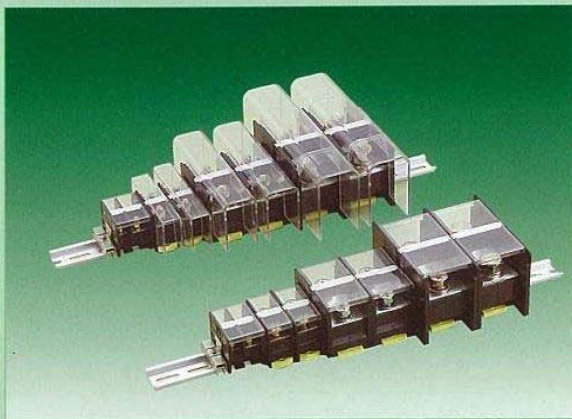
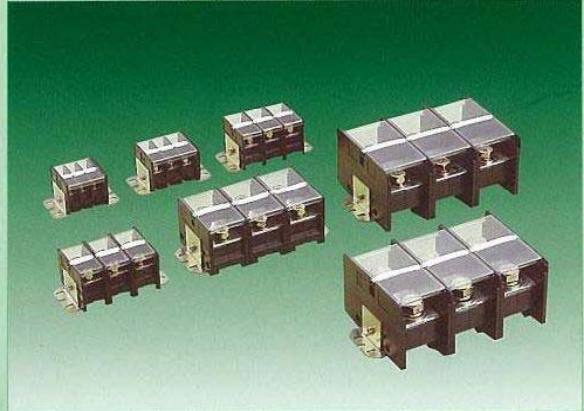


HC-Type Terminal Blocks



SEIKO
ELECTRIC

Table of Contents

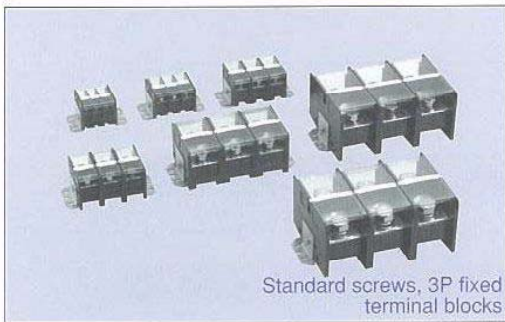
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1. Models (● indicates production model)

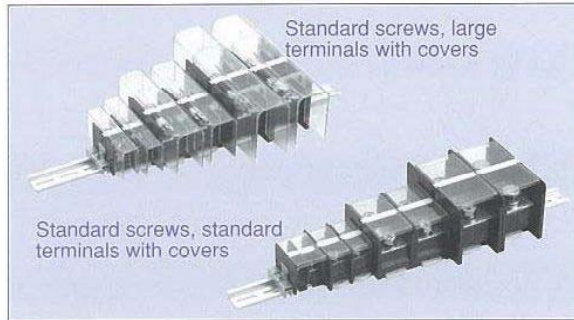
Model	Rated operating current	Supported wire size (max.)	Terminal screw size	Fixed terminal blocks				Rail-mounted terminal blocks			
				Standard screws		Stud screws		Standard screws		Stud screws	
				Standard terminals with covers	Large terminals with covers	Standard terminals with covers	Large terminals with covers	Standard terminals with covers	Large terminals with covers	Standard terminals with covers	Large terminals with covers
HC70	70A	14mm ²	M5	●		●		●		●	
HC90	90A	22mm ²	M6	●		●		●		●	
HC130	130A	38mm ²	M8	●	●	●	●	●	●	●	●
HC175	175A	60mm ²	M8	●	●	●	●	●	●	●	●
HC300	300A	150mm ²	M10	●	●	●	●	●	●	●	●
HC400	400A	250mm ²	M12	●	●	●	●	●	●	●	●
HC600	600A	325mm ²	M16	●	●	●	●	●	●	●	●

* We also offer heat-treating after assembly (see page 10)

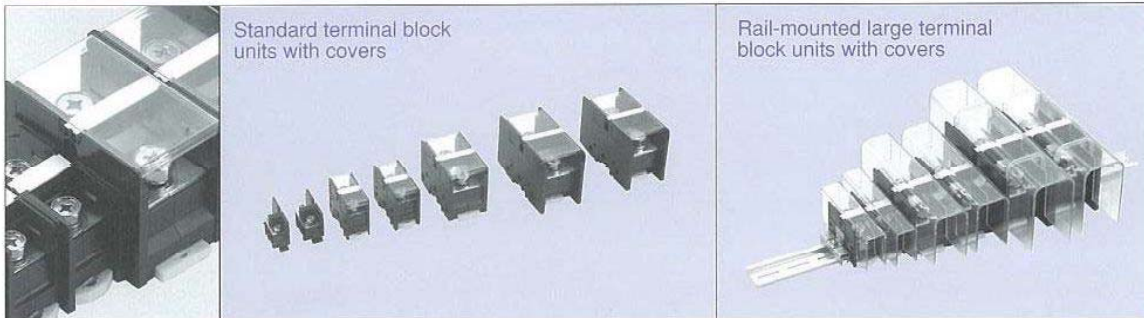
■ Fixed terminal blocks series



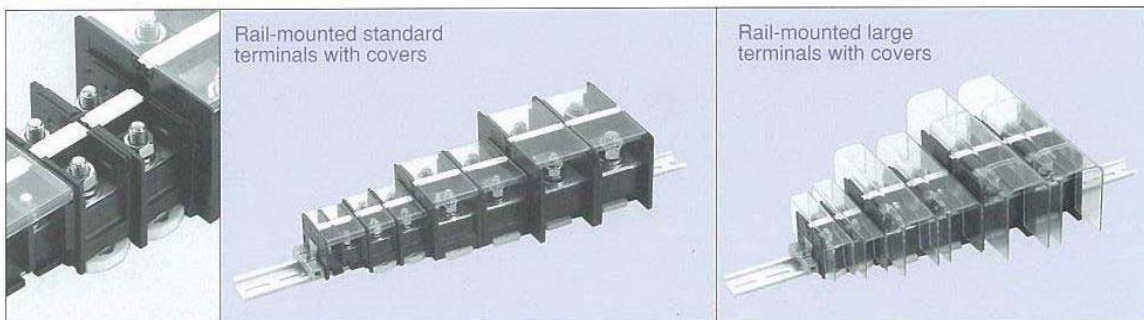
■ Rail-mounted terminal blocks series



■ Standard screw series



■ Stud screw series



2. Performance and characteristics

Standard compliance

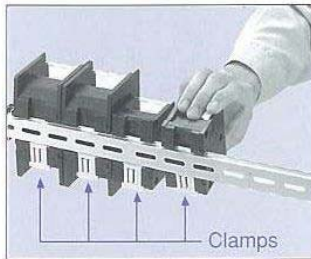
- **JISC2811** (industrial terminal blocks)

