

Zertifikat Certificate



Zertifikat Nr. Certificate No.
R 50321593

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0001

Ihr Zeichen Client Reference	Unser Zeichen Our Reference	Ausstellungsdatum	Date of Issue (day/month/year)
SL-4500-1	ZJL-YTS- 50033686 001	13.10.2015	

Genehmigungsinhaber License Holder
Sato Parts Co., Ltd.
3-3-3 Ebisu
Shibuya-ku, Tokyo
150-0013 JAPAN

Fertigungsstätte Manufacturing Plant
Sato Parts Co., Ltd.
Kasukabe Factory
8-4 Minami-Sakae-cho
Kasukabe-shi, Saitama
344-0057 JAPAN

Prüfzeichen Test Mark

Geprüft nach Tested acc. to
EN 61984:2009



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Connector Connector with screwless terminals

Type Designation:	SL-4500-b-c-d	5
	b = (see Appendix 1)	1
	c = 2 - 5 followed by P	1
	d = (see Appendix 1)	
Number of Poles (c):	2 to 5	
Rated Operational Voltage:	AC/DC 300V	
Rated Operational Current:	10A max. / contact	
Overvoltage Category:	III	
Pollution Degree:	3	
Protection Degree:	IP20 (mated condition and installed in an enclosure or equipment.)	
Temperature Range:	-20°C to +105°C	
Ambient Temperature at rated current:	max. 85°C	
Rated Connecting Capacity for flex. wire:	AWG24 - AWG14	
for rigid wire:	AWG26 - AWG14	

ANLAGE (Appendix): 1.0

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

Vilmos Sztaroveczki

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg
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.*
R 50321593

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Ihr Zeichen *Client Reference*
SL-4500-1

Unser Zeichen *Our Reference*
ZJL-YTS- 50033686 001

Ausstellungsdatum
24.09.2015

Date of Issue
(day/mo/yr)

Genehmigungsinhaber *License Holder*
Sato Parts Co., Ltd.
3-3-3 Ebisu
Shibuya-ku, Tokyo
150-0013 JAPAN

Fertigungsstätte *Manufacturing Plant*
Sato Parts Co., Ltd. Niigata Factory
2255-2 Torigoe
Nagaoka-shi, Niigata
940-2316 JAPAN

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*
EN 61984:2009



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Connector Connector with screwless terminals

Addition

Factory: (see above)

ANLAGE (Appendix): 1.0

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



Zertifizierungsstelle

Vilmos Sztaroveczki

Zertifikat *Certificate*



Zertifikat Nr. *Certificate No.*
R 50321593

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0003

Ihr Zeichen *Client Reference*
TUV-ADD-CH

Unser Zeichen *Our Reference*
ZJL-MAA- 50033686 001

Ausstellungsdatum
27.09.2016

Date of Issue
(day/mo/yr)

Genehmigungsinhaber *License Holder*
Sato Parts Co., Ltd.
3F Sanyu Bldg. 3-42-1, Hongo
Bunkyo-ku, Tokyo
113-0033 Japan

Fertigungsstätte *Manufacturing Plant*
Sato Parts Co., Ltd. Niigata Factory
2255-2 Torigoe
Nagaoka-shi, Niigata
940-2316 Japan

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*
EN 61984:2009

Zertifiziertes Produkt (*Geräteidentifikation*)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Connector Connector with screwless terminals

Change

Address of
License Holder: 3-3-3 Ebisu, Shibuya-ku, Tokyo
150-0013 JAPAN

changed to: (see above)



Zertifizierungsstelle

Vilmos Sztaroveczki

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 Certificate



Zertifikat Nr. *Certificate No.*
R 50321593

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Ihr Zeichen <i>Client Reference</i>	Unser Zeichen <i>Our Reference</i>	Ausstellungsdatum	<i>Date of Issue</i> (day/month/year)
Factory-Del-Kasukabe	ZJL-MAA- 50033686 001	27.01.2017	

Genehmigungsinhaber *License Holder*
Sato Parts Co., Ltd.
3F Sanyu Bldg. 3-42-1, Hongo
Bunkyo-ku, Tokyo
113-0033 Japan

Fertigungsstätte *Manufacturing Plant*
Sato Parts Co., Ltd. Niigata Factory
2255-2 Torigoe
Nagaoka-shi, Niigata
940-2316 Japan

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*
EN 61984:2009



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Connector Connector with screwless terminals

Change

Factory: Sato Parts Co., Ltd.
Kasukabe Factory
8-4 Minami-Sakae-cho
Kasukabe-shi, Saitama
344-0057 JAPAN

withdrawn

Remark: Replaces R 50321593 page 0004, dated 17.01.2017.



