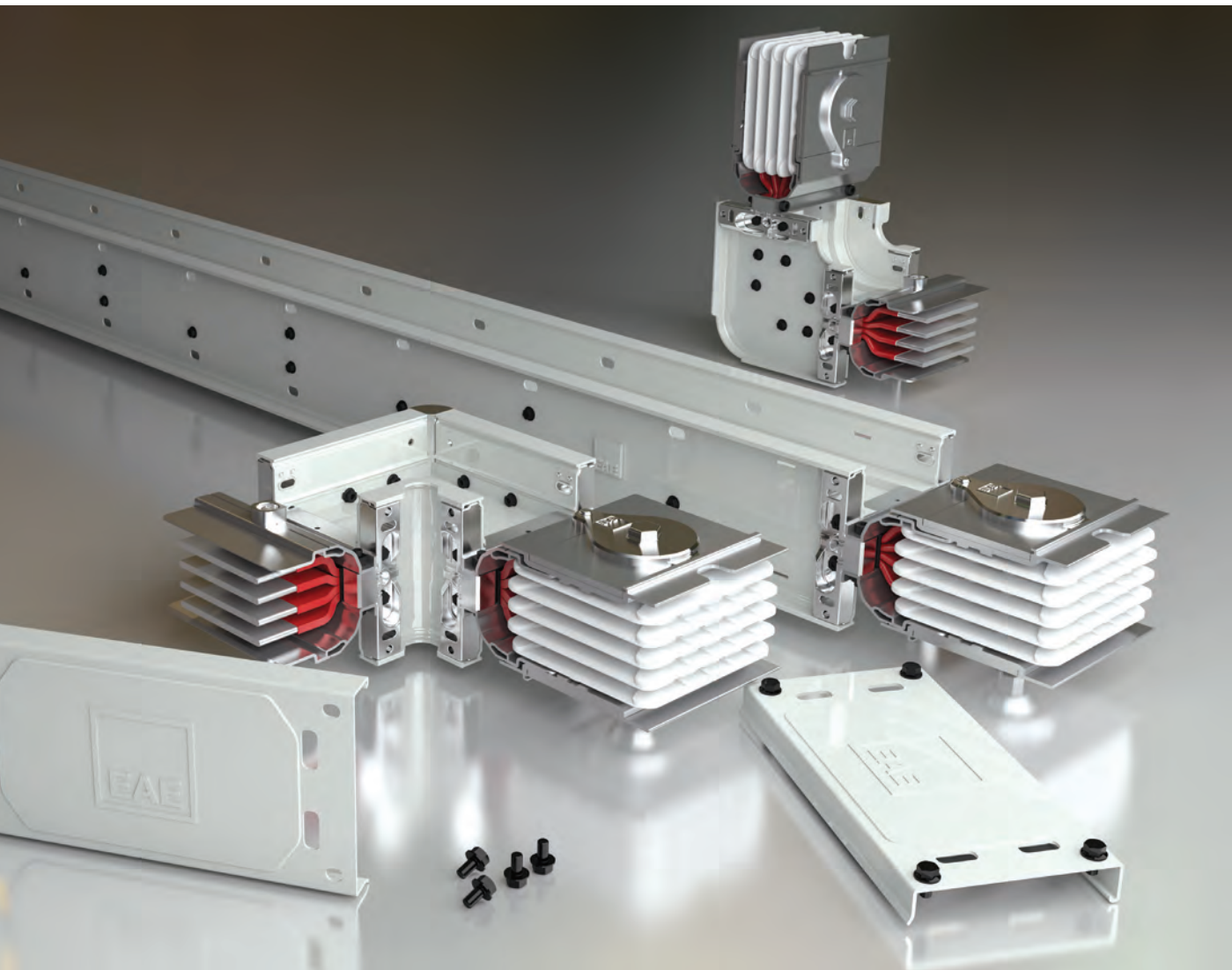




E-LINEKX

Busbar Systems 400...6300 A



E-LINEKX

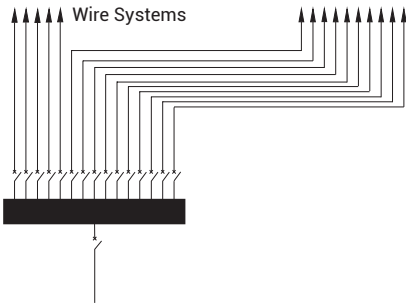
Please visit our website for the updated version of our catalogues.
www.eaelectric.com



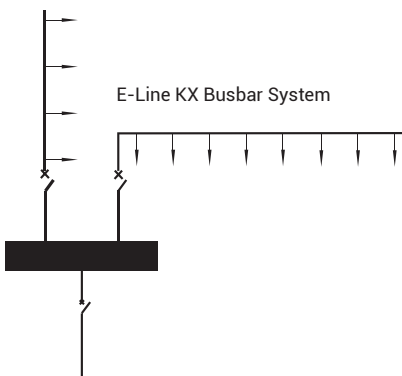
CONTENTS

▶▶ E-LINE KX

| | |
|--|-------|
| Introduction | 2-3 |
| Distribution & Horizontal Applications..... | 4 |
| Riser & Vertical Applications | 5 |
| Technical Characteristics | 6-9 |
| Order Code System | 10 |
| Straight Lengths..... | 11 |
| Elbows..... | 12-15 |
| "T" Module | 16 |
| Reduction Modules | 17 |
| Expansions | 18 |
| Phase Transposition Module..... | 19 |
| End Closers..... | 20 |
| Panel Connections | 21-25 |
| Transformer Connections | 26-30 |
| Tap-off Boxes..... | 31-36 |
| Vertical and Horizontal Busbar Applications..... | 37-38 |
| Feeder Boxes | 39-40 |
| Fixing Elements | 41-49 |
| Joint Structure..... | 50 |
| Measuring a Special Length | 51 |
| Inserting "Make up Section" | 52 |
| Declaration | 53 |
| Certificate | 54 |
| Product Overview | 55 |



Transportation and distribution of electricity especially at high ampere ratings used to be provided by paralleling a number of large sized cables. In order to support these cables in the buildings, there were used a lot of cable trays, cable ladders, under-floor cable channels, etc. Applications of cables, such as, fixing to cable channels, branching, connecting, calculating distances between cables for heat dissipation, adjusting difference lengths, etc. need special expert workers, more time, more effort, which means more money. Even after all above difficulties and expense, the result is not efficient enough. For example, there is no flexibility in this solution.



