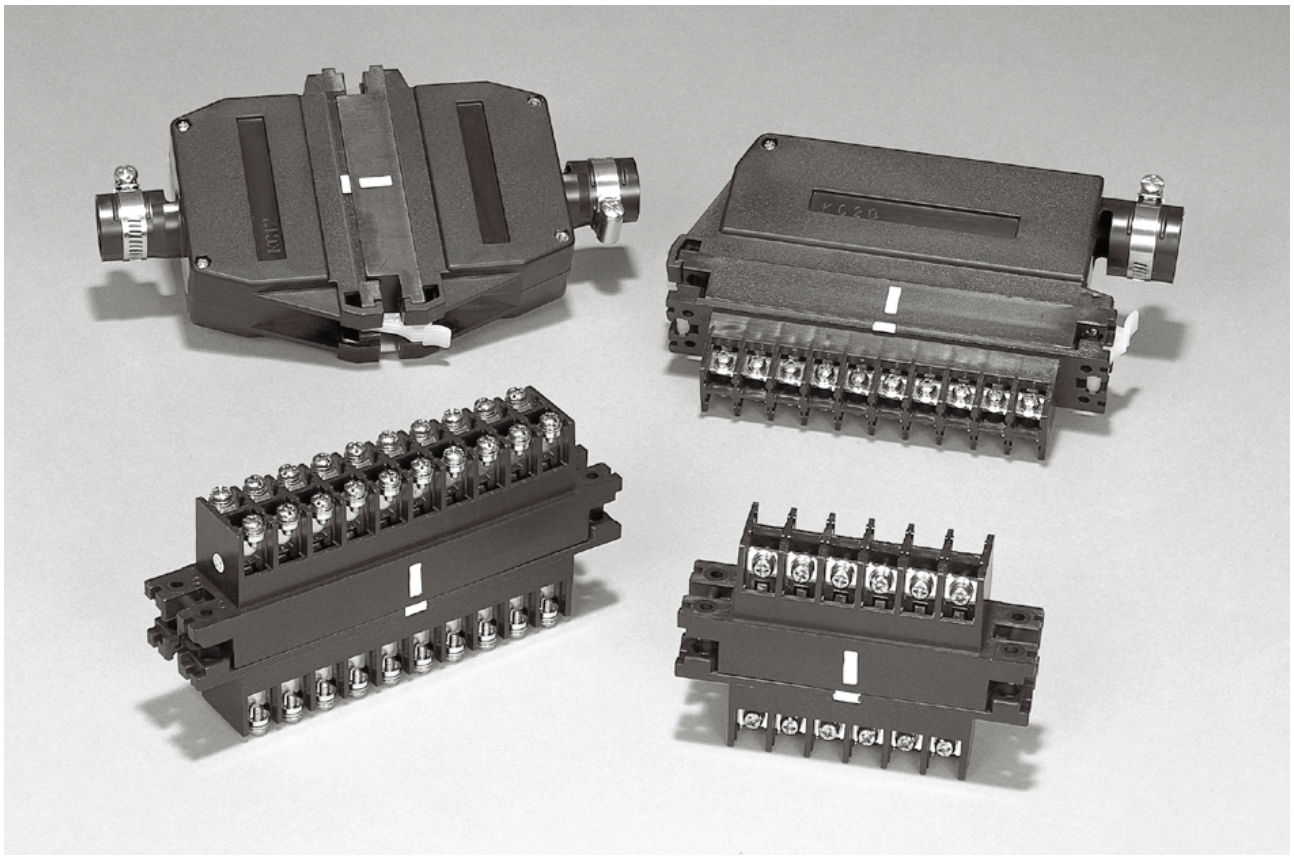
RECTANGULAR CONNECTOR

KC-TYPE



FEATURES

■Highly reliable contact (contactor)

The fork-shaped contact has a cleaning groove in the contacting part, which wipe off dust and other foreign material attached to the contacting part so that good contact is always maintained. The contacting part is fork-shaped having 2 contacting points per prong. Thus, 1 contact provides 6 contacting points and this structure assures high reliability.

■Safety

All the live parts are accommodated in the housing made of rigid engineering plastic.
A beautiful cover that also serves as a grip is provided to shield the terminal side.