*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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Zertifizierungsstelle

Dipl.-Ing. (FH) F. Becker

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Zertifikat *Certificate*



Zertifikat Nr. *Certificate No.*
R 50321593

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Ihr Zeichen *Client Reference*
ADD-CH

Unser Zeichen *Our Reference*
ZJL-MAA- 50033686 001

Ausstellungsdatum
27.02.2020

Date of Issue
(day/mo/yr)

Genehmigungsinhaber *License Holder*
Sato Parts Co., Ltd.
3-3-8, Sotokanda,
Chiyoda-ku, Tokyo
101-0021 Japan

Fertigungsstätte *Manufacturing Plant*
Sato Parts Co., Ltd. Niigata Factory
2255-2 Torigoe
Nagaoka-shi, Niigata
940-2316 Japan

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*
EN 61984:2009



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Connector Connector with screwless terminals

Change

Address of
License Holder: 3F Sanyu Bldg. 3-42-1, Hongo
Bunkyo-ku, Tokyo
113-0033 Japan

changed to: (see above)



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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Zertifizierungsstelle

Dipl.-Ing. (FH) F. Becker

Constructional Data Form for Connector

License holder: Sato Parts Co., Ltd.
3-3-3 Ebisu, Shibuya-ku, Tokyo 150-0013 Japan

Factory: Sato Parts Co., Ltd.
(Full address) Kasukabe Factory 8-4 Minami-Sakae-cho, Kasukabe-shi, Saitama 344-0057 Japan
Sato Parts Co., Ltd. Niigata Factory
2255-2 Torigoe Nagaoka-shi, Niigata 940-2316 Japan

Type or Model Number: **SL-4500 series**

Kind of device: **Connector with screwless terminal**

Specifications	
Type designation	SL- 4500 series
Contact material	Pin/male contacts: Copper Alloy / Au & Ni-plating Socket/female clamping contacts: Copper Alloy / Au & Ni-plating
Number of poles	2 – 5 (SL-4500-AS, SL-4500-ASV, SL-4500-ASH, SL-4500-AP, SL-4500-AJ, SL-4500-ASJV, SL-4500-ASJH : 2 – 5 / SL-4500-ASF, SL-4500-ASJF : 2 – 3)
Rated voltage	AC/DC 300V
Rated current	10A max. / contact
Upper limit temperature	+105°C
Lower limit temperature	-20°C
Reference ambient temperature at rated current	-20°C to +85°C
IP degree	IP20 (mated condition and installed in an enclosure or equipment.)

TÜV Rheinland

Ebisu

2015-10-6

(Place)

(Date)

Sato Parts Co., Ltd.

H.Kinoshita

H. Kinoshita

2015-10-06

(Date)

(Signature)

(Stamp and Signature of Applicant)

Constructional Data Form for Connector

Classification	
Kind of equipment	<input checked="" type="checkbox"/> Connector without breaking capacity (COC) <input type="checkbox"/> Connector with breaking capacity (CBC)
Existence of an enclosure	<input checked="" type="checkbox"/> Unenclosed connector <input type="checkbox"/> Enclosed connector <input type="checkbox"/> Connector for class II equipment
Design of the connector	<input checked="" type="checkbox"/> Fixed connection Mounting: <input checked="" type="checkbox"/> Panel <input type="checkbox"/> PCB <input type="checkbox"/> other: <input checked="" type="checkbox"/> Free connector
Additional characteristics	<input type="checkbox"/> PE contact <input type="checkbox"/> Cable clamp <input type="checkbox"/> Interlock <input type="checkbox"/> Non-rewirable connector <input checked="" type="checkbox"/> Rewirable connector
Operating cycles	<input type="checkbox"/> 10 <input type="checkbox"/> 50 <input checked="" type="checkbox"/> 100 <input type="checkbox"/> 500 <input type="checkbox"/> 1 000 <input type="checkbox"/> 5 000: <input type="checkbox"/> other:
Bendings	<input type="checkbox"/> 100 <input type="checkbox"/> 500 <input type="checkbox"/> 1 000 <input type="checkbox"/> 2 000 <input type="checkbox"/> 5 000 <input type="checkbox"/> 20 000 <input checked="" type="checkbox"/> other N/A
Number of terminal	<input type="checkbox"/> Single terminal devices <input checked="" type="checkbox"/> Multiway terminal devices
Protection against electric shock	<input checked="" type="checkbox"/> Devices without protection <input type="checkbox"/> Devices with protection
Method of making the connection	<input type="checkbox"/> With a general purpose tool <input type="checkbox"/> With a special tool <input checked="" type="checkbox"/> By hand
Type of terminals	<input type="checkbox"/> Wrapped connections <input type="checkbox"/> Solder terminals <input type="checkbox"/> Clip connections <input type="checkbox"/> Crimped connections <input type="checkbox"/> Insulation displacement connections <input type="checkbox"/> Press-in connections <input checked="" type="checkbox"/> Screwless terminals <input type="checkbox"/> Screw terminals <input type="checkbox"/> Flat, quick connect terminations <input type="checkbox"/> other:
Terminal designation	Wire to wire
Spec. Tightening torque	N/A
Conductor type and rated cross section	Flex : 0.2 mm ² – 2.0 mm ² (AWG 24 - 14) Rigid : ϕ 0.4 mm – ϕ 1.6 mm (AWG 26 - 14)
Required preparation of the conductor	None
Max. Stripping length	10.0 mm
Max. Number of conductors per terminal	1

