### **EF2** Series

Supports up to 400A, ZERO SCREW terminal blocks

	Product	400	250	200	150	60	30				
	Push type	-	-	-	-	EF2-D60B-1	EF2-D30B-1				
Part number	Twist type	EF2A-D400B-1	EF2A-D250B-1	EF2A-D200B-1	EF2A-D150B-1	-	-				
	One-sided screw type (Push)	-	-	-	-	EF2-DH60B-1	EF2-DH30B-1				
	One-sided screw type (Twist)	EF2A-DH400B-1	EF2A-DH250B-1	EF2A-DH200B-1	EF2A-DH150B-1	-	-				
Image		٩			۱						
Rated current		400A : 200mm <sup>2</sup> (400MCM)	310A : 150mm <sup>2</sup> (250MCM)	175A : 60mm <sup>2</sup> (AWG#1/0) 240A :100mm <sup>2</sup> (AWG#4/0)	94A : 22mm² (AWG#4) 132A : 38mm² (AWG#2) 175A : 60mm² (AWG#1/0)	40A : 5.5mm <sup>2</sup> (AWG#10) 50A : 8mm <sup>2</sup> (AWG#8) 70A : 14mm <sup>2</sup> (AWG#6)	16A : 1.25mm <sup>2</sup> (AWG#16) 21A : 2mm <sup>2</sup> (AWG#14) 30A : 3.5mm <sup>2</sup> (AWG#12) 40A : 5.5mm <sup>2</sup> (AWG#10)				
Rated voltage			AC 1,000V 、DC1,500V		AC / DC 600V						
Withstanding voltage			5000V AC for 1minute		2500 AC for 1minute						
Contact resistance			0.1mΩ max. (1A DC)		1mΩ max. (1A DC)						
Operating temperature		25 to +105℃ (Including the temperature rising by current flow.)									
Durability		50 times									
Environmental standards		RoHS2 compliant									
Compatible terminal		"R200-16" "R150-16" from Nichifu or JST, from Nichifu or JST, or equivalent terminal or equivalent terminal		"R60-12" or "R100-12" from Nichifu or JST, or equivalent terninal	"R22-12", "R38-12" or "R60-12" from Nichifu or JST, or equivalent terminal	"R5.5-6", "R8-5" or "R14-5" from Nichifu or JST, or equivalent terminal	"R1.25-5", "R2-5", "R3.5-4" or "R5.5-4" from Nichifu or "R1.25", "R2-5", "3.5-R4" or "R5.5-4" from JST, or equivalent terminal				

#### Please choose a terminal with a large hole diameter as much as possible.

1 \*Terminal thickness is important. Using an inappropriate crimp terminal may result in performance degradation and serious accident. Please make sure to use applicable terminals.

# $\underline{\mathsf{EF2}}_{1} - \underline{\mathsf{D}}_{2} + \underline{\mathsf{H}}_{3} + \underline{\mathsf{H50B}}_{4} - \underline{\mathsf{H}}_{6} + \underline{\mathsf{H50B}}_{7}$

	① Series nan EF2 : Push typ EF2A : Twist	-	<b>punt type</b> DIN rail mount e	(3) Connection Blank : Singl H : One-side	e action type	④Current ca sign	apacity	(5) Protect desi Blank=No prote B=With protecti	ction design	Linked qualit (D150 type only)	Blank	<b>e</b> ≕With end plate No end plate
Crimp terminal conformity table												
Current capacity	R1.25	R2	R3.5	R5.5	R8	R14	R22	R38	R60	R100	R150	R200
30	0	0	0	0	×	×	×	×	×	×	×	×
60	×	×	×	0	0	0	×	×	×	×	×	×
150	×	×	×	×	×	×	0	0	0	×	×	×
200	×	×	×	×	×	×	×	×	0	0	×	×
250	×	×	×	×	×	×	×	×	×	×	0	×
400	×	×	×	×	×	×	×	×	×	×	×	0

O: Usable crimp terminals,  $\times$ : Unusable crimp terminals

#### Safety Precautions

- Do not touch the exposed conductor while it is energized. Failure to follow this warning could result an electric shock and injury. - The power to be turned off when inserting or extracting the crimp terminal. **Warnings** - After mating the crimp terminal, pull the cable gently to confirm that it will not be disconnected. If it is not mated correctly, the cable will be

removed. An incomplete mating will cause disconnection or contact failure which lead significant danger \*Please check our Guideline for more detail:

ZERO SCREW $^{
m m}$  Terminal block (EF2 series) special site ightarrow

# **HIROSE ELECTRIC CO., LTD.**

Contact us (JAPAN)

6-3, Nakagawachuo 2-chome, Tsuzuki-ku, Yokohama 224-8540 https://www.hirose.com

JAPAN : Tokyo

ZERO SCREW

♦ CHINA : Shanghai, Shenzhen ,Beijing / ♦ HONG KONG / ♦ TAIWAN / ♦ KOREA ♦ SINGAPORE / ♦ INDIA : Delhi , Bangalore / ♦ MALAYSIA : Penang THAILAND : Bangkok

Search

OSE WORLD WIDE SALES LOCATIO

- U.S.A : Chicago : San Jose , Detroit , Boston , Dallas , Irvine
- ◆ THE NETHERLANDS : Amsterdam / ◆ GERMANY : Stuttgart, Nuremberg, Hanover
- FRANCE : Paris / UNITED KINGDOM / ITALY : Milan



JECA FAIR 2018 57th JECA PRODUCTS AWARD

lonorable





Supports up to 400A, ZERO SCREW terminal blocks

# HIROSE ELECTRIC CO., LTD.

# **The Zero Screw** Solution.

# **ZERO SCREW** terminal block achieves enhanced safety and reduces construction time.

ZERO SCREW terminal block (EF2 Series) can be connectedin a single action without screws. Simply insert the ring terminalto connect. Since a highly reliable contact can be maintained overa long time period, maintenance work is also reduced. It is a newchoice of terminal block that improves the work quality, construction time and the safety of electrical facilities.

**Reduced Electrical Equipment Fire Risk** 

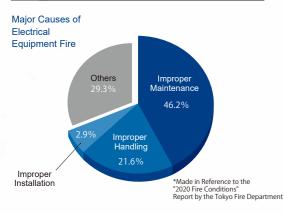
All Rights Reserved.

Ĺ Ĺ

CO.,

Dec.1.2021 Copyright 2021 HIROSE ELECTRIC

Maintains Stable Connection



An electrical fire not only endangers the life of building users, it also lowers trust in developers, construction companies and fire source product suppliers. About 70% of the cause of electrical fires is poor handling and lack of maint enance. More specifically, screw looseness can be identified as the cause of these fires. Period maintenance and inspection of screws is required. Even with periodic maintenance, it is difficult to completely prevent an accident.

The ZERO SCREW terminal block maintains a highly reliable connection for a long time with its unique, screw-less design that reduces fire risk caused by loose screws in electrical equipment to zero.

## Solves the Shortage of Technicians Simply Insert the Contact to Connect

Screw type terminal blocks cause variations in "screw tightening" and "torque management " by different workers

ZERO SCREW terminal block with single insertion achieves stable work quality regardless of workers' ability. Ideal for future staffing where there will be fewer skilled workers.



#### Shortens Construction Time Drastically Reduce All Process Related to Screw

With screw type terminal blocks, screwing and unscrewing is required for new construction and torque checking is needed during maintenance. Since the ZERO SCREW Terminal Block has no screws, it can reduce the number of work hours by more than one-third compared to a conventional screw terminal block for a dramatic reduction in construction time

Work Hours Co with Screw Ter	
* The graph is an examp New construction + main Work hours for single ph	
	New construction Maintenance
Screw Terminal Block	About 90 minutes
ZERO SCREW Terminal Block	About 60 minutes Reduce work time by about 1/3 rd

22: 10-55.0 0 



#### Simply insert to Connect. No screws needed.

Quick and secure single action positive lock design Unlike a conventional screw terminal block, an operator with less experience can easily maintain stable work quality. Visual confirmation of the insertio status from the top after mating ensures safety

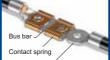
Easy operation



#### Long-term stable connection

Highly Reliable Connection with Unique Contact Spring Design

Unique design presses the ring terminal directly against the busbar for connection, improving contact reliability and maintaining a stable lona-term connection



#### Positive lock

#### Fully Locked State is the **Standard Position**

EF2 is always in a locked state when connected. The safety design prevents the ring terminal from coming out unless the bottom is pressed and the ring terminal is removed. This design also prevents workers from forgetting to lock the connector and the ring terminal from falling out

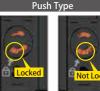
check the







Can visually insertion state from the top after mating.









# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Hirose Electric: EF2A-D200-1 EF2A-DH200-1