■Complete structure to prevent wrong insertion

The housing is designed to be inserted in a given direction. Since the contacts are completely protected by the housing, an inserting attempt in wrong direction does not create a contact between different circuits.

■Large current capacity

The current-carrying capacity is 20 A when all the circuits are always ON or 25 A when a half of the circuits are used.

■Quick locking mechanism

The quick locking mechanism (with the KC hook) of the housing is easy to use.

SPECIFICATIONS (RATINGS, PERFORMANCE)

Specification \ Type	KC-12	KC-20
Rated insulation voltage (Ui)	600V	
Rated current-carrying capacity (Ith)	20A (25 A when 1/2 circuit is closed)	
Applicable wire size	2㎟ to 5.5㎟	2㎟ to 5.5㎟ (18 wires maximum)
Rated withstand voltage	(Live part to assembly mounting panel) 2,500V AC / 1 min. / (Between live parts) 2,500V AC / 1 min.	
Lightning impulse	(Between live parts and mounting panel) ±7kV / 3 times for each pole (1.2 / 50μs) (Between live parts) ±4,.5kV / 3 times for each pole (1.2 / 50μs)	
Short-time current	200A 2 sec.	
Contact resistance	Between poles 10mΩ max. (initial value)	
Shock resistance	30 G or more / each axial direction	
Operating temperature	–20 to 50°C	
Storing temperature	–40 to 85°C	
Relative humidity	85% max.	
Altitude	2,000 m max.	

RECTANGULAR CONNECTOR

KC-TYPE

HOW TO ORDER

KC-12PSFC1

Basic type

Pole No.

Code	Description
12	12 poles
20	20 poles

Plug side

Code	Description
P	Standard terminal
PB	Rear mounted terminal

Hook

Socket side

Code	Description
S	Standard terminal
SB	Rear mounted terminal

Number of covers

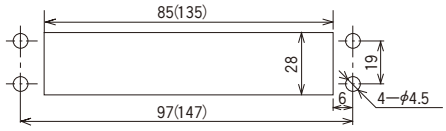
Code	Description
1	With 1 cover
2	With 2 covers

Cover

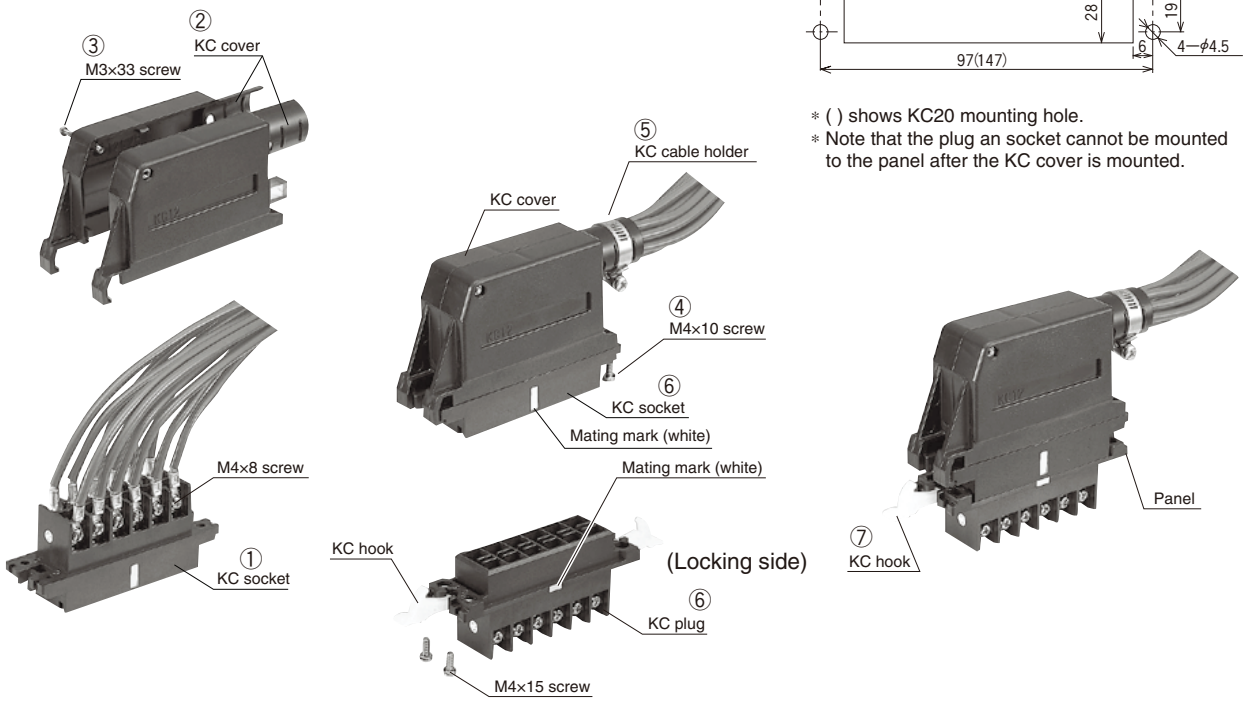
Code	Single part code	Description
C	12CV	Side type cover: 12 poles
	20CV	Side type cover: 20 poles
CT	12CVT	Top type cover: 12 poles
	20CVT	Top type cover: 20 poles

