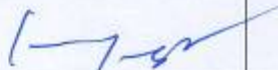
Specification (contact-circuit)

Contact material	AgSnO ₂ or AgCdO		
Contact configuration	1a		
Rated contact voltage	277VAC		
Rated contact current	5A		
cos φ	1,0		
L/R	-		
Frequency (Hz)	50/60		
Schematics for contact loading <small>*according to Tab 13 of EN 61810-1: 2004</small>	Single-pole: a		
Kind of contacts			
Number of cycles for electrical endurance / Frequency of operation	100,000 1200Cycles/h		
Number of cycles for mechanical endurance / Frequency of operation	10,000,000 18,000Cycles/h		
Duty factor	50%		
Type of interruption	Micro-disconnection		
Insulation resistance	≥ 1,000M Ω (500VDC)		

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License holder

09.07.2019
Date


Signature

Name

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Certificate No. R50138320 0004 Our Reference 01-KSH-15029024 003 Appendix No. 1.1

Constructional Data Form (CDF) All-or-Nothing Electromechanical Relays Page 2 of 4

* Endurance according to IEC 60730-1 (ratings, number of cycles, frequency of operation)

Above Electrical ratings are also tested in accordance with clause 17-endurance of IEC 60730-1:1999

Specification (coil-circuit)

Rated coil voltage (Rated coil voltage) <input checked="" type="checkbox"/> DC <input type="checkbox"/> AC	05	06	09	12	18	24
Coil resistance (at 20°C) (Ω) $\pm 10\%$	70	100	225	400	900	1600
Frequency for AC (Hz)	---					
Rated power	0,36W					
Operative range	<input checked="" type="checkbox"/> class 1: 80% to 110% of rated coil voltage <input type="checkbox"/> class 2: 85% to 110% of rated coil voltage <input type="checkbox"/> other:					
Thermal insulation class	F					

Specification (general)

Overvoltage category	II		
Pollution degree	2		
Test voltages	<i>coil-contact</i>	: 4,000VAC(50/60Hz) for 1min	
	<i>contact - contact</i>	---	
	<i>across open contact</i>	: 750VAC(50/60Hz) for 1min	
	<i>live parts - outside</i>	---	
Minimum creepage distances	<i>coil-contact</i>	: 7,0mm	
	<i>contact - contact</i>	---	
	<i>across open contact</i>	: 3,0mm	
	<i>live parts - outside</i>	: ---	
Minimum clearances	<i>coil-contact</i>	: 8,5mm	
	<i>contact - contact</i>		
	<i>across open contact</i>	: 0,25mm	
	<i>live parts - outside</i>	: ---	
Insulation: <i>U_i = 277V, OV-cat. II Material gr. IIIa, Poll. deg. 2</i>	<i>coil-contact</i>	: <input type="checkbox"/> basic	<input checked="" type="checkbox"/> reinforced <input type="checkbox"/> NA
	<i>contact - contact</i>	: <input type="checkbox"/> basic	<input type="checkbox"/> reinforced <input checked="" type="checkbox"/> NA
	<i>across open contact</i>	: <input checked="" type="checkbox"/> micro	<input type="checkbox"/> full <input type="checkbox"/> NA
	<i>live parts - outside</i>	: <input type="checkbox"/> basic	<input type="checkbox"/> reinforced <input checked="" type="checkbox"/> NA
Ambient temperature	-40°C ~ +85°C		

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Constructional Data Form (CDF) All-or-Nothing Electromechanical Relays Page 3 of 4

Minimum mounting distance	H: 3mm V: 3mm
Relay technology category	<input type="checkbox"/> RT 0 <input type="checkbox"/> RT I <input checked="" type="checkbox"/> RT II <input type="checkbox"/> RT III <input type="checkbox"/> RT IV <input type="checkbox"/> RT V

Terminals

Terminal designation	N/A
Type of terminals	<input type="checkbox"/> Screw terminals and screwless terminals <input type="checkbox"/> Flat quick-connect terminations <input checked="" type="checkbox"/> Solder terminals PCB solder pin Maximum permissible steady-state temperature indicated by manufacturer: 160°C <input type="checkbox"/> Sockets <input type="checkbox"/> Alternative termination types
Material/plating of the terminal	Nickel plated copper alloy
Required preparation of the conductor	1

Plastic Parts

Part	Material name	Type designation	RTI (minimum)	Material Group
Cover	PBT	CRN7030	140	IIIa
Bobbin	PBT	CRN7030	140	IIIa
Base	PBT	CRN7030	140	IIIa

Type Nomenclature:

SRB-x-1yHMv-w-t

Basic designation: SRB

x stands for S or SH(S means sealed type, SH means sealed type washable)

1 stands for number of poles: 1 pole;

y stands for rated coil voltage(VDC):05;06;09;12;18;24;

H stands for rated coil power: 0,36W;

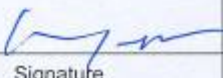
M stands for contact type: Make contact;

 v stands for contact material: blank means AgSnO₂ type, 1 means AgCdO type;

w stands for insulation (system)class: F means class F ; B means class B; blank means general type(standard type)

TÜV Rheinland Group
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 09.07.2019
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TÜVRheinland®
DIN CERTCO



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Certificate No. R50138320 0004 Our Reference 01-KSH-15029024 003 Appendix No. 1.1

Constructional Data Form (CDF) All-or-Nothing Electromechanical Relays Page 4 of 4

t means special parameter: blank means standard type; letter or number 10 means 3A standard product, others are special requirement which not effect constructions.

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Signature

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