

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50367780

Blatt *Sheet*
0004

Ihr Zeichen *Client Reference*
K.S.

Unser Zeichen *Our Reference*
ZJL-MAS-50051838 003

Ausstellungsdatum *Date of Issue*
06.07.2022 (day/mo/yr)

Genehmigungsinhaber *License Holder*

Hirose Electric Co., Ltd.
2-6-3 Nakagawa-Chuo, Tsuzuki-ku
Yokohama-shi, Kanagawa
224-8540 Japan

Fertigungsstätte *Manufacturing Plant*

Koriyama Hirose Electric Co., Ltd.
87-3 Okawara
Koriyama-shi, Fukushima
963-8828 Japan

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

EN 61984:2009
IEC 61984:2008

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

**Lizenzentgelte - Einheit
*License Fee - Unit***

Connector as page 0001

Addition

for Type Designation DF63Wx-yEP-3.96Cz (Plug)
DF63Wx-yS-3.96Cz (Socket)

value for suffix y: 6

Classification: COC (Mechanical Endurance: 30 times)
Number of Poles: 6
Rated Voltage: AC/DC 300V
Rated Current: (see Appendix 1.2)
Overvoltage Category: II
Pollution Degree: 2
IP-degree: IP67
Max Ambient Temperature: +75°C
Upper Limit Temperature: +105°C
Lower Limit Temperature: -55°C



ANLAGE (Appendix): 1.2

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.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

http://www.tuv.com/safety E-mail: markcheck@tuv.com
Fax: +49 221 806-3935

Zertifizierungsstelle

Dipl.-Ing. (FH) F. Becker

Constructional Data Form for Connector

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License holder: Hirose Electric Co., Ltd.
2-6-3 Nakagawa Chuoh, Tsuzuki-ku, Yokohama 224-8540 Japan

Factory: Koriyama Hirose Electric Co., Ltd.
(Full address) 87-3 Okawara, Koriyama-shi, Fukushima 963-8828 Japan

Type or Model Number: **DF63Wx-yEP-3.96Cz, DF63Wx-yS-3.96Cz**
DF63-vwz, DF63W-vwz

Kind of device: **Connectors**

Specifications						
Type designation	DF63Wx-yEP-3.96Cz, DF63Wx-yS-3.96Cz, DF63-1618PCF(zz) DF63-vwz, DF63W-vwz					
Contact material	Copper alloy, tin plating					
Number of poles	6 poles maximum					
Rated voltage	AC / DC 300 V					
Rated current	Unit: A					
	AWG SIZE	2 poles	3 poles	4 poles	5 poles	6 poles
	AWG #16	14	13	12	10	10
	AWG #18	11	10	9	8	8
	AWG #20	11	8	7	7	7
	AWG #22	9	7	6	6	6
Mechanical endurance	30 times					
Classification	☐ CBC ☒ COC (Non CBC) ☐ other					
Number of bendings (non-rewirable terminals only)	N/A					
Upper limit temperature	105°C					
Lower limit temperature	-55°C					
Maximum ambient temperature at rated current	75°C					

TÜV Rheinland

29 June 2022

(Date)

In Masuda

(Signature)

Tokyo, Japan

(Place)

Hirose Electric Co., Ltd.

Kenichi SATO

Kenichi SATO

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Constructional Data Form for Connector

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Classification of Connectors ☒ COC ☐ CBC						
Type of connector	Style	Enclosure		Cable Clamp		Function
Socket	☒ Free Connector ☐ Fixed Connector	☒ Enclosed ☐ Un-enclosed	☒ Hand Back Safety mated ☐ Hand Back Safety unmated ☒ Finger Safety mated ☐ Finger Safety unmated ☒ IP67 mated ☐ IP00 unmated	☐ with ☐ with additional insulation bushing ☒ without	Applicable Cable Size Range: N/A	☐ with PE ☒ without PE
		*1) Protection class mated: ☐ Class I ☒ Class II ☐ N/A				☐ with interlock ☒ without interlock
Plug	☒ Free Connector ☐ Fixed Connector	☒ Enclosed ☐ Un-enclosed	☒ Hand Back Safety mated ☐ Hand Back Safety unmated ☐ Finger Safety mated ☒ Finger Safety unmated ☒ IP67 mated ☐ IP20 unmated	☐ with ☐ with additional insulation bushing ☒ without	Applicable Cable Size Range: N/A	☐ with PE ☒ without PE
		*1) Protection class mated: ☐ Class I ☒ Class II ☐ N/A				☐ with interlock ☒ without interlock

Remark: *1)The protection class of components is dependent upon the equipment in which they are used, these connectors are intended for class I equipment normally.

