

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50142423

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0001

Ihr Zeichen <i>Client Reference</i>	Unser Zeichen <i>Our Reference</i>	Ausstellungsdatum	<i>Date of Issue</i> (day/mo/yr)
C.C.G	01-KSH- 15029900 001	25.12.2008	

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*

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	: SH-x-lyDuv-w-t (SANYOU)	5
	x,y,u,v,w,t = See appendix 1	6
Rated Coil Voltage	: DC 5V;6V;9V;12V;18V;24V or 48V	
Rated Coil Power	: 0,36W	
Ambient Temperature	: -40°C to +85°C	
Contact Loads	: 5A 250VAC	
	5A 30VDC	
Electrical Endurance	: 100 000	
Mechanical Endurance	: 10 000 000	
Type of Interruption	: Micro-Disconnection	
Insulation System between Coil and Contact	: Basic 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.

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

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
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0002

Ihr Zeichen *Client Reference*
C.C.G

Unser Zeichen *Our Reference*
01-KSH- 15029900 001

Ausstellungsdatum
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Date of Issue
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Zertifiziertes Produkt (Geräteidentifikation)
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Lizenzentgelte - Einheit
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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 250V
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 BEA.



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

Dipl.-Ing. G. Reimann

Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50142423

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0003

Ihr Zeichen Client Reference
C.C.G

Unser Zeichen Our Reference
01-KSH- 15029900 001

Ausstellungsdatum
25.12.2008

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.
Erhuan Road, Xitou Industrial Zone
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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) [®]

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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.

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Certificate No. R50142423 0001-0003 Our Reference 01-KSH-15029900 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: SH-x-1yDuv-w-t

Kind of device: Electromechanical Elementary Relay

Specification (contact-circuit)

Contact material	AgSnO ₂ or AgCdO					
Contact configuration	Make; Break; Change-over					
Rated contact voltage	250VAC			30VDC		
Rated contact current	5A			5A		
cos φ	1			---		
L/R	---			0		
Frequency (Hz)	50			---		
Schematics for contact loading <small>*according to Tab 13 of EN 61810-1: 2004</small>	Single-pole: a; b; o			Single-pole: a; b; o		
Kind of contacts						
Number of cycles for electrical endurance / Frequency of operation	100,000 1,200Cycles/h*			100,000 1,200Cycles/h		
Number of cycles for mechanical endurance / Frequency of operation	10,000,000 18000Cycles/h			10,000,000 18000Cycles/h		
Duty factor	50%			50%		
Type of interruption	Micro-disconnection			Micro-disconnection		
Insulation resistance	≥100MΩ (500VDC)					

TÜV Rheinland Group

25.11.2008

Kenny Shi

Date

Name

Signature

Certificate No. R50142423 0001-0003 Our Reference 01-KSH-15029900 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: **5A; 250VAC; 100 000 cycles** was 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	48
Coil resistance (at 20°C) (Ω) ± 10%	70	100	225	400	900	1,600	6,400
Frequency for AC (Hz)	---						
Rated power	0,36W						
Operative range	<input type="checkbox"/> class 1: 80% to 110% of rated coil voltage <input type="checkbox"/> class 2: 85% to 110% of rated coil voltage <input checked="" type="checkbox"/> other: declared: 75% to 130% of rated coil voltage						
Thermal insulation class	B						

Specification (general)

Overvoltage category	II		
Pollution degree	2		
Test voltages	<i>coil-contact</i> : 2,000VAC(50/60Hz)for 1min <i>contact - contact</i> : --- <i>across open contact</i> : 1,000 VAC(50/60Hz)for 1min <i>live parts - outside</i> : ---		
Minimum creepage distances	<i>coil-contact</i> : 2,7mm <i>contact - contact</i> : --- <i>across open contact</i> : 2,50mm <i>live parts - outside</i> : ---		
Minimum clearances	<i>coil-contact</i> : 2,5mm <i>contact - contact</i> : --- <i>across open contact</i> : 0,30mm <i>live parts - outside</i> : ---		
Insulation: <i>U_i = 250V, OV-cat. II</i> <i>Material gr. IIIa, Poll. deg. 3</i>	<i>coil-contact</i> : <input checked="" type="checkbox"/> basic <i>contact - contact</i> : <input type="checkbox"/> basic <i>across open contact</i> : <input checked="" type="checkbox"/> micro <i>live parts - outside</i> : <input type="checkbox"/> basic	<input type="checkbox"/> reinforced <input type="checkbox"/> reinforced <input type="checkbox"/> full <input type="checkbox"/> reinforced	<input type="checkbox"/> NA <input checked="" type="checkbox"/> NA <input type="checkbox"/> NA <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 3

Minimum mounting distance	H: 3 mm	V: 3 mm	
Relay technology category	<input type="checkbox"/> RT 0 <input type="checkbox"/> RT III	<input type="checkbox"/> RT I <input type="checkbox"/> RT IV	<input checked="" type="checkbox"/> RT II <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 Solder terminals for PCB mounting 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	Brass(>70%Cu)
Required preparation of the conductor	1

Plastic Parts

Part	Material name	Type designation	RTI (minimum)	Material Group
Cover	PBT	G2830(b)	140	III
Bobbin	PBT	G2830(b)	140	III
Base	PBT	G2830(b)	140	III

Type Nomenclature:

SH-x-1yDuv-w-t

Basic designation: SH

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

D stands for rated coil power: D means 0.36w

u stands for contact form: M means make contact; B means break contact; blank means change-over contact

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

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

t means special parameter: blank means standard type; letter or number means special requirement which don't affect constructions.

TÜV Rheinland Group

25.11.2008

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