Specifications

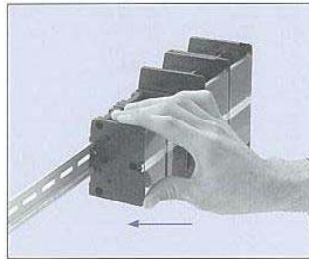
Rated dielectric strength		660V
Insulation resistance		100 M Ω min. (DC500 V megger)
Commercial power voltage resistance		2500 V, 1 minute
Impulse voltage resistance		$\pm 7000V$ 1.2/50 μs
Operating environment	Ambient temperature	-30 ~ +60 $^{\circ}C$ (no condensation)
	Relative humidity	45 ~ 85%
Temperature rise		Conductor increase max. 45 $^{\circ}C$

3. Features

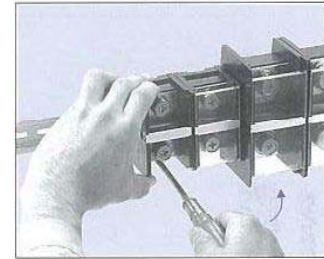
Units can be added and remove from anywhere on the rail



- ① With clamp at bottom, snap top of unit over rail.



- ② Press clamp (bottom) against rail, and clamp hook will lock with rail securely.

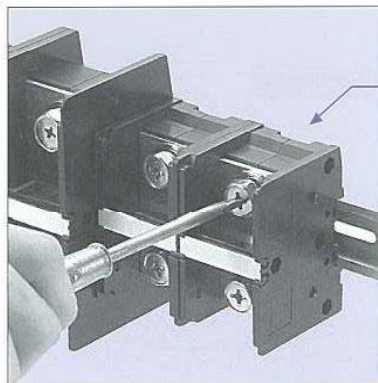


- ③ First, separate from adjacent unit(s). To remove unit, insert blade screwdriver into the clamp slot and pull upward.

Easy-to-use terminal screws



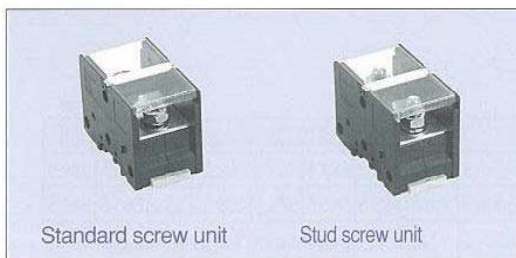
For sizes M5 to M12, hex-headed bolts are provided with indentation for cross screwdriver, flat washer and spring.



Hand-tighten with cross screwdriver

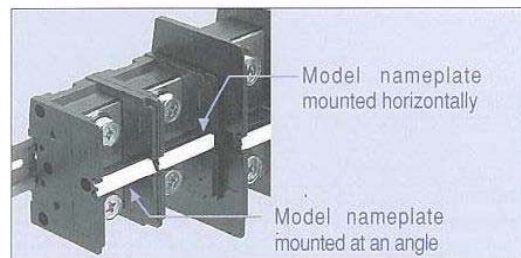
Design helps prevent gaps between units

Easy-to-read model nameplate



Standard screw unit

Stud screw unit



Model nameplate mounted horizontally

Model nameplate mounted at an angle

Models HC130 to HC600 are independent. They are designed to minimize inter-unit gaps caused by left-right cable tension.

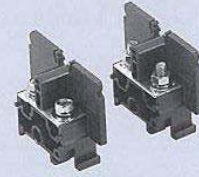
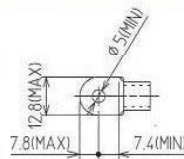
The model nameplate may be mounted at an angle for optimal viewing, depending on the mounting position of the terminal block.

4. Product outlines

HC70

Rated operating current	70A
Supported wire size	MAX. 14 mm ² (6 AWG)
Terminal screw size	M5×10 hex-headed bolts (with Cross indentation)
Tightening torque	2.0~2.8 N·m

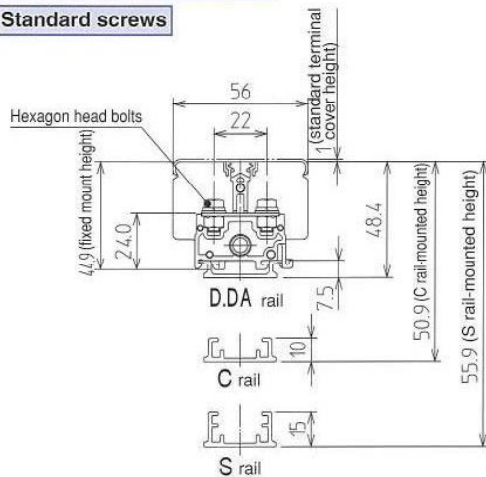
Compatible crimp terminal



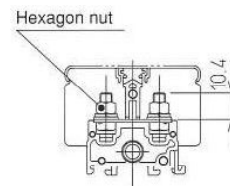
Model nameplates and standard terminal covers sold separately

Unit internal dimensions

Standard screws

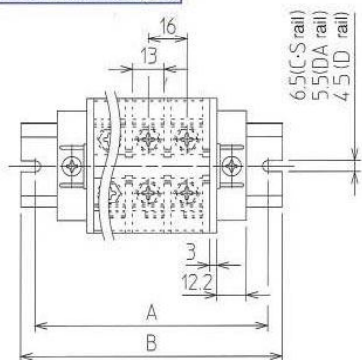


Stud screws

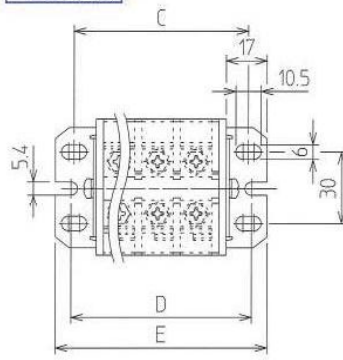


Mounting dimensions

Rail-mounted type



Fixed type



Calculating assembled dimensions

Rail-mounted type

$$A \text{ (mounting dimension)} = (16 \times \text{terminal count}) + 48.5$$

$$B \text{ (total rail length)} = A + 18$$

Fixed type

$$C \text{ (mounting dimension)} = (16 \times \text{terminal count}) + 24.5$$

$$D \text{ (mounting dimension)} = (16 \times \text{terminal count}) + 27$$

$$E \text{ (total length)} = (16 \times \text{terminal count}) + 40$$

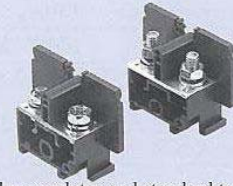
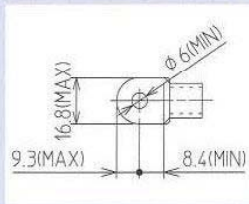
Dimension table