ASSEMBLY

■Mounting hole (common to plug and socket sides)



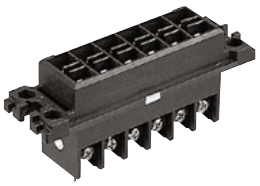
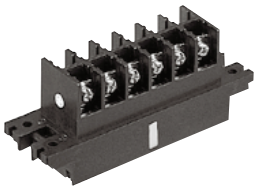
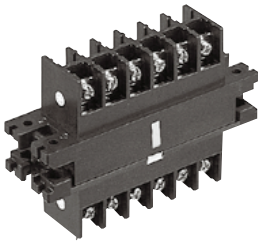
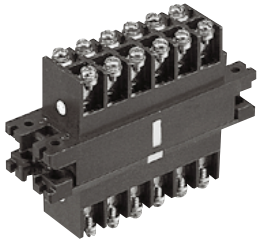
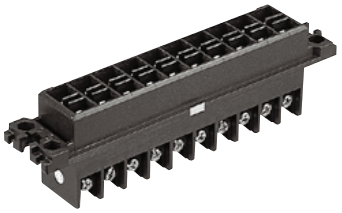
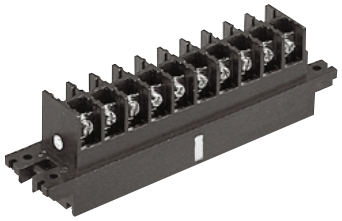
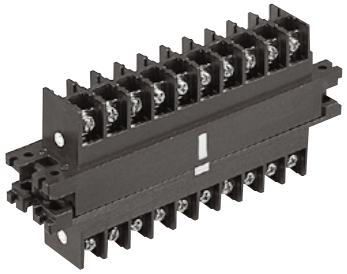
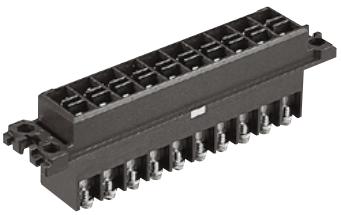
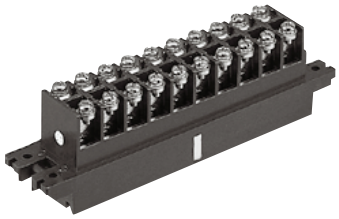
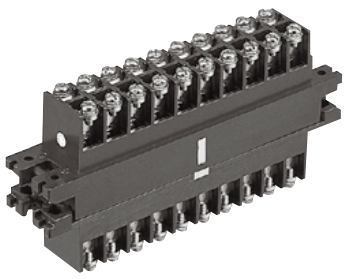
＊( ) shows KC20 mounting hole.
＊Note that the plug an socket cannot be mounted to the panel after the KC cover is mounted.



