

Certificate of Compliance

Certificate Number:

UL-US-L496133-618711-01108102-3

Report Reference:

E496133-20180110

Issue Date:

2024-01-10

Issued to:

**HIROSE ELECTRIC CO., LTD.
2-6-3 NAKAGAWA CHUOH
TSUZUKI-KU YOKOHAMA-SHI, Kanagawa 224-8540
Japan**

This certificate confirms that representative samples of:
XCFR2 - Terminal Blocks - 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.

UL 1059, Edition 5, Issued 2019-11-26, Revised 2022-07-28, UL 486E, 5th Ed., Issue Date: 2015-09-30, Revision Date: 2019-04-02

Additional Information:

See UL Product iQ® 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.



David Piecuch
UL Mark Certification Program Manager



Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact UL Solutions Customer Service at <https://www.ul.com/contact-us>.

CERTIFICATE OF COMPLIANCE

Certificate number UL-US-L496133-618711-01108102-3
Report reference E496133-20180110
Date 2024-01-10

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

Model	Product Description
EF2, followed by -D150, followed by -1 thru -5, may be followed by (01) thru (99).EF2A, followed by -D150B, followed by -1 thru -5, may be followed by (01) thru (99).	Terminal Blocks
EF2, followed by -D250, followed by -1, may be followed by (01) thru (99).EF2A, followed by -D250B, followed by -1, may be followed by (01) thru (99).	Terminal Blocks
EF2, followed by -D30, -D30B or -D30BA, followed by -1, may be followed by (01) thru (99).	Terminal Blocks
EF2, followed by -D400, followed by -1, may be followed by (01) thru (99). EF2A, followed by -D400B, followed by -1, may be followed by (01) thru (99).	Terminal Blocks
EF2, followed by -D60, -D60B or -D60BA, followed by -1, may be followed by (01) thru (99).	Terminal Blocks
EF2, followed by -DH150, followed by -1 thru -5, may be followed by (01) thru (99).EF2A, followed by -DH150B, followed by -1 thru -5, may be followed by (01) thru (99).	Terminal Blocks



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Certificate of Compliance

Certificate Number:

UL-CA-L496133-618911-
01108102-2

Report Reference:

E496133-20180110

Issue Date:

2024-01-10

Issued to:

**HIROSE ELECTRIC CO., LTD.
2-6-3 NAKAGAWA CHUOH
TSUZUKI-KU YOKOHAMA-SHI, Kanagawa 224-8540
Japan**

This certificate confirms that representative samples of:

XCFR8 - Terminal Blocks Certified for Canada - 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.

CSA C22.2 No. 158, 4th Ed., Issue Date: 2023-02-01

Additional Information:

See UL Product iQ® at <https://iq.ulprospector.com> for additional information.

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CERTIFICATE OF COMPLIANCE

Certificate number UL-CA-L496133-618911-01108102-2
Report reference E496133-20180110
Date 2024-01-10

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

Model	Product Description
EF2, followed by -D150, followed by -1 thru -5, may be followed by (01) thru (99).EF2A, followed by -D150B, followed by -1 thru -5, may be followed by (01) thru (99).	Terminal Blocks
EF2, followed by -D30, -D30B or -D30BA, followed by -1, may be followed by (01) thru (99).	Terminal Blocks
EF2, followed by -D60, -D60B or -D60BA, followed by -1, may be followed by (01) thru (99).	Terminal Blocks
EF2, followed by -DH150, followed by -1 thru -5, may be followed by (01) thru (99).EF2A, followed by -DH150B, followed by -1 thru -5, may be followed by (01) thru (99).	Terminal Blocks



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UL Mark Certification Program Manager

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File E496133
Project 4788171127

January 10, 2018

REPORT

on

COMPONENT - TERMINAL BLOCKS

HIROSE ELECTRIC CO., LTD.
Kanagawa, Japan

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DESCRIPTION

PRODUCT COVERED:

USR and CNR Recognized Component - Terminal Blocks,

<Series **EF2-D30, EF2-D30B, EF2-D30BA, EF2-D60, EF2-D60B, and EF2-60BA**>

*- Cat. Nos. EF2, followed by -D30, -D30B, -**D30BA**, -D60, -D60B, **or -D60BA** followed by -1, may be followed by (01) thru (99).

<Series **EF2-D150, EF2-DH150, EF2-D150B and EF2-DH150B**>

- Cat. Nos. EF2, followed by -D150, followed by -1 thru -5, may be followed by (01) thru (99).

- Cat. Nos. EF2A, followed by -D150B, followed by -1 thru -5, may be followed by (01) thru (99).

- Cat. Nos. EF2, followed by -DH150, followed by -1 thru -5, may be followed by (01) thru (99).

- Cat. Nos. EF2A, followed by -DH150B, followed by -1 thru -5, may be followed by (01) thru (99).

GENERAL CHARACTER AND USE:

The terminal blocks covered by this Report are intended for use in the following applications and within the ratings specified.

RATINGS:

Application -

- General industrial (such as motor controllers, pushbutton stations, etc).

Terminal Type -

Cat. No. (Series)	Front (Line)	Back (Load)
*EF2-D30, D30B, D30BA , D60, D60B or D60BA EF2-D150 EF2A-D150B	Push-In Type (Wire Secured by Spring Type Action)	Push-In Type (Wire Secured by Spring Type Action)
EF2-DH150 EF2A-DH150B		Pressure Screw (Stud and Nut)

Type Wiring - Factory and Field wiring.

RATINGS: (CONT'D)

Electrical Ratings -

Series	Wire Range, AWG	Wire Type	FW	Torque, in-lbs (N·m)	Voltage, V	Current, A	UG	CA
EF2-D30, D30B , D30BA	16 - 10, Prepared	CU	2	N/A	600	40	C	2 (105), 4, 5 (#)
EF2-D60, D60B , D60BA	10 - 6, Prepared	CU	2	N/A	600	70		
EF2-D150 EF2A-D150B	4 - 1/0, Prepared	CU	2	N/A	600	175		
EF2-DH150 EF2A-DH150B	4 - 1/0, Prepared	CU	2	Line: N/A	600	175		2 (105), 4, 5 (#)
		CU	2	Load: 53.1 (6.0)	600	175		2 (105), 5
Note (#) Intended to be use with Ring-lug type crimp terminal only.								

Environmental - Maximum ambient temperature rating for CNR: 55°C

NOMENCLATURE:

Example: Cat. No. EF2-D30-1(01)

EF2	-D				30			-1	(01)
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)

A - Basic series name:

EF2: Push the lock pin to unlock.

EF2A: Turn the lock pin to unlock.

B - Mounting type:

-D: DIN-rail mount

C - Variation of attachment type:

None: Spring-force type

D - Wiring Terminal Variation:

None: Normal type (Line/Load: Spring-force)

H: Hybrid type (Line: Spring-force / Load: Pressure Screw)

E - Checker:

None: Without Checker

F - Current Rating:

30: Series EF2-30

60: Series EF2-60

150: Series EF2-150

G - Body color:

None: Black

H - Protector:

None: Without protector

B: With protector

BA: Difference only Base from B type

I - Numbers of pole:

-1: 1 pole for other than Series EF2-150

-1 thru -5: 1 thru 5 poles for Series EF2-150

J - Other specifications: (No-construction issue)

Customer Specifications - (01)-(99) or none, denoting packaging