Terminals		1	2	3	4	6	9	12	15	20	25	30	35	40	45	50	55
Rail-mounted	A (mounting dimension)	64.5	80.5	96.5	112.5	144.5	192.5	240.5	288.5	368.5	448.5	528.5	608.5	688.5	768.5	848.5	928.5
	B (total rail length)	82.5	98.5	114.5	130.5	162.5	210.5	258.5	306.5	386.5	466.5	546.5	626.5	706.5	786.5	866.5	946.5
Fixed	C (mounting dimension)	40.5	56.5	72.5	88.5	120.5	168.5	216.5	264.5	Note 1: Specification for assembly is standard terminal with cover. Note 2: Rail mounting holes may be different from those shown above.							
	D (mounting dimension)	43	59	75	91	123	171	219	267								
	E (total length)	56	72	88	104	136	184	232	280								

HC90

Rated operating current	90A
Supported wire size	MAX. 22 mm ² (4 AWG)
Terminal screw size	M6×12 hex-headed bolts (with Cross indentation)
Tightening torque	3.0 ~ 4.0 N · m

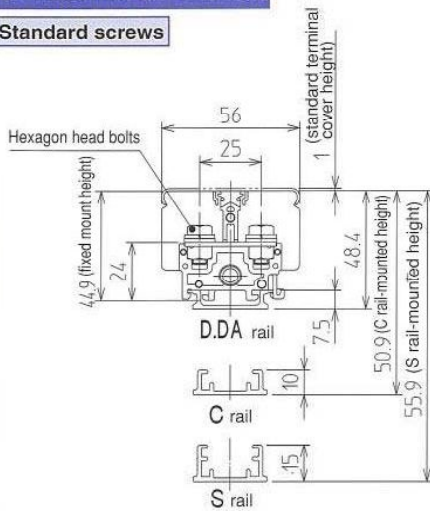
Compatible crimp terminal



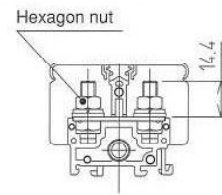
Model nameplates and standard terminal covers sold separately

Unit internal dimensions

Standard screws

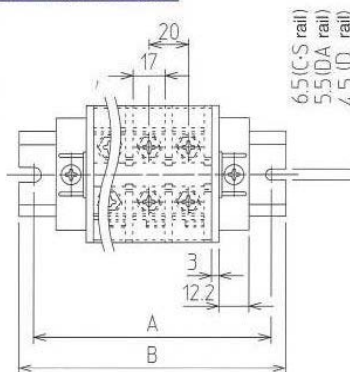


Stud screws

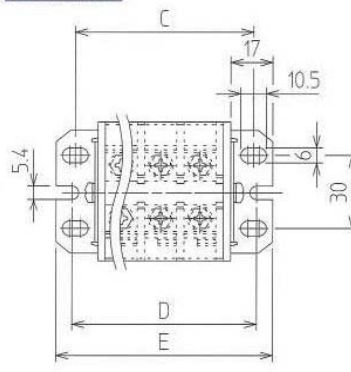


Mounting dimensions

Rail-mounted type



Fixed type



Calculating assembled dimensions

Rail-mounted type

$$A \text{ (mounting dimension)} = (20 \times \text{terminal count}) + 48.5$$

$$B \text{ (total rail length)} = A + 18$$

Fixed type

$$C \text{ (mounting dimension)} = (20 \times \text{terminal count}) + 24.5$$

$$D \text{ (mounting dimension)} = (20 \times \text{terminal count}) + 27$$

$$E \text{ (total length)} = (20 \times \text{terminal count}) + 40$$

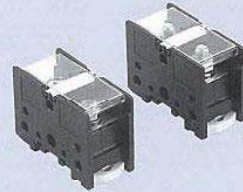
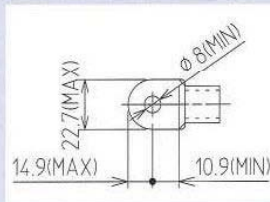
Dimension table

Terminals		(mm)													
		1	2	3	4	6	9	12	15	20	25	30	35	40	45
Rail-mounted	A (mounting dimension)	68.5	88.5	108.5	128.5	168.5	228.5	288.5	348.5	448.5	548.5	648.5	748.5	848.5	948.5
	B (total rail length)	86.5	106.5	126.5	146.5	186.5	246.5	306.5	366.5	466.5	566.5	666.5	766.5	866.5	966.5
Fixed	C (mounting dimension)	44.5	64.5	84.5	104.5	144.5	204.5	264.5	324.5	Note 1: Specification for assembly is standard terminal with cover. Note 2: Rail mounting holes may be different from those shown above.					
	D (mounting dimension)	47	67	87	107	147	207	267	327						
	E (total length)	60	80	100	120	160	220	280	340						

HC 130

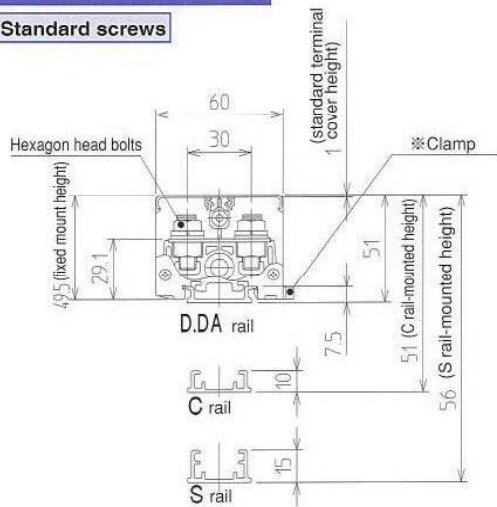
Rated operating current	130A
Supported wire size	MAX. 38 mm ² (2 AWG)
Terminal screw size	M8×18 hex-headed bolts (with Cross indentation)
Tightening torque	6~9 N·m