Typical assembly procedure

①Wire to the KC socket terminal.
②Fit the KC cover to the KC socket.
③Tighten the KC cover with an M3×33 screw.
④Fix the KC cover with an M4x10 screw.
⑤Tighten the KC cover cable outlet with the KC cable holder.
⑥After mounting the KC plug to the panel, assemble it to the KC socket (matching the mating marks with each other).
⑦Lock with the KC hook on both sides.

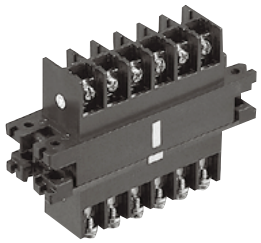
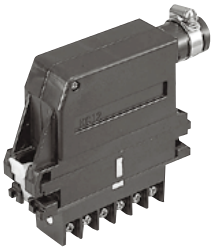
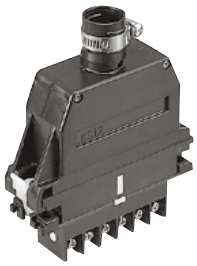
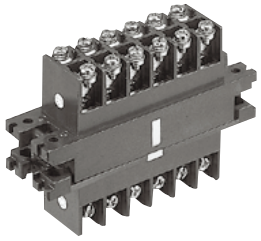
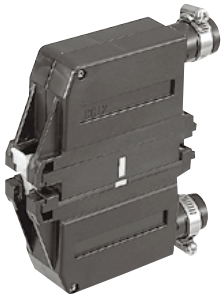
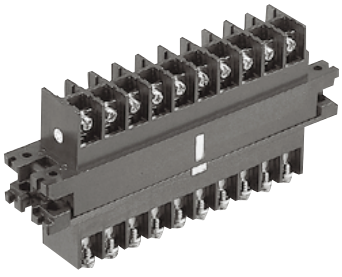
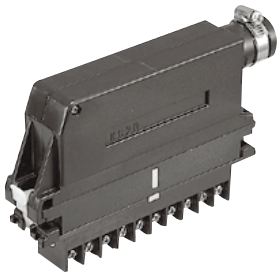
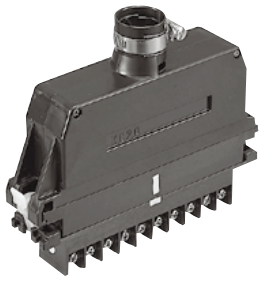
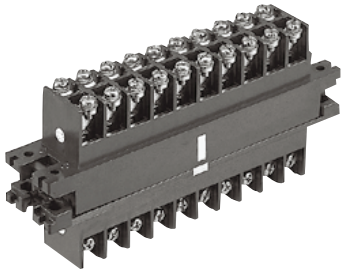
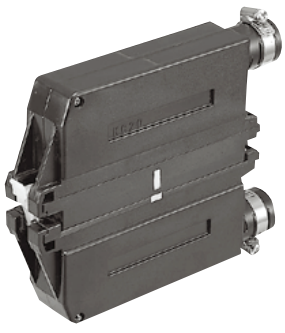
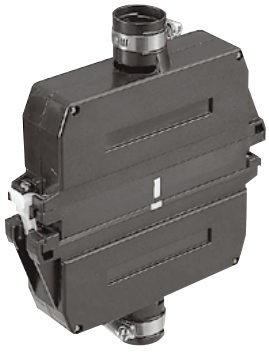
STANDARD PRODUCTS

	Plug	Socket	Set of plug and socket
12 poles	KC-12P 	KC-12S 	KC-12PS 
	KC-12PB (Rear mounted terminal block) 	KC-12SB (Rear mounted terminal block) 	KC-12PBSB (Rear mounted terminal block) 
20 poles	KC-20P 	KC-20S 	KC-20PS 
	KC-20PB (Rear mounted terminal block) 	KC-20SB (Rear mounted terminal block) 	KC-20PBSB (Rear mounted terminal block) 

∗ No cover can be fit to the rear mounted terminal block type.