In order to eliminate all above disadvantages, modern **BUSBAR SYSTEMS** are developed. **EAE** manufactures **E-LINE** busbar systems from 25A up to 6.300A in order to convert above disadvantages to advantages. High technological, modular structured **E-LINE** busbar systems allow users to get safe energy how much and where ever they need by tap off boxes, easy and efficient planning, short installation time, better heat dissipation, automatic length adjustments, redesign / re-using capability, better electrical characteristics, etc. **E-LINE** busbar systems are designed and certified as per IEC 61439-6 standard.

Standard Prefabricated Structure

E-Line KX busbar system can be adapted to any kind of building structure using. Space-saving prefabricated components. All necessary components and fitting elements are manufactured items.

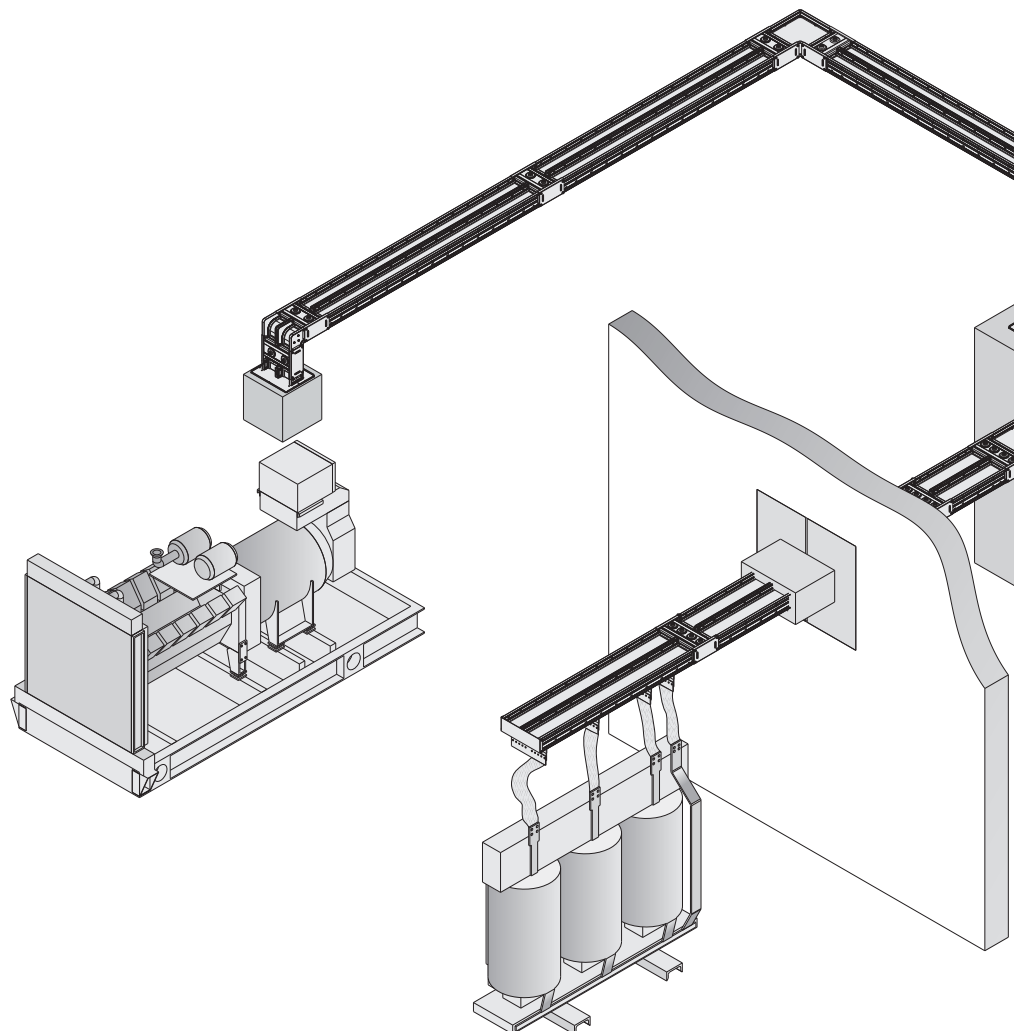
** Special components can be manufactured in one week on request.*

Rapid and Efficient Installation

It has been important to keep abreast with the rapidly improving building technologies in civil engineering, the installation time was we have lowered by reducing the number of bolts on the joint points of the busbar.

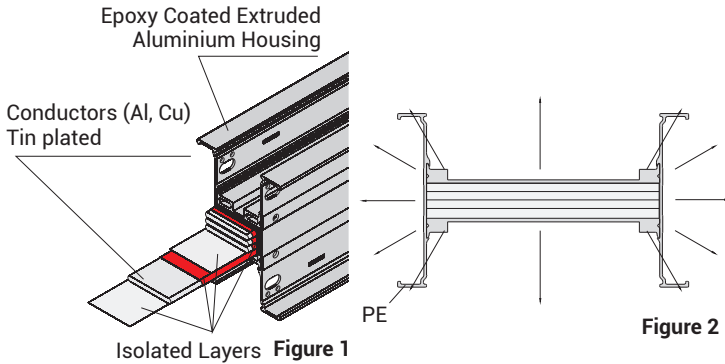
Flexible Power Supply

Tap-off points at short intervals make electrical power available in all locations; the power supply can be adapted to different production processes simply by relocating the tap-off unit.



Hybrid Insulation

The perfect design for high current busbar systems is the "compact structure" where tin plated and insulated with B class polyester film and epoxy coated on conductors are tightly placed into the extruded aluminium housing. (Figure 1).