Compatible crimp terminal

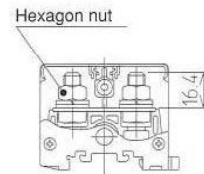


Unit internal dimensions

Standard screws



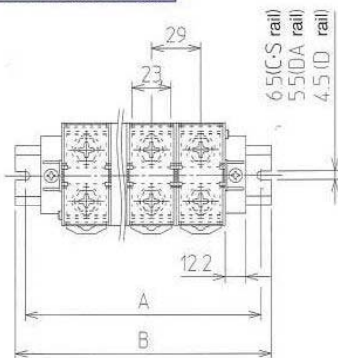
Stud screws



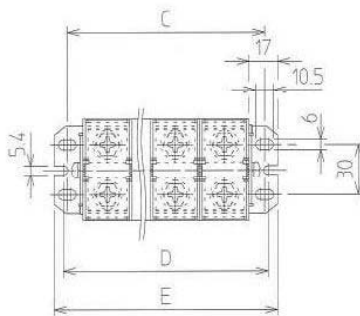
※Clamps are used on D and DA type rails

Mounting dimensions

Rail-mounted type



Fixed type



Calculating assembled dimensions

Rail-mounted type

$$A \text{ (mounting dimension)} = (29 \times \text{terminal count}) + 42.5$$

$$B \text{ (total rail length)} = A + 18$$

Fixed type

$$C \text{ (mounting dimension)} = (29 \times \text{terminal count}) + 18.5$$

$$D \text{ (mounting dimension)} = (29 \times \text{terminal count}) + 23$$

$$E \text{ (total length)} = (29 \times \text{terminal count}) + 34$$

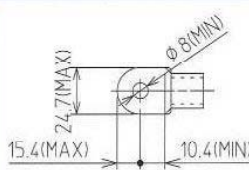
Dimension table

		(mm)											
		Terminals	1	2	3	4	6	9	12	15	20	25	30
Rail-mounted	A (mounting dimension)		71.5	100.5	129.5	158.5	216.5	303.5	390.5	477.5	622.5	767.5	912.5
	B (total rail length)		89.5	118.5	147.5	176.5	234.5	321.5	408.5	495.5	640.5	785.5	930.5
Fixed	C (mounting dimension)		47.5	76.5	105.5	134.5	192.5	279.5	366.5	Note 1: Specification for assembly is standard terminal with cover. Note 2: Rail mounting holes may be different from those shown above.			
	D (mounting dimension)		52	81	110	139	197	284	371				
	E (total length)		63	92	121	150	208	295	382				

HC175

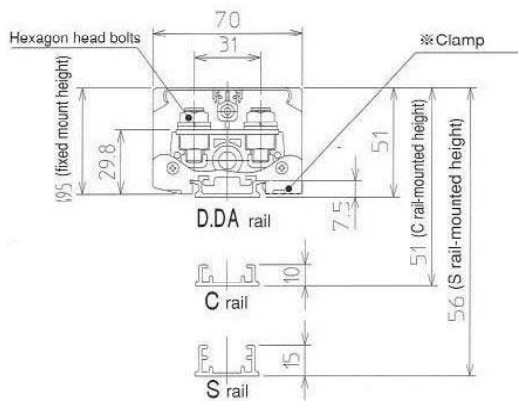
Rated operating current	175A
Supported wire size	MAX. 60 mm ² (2/0 AWG)
Terminal screw size	M8×18 hex-headed bolts (with Cross indentation)
Tightening torque	6~9 N·m

Compatible crimp terminal

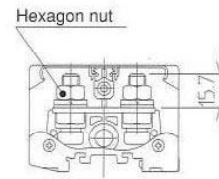


Unit internal dimensions

Standard screws



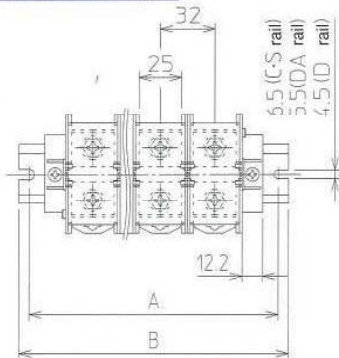
Stud screws



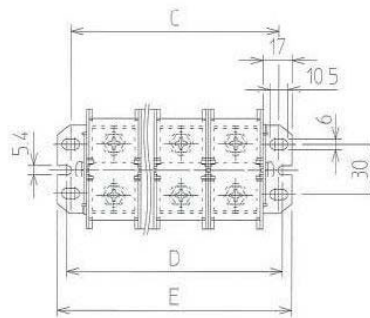
※Clamps are used on D and DA type rails

Mounting dimensions

Rail-mounted type



Fixed type



Calculating assembled dimensions

Rail-mounted type

$$A \text{ (mounting dimension)} = (32 \times \text{terminal count}) + 42.5$$

$$B \text{ (total rail length)} = A + 18$$

Fixed type

$$C \text{ (mounting dimension)} = (32 \times \text{terminal count}) + 18.5$$

$$D \text{ (mounting dimension)} = (32 \times \text{terminal count}) + 23$$

$$E \text{ (total length)} = (32 \times \text{terminal count}) + 34$$

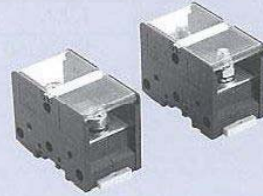
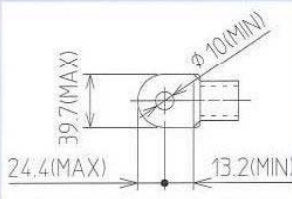
Dimension table

		Terminals										(mm)
		1	2	3	4	6	9	12	15	20	25	
Rail-mounted	A (mounting dimension)	74.5	106.5	138.5	170.5	234.5	330.5	426.5	522.5	682.5	842.5	
	B (total rail length)	92.5	124.5	156.5	188.5	252.5	348.5	444.5	540.5	700.5	860.5	
Fixed	C (mounting dimension)	50.5	82.5	114.5	146.5	210.5	306.5	402.5	Note 1: Specification for assembly is standard terminal with cover.			
	D (mounting dimension)	55	87	119	151	215	311	407	Note 2: Rail mounting holes may be different from those shown above.			
	E (total length)	66	98	130	162	226	322	418				

HC300

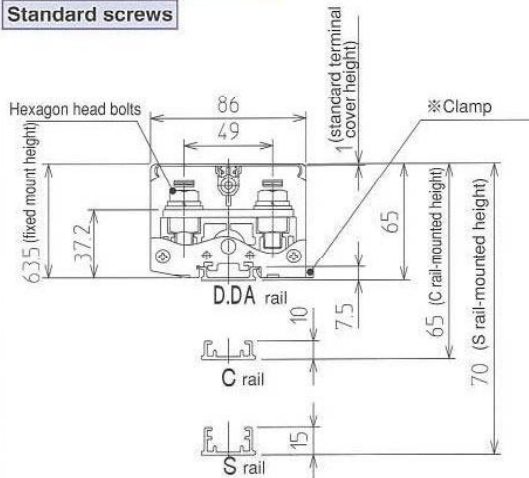
Rated operating current	300A
Supported wire size	MAX. 150 mm ² (300 MCM)
Terminal screw size	M10×25 hex-headed bolts (with Cross indentation)
Tightening torque	10~16 N·m

