Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
R 50139131

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0001

Ihr Zeichen *Client Reference*	**Unser Zeichen** *Our Reference*	**Ausstellungsdatum**	*Date of Issue (day/mo/yr)*
C.C.G	01-KSH- 15028409 003	22.10.2008	

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*

TÜV Rheinland Product Safety | BAUART GEPRÜFT | TYPE APPROVED

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	: SRU-x-1yzuv-w-t	5
	x,y,z,u,v,w,t = See appendix 1	7
Rated Coil Voltage	: DC 3V;5V;6V;9V;12V;18V;24V or 48V	
Rated Coil Power	: 0,36W; 0,45W or 1,06W	
Ambient Temperature	: -40°C to +85°C	
Contact Loads	: AC 240V or DC 24V 10A or 5A (See appendix 1)	
Electrical Endurance	: 100 000	
Mechanical Endurance	: 10 000 000	
Type of Interruption	: Micro-Disconnection	
Insulation System between Coil and Contact	: Basic Insulation	

Continued on page 0002

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ANLAGE (Appendix): 1

TÜV Rheinland Product Safety GmbH TÜVRheinland Zertifizierungsstelle

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. G. Reimann

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

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Zertifikat *Certificate*

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Zertifikat Nr. *Certificate No.*	Blatt *Page*
R 50139131	0002

Ihr Zeichen *Client Reference*	Unser Zeichen *Our Reference*	Ausstellungsdatum *Date of Issue (day/mo/yr)*
C.C.G	01-KSH- 15028409 003	22.10.2008

Genehmigungsinhaber *License Holder*
Dongguan Sanyou Electrical
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Bolan Road, Xitou Industrial Zone
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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*

TÜV Rheinland Product Safety | BAUART GEPRÜFT / TYPE APPROVED

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)

continuation from page 0001

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

Rated Voltage : AC 240V or DC 24V
Rated Current : 10A or 5A
(See appendix 1)

Remark:
1) 850°C glow-wire passed without flame.
2) The labelling requirements acc. to EU Directive 2001/95 have to be observed for distribution within the EEA.

TÜV Rheinland Product Safety GmbH TÜVRheinland® Zertifizierungsstelle

ANLAGE (Appendix): 1

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Dipl.-Ing. G. Reimann

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Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
R 50139131

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0003

Ihr Zeichen *Client Reference*	**Unser Zeichen** *Our Reference*	**Ausstellungsdatum**	*Date of Issue (day/mo/yr)*
C.C.G	01-KSH- 15028409 003	22.10.2008	

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

Prüfzeichen *Test Mark*

TÜV Rheinland Product Safety | BAUART GEPRÜFT / TYPE APPROVED

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 0001-0002

Addition

Name of Factory : See above

Address of Factory : See above

TÜVRheinland®

TÜV Rheinland Product Safety GmbH – TÜVRheinland – Zertifizierungsstelle

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

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
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Dipl.-Ing. G. Reimann

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Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
R 50139131

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0004

Ihr Zeichen *Client Reference*	**Unser Zeichen** *Our Reference*	**Ausstellungsdatum**	*Date of Issue (day/mo/yr)*
C.C.G	01-KSH- 15028409 004	10.10.2009	

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*
Mingguang Sanyou Electronics
Co., Ltd.
Mingguang Industrial Zone
Mingguang City, Anhui 239400
P.R. China

Prüfzeichen *Test Mark*

www.tuv.com TÜVRheinland ID:2000000000
- BAUART GEPRÜFT
- TYPE APPROVED

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 0001-0002

Addition

Name of Factory : See above

Address of Factory : See above

TÜV Rheinland Product Safety GmbH Zertifizierungsstelle TÜVRheinland®

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.

Zertifizierungsstelle

Dipl.-Ing. F. He

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Tel.: (+49/221)8 06 - 13 71 e-mail: cert-validity@de.tuv.com
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Constructional Data Form (CDF) All-or-Nothing Electromechanical Relays

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

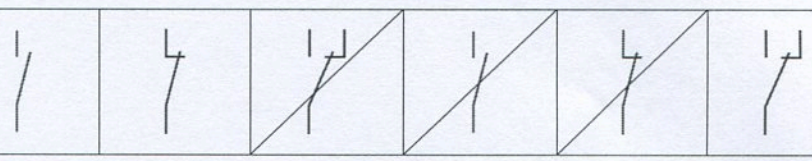
Factory1: Dongguan Sanyou Electrical Appliances Co., Ltd.
(full address) Bolan Road, Xitou Industrial Zone, Houjie Town, Dongguan City, Guangdong 523952 P.R. China