KC-TYPE

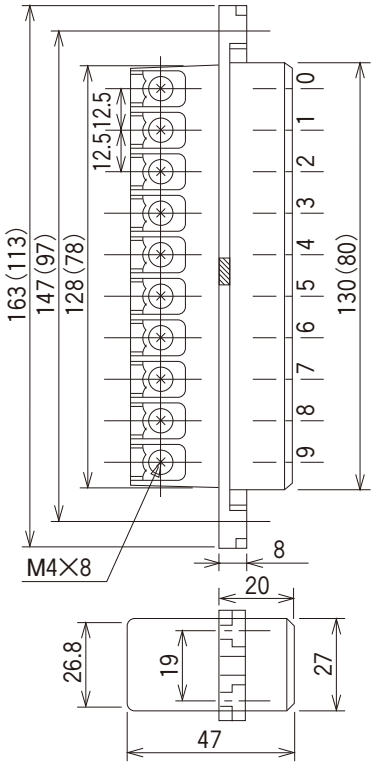
STANDARD PRODUCTS

Set of plug and socket	Combinations of side type cover	Combinations of top type cover
KC-12PBS (Rear mounted terminal block on plug side) 	**KC-12PSFC1** 	**KC-12PSFCT1** 
KC-12PSB (Rear mounted terminal block on socket side) 	**KC-12PSFC2** 	**KC-12PSFCT2** 
KC-20PBS (Rear mounted terminal block on plug side) 	**KC-20PSFC1** 	**KC-20PSFCT1** 
KC-20PSB (Rear mounted terminal block on socket side) 	**KC-20PSFC2** 	**KC-20PSFCT2** 

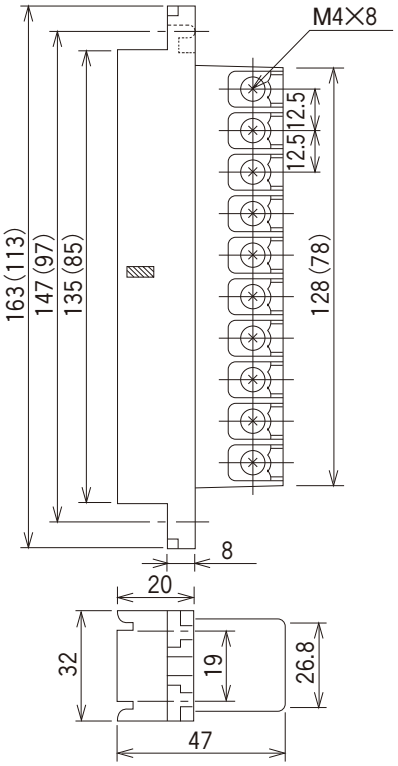
∗ No cover can be fit to the rear mounted terminal block type.

DRAWING ( ) shows KC-12 dimensions.

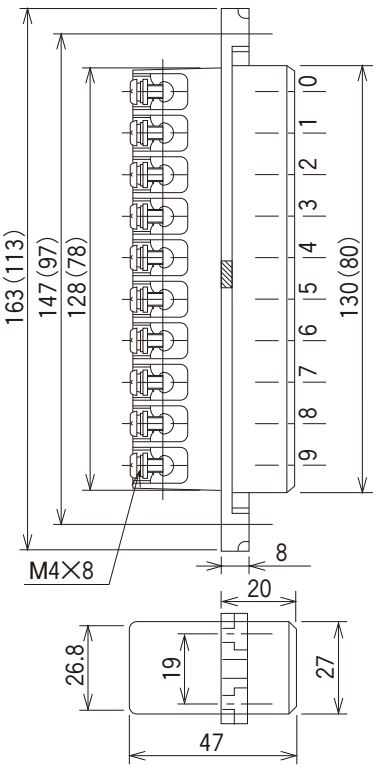
KC-20P (12P)



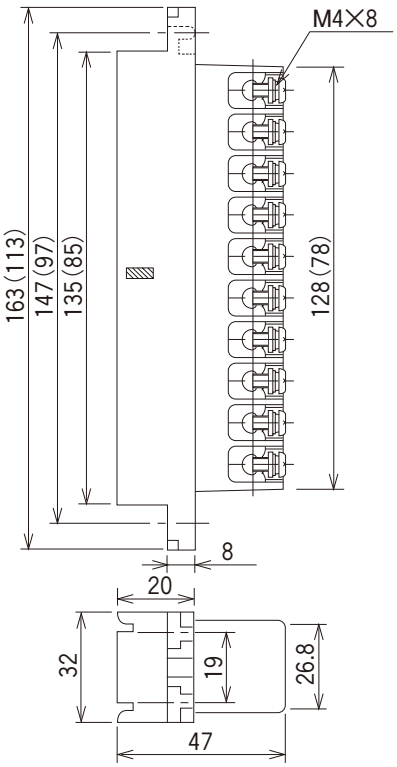
KC-20S (12S)