Heat Transfer

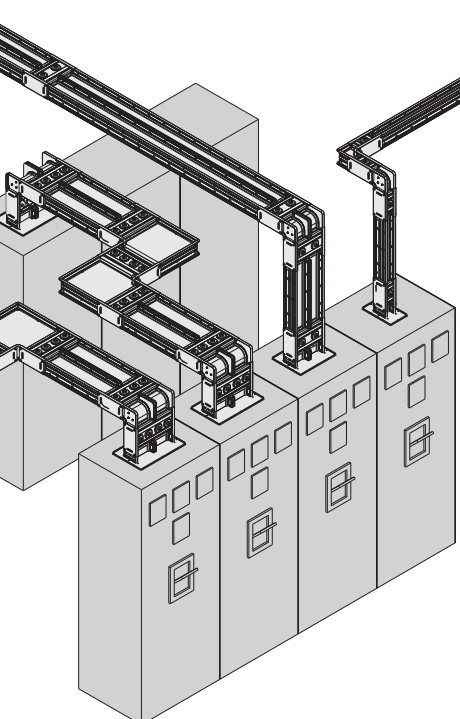
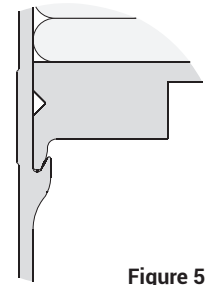
"In compact structure" there is no empty space filled with air and heat is easily transferred to the environment by the housing that works like a heat-sink (Figure 2).

Minimum Voltage Drop

In E-Line KX, inductive reactance is very low due to closely placed conductors. The voltage drop comparison of compact and ventilated busbar that have same cross sectional area prove the importance of the compact structure.

High Short-Circuit Endurance

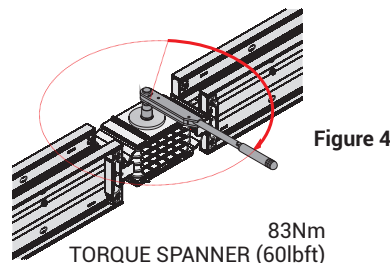
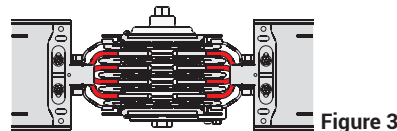
As there are no support points in "compact structure" momentum levers are not formed (Figure 1). This feature ensures high short-circuit endurance (Figure 5).



One Bolt Joint Ensures Safety and Easy Installation

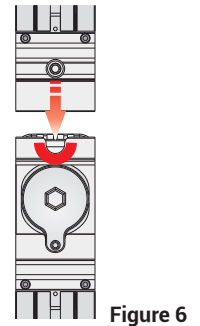
E-Line KX Busbars are installed by tightening the "one bolt joint". Belleville spring washers on both ends of the bolt retains the original contact pressure, ensuring a more secure, reliable and maintenance - free joint. E-Line KX Busbar Systems are easily installed (Figures 3-4).

*** The bolt is tightened to 83 Nm (60 lbft) using the torque spanner.**



Easy and Safe Installation:

Due to alignment piece on the joint point, block joint element and busbar tray are aligned. This makes installation easier and correct on the right axes. (Figure 6).



While designing an electrical distribution system with E-Line KX a few approximate details will be necessary.

- Location, number, type and approximate ratings of loads,
- Transformer rates and short-circuit capacities, Utilization factor= α ,
- System coordination with other distribution system (heat, water, etc.),
- Determining the route of E-Line KX on layout, If necessary, coordination of E-Line KX Busbar with E-Line KO-II runs,
- Deciding on suitable hanger types.

Utilization Factor (α)

Utilization factor (α) depends on the type and number of loads.

It is usually around 0.7 or lower. The utilization factor of a line that supplies electricity to motors and lighting systems is usually lower than 0.6.

It is as low as 0.30 in weld shops of car factories, it can be 1 in lines where only one big load is supplied.

Voltage Drop

For practical voltage drop calculation, necessary values, formula and easy calculation methods are given on the technical characteristics table on pages 6-9.

Rated Current

The current is calculated using the following equation:

$$I_b = \frac{P \cdot \alpha}{\sqrt{3} \cdot U \cdot \cos \varphi}$$

I_b = Operation current (A)

P = Installed load (W)

α = Utilization factor

U = Supply voltage (V)

- Busbar current rating is chosen as equal to or higher than the calculated IB current.
- After the voltage drop calculation if the chosen current rate is not convenient, a higher rating is chosen.

Short-Circuit

Tested short-circuit capacities are given on technical characteristics table on pages 6-9.

Busbar Installation Plan

Our distributor's project & design departments will help you for preparing the installation plans on request.

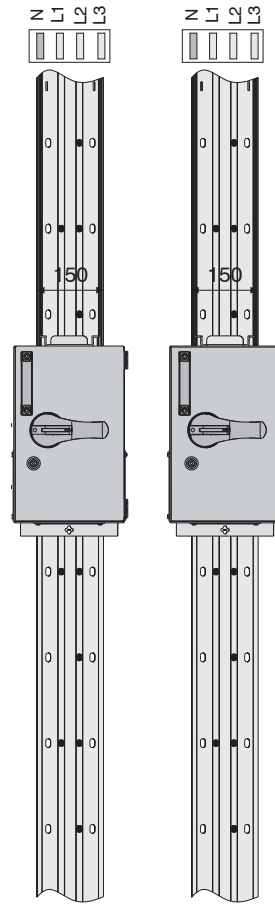
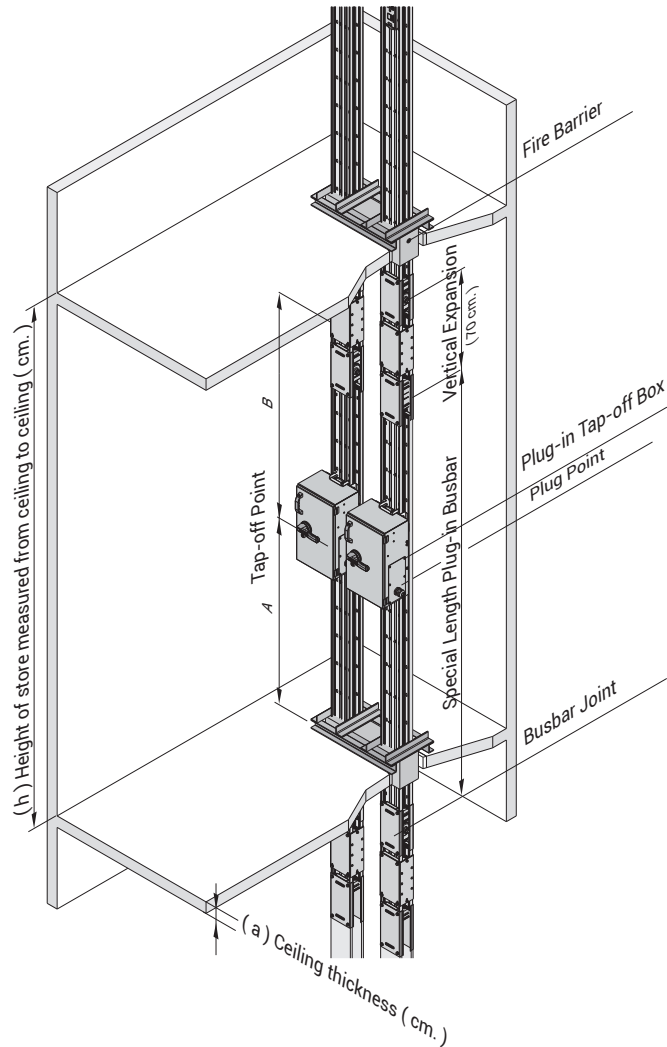
| Components List | | | |
|-----------------|------------------|-------------------------|----------|
| Item | Components | | Quantity |
| 1 | KXA 20504 - STD | Busbar (20 x 3m.) | 60 m. |
| 2 | KXA 20504 - D | Downwards Elbow | 2 pcs. |
| 3 | KXA 20504 - R | Right Elbow | 1 pc. |
| 4 | KXA 20504 - U | Upwards Elbow | 1 pc. |
| 5 | KXA 20504 - L | Left Elbow | 1 pc. |
| 6 | KXA 20504 - P11 | Panel Connection | 1 pc. |
| 7 | KXA 20504 - S10 | End Closer | 1 pc. |
| 8 | KXA 20504 - X95 | Special Straight Length | 1 pc. |
| 9 | KXA 20504 - X120 | Special Straight Length | 1 pc. |
| 10 | KXA 20504 - X122 | Special Straight Length | 1 pc. |
| 11 | KXA 20504 - X200 | Special Straight Length | 1 pc. |
| 12 | KXA 20504 - X174 | Special Straight Length | 1 pc. |
| 13 | KXP 1650 | Tap-off Box | 8 pcs. |
| 14 | KXB 2550 | Tap-off Box | 6 pcs. |