Compatible crimp terminal

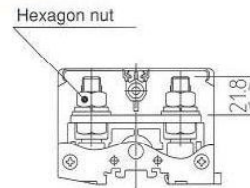


Unit internal dimensions

Standard screws



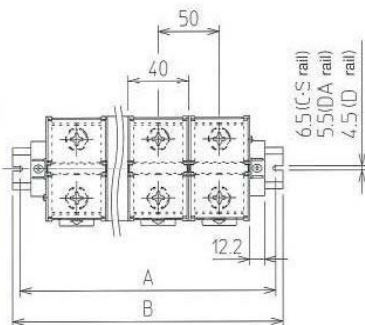
Stud screws



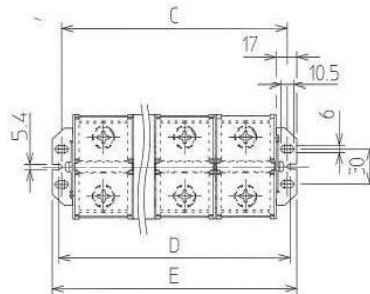
※Clamps are used on D and DA type rails

Mounting dimensions

Rail-mounted type



Fixed type



Calculating assembled dimensions

Rail-mounted type

$$A \text{ (mounting dimension)} = (50 \times \text{terminal count}) + 42.5$$

$$B \text{ (total rail length)} = A + 18$$

Fixed type

$$C \text{ (mounting dimension)} = (50 \times \text{terminal count}) + 18.5$$

$$D \text{ (mounting dimension)} = (50 \times \text{terminal count}) + 23$$

$$E \text{ (total length)} = (50 \times \text{terminal count}) + 34$$

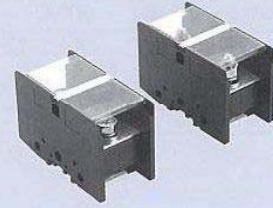
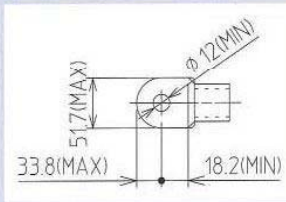
Dimension table

Terminals		1	2	3	4	6	9	12	15
Rail-mounted	A (mounting dimension)	92.5	142.5	192.5	242.5	342.5	492.5	642.5	792.5
	B (total rail length)	110.5	160.5	210.5	260.5	360.5	510.5	660.5	810.5
Fixed	C (mounting dimension)	68.5	118.5	168.5	218.5	318.5	468.5	Note 1: Specification for assembly is standard terminal with cover. Note 2: Rail mounting holes may be different from those shown above.	
	D (mounting dimension)	73	123	173	223	323	473		
	E (total length)	84	134	184	234	334	484		

HC400

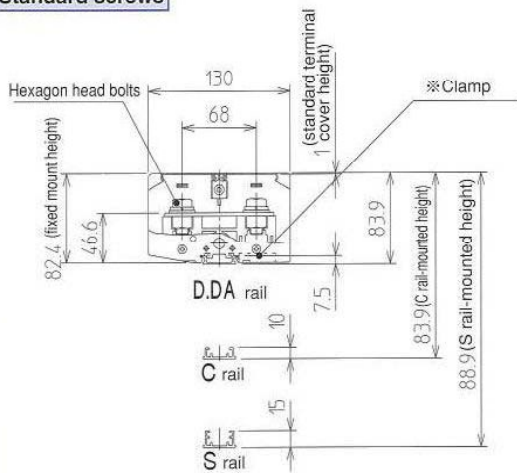
Rated operating current	400A
Supported wire size	MAX. 250 mm ² (500 MCM)
Terminal screw size	M12×25hex-headed bolts (with Cross indentation)
Tightening torque	14~26 N·m

Compatible crimp terminal

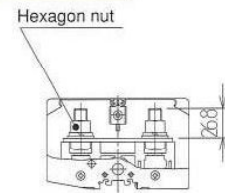


Unit internal dimensions

Standard screws



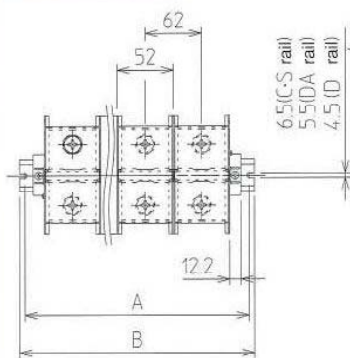
Stud screws



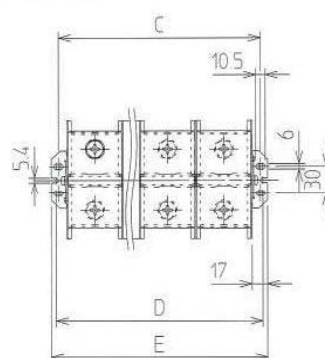
※ Clamps are used on D and DA type rails

Mounting dimensions

Rail-mounted type



Fixed type



Calculating assembled dimensions

Rail-mounted type

$$A \text{ (mounting dimension)} = (62 \times \text{terminal count}) + 42.5$$

$$B \text{ (total rail length)} = A + 18$$

Fixed type

$$C \text{ (mounting dimension)} = (62 \times \text{terminal count}) + 18.5$$

$$D \text{ (mounting dimension)} = (62 \times \text{terminal count}) + 23$$

$$E \text{ (total length)} = (62 \times \text{terminal count}) + 34$$

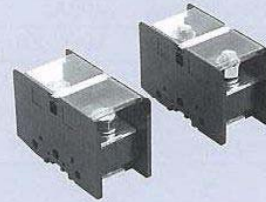
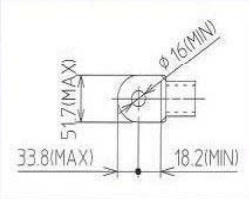
Dimension table

		Terminals								(mm)
		1	2	3	4	6	9	12	15	
Rail-mounted	A (mounting dimension)	104.5	166.5	228.5	290.5	414.5	600.5	786.5	972.5	
	B (total rail length)	122.5	184.5	246.5	308.5	432.5	618.5	804.5	990.5	
Fixed	C (mounting dimension)	80.5	142.5	204.5	266.5	390.5	576.5			Note 1: Specification for assembly is standard terminal with cover. Note 2: Rail mounting holes may be different from those shown above.
	D (mounting dimension)	85	147	209	271	395	581			
	E (total length)	96	158	220	282	406	592			