KC-20PB (12PB)



KC-20SB (12SB)

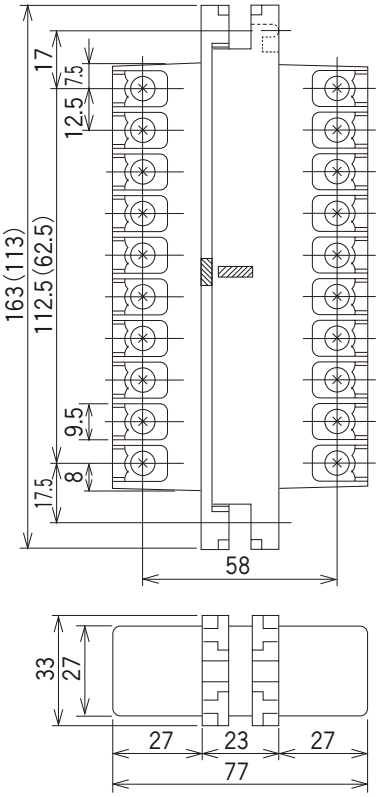


RECTANGULAR CONNECTOR

KC-TYPE

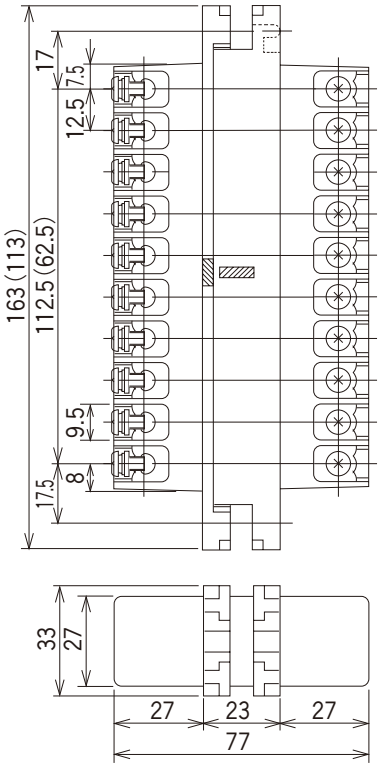
DRAWING OF PLUG AND SOCKET SET ( ) shows KC-12 dimensions.

KC-20PS (12PS)



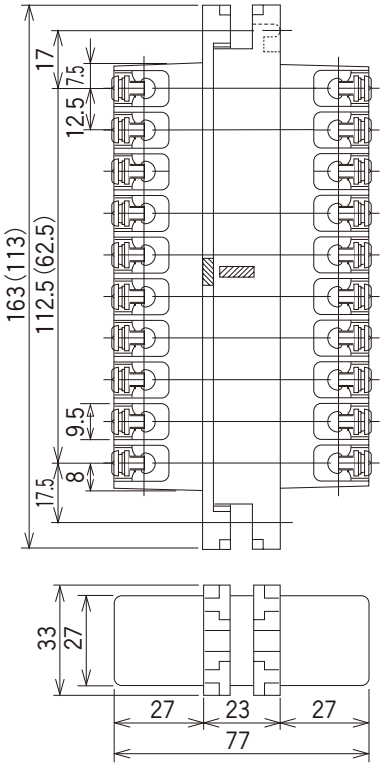
KC-20PBS (12PBS)

Former type code KC-20PSB (12PSB)



