

Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50138321

Blatt Page
0001

Ihr Zeichen Client Reference
F.T.N

Unser Zeichen Our Reference
01-KSH- 15029025 001

Ausstellungsdatum
31.10.2008

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	: SFK-1yDMv-w-t (SANYOU) y,v,w,t = See appendix 1	5 4
Rated Coil Voltage	: DC 3V;5V;6V;9V;12V;18V or 24V	
Rated Coil Power	: 0,9W	
Ambient Temperature	: -40°C to +85°C	
Contact Loads	: AC 250V Making: 80A for 300ms;cos phi=0,7 Breaking: 20A;cos phi=0,9	
Electrical Endurance	: 100 000	
Mechanical Endurance	: 2 000 000	
Type of Interruption	: Micro-Disconnection	
Insulation System between Coil and Contact	: Reinforced Insulation	

Continued on page 0002

ANLAGE (Appendix): 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.



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

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Zertifikat Nr. *Certificate No.*
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0002

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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 : Making: 80A for 300ms;cos phi=0,7
Breaking: 20A;cos phi=0,9

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

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Dipl.-Ing. G. Reimann

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Zertifikat Nr. *Certificate No.*
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F.T.N	01-KSH- 15029025 001	31.10.2008	

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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
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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



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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*

Geprüft nach *Tested acc. to*
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Zertifiziertes Produkt *(Geräteidentifikation)*
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as page 0001-0002

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Certificate No. R50138321 0001-0004 Our Reference 01-KSH-15029025 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

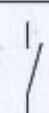
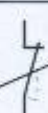
Factory2 : Dongguan Sanyou Electrical Appliances Co., Ltd
 (full address) Erhuan Road, Xitou Industrial Zone, Houjie Town, Dongguan City, Guangdong 523952, P.R. China

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

Type or Model Number: SFK-1yDMv-w-t

Kind of device: Electromechanical Elementary Relay

Specification (contact-circuit)

Contact material	AgSnO ₂	
Contact configuration	Make contact	
	Making	Breaking
Rated contact voltage	250VAC	250VAC
Rated contact current	80A for 300ms	20A
cos φ	0,7	0,9
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 1200 Cycles/h	
Number of cycles for mechanical endurance / Frequency of operation	2,000,000 18,000 Cycles/h	
Duty factor	50%	

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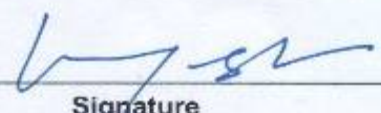
23.09.2008

Kenny Shi

Date

Name

Signature



Certificate No. R50138321 0001-0004 Our Reference 01-KSH-15029025 001 Appendix No. 1

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

Type of interruption	Micro-disconnection
Insulation resistance	≥1,000M Ω (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 (Rated coil voltage) <input checked="" type="checkbox"/> DC <input type="checkbox"/> AC	03	05	06	09	12	18	24
Coil resistance (at 20°C) (Ω) ± 10%	10	27.80	40	90	160	360	640
Frequency for AC (Hz)	---						
Rated power	0.9W						
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> : 4,500VAC(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> : 7,0mm <i>contact - contact</i> : --- <i>across open contact</i> : 4,5mm <i>live parts - outside</i> : ---																
Minimum clearances	<i>coil-contact</i> : 7,0mm <i>contact - contact</i> : --- <i>across open contact</i> : 0,5mm <i>live parts - outside</i> : ---																
Insulation: <i>U_i = 250V, OV-cat. II</i> <i>Material gr. IIIa, Poll. deg. 3</i>	<table border="0"> <tr> <td><i>coil-contact</i> :</td> <td><input type="checkbox"/> basic</td> <td><input checked="" type="checkbox"/> reinforced</td> <td><input type="checkbox"/> NA</td> </tr> <tr> <td><i>contact - contact</i> :</td> <td><input type="checkbox"/> basic</td> <td><input type="checkbox"/> reinforced</td> <td><input checked="" type="checkbox"/> NA</td> </tr> <tr> <td><i>across open contact</i> :</td> <td><input checked="" type="checkbox"/> micro</td> <td><input type="checkbox"/> full</td> <td><input type="checkbox"/> NA</td> </tr> <tr> <td><i>live parts - outside</i> :</td> <td><input type="checkbox"/> basic</td> <td><input type="checkbox"/> reinforced</td> <td><input checked="" type="checkbox"/> NA</td> </tr> </table>	<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
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Constructional Data Form (CDF) All-or-Nothing Electromechanical Relays Page 3 of 3

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	Contact terminal
Type of terminals	<input type="checkbox"/> Screw terminals and screwless terminals <input checked="" type="checkbox"/> Flat quick-connect terminations: 6,3X0,8mm <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	Tin plated copper alloy
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
Base	PBT	420SEO	130	IIIa

Type Nomenclature:

Basic designation: SFK-1yDMv-w-t

1 stands for number of poles: 1 pole;

y stands for rated coil voltage(VDC):03;05;06;09;12;18;24;

D stands for rated coil power: 0.9W;

M stands for contact type: form A;

v stands for terminal type: blank means standard type; P means PCB type;

w stands for insulation class: 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.

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