HC600

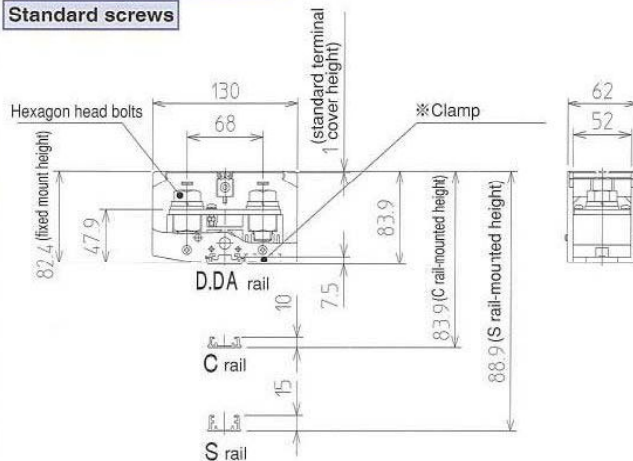
Rated operating current	600A
Supported wire size	MAX. 325 mm ² (600 MCM)
Terminal screw size	M16×35 hexagon head bolts
Tightening torque	25 ~ 38 N · m

Compatible crimp terminal

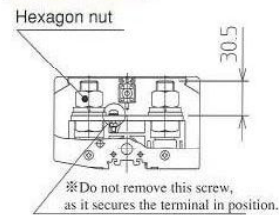


Unit internal dimensions

Standard screws



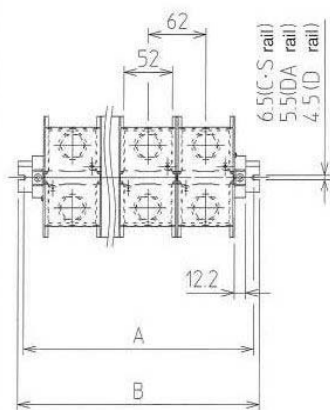
Stud screws



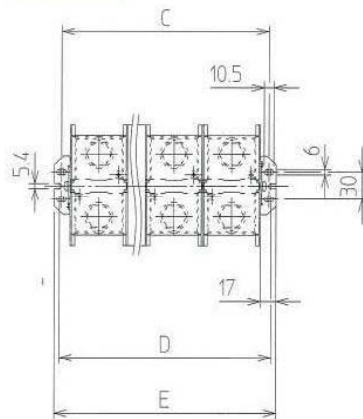
※Clamps are used on D and DA type rails

Mounting dimensions

Rail-mounted type



Fixed type



Calculating assembled dimensions

Rail-mounted type

$$A \text{ (mounting dimension)} = (62 \times \text{terminal count}) + 42.5$$

$$B \text{ (total rail length)} = A + 18$$

Fixed type

$$C \text{ (mounting dimension)} = (62 \times \text{terminal count}) + 18.5$$

$$D \text{ (mounting dimension)} = (62 \times \text{terminal count}) + 23$$

$$E \text{ (total length)} = (62 \times \text{terminal count}) + 34$$

Dimension table

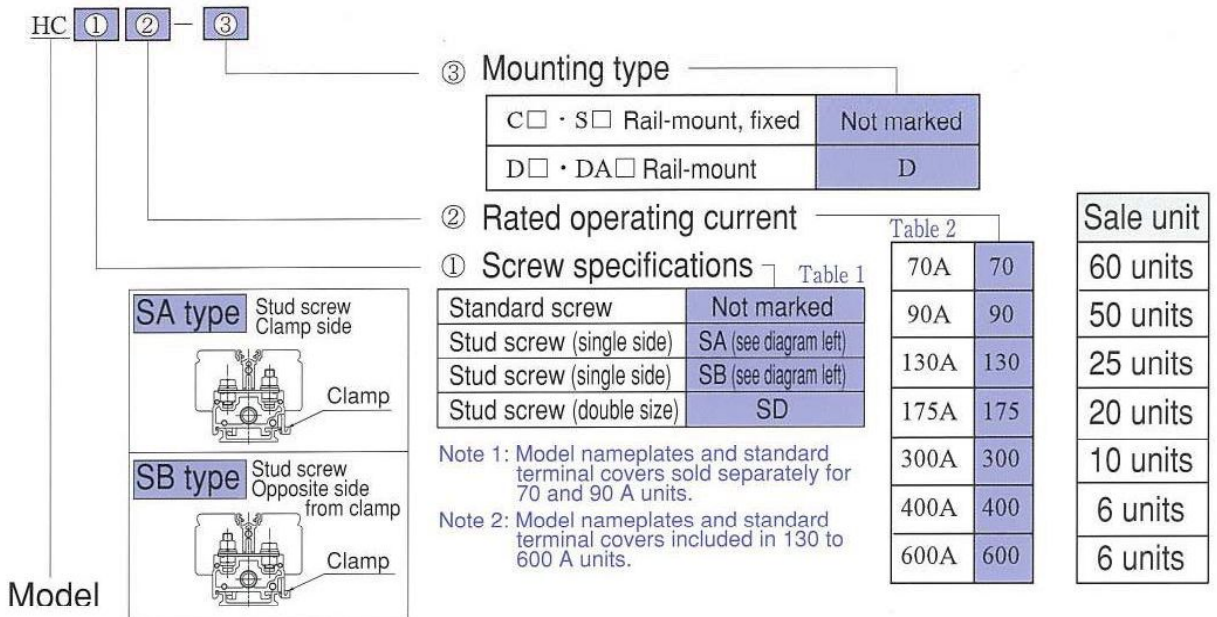
		Terminals								(mm)
		1	2	3	4	6	9	12	15	
Rail-mounted	A (mounting dimension)	104.5	166.5	228.5	290.5	414.5	600.5	786.5	972.5	
	B (total rail length)	122.5	184.5	246.5	308.5	432.5	618.5	804.5	990.5	
Fixed	C (mounting dimension)	80.5	142.5	204.5	266.5	390.5				
	D (mounting dimension)	85	147	209	271	395				
	E (total length)	96	158	220	282	406				

Note 1: Specification for assembly is standard terminal with cover.