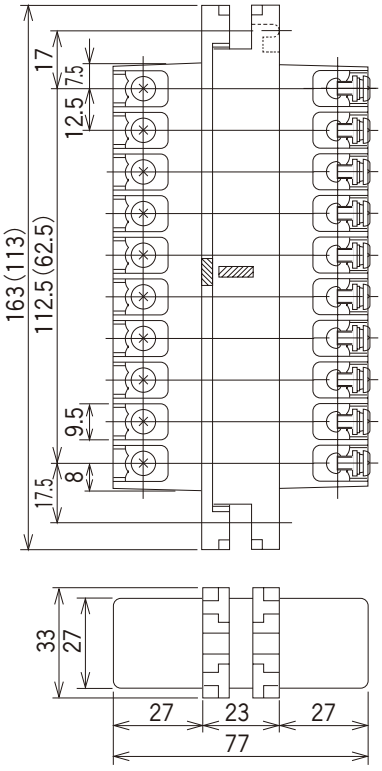
KC-20PBSB (12PBSB)

Former type code KC-20PSC (12PSC)

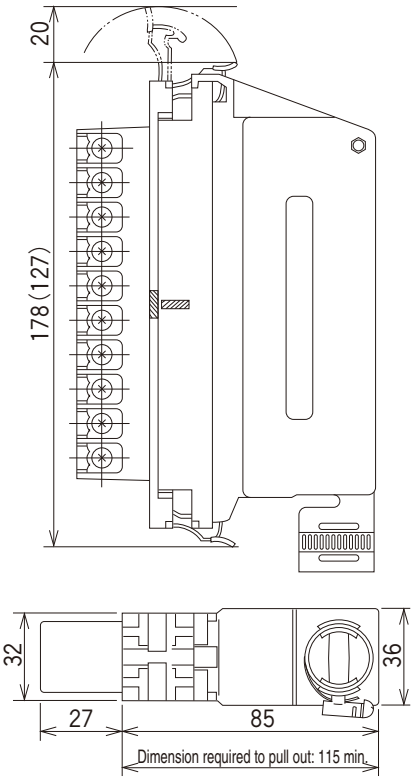


KC-20PSB (12PSB)

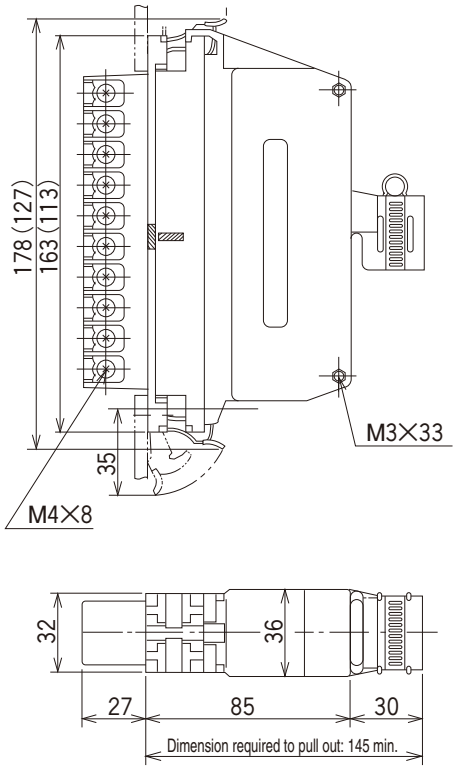
Former type code KC-20PSA (12PSA)



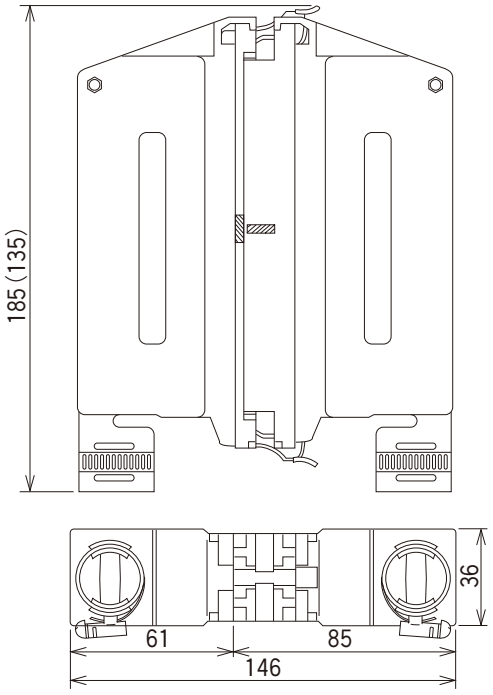
KC-20PSFC1(12SFC1)