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

Factory3 : Mingguang Sanyou Electronics Co., Ltd
(full address) Mingguang Industrial Zone, Mingguang City, Anhui 239400, P.R. China

Type or Model Number: SRU-x-1yzuv-w-t

Kind of device: Electromechanical Elementary Relay

Specification (contact-circuit)				
Contact material	AgSnO2 or AgCdO			
Contact configuration	Make;Break contact		Change-over contact	
			Make	Break
Rated contact voltage	240VAC	24VDC	240VAC/24VDC	240VAC/24VDC
Rated contact current	10A	10A	10A	5A
cos φ	1	---	1/---	
L/R	---	0	---/0	
Frequency (Hz)	50	---	50/---	
Schematics for contact loading *according to Tab 13 of EN 61810-1: 2004	Single-pole: a; b Chang-over: o			
Kind of contacts				
Number of cycles for electrical endurance / Frequency of operation	100,000 1200 cycles/hour			
Number of cycles for mechanical endurance / Frequency of operation	10,000,000 18000 cycles/hour			
Duty factor	50%			

TÜV Rheinland Group

Gesehen/Reviewed Shanghai... KSH-15028409
TÜV Product Safety GmbH

29.09.2009 Kenny Shi

Date **Name** **Signature**

Certificate No. R50139131 0001-0004 **Our Reference** 01-KSH-15028409 004 **Appendix No.** 1

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

Type of interruption	Micro-disconnection
Insulation resistance	≥100MΩ（500VDC）
* 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	0.45w								0.36w								1.06w	
(Rated coil voltage) ☒ DC ☐ AC	3	5	6	9	12	18	24	48	3	5	6	9	12	18	24	48	12	24
Coil resistance (at 20°C) (Ω)± 10%	20	56	80	180	320	720	1,280	5,120	25	70	100	225	400	900	1,600	6,400	135	543
Frequency for AC (Hz)	---																	
Rated power	0.45w;0.36w;1.06w																	
Operative range	☐ class 1: 80% to 110% of rated coil voltage ☐ class 2: 85% to 110% of rated coil voltage ☒ other:declared:75% to 130% of rated coil voltage																	
Thermal insulation class	B																	

Specification (general)

Overvoltage category	II
Pollution degree	2

TÜV Rheinland Group

Gesehen/Reviewed Shanghai KSH-15028409 TÜV Product Safety GmbH

29.09.2009 Kenny Shi

Date **Name** **Signature**

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

Test voltages	*coil-contact*	:1,500VAC(50/60Hz) for 1min
	contact - contact	: ---
	across open contact	:1,000VAC(50/60Hz) for 1min
	live parts - outside	: ---
Minimum creepage distances	*coil-contact*	: 3.0mm
	contact - contact	:--
	across open contact	: 4,5mm
	live parts - outside	: ---
Minimum clearances	*coil-contact*	: 2.0mm
	contact - contact	:---
	across open contact	: 0.30mm
	live parts - outside	: ---
Insulation: *U_i = 250V, OV-cat. II* *Material gr. IIIa, Poll. deg. 2*	*coil-contact*	: ☒ basic ☐ reinforced ☐ NA
	contact - contact	: ☐ basic ☐ reinforced ☒ NA
	across open contact	: ☒ micro ☐ full ☐ NA
	live parts - outside	: ☐ basic ☐ reinforced ☒ NA
Ambient temperature	-40℃～+85℃	
Minimum mounting distance	H: 3 mm V: 3 mm	
Relay technology category	☐ RT 0 ☐ RT I ☒ RT II ☐ RT III ☐ RT IV ☐ RT V	

Terminals	
Terminal designation	---
Type of terminals	☐ Screw terminals and screwless terminals ☐ Flat quick-connect terminations ☒ Solder terminals Soldering terminal PCB mounting Maximum permissible steady-state temperature indicated by manufacturer: 160℃ ☐ Sockets ☐ 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

TÜV Rheinland Group

Gesehen/Reviewed
Shanghai KSH-15028409 004
TÜV Product Safety GmbH

29.09.2009	Kenny Shi	
Date	**Name**	**Signature**

Cover	PBT	1403G6	130	III
Bobbin	PBT	1403G6	130	III

Type Nomenclature:

SRU-x-1yzuv-w-t

Basic designation: SRU

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):03;05;06;09;12;18;24;48

z stands for rated coil power: D means 0.45w; L means 0.36w; H means 1.06w

u stands for contact type: M means form A; B means form B; blank means form C

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

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

t means special parameter: blank means standard type; letter or number means special requirement which not

effect constructions

Remarks

First issue: 22.10.2008

This CDF was issued based on test report: 15028409 003.

Second and latest issue:29.09.2009

Add a new manufacturing plant based on test report: 15028409 004.