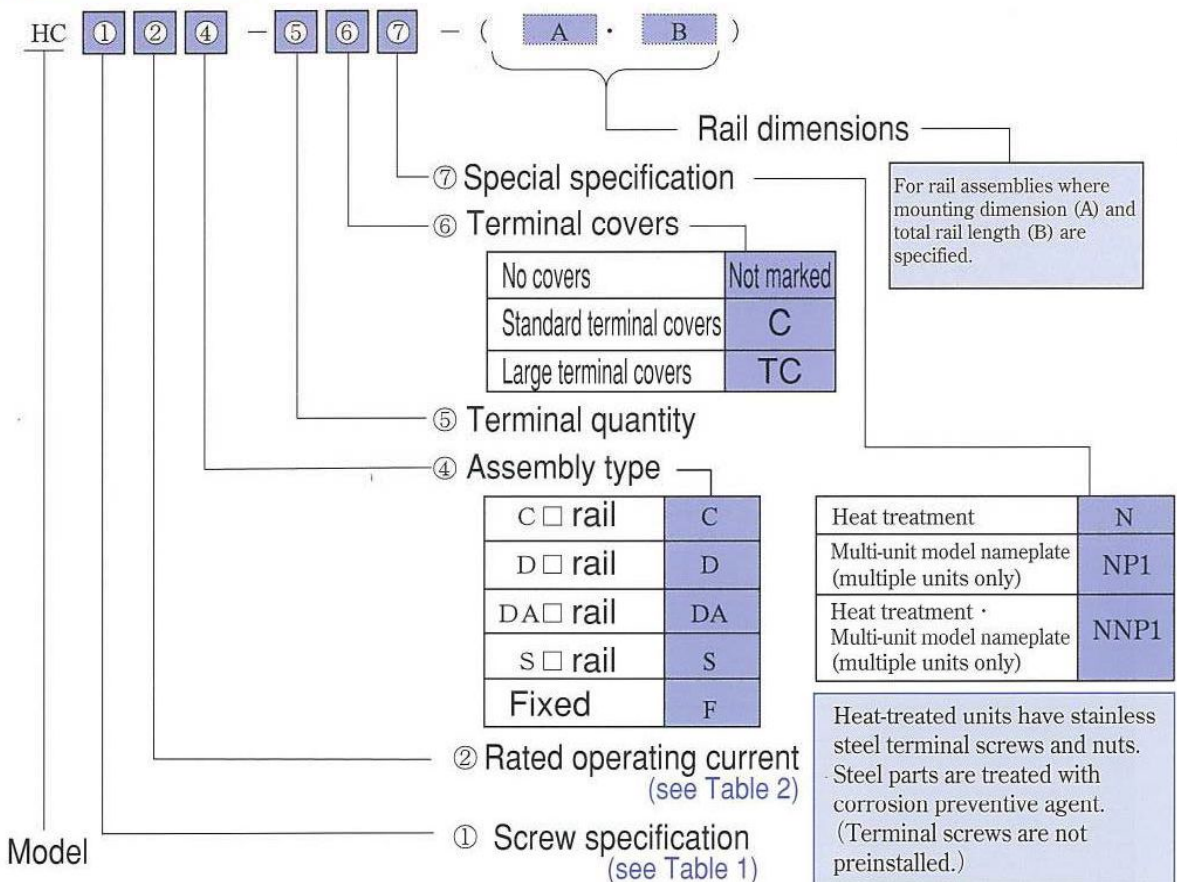
Note 2: Rail mounting holes may be different from those shown above.

5. Classification

Single units



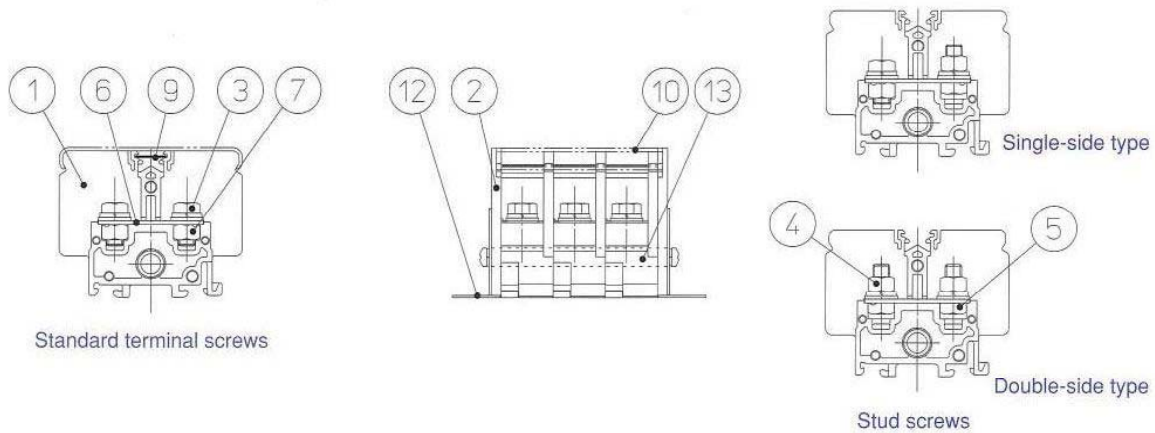
Assembled units



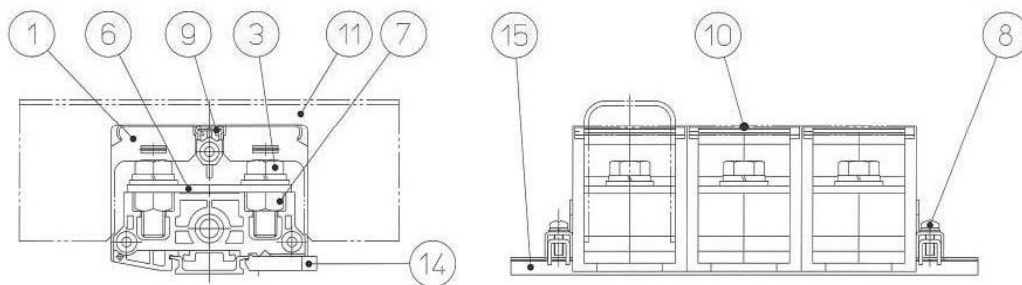
※ Customer-specified characters can also be printed on model nameplate.