Company : Demir Makine
 Project : II.OSB
 Project No : 1128

Prepared by Name : Abdullah ELDELEKLI
 Date : 02 / 01 / 2022
 Signature :

As each building's structure is different than the other for vertical applications of E-Line KX special projects has to be designed.

The details on this page briefly explain the necessary information for drawing a vertical application project.



Project Design

The details below should be sent to our Project & Design department.

- Location and dimensions of the floor penetration where busbar will be installed.
- Number, height and ceiling thickness of storeys. (a=..., h=...)
- Connected load for each storey.
- Supply type of the vertical line (busbar or cable).

Please send the information to us by fax or e-mail with a sample drawing in Figure 1.

⚠ In multipath busbars in high-rise vertical shaft applications; Due to floor heights, floor thickness and product tolerances, the window or additional point alignments on the upper floors may not be the same. In order for the Tap off boxes to be aligned and the joint point not to coincide with the floor transitions, the assembly should be continued by making measurements on each floor.

■ EAE is not responsible for the potential risks that may occur in cases where the products in our catalogue are used outside of the standard phase sequences as shown in the catalogue.

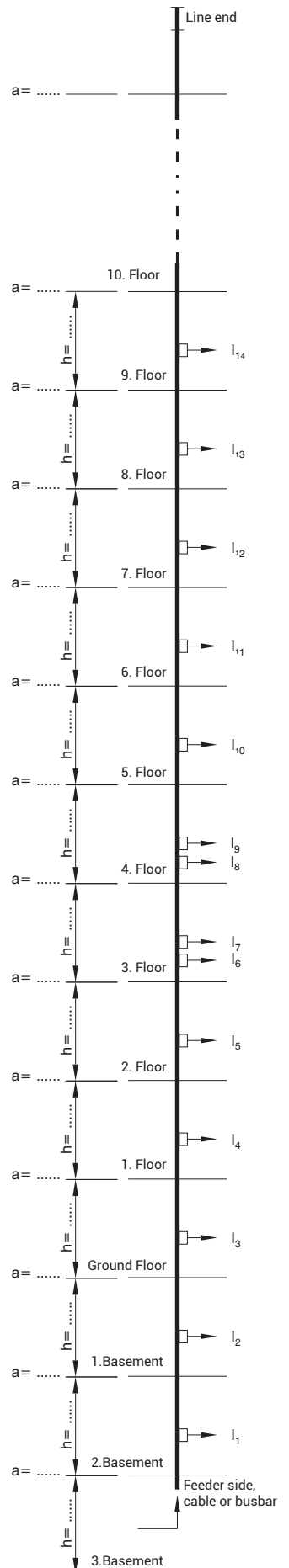
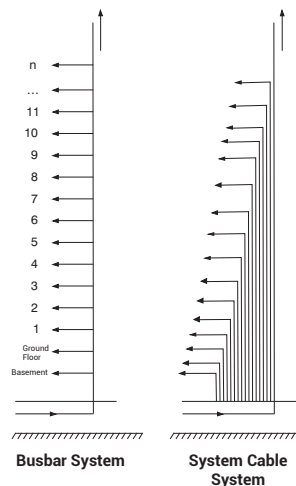


Figure 1

Aluminium Conductor (Al)

