CERTIFICATE OF COMPLIANCE

 Certificate Number
 20190813-E52653

 Report Reference
 E52653-19860930

Issue Date 2019-AUGUST-13

Issued to: HIROSE ELECTRIC CO., LTD.

5-23 OSAKI 5-CHOME SHINAGAWA-KU

TOKYO 141-8587 JAPAN

This certificate confirms that representative samples of

COMPONENT - CONNECTORS FOR USE IN DATA, SIGNAL, CONTROL AND POWER APPLICATIONS

Refer Addendum page for Models

Have been investigated 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, Component Connector for Use in Data, Signal,

Control and Power Applications

Additional Information: See the UL Online Certifications Directory at

https://iq.ulprospector.com for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark. Only the UL Follow-Up Services Procedure 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.

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Bruce Mahranholz Director North

Bruce Mahrenholz, Director North American Certification Program

UL LLC

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CERTIFICATE OF COMPLIANCE

Certificate Number 2
Report Reference E
Issue Date 2

20190813-E52653 E52653-19860930 2019-AUGUST-13

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

Component Connector - Series HIF3H:

Pin Header, Cat. Nos. HIF3H, followed by -4, -6, -10, -12, -14, -16, -20, -24, -26, -30, -34, -40, -50, -60 or -70, followed by P, followed by A or B, followed by -2.54, followed by DS or DSA, may be followed by (00) thru (99).

Socket, Cat. Nos. HIF3H, may be followed by A or B, followed by -4, -6, -8, -10, -12, -14, -16, -18, -20, -24, -25, -26, -30, -34, -40, -50, -60, -64 or -70, followed by D or S, may be followed by A or B, followed by -2.54, followed by DS or DSA, may be followed by (00) thru (99).



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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File E52653 Project 4652180

Issued: September 30, 1986 Revised: January 18, 2018

REPORT

on

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

HIROSE ELECTRIC CO., LTD. TOKYO, JAPAN

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File E52653 Vol. 3 Sec. 1 Page 1 Issued: 1986-09-30 and Report Revised: 2019-08-08

PRODUCT COVERED:

USR Component Connector - Series HIF3H:

Pin Header, Cat. Nos. HIF3H, followed by -4, -6, -10, -12, -14, -16, -20, -24, -26, -30, -34, -40, -50, -60 or -70, followed by P, followed by A or B, followed by -2.54, followed by DS or DSA, may be followed by (00) thru (99).

Socket, Cat. Nos. HIF3H, may be followed by A or B, followed by -4, -6, -8, -10, -12, -14, -16, -18, -20, -24, -25, -26, -30, -34, -40, -50, -60, -64 or -70, followed by D or S, **may be** followed by A or B, followed by -2.54, followed by DS or DSA, may be followed by (00) thru (99).

GENERAL:

These devices are multi-pole connectors intended for factory assembly on printed wiring boards where the acceptability of combinations is determined by UL LLC. The devices are identified as follows:

USR indicates investigation to United States Standards, UL 1977.

ELECTRICAL RATINGS:

1 A, voltage rating not determined, see Conditions of Acceptability.

Disconnecting Use - See Sec. Gen. For required markings.

File E52653 Vol. 3 Page 1A Issued: 1986-09-30 Sec. 1 Revised: 2018-11-15 and Report

NOMENCLATURE: The Pin Header, Series HIF3H is designated as follows:

Example:

HIF3H	_	16	Р	А	-	2.54	DS	(71)
А	_	В	С	D	-	E	F	G

A - Basic Construction:

HIF3H: Series HIF3H

B - Number of Contacts:

4, 6, 10, 12, 14, 16, 20, 24, 26, 30, 34, 40, 50, 60 or 70 contacts

C - Pin Header:

P: Pin header

D - Contact Material:

A: Phosphor bronze

B: Brass

E - Contact Pitch:

2.54: 2.54 mm

F - Contact Type:

DS: Right angle type DSA: Straight type

G - Customer Specifications

(00) to (99) or blank: Indicating packaging differences or Insulator material color variations. unless noted otherwise.

Other than (63): Tin or Gold-plated / Employing SABIC insulating materials (63): Tin or Gold-plated / Employing TORAY insulating material

File E52653 Vol. 3 Sec. 1 Page 1B Issued: 1986-09-30 and Report Revised: 2019-08-08

NOMENCLATURE: The Socket, Series HIF3H is designated as follows:

Example:

HIF3H	А	-	16	D	А	_	2.54	DSA	(71)
А	В	_	С	D	E	_	F	G	Н

A - Basic Construction:

HIF3H: Series HIF3H

B - Housing Style:

No Symbol: Standard

A: With mis-insertion preventive guide

B: Similarly, guide position center 1 point type for 50, 60 and 64 contacts

C - Number of Contacts:

4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 25, 26, 30, 34, 40, 50, 60, 64 or 70 contacts

D - Socket, Contact Alignment:

D: Double rows
S: Single row

E - Contact Plated Material Type:

No Symbol: Straight Contact, Plated material type (Contact: All Au plated)

Straight Contact, Plated material type (Contact: Partial Au plated, Mounting area: Sn plated)

B: Right angle Contact, Plated material type (Mounting area: Sn plated)

F - Contact Pitch:

2.54: 2.54 mm

G - Contact Type:

DS: Right angle type DSA: Straight type

H - Customer Specifications

(01) to (99) or blank: Indicating packaging differences or Insulator material color variations unless noted otherwise.

Other than (63): Tin or Gold-plated / Employing SABIC insulating materials

(63): Tin or Gold-plated / Employing TORAY insulating material

File E52653 Vol. 3 Sec. 1 Page 1C Issued: 1986-09-30 and Report New: 2018-01-18

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.

- 1. These devices are not suitable for interrupting the flow of current by connecting or disconnecting the mating connector.
- 2. Delete.
- 3. Spacing between adjacent contacts in the same row is 0.020 in. Spacing between adjacent contacts of different rows is 0.031 in. A max voltage rating of 250 V can be assigned only if every fourth contact in the same row is used, and not both rows at the same time.