6. Part names and materials

HC70, HC90



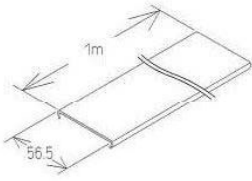
HC130~HC600



No.	Name	Material	Processing	Flame retardant grade	Remarks
1	Base	PPE	—	UL94V-0	—
2	End	PPE	—	UL94V-0	HC70/CH90 only
3	Assembled terminal screw (standard spec.)	Hexagon head bolt	Steel	Zinc-chromate plate	Cross indentation in head (excluding HC600)
		Spring washer	Steel	Zinc-chromate plate	
		Flat washer	Steel	Zinc-chromate plate	
4	Hexagonal nut	Steel	Zinc-chromate plate	—	—
5	Hexagon head bolt	Steel	Zinc-chromate plate	—	—
6	Terminal	Copper	Nickel plate	—	—
7	Hexagonal nut	Steel	Zinc-chromate plate	—	—
8	Rail fittings	Steel	Zinc-chromate plate	—	—
9	Model nameplate	PVC	—	UL94V-0	—
10	Standard terminal cover	PC	—	UL94V-0	—
11	Large terminal cover	PC	—	UL94V-0	HC130~HC600only
12	Mounting fittings	Steel plate	Zinc-chromate plate	—	—
13	Linking shaft	Steel	Zinc-chromate plate	—	—
14	Clamp	Nylon	—	UL94V-0	HC130~HC600only
15	Rail	Aluminum	—	—	—

7. Accessories and sale units

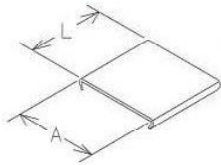
(1) Standard terminal cover (for HC70 and HC90 units)



Material: Polycarbonate (clear)
Type: HGA

Sale unit: 20 pcs.

(2) Standard terminal cover (for HC130 to HC600 units)

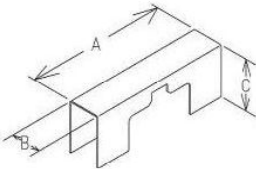


Material: Polycarbonate (clear)

Type	Applicable units	L (mm)	A (mm)
HGB	HC130	25.5	60
HGC	HC175	27.5	60
HGD	HC300	46.5	81.5
HGE	HC400 · HC600	58.5	107.5

Sale unit: 20 pcs. ea.

(3) Large terminal cover (for HC130 to HC600 units)

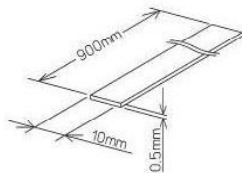


Material: Polycarbonate (clear)

Type	Applicable units	A (mm)	B (mm)	C (mm)
TC130	HC130	106	23	43
TC175	HC175	125	25	45
TC300	HC300	166	40	62
TC400.600	HC400 · HC600	223	52	82.5

Sale unit: 5 pcs. ea.

(4) Model nameplate (fixed size)



Material: PVC (white)
Type: HNS

Sale unit: 20 pcs.

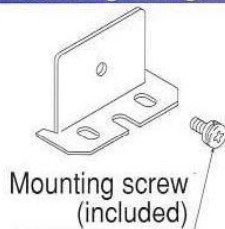
(5) Model nameplate (roll)



Material: PVC (white)
Size: 10 mm wide x 0.5 mm thick x 25 m long
Type: HNR

Sales unit: 1 pc.

(6) Mounting fittings

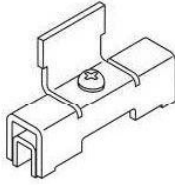


Material: Steel plate
Processing: Zinc-chromate plate

Type	Applicable units	Mounting screw (included) size
HFA	HC70.HC90	M4×12 with spring washer
HFB	HC130.HC175	M5×16 with spring washer
HFC	HC300~HC600	M5×16 with spring washer

Sale unit: 50 pcs. ea.

(7) Rail fittings



Material: Steel plate
Processing: Zinc-chromate plate

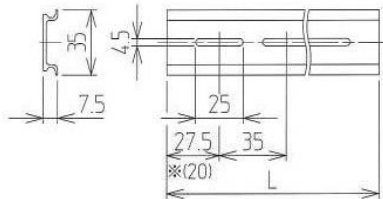
Type	Applicable rails
HKC	C rails · S rails
HKD	D rails · DA rails

Sale unit: 50 pcs. ea.

(8) Rails

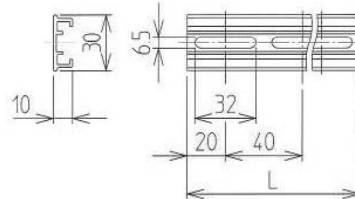
Material: Aluminum

- Name : D1 rail (L=1000 mm)
: D2 rail (L=2000 mm)



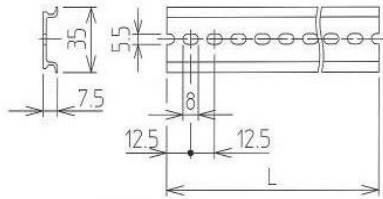
※Dimensions in parentheses for D2 rails.

- Name : C1 rail (L=1000 mm)
: C2 rail (L=2000 mm)

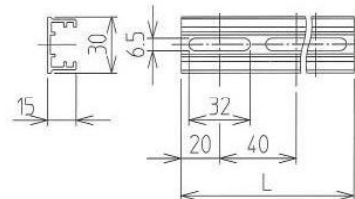


Sale unit: 5 pcs. ea.

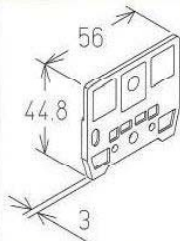
- Name : DA1 rail (L=1000 mm)
: DA2 rail (L=2000 mm)



- Name : S1 rail (L=1000 mm)
: S2 rail (L=2000 mm)



(9) HC ends

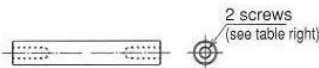


Material: PPE (black)
Type: HCE

※End plates for HC70 and HC90 units
(when HC70 or HC90 units combined, no end plate is required between them).

Sale unit: 50 pcs.

(10) Linking shaft



Material: Steel
Zinc-chromate plate

Type	Applicable units	Terminals	Screw size
HSA-□	HC70	1~15	M4
HSB-□	HC90	1~15	M4
HSC-□	HC130	1~12	M5
HSD-□	HC175	1~12	M5
HSE-□	HC300	1~9	M5
HSF-□	HC400,HC600	1~9	M5

The number of terminals is indicated by the "□" mark under Type.

Sale unit: 50 pcs. ea.

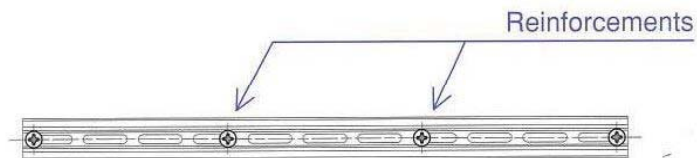
8. Precautions in use

● Precautions in tightening terminal screws

The Cross indentation in the heads of the M10 and M12 terminal screws is for hand-tightening only. Always use a socket or other appropriate wrench for full tightening.

● Precautions in mounting method

To ensure sufficient strength in long rails, be sure to use mounting screws not only at the ends, but at appropriate middle points as well.



● Always tighten terminal screws to torque specified in product outline.

● Avoid use in environments subject to excessive particles, corrosive gas or other unusual conditions.

● Chemicals such as paint thinner or benzene may cause deterioration in resins, and should be avoided.