| | | | | | | | | | | |
|--|--|-----------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|
| Standards | IEC 61439-6, TS EN 61439-6, IEC 61439-1, TS EN 61439-1 | | | | | | | | | |
| Rated Isolation Voltage | U _i | V | 1000 | at Cat IV | | | | | | |
| Max. Rated Operational Voltage | U _e | Vac | 1000 | | | | | | | |
| Rated Impulse Withstand Voltage | U _{imp} | kV | 12 | | | | | | | |
| Rated Frequency | f | Hz | 50 | | | | | | | |
| Pollution Degree | III | | | | | | | | | |
| Protection Degree | IP55 / IP65 | | | | | | | | | |
| External Mechanical Impacts (IK Code)* | Bolt-on Busbar IK10+, Plug-in Busbar IK08 | | | | | | | | | |
| Rated Current | I_n | A | 400 | 500 | 630 | 800 | 1000 | 1000 | 1250 | 1350 |
| Busbar Code | | | 04 | 05 | 06 | 08 | 11 | 10 | 12 | 14 |
| Rated Short-time Withstand Current (1s) (Three phase) | I _{cw} | kA | 16 | 16 | 25 | 35 | 35 | 50 | 60 | 60 |
| Rated Peak Withstand Current | I _{pk} | kA | 32 | 32 | 52,5 | 73,5 | 73,5 | 105 | 132 | 132 |
| Rated Short-time Withstand Current for Neutral Conductor(1s)(Single phase) | I _{cw} | kA | 9,6 | 9,6 | 15 | 21 | 21 | 30 | 36 | 36 |
| Rated Peak Withstand Current for Neutral Conductor | I _{pk} | kA | 16,32 | 16,32 | 30 | 44,1 | 44,1 | 63 | 75,6 | 75,6 |
| Rated Short-time Withstand Current for PE (Housing) Conductor(1s)(Single phase) | I _{cw} | kA | 9,6 | 9,6 | 15 | 21 | 21 | 30 | 36 | 36 |
| Rated Peak Withstand Current for PE (Housing) Conductor | I _{pk} | kA | 16,32 | 16,32 | 30 | 44,1 | 44,1 | 63 | 75,6 | 75,6 |
| MEAN PHASE CONDUCTOR CHARACTERISTICS AT RATED CURRENT I_n | | | | | | | | | | |
| Resistance at a conductor temperature of 20 °C | R ₂₀ | mΩ/m | 0,197 | 0,163 | 0,121 | 0,088 | 0,077 | 0,061 | 0,044 | 0,040 |
| Resistance at an ambient air temperature of 35 °C | R | mΩ/m | 0,258 | 0,225 | 0,159 | 0,116 | 0,103 | 0,080 | 0,058 | 0,052 |
| Reactance (Independent from Temperature) | X | mΩ/m | 0,035 | 0,033 | 0,027 | 0,021 | 0,020 | 0,015 | 0,013 | 0,013 |
| Positive and negative sequence impedances at an ambient air temperature of 35 °C | Z | mΩ/m | 0,260 | 0,227 | 0,162 | 0,118 | 0,105 | 0,082 | 0,060 | 0,053 |
| Positive and negative sequence impedances at a conductor temperature of 20 °C | Z ₂₀ | mΩ/m | 0,200 | 0,167 | 0,124 | 0,091 | 0,077 | 0,063 | 0,046 | 0,042 |
| DC Resistance at a conductor temperature of 20 °C for Phases | R/ort _{ph} | mΩ/m | 0,197 | 0,161 | 0,124 | 0,087 | 0,075 | 0,060 | 0,043 | 0,039 |
| DC Resistance at a conductor temperature of 20 °C for Neutral | R _N | mΩ/m | 0,198 | 0,164 | 0,126 | 0,090 | 0,075 | 0,061 | 0,044 | 0,039 |
| DC Resistance at a conductor temperature of 20 °C for PE (Housing) | R _{PE} | mΩ/m | 0,038 | 0,033 | 0,028 | 0,024 | 0,024 | 0,023 | 0,023 | 0,026 |
| SECTIONS | | | | | | | | | | |
| L1,L2,L3,N | | mm ² | 150 | 180 | 240 | 330 | 360 | 480 | 660 | 750 |
| PE (4 ½ Conductors) | | mm ² | 75 | 90 | 120 | 165 | 180 | 240 | 330 | 375 |
| PE (5 Conductors) | | mm ² | 150 | 180 | 240 | 330 | 360 | 480 | 660 | 750 |
| Aluminium Housing Section (Aluminium) | | mm ² | 1449 | 1509 | 1686 | 1788 | 1829 | 1894 | 2050 | 2128 |
| Conductor Dimensions | | mmxmm | 6x25 | 6x30 | 6x40 | 6x55 | 6x60 | 6x80 | 6x110 | 6x125 |
| Busbar Weight (4 Conductors) | | kg/m | 7,0 | 7,4 | 7,9 | 9,2 | 10,1 | 11,3 | 13,9 | 15,2 |
| Busbar Weight (5 Conductors) | | kg/m | 7,4 | 7,9 | 8,6 | 10,2 | 11,1 | 12,8 | 15,9 | 17,5 |
| MEAN FAULT-LOOP CHARACTERISTICS | | | | | | | | | | |
| Zero-sequence Impedance | | | | | | | | | | |
| Zero-sequence impedance at a conductor temperature of 20 °C | Z _{(0)b20phN} | mΩ/m | 0,873 | 0,748 | 0,572 | 0,419 | 0,351 | 0,291 | 0,214 | 0,194 |
| Zero-sequence impedance at a conductor temperature of 20 °C (Housing) | Z _{(0)b20phPE} | mΩ/m | 0,430 | 0,398 | 0,326 | 0,268 | 0,215 | 0,245 | 0,208 | 0,199 |
| Zero-sequence impedance at an ambient temperature of 35 °C | Z _{(0)bphN} | mΩ/m | 1,129 | 1,011 | 0,742 | 0,540 | 0,470 | 0,371 | 0,274 | 0,245 |
| Zero-sequence impedance at an ambient temperature of 35 °C (Housing) | Z _{(0)bphPE} | mΩ/m | 0,528 | 0,507 | 0,406 | 0,331 | 0,276 | 0,303 | 0,260 | 0,245 |
| RESISTANCES AND REACTANCES | | | | | | | | | | |
| Resistance at a conductor temperature of 20 °C | R _{b20phph} | mΩ/m | 0,399 | 0,337 | 0,249 | 0,184 | 0,153 | 0,125 | 0,092 | 0,083 |
| Resistance at a conductor temperature of 20 °C | R _{b20phN} | mΩ/m | 0,408 | 0,347 | 0,255 | 0,192 | 0,161 | 0,131 | 0,096 | 0,087 |
| Resistance at a conductor temperature of 20 °C (Housing) | R _{b20phPE} | mΩ/m | 0,252 | 0,223 | 0,175 | 0,137 | 0,112 | 0,112 | 0,093 | 0,086 |
| Resistance at an ambient air temperature of 35 °C | R _{bphph} | mΩ/m | 0,523 | 0,464 | 0,328 | 0,241 | 0,211 | 0,164 | 0,120 | 0,107 |
| Resistance at an ambient air temperature of 35 °C | R _{bphN} | mΩ/m | 0,534 | 0,477 | 0,336 | 0,252 | 0,220 | 0,171 | 0,126 | 0,113 |
| Resistance at an ambient air temperature of 35 °C (Housing) | R _{bphPE} | mΩ/m | 0,330 | 0,307 | 0,231 | 0,180 | 0,153 | 0,146 | 0,122 | 0,112 |
| Reactance (Independent from temperature) | X _{bphph} | mΩ/m | 0,073 | 0,065 | 0,043 | 0,042 | 0,037 | 0,032 | 0,024 | 0,023 |
| Reactance (Independent from temperature) | X _{bphN} | mΩ/m | 0,102 | 0,092 | 0,075 | 0,058 | 0,053 | 0,045 | 0,034 | 0,032 |
| Reactance (Independent from temperature) | X _{bphPE} | mΩ/m | 0,102 | 0,093 | 0,069 | 0,061 | 0,049 | 0,050 | 0,041 | 0,039 |

| | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| 1600 | 1600 | 2000 | 2000 | 2500 | 2500 | 2500 | 3200 | 3200 | 4000 | 4000 | 5000 | 6000 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
|------|------|------|------|------|------|------|------|------|------|------|------|------|

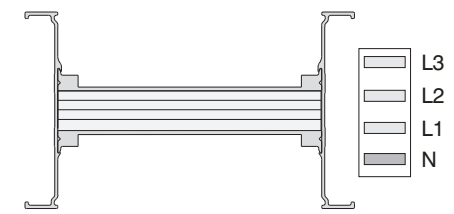
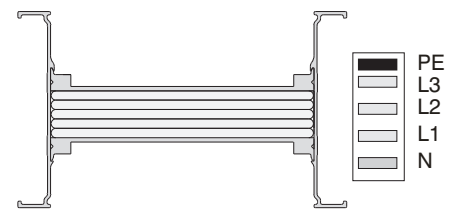
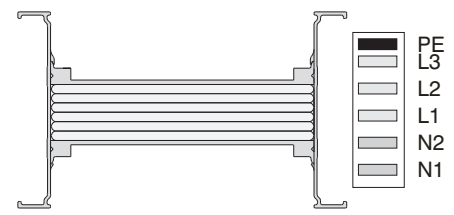
| 16 | 17 | 18 | 20 | 29 | 27 | 25 | 32 | 33 | 40 | 41 | 51 | 60 |
|------|-------|-------|-------|-------|-------|-----|-----|-------|-------|-------|-------|-------|
| 60 | 80 | 80 | 80 | 80 | 80 | 100 | 100 | 120 | 120 | 120 | 120 | 120 |
| 132 | 176 | 176 | 176 | 176 | 176 | 220 | 220 | 264 | 264 | 264 | 264 | 264 |
| 36 | 48 | 48 | 48 | 48 | 48 | 60 | 60 | 72 | 72 | 72 | 72 | 72 |
| 75,6 | 100,8 | 100,8 | 100,8 | 100,8 | 100,8 | 132 | 132 | 158,4 | 158,4 | 158,4 | 158,4 | 158,4 |
| 36 | 48 | 48 | 48 | 48 | 48 | 60 | 60 | 72 | 72 | 72 | 72 | 72 |
| 75,6 | 100,8 | 100,8 | 100,8 | 100,8 | 100,8 | 132 | 132 | 158,4 | 158,4 | 158,4 | 158,4 | 158,4 |

| | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0,034 | 0,031 | 0,027 | 0,024 | 0,021 | 0,019 | 0,022 | 0,017 | 0,015 | 0,012 | 0,014 | 0,010 | 0,008 |
| 0,044 | 0,041 | 0,035 | 0,034 | 0,028 | 0,026 | 0,029 | 0,022 | 0,020 | 0,016 | 0,017 | 0,014 | 0,010 |
| 0,010 | 0,010 | 0,008 | 0,008 | 0,007 | 0,007 | 0,007 | 0,005 | 0,005 | 0,004 | 0,004 | 0,003 | 0,002 |
| 0,045 | 0,042 | 0,036 | 0,035 | 0,029 | 0,027 | 0,030 | 0,022 | 0,020 | 0,017 | 0,018 | 0,014 | 0,010 |
| 0,034 | 0,033 | 0,028 | 0,027 | 0,022 | 0,021 | 0,023 | 0,017 | 0,016 | 0,013 | 0,013 | 0,010 | 0,008 |
| 0,032 | 0,030 | 0,025 | 0,024 | 0,020 | 0,019 | 0,022 | 0,016 | 0,015 | 0,012 | 0,013 | 0,010 | 0,008 |
| 0,032 | 0,031 | 0,025 | 0,025 | 0,020 | 0,020 | 0,023 | 0,018 | 0,017 | 0,013 | 0,013 | 0,010 | 0,008 |
| 0,022 | 0,022 | 0,021 | 0,021 | 0,022 | 0,020 | 0,019 | 0,017 | 0,017 | 0,015 | 0,016 | 0,013 | 0,013 |

| | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|----------|----------|----------|----------|----------|----------|----------|
| 840 | 960 | 1080 | 1200 | 1380 | 1500 | 1320 | 1680 | 1920 | 2400 | 2160 | 3000 | 3600 |
| 420 | 480 | 540 | 600 | 690 | 750 | 660 | 840 | 960 | 1200 | 1080 | 1500 | 1800 |
| 840 | 960 | 1080 | 1200 | 1380 | 1500 | 1320 | 1680 | 1920 | 2400 | 2160 | 3000 | 3600 |
| 2206 | 2314 | 2410 | 2518 | 2679 | 2764 | 3912 | 4224 | 4411 | 4848 | 4640 | 5275 | 7128 |
| 6x140 | 6x160 | 6x180 | 6x200 | 6x230 | 6x250 | 2(6x110) | 2(6x140) | 2(6x160) | 2(6x200) | 2(6x180) | 2(6x250) | 3(6x200) |
| 17,0 | 18,3 | 20,5 | 21,7 | 24,9 | 28,5 | 27,3 | 32,5 | 35,9 | 42,9 | 38,6 | 57,2 | 63,9 |
| 19,6 | 21,1 | 23,7 | 25,3 | 29,0 | 34,2 | 31,2 | 37,5 | 41,6 | 50 | 45,0 | 68,5 | 74,6 |

| | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0,164 | 0,153 | 0,132 | 0,130 | 0,102 | 0,103 | 0,108 | 0,081 | 0,074 | 0,060 | 0,065 | 0,048 | 0,039 |
| 0,141 | 0,161 | 0,126 | 0,158 | 0,112 | 0,131 | 0,101 | 0,076 | 0,101 | 0,084 | 0,085 | 0,078 | 0,043 |
| 0,209 | 0,195 | 0,169 | 0,167 | 0,131 | 0,135 | 0,140 | 0,104 | 0,094 | 0,078 | 0,084 | 0,064 | 0,050 |
| 0,176 | 0,199 | 0,159 | 0,199 | 0,143 | 0,168 | 0,126 | 0,095 | 0,127 | 0,108 | 0,111 | 0,102 | 0,054 |

