

CERTIFICATE OF COMPLIANCE

Certificate Number UL-US-L52653-111-90504102-7
Report Reference E52653-20140509
Date 12-Aug-2022

Issued to: HIROSE ELECTRIC CO., LTD.
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Japan

This is to certify that representative samples of ECBT2 - Connectors for Use in Data, Signal, Control and Power Applications - Component
See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

Standard(s) for Safety: UL 1977, 3rd Ed., Issue Date: 2016-01-07, Revision Date: 2020-11-17

Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Recognized Component Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

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This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description
Series DF13	Component Connector



Bruce Mahrenholz, Director North American Certification Program

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File E52653
Project 4786335909

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REPORT

on

COMPONENT - Connectors for Use in Data, Signal, Control and Power
Applications

Hirose Electric Co Ltd
Kanagawa, Japan

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DESCRIPTION

PRODUCT COVERED:

USR, Component Connector, Series DF13

GENERAL:

These devices are multi-pole connectors intended for factory assembly on copper wire sizes as indicated in Ratings table below or printed wiring boards where the acceptability of combinations is determined by UL LLC. The devices are identified as follows:

* USR - **Products designated USR have been investigated using US requirements as noted in the Test Record.**

RATINGS:

Cat. Nos.	Voltage (Vac)	Ampere (A)	Contact Type	Conductor Sizes, AWG Cu, Str
DF13*-**P-1.25*** (zz), DF13*-**DP-1.25*** (zz)	29.9	1	-	(+)
DF13-**S-1.25*** (zz), DF13*-**DS-1.25*** (zz)	29.9	1	DF13-2630SCF, DF13G-2630SCF, DF13-2630SCFA, DF13G-2630SCFA	30 - 26
			DF13-3032SCF, DF13-3032SCFA,	32 - 30
DF13E-**DP-1.25V (zz) DF13EA-**DP-1.25V (zz)	29.9	1	-	(+)

(*) - Shape Designation

(**) - Number of contacts

(***) - Mounting or wire connection

(zz) - Customer specification

(+) - PCB Mount

NOMENCLATURE:

Series DF13 are designated as follows:

Example:

*DF13	v	-	ww	xx	-	1.25	yy	(zz)
A	B		C	D		E	F	G

- A) Series Name
DF13
- B) Shape Designation
Blank
A,C - Accept emboss package
E - With boss
EA - Without boss
- C) Contact Number
DF13E, DF13EA - 10,20,30,40
DF13, DF13A, DF13C - 2 to 15, 20, 30, 40
- D) Connector Shape
S - Single row socket
P - Single row pin header
DS - Double row socket
DP - Double row pin header (only V mounting)
- E) Contact Pitch
1.25
- F) Mounting or Wire Connection
C - Socket housing, use crimp contact
DSA - Straight contact, dip mount
V - Straight contact, SMT mount
DS - Right angle contact, dip mount
H - Right angle contact, SMT mount
- G) Customer specification (body color, contact plating or packaging)
Blank or (01) thru (99)

NOMENCLATURE Continued:

DF13 Crimp Contact

Example:

DF13	G	-	2630	SCF	A	(zz)
A	B		C	D	E	F

A) Series Name
DF13

B) Shape Designation
Blank
G - Low insertion force configuration (only for 2630 wire size)

C) Applicable Wire Size
2630 - 26 AWG to 30 AWG
3032 - 30 AWG to 32 AWG

D) Contact Type
SFC - Female contact, reel pack

E) Contact Plating
Blank - Tin plating
A - Gold plating

F) Customer Specification (packaging)
Blank or (01) thru (99)

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC.

Conditions of Acceptability - The following are among the considerations to be made when evaluating the device in the end-use product.

Interruption of Current

1. These devices are not suitable for interrupting the flow of current by connecting or disconnecting the mating connector.

Current-Carrying Capability and Current Ratings

2. These devices have been subjected to the Temperature test with the rated currents and maximum temperature rise values tabulated below.

Cat Nos.	Contact	AWG	Current, A	Maximum Temperature Rise, °C
DF13-15P-1.25DSA mated with DF13-15S-1.25C	DF13-2630SCFA	30	1	8.2
DF13-15P-1.25DSA mated with DF13-15S-1.25C	DF13-3032SCFA	32	1	13.5
DF13-40DP-1.25V mated with DF13-40DS-1.25C	DF13-2630SCFA	30	1	11
DF13-40DP-1.25V mated with DF13-40DS-1.25C	DF13-3032SCFA	32	1	16.9
DF13EA-40DP-1.25V(zz) (mated with DF13-40DS- 1.25 for testing purpose only)	N/A	N/A	1	26.5

Terminations

3. The DF13 Sockets (female) devices are not suitable for use other than No. 26-32 AWG flexible cord. The DF13 Plug (male) devices are PCB mount.