

# Zertifikat

# Certificate



Zertifikat Nr. Certificate No.  
R 50143457

Blatt Page  
0001

Ihr Zeichen Client Reference  
C.C.G

Unser Zeichen Our Reference  
01-KSH- 15030126 001

Ausstellungsdatum  
11.02.2009

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**  
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	: SJE-x-lyzuv-w-t (SANYOU)	5
	x,y,z,u,v,w,t = See appendix 1	7
Rated Coil Voltage	: DC 3V;5V;6V;9V;12V;18V or 24V	
Rated Coil Power	: 0,45W; 0,20W	
Ambient Temperature	: -40°C to +70°C	
Contact Loads	: See appendix 1	
Electrical Endurance	: 100 000	
Mechanical Endurance	: 1 000 000	
Type of Interruption	: Micro-Disconnection	
Insulation System between Coil and Contact	: Reinforced Insulation	

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

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



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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.

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

Dipl.-Ing. F. He

# Zertifikat

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Zertifikat Nr. Certificate No. R 50143457  
Blatt Page 0002

Ihr Zeichen Client Reference C.C.G  
Unser Zeichen Our Reference 01-KSH- 15030126 001  
Ausstellungsdatum Date of Issue 11.02.2009 (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.  
Erhuan 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) ®

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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.

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.

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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

Dipl.-Ing. F. He



Certificate No. R50143457 0001-0002 Our Reference 01-KSH-15030126 001 Appendix No. 1

**Constructional Data Form (CDF) All-or-Nothing Electromechanical Relays** Page 1 of 3

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: SJE-x-1yzuv-w-t  
 Kind of device: Electromechanical Elementary Relay

**Specification (contact-circuit )**

Contact material	AgSnO <sub>2</sub> or AgCdO		
Contact configuration	Make contact	Change-over contact	
		N.O	N.C
Rated contact voltage	250VAC	250VAC	250VAC
Rated contact current	5A	5A	3A
cos φ	1	1	1
L/R	---	---	---
Frequency (Hz)	50/60	50/60	50/60
Schematics for contact loading <small>*according to Tab 13 of EN 61810-1: 2004</small>	Single-pole: a	Single-pole: o	
Kind of contacts			
Number of cycles for electrical endurance / Frequency of operation	100,000	100,000	
	1200Cycles/h	1200Cycles/h	
Number of cycles for mechanical endurance / Frequency of operation	1,000,000	1,000,000	
	18,000Cycles/h	18,000Cycles/h	
Duty factor	50%		
Type of interruption	Micro-disconnection		
Insulation resistance	≥ 1,000M Ω (500VDC)		

TÜV Rheinland Group

12.12.2008

Kenny Shi

Date

Name

Signature

Certificate No. R50143457 0001-0002 Our Reference 01-KSH-15030126 001 Appendix No. 1

**Constructional Data Form (CDF) All-or-Nothing Electromechanical Relays** Page 2 of 3

\* 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	0,45w							0,2w						
	03	05	06	09	12	18	24	03	05	06	09	12	18	24
Coil resistance (at 20°C) (Ω) ± 10%	20	55	80	180	320	720	1,280	45	125	180	405	720	1,620	2,880
Frequency for AC (Hz)	---													
Rated power	0,45w; 0,2w													
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> : 1,000VAC(50/60Hz) for 1min <i>live parts - outside</i> : ---
Minimum creepage distances	<i>coil-contact</i> : 10,0mm <i>contact - contact</i> : --- <i>across open contact</i> : 1,5mm <i>live parts - outside</i> : ---
Minimum clearances	<i>coil-contact</i> : 8,0mm <i>contact - contact</i> : --- <i>across open contact</i> : 0,3mm <i>live parts - outside</i> : ---

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

Insulation: <i>U<sub>i</sub> = 250V, OV-cat. II</i> <i>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 ~ +70°C
Minimum mounting distance	H: 3 mm V: 3 mm
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
<b>Terminals</b>	
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	Copper Alloy 62%/---
Required preparation of the conductor	1

Plastic Parts				
Part	Material name	Type designation	RTI (minimum)	Material Group
Cover	PBT	420SEO	130	IIIa
Bobbin	PBT	420SEO	130	IIIa
Push rod	PPS	R-4	130	IIIa

Type Nomenclature:  
 SJE-x-1yzuv-w-t  
 Basic designation: SJE  
 x stands for sealed type: S means standard 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.  
 z stands for rated coil power: D means 0,45w;L means 0,20w.  
 u stands for contact type: blank means change-over contact; M means make contact.  
 v stands for contact material: blank means AgSnO<sub>2</sub>;1 means AgCdO.  
 w stands for insulation class: F means class F; B means class B; blank means general type.  
 t means special parameter: blank means standard type; letter or number means special requirement which not affect constructions.

TÜV Rheinland Group

12.12.2008

Kenny Shi

Date

Name



Signature