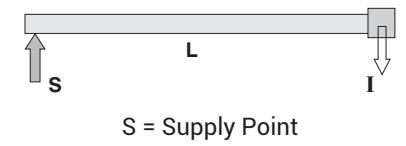
| | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0,067 | 0,065 | 0,054 | 0,054 | 0,041 | 0,042 | 0,046 | 0,034 | 0,031 | 0,025 | 0,026 | 0,020 | 0,016 |
| 0,071 | 0,069 | 0,057 | 0,057 | 0,044 | 0,044 | 0,049 | 0,036 | 0,033 | 0,027 | 0,028 | 0,021 | 0,017 |
| 0,063 | 0,068 | 0,055 | 0,065 | 0,047 | 0,050 | 0,053 | 0,033 | 0,049 | 0,035 | 0,033 | 0,031 | 0,019 |
| 0,088 | 0,086 | 0,071 | 0,072 | 0,055 | 0,057 | 0,059 | 0,044 | 0,040 | 0,033 | 0,035 | 0,027 | 0,021 |
| 0,094 | 0,090 | 0,076 | 0,076 | 0,058 | 0,060 | 0,062 | 0,047 | 0,043 | 0,035 | 0,038 | 0,029 | 0,022 |
| 0,083 | 0,089 | 0,072 | 0,086 | 0,062 | 0,068 | 0,067 | 0,044 | 0,064 | 0,046 | 0,045 | 0,042 | 0,025 |
| 0,019 | 0,018 | 0,016 | 0,017 | 0,012 | 0,013 | 0,012 | 0,010 | 0,009 | 0,008 | 0,008 | 0,005 | 0,005 |
| 0,028 | 0,026 | 0,023 | 0,023 | 0,018 | 0,020 | 0,018 | 0,014 | 0,013 | 0,012 | 0,012 | 0,009 | 0,007 |
| 0,028 | 0,032 | 0,023 | 0,030 | 0,019 | 0,023 | 0,024 | 0,014 | 0,019 | 0,015 | 0,012 | 0,014 | 0,007 |



Voltage Drop Calculation
Generally Voltage drop of a busbar system can be calculated with the following formula.

$$\Delta U = \sqrt{3} \cdot L \cdot I \cdot (R \cdot \cos\phi + X \cdot \sin\phi) \cdot 10^{-3} \text{ [V]}$$

ΔU = Voltage Drop (V)
 L = Line Length (m)
 I = Line Current or Load (A)
 R = Resistance (mΩ/m)
 X = Reactance (mΩ/m)



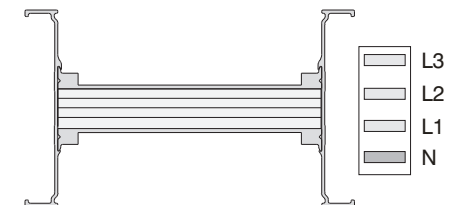
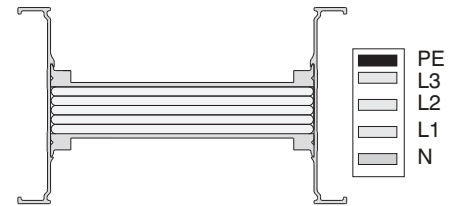
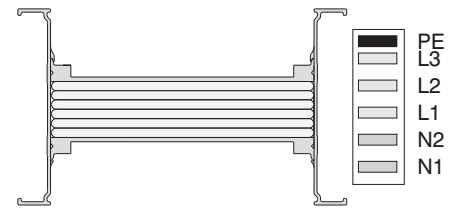
- All phase conductor characteristics had been determined according to Annex BB of IEC / EN 61439-6.
- Fault-loop zero-sequences impedances had been determined according to Annex CC of IEC / EN 61439-6.
- Fault-loop resistances and impedances had been determined according to Annex DD of IEC / EN 61439-6.

* IK10 corresponds to impact energy of 20J according to IEC 62262.

Copper Conductor (Cu)