TÜV Rheinland

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(Date)

Sato Parts Co., Ltd.

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2015-10-06

(Date)

(Signature)

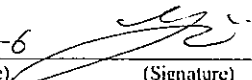
(Stamp and Signature of Applicant)

Constructional Data Form for Connector

Insulation Coordination	
Overvoltage category	III / 4.0kVpk
Pollution degree	3
Insulation voltage	300V
Test voltages	Contact – Contact: 2210 Vrms Contacts – Enclosure: 2210 Vrms
Minimum creepage distances (mated condition)	Live contact – Live contact : 4.23 mm Live contact – outside (release button) : 7.64 mm Live contact – outside (mounting surface) : 9.78 mm
Minimum clearance distances (mated condition)	Live contact – Live contact : 4.08 mm Live contact – outside (release button) : 7.64 mm Live contact – outside (mounting surface) : 9.14 mm
Insulation system (IEC 60664-1)	Live contact – Live contact : <input checked="" type="checkbox"/> basic <input type="checkbox"/> reinforced <input type="checkbox"/> NA Live contact – outside : <input checked="" type="checkbox"/> basic <input type="checkbox"/> reinforced <input type="checkbox"/> NA

Insulating Materials						
Part	Type	Manufacturer	RTI	Flammability	Material Group	Approval
Housing / Body	PA66 A30SFN31	LANXESS AG	105	V-0	I	UL E245249
Wire release button	PPE/PS LN60	MITSUBISHI ENGINEERING PLASTICS	65	V-0	I	UL E41179

TÜV Rheinland

2015-10-6
 (Date) 
 (Signature)

Ebisu

(Place)

Sato Parts Co., Ltd.

H.Kinoshita

(Stamp and Signature of Applicant)

2015-10-6

(Date)



Constructional Data Form for Connector

TYPE NOMENCLATURE:

SL-4500	-AS	-5P	-z
(a)	(b)	(c)	(d)

(a) - Basic Construction

(b) - Type

AS: Relay type

ASV: Relay type with mounting block for vertical fixation

ASH: Relay type with mounting block for horizontal fixation

ASF: Relay type with flange for panel mounts

AP: Connector, use a part of AS, ASV, ASH, ASF (Plug)

AJ: Connector, use a part of AS (Receptacle)

ASJV: Connector, use a part of ASV (Receptacle)

ASJH: Connector, use a part of ASH (Receptacle)

ASJF: Connector, use a part of ASF (Receptacle)

(c) - Number of poles

AS, ASV, ASH, AP, AJ, ASJV, ASJH : 2 thru 5 followed by P
 ASF, ASJF : 2 thru 3 followed by P

(d) - Color code (Minor suffix)

Blank or maximum 15 digit(s) number and/or letters such as drawing numbers.
 Example; Specified drawing number that denote specified colors of the body.

Note: Dashes are optional.

TÜV Rheinland

2015-10-06

(Date)


 (Signature)

Ebisu

(Place)

Sato Parts Co., Ltd.

2015-10-6

(Date)

H. Kinoshita



(Stamp and Signature of Applicant)