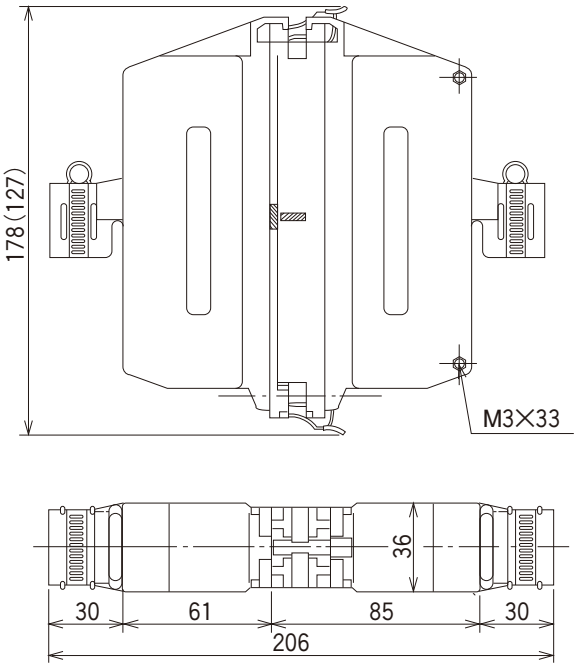
KC-20PSFCT1(12PSFCT1)



KC-20PSFC2(12PSFC2)



KC-20PSFCT2(12PSFCT2)



RECTANGULAR CONNECTOR

KC-TYPE

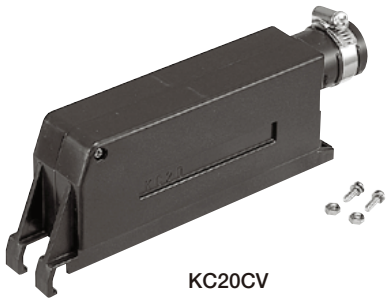
ACCESSORIES

Hook

KC hook

Side type cover

KC12CV



KC20CV

Cover opening tie

For 12 poles NM-10
For 20 poles NM-12

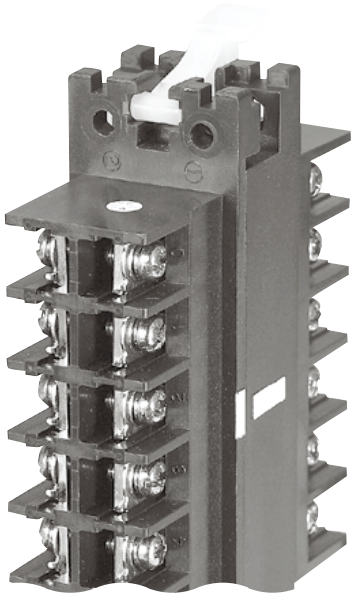
Top type cover

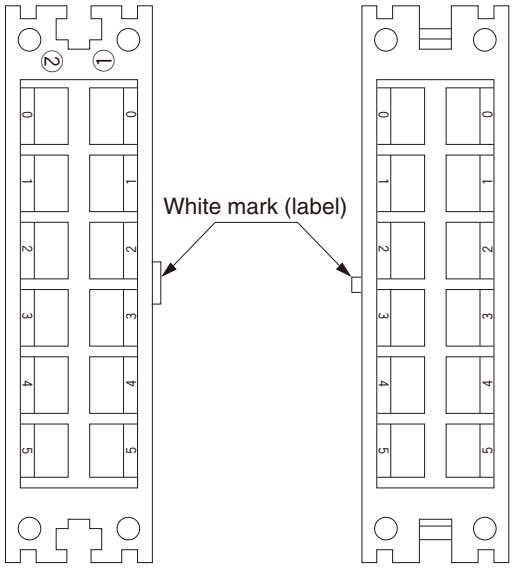
KC12CVT

KC20CVT

TERMINAL NUMBERS

The terminal numbers of the KC type connector are assigned as follows:





KC-12P side
(0 through 9 for the KC-20P)

KC-12S side
(0 through 9 for the KC-20S)