Insulation Coordination	
Overvoltage category	II
Pollution degree	2
Insulation voltage	AC/DC 300V
withstand voltage	Live Contact – Live Contact : 1.39 KVrms Live Contact – case:2.21kVrms
Minimum creepage distances (mated)	Live Contact – Live Contact(terminal of socket): 4.9 mm (3.2mm) Live Contact – case:13.03 mm(6.4mm)
Minimum clearance distances (mated)	Live Contact – Live Contact(terminal of socket): 3.3 mm (1.5mm) Live Contact – case :10.36 mm(3.0mm)

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Constructional Data Form for Connector

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Insulation Construction (IEC 60664-1)	Contact – Contact : ☒ basic	☐ reinforced	☐ NA
	Live Contact - case : ☐ basic	☒ reinforced	☐ NA

Specifications of Terminals / Connection _ ☒ Rewirable ☐ Non-rewirable	
Type of terminals	☒ Crimp
Terminal designation	Marking : 1, 2, 3, 4, 5, 6
Spec. Tightening torque	N/A
Rated cross section of conductor	1.317mm ² - 0.342 mm ² (AWG#16 – AWG#22)
Type of conductor	Flexible
Required preparation of the conductor	N/A
Max. Stripping length	3.6mm
Max. Number of conductors per terminal	1

Materials			
Type designation	See Nomenclature		
Contact material	Copper alloy, tin plating		
Contact block (housing)		Plug	Socket
	Insulator (Front)	PBT: Black : 4130-104K	
	Insulator (Rear)	Chang Chung Plastics Co., LTD	
*2) Cord Anchorage sealing material for IP67 protection	Insulation Bushing	Silicone rubber	
	Backshell and clamping units	Silicone rubber	

*2) ~~Parts for Secure Cord Anchorage:~~

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Constructional Data Form for Connector

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TYPE NOMENCLATURE:

1. Plug

Example: DF63Wx – y EP – 3.96 C z

(i) (ii) (iii) (iv) (v) (vi)

(i) x=Shape

None : Standard type

A : Different Applicable Cable

R : Different guide key

RA : Different guide key.(Different Applicable Cable)

(ii) y=Number of contacts: 2 to 6

(iii) Contact type

EP: in-line plug

(iv) Contact pitch :3.96mm

(v) Connector type

C: Crimp housing

(vi) z=Customer specifications

none or (01) to (99)

2. Socket

Example: DF63Wx – y S – 3.96 C z

(i) (ii) (iii) (iv) (v) (vi)

(i) x=Shape

None : Standard type

A : Different Applicable Cable

R : Different guide key

RA : Different guide key.(Different Applicable Cable)

(ii) y=Number of contacts: 2 to 6

(iii) Contact type

S: Socket

(iv) Contact pitch :3.96mm

(v) Connector type

C: Crimp housing

(vi) z=Customer specifications

none or (01) to (99)

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Constructional Data Form for Connector

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3. Plug Crimp contact

Example: DF63 – v w z
(i) (ii) (iii)

(i) v=Applicable conductor

1618: AWG16-18

2022: AWG20-22

(ii) w=Packaging

PCF : plug contact , reel

PC : plug contact , bag

(iii) z=none or (01) to (99)

4. Socket Crimp contact

Example: DF63W – v w z
(i) (ii) (iii)

(i) v=Applicable conductor

1618: AWG16-18

2022: AWG20-22

(ii) w=Packaging

SCF : socket contact , reel

SC : socket contact , bag

(iii) z= none or (01) to (99)

End of the documentation

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