| | | | | | | | | |
|--|--|-----------------|------------|------------|------------|-------------|-------------|-------------|
| Standards | IEC 61439-6, TS EN 61439-6, IEC 61439-1, TS EN 61439-1 | | | | | | | |
| Rated Isolation Voltage | U _i | V | 1000 | at Cat IV | | | | |
| Max. Rated Operational Voltage | U _e | V _{ac} | 1000 | | | | | |
| Rated Impulse Withstand Voltage | U _{imp} | kV | 12 | | | | | |
| Rated Frequency | f | Hz | 50 | | | | | |
| Pollution Degree | III | | | | | | | |
| Protection Degree | IP55 / IP65 | | | | | | | |
| External Mechanical Impacts (IK Code)* | Bolt-on Busbar IK10+, Plug-in Busbar IK08 | | | | | | | |
| Rated Current | I_n | A | 550 | 650 | 800 | 1000 | 1250 | 1350 |
| Busbar Code | | | 05 | 06 | 08 | 10 | 12 | 14 |
| Rated Short-time Withstand Current (1s) (Three phase) | I _{cw} | kA | 24 | 24 | 40 | 50 | 60 | 60 |
| Rated Peak Withstand Current | I _{pk} | kA | 50,4 | 50,4 | 84 | 105 | 132 | 132 |
| Rated Short-time Withstand Current for Neutral Conductor(1s)(Single phase) | I _{cw} | kA | 14,4 | 14,4 | 24 | 30 | 36 | 36 |
| Rated Peak Withstand Current for Neutral Conductor | I _{pk} | kA | 28,8 | 28,8 | 50,4 | 63 | 75,6 | 75,6 |
| Rated Short-time Withstand Current for PE (Housing) Conductor(1s)(Single phase) | I _{cw} | kA | 14,4 | 14,4 | 24 | 30 | 36 | 36 |
| Rated Peak Withstand Current for PE (Housing) Conductor | I _{pk} | kA | 28,8 | 28,8 | 50,4 | 63 | 75,6 | 75,6 |
| MEAN PHASE CONDUCTOR CHARACTERISTICS AT RATED CURRENT I_n | | | | | | | | |
| Resistance at a conductor temperature of 20 °C | R ₂₀ | mΩ/m | 0,123 | 0,100 | 0,074 | 0,055 | 0,044 | 0,038 |
| Resistance at an ambient air temperature of 35 °C | R | mΩ/m | 0,162 | 0,137 | 0,097 | 0,071 | 0,057 | 0,050 |
| Reactance (Independent from Temperature) | X | mΩ/m | 0,044 | 0,034 | 0,028 | 0,023 | 0,019 | 0,016 |
| Positive and negative sequence impedances at an ambient air temperature of 35 °C | Z | mΩ/m | 0,168 | 0,141 | 0,101 | 0,075 | 0,060 | 0,053 |
| Positive and negative sequence impedances at a conductor temperature of 20 °C | Z ₂₀ | mΩ/m | 0,130 | 0,106 | 0,079 | 0,060 | 0,047 | 0,041 |
| Rated Power Loss at 35 °C | | W/m | 143,5 | 166,8 | 185,5 | 213,6 | 264,8 | 274,5 |
| DC Resistance at a conductor temperature of 20 °C for Phases | R _{ort_{ph}} | mΩ/m | 0,118 | 0,097 | 0,072 | 0,053 | 0,041 | 0,036 |
| DC Resistance at a conductor temperature of 20 °C for Neutral | R _N | mΩ/m | 0,120 | 0,099 | 0,074 | 0,054 | 0,042 | 0,036 |
| DC Resistance at a conductor temperature of 20 °C for PE (Housing) | R _{PE} | mΩ/m | 0,036 | 0,034 | 0,027 | 0,029 | 0,024 | 0,028 |
| SECTIONS | | | | | | | | |
| L1,L2,L3,N | | mm ² | 150 | 180 | 240 | 330 | 420 | 480 |
| PE (4 ½ Conductors) | | mm ² | 75 | 90 | 120 | 165 | 210 | 240 |
| PE (5 Conductors) | | mm ² | 150 | 180 | 240 | 330 | 420 | 480 |
| Aluminium Housing Section (Aluminium) | | mm ² | 1449 | 1509 | 1686 | 1788 | 1842 | 1894 |
| Conductor Dimensions | | mmxmm | 6x25 | 6x30 | 6x40 | 6x55 | 6x70 | 6x80 |
| Busbar Weight (4 Conductors) | | kg/m | 10,7 | 11,9 | 14,4 | 18,3 | 22 | 24,5 |
| Busbar Weight (5 Conductors) | | kg/m | 12,2 | 13,52 | 16,8 | 21,5 | 26,1 | 29,2 |
| MEAN FAULT-LOOP CHARACTERISTICS | | | | | | | | |
| Zero-sequence Impedance | | | | | | | | |
| Zero-sequence impedance at a conductor temperature of 20 °C | Z _{(0)b20phN} | mΩ/m | 0,585 | 0,489 | 0,393 | 0,295 | 0,250 | 0,198 |
| Zero-sequence impedance at a conductor temperature of 20 °C (Housing) | Z _{(0)b20phPE} | mΩ/m | 0,365 | 0,338 | 0,268 | 0,281 | 0,229 | 0,209 |
| Zero-sequence impedance at an ambient temperature of 35 °C | Z _{(0)bphN} | mΩ/m | 0,750 | 0,646 | 0,499 | 0,371 | 0,309 | 0,251 |
| Zero-sequence impedance at an ambient temperature of 35 °C (Housing) | Z _{(0)bphPE} | mΩ/m | 0,442 | 0,419 | 0,324 | 0,345 | 0,286 | 0,259 |
| Resistances and Reactances | | | | | | | | |
| Resistance at a conductor temperature of 20 °C | R _{b20phph} | mΩ/m | 0,248 | 0,206 | 0,159 | 0,119 | 0,091 | 0,077 |
| Resistance at a conductor temperature of 20 °C | R _{b20phN} | mΩ/m | 0,256 | 0,214 | 0,167 | 0,126 | 0,097 | 0,083 |
| Resistance at a conductor temperature of 20 °C (Housing) | R _{b20phPE} | mΩ/m | 0,176 | 0,155 | 0,123 | 0,112 | 0,137 | 0,083 |
| Resistance at an ambient air temperature of 35 °C | R _{bphph} | mΩ/m | 0,328 | 0,283 | 0,209 | 0,154 | 0,118 | 0,103 |
| Resistance at an ambient air temperature of 35 °C | R _{bphN} | mΩ/m | 0,339 | 0,294 | 0,219 | 0,163 | 0,126 | 0,110 |
| Resistance at an ambient air temperature of 35 °C (Housing) | R _{bphPE} | mΩ/m | 0,233 | 0,213 | 0,161 | 0,145 | 0,178 | 0,111 |
| Reactance (Independent from temperature) | X _{bphph} | mΩ/m | 0,079 | 0,069 | 0,052 | 0,043 | 0,036 | 0,032 |
| Reactance (Independent from temperature) | X _{bphN} | mΩ/m | 0,105 | 0,094 | 0,071 | 0,059 | 0,050 | 0,045 |
| Reactance (Independent from temperature) | X _{bphPE} | mΩ/m | 0,101 | 0,093 | 0,070 | 0,061 | 0,054 | 0,050 |

| 1600 | 2000 | 2500 | 2000 | 2500 | 3300 | 3600 | 4000 | 5000 | 6300 |
|-------|-------|-------|---------|---------|----------|----------|----------|----------|----------|
| 17 | 23 | 25 | 22 | 27 | 32 | 36 | 40 | 50 | 63 |
| 80 | 80 | 100 | 80 | 100 | 120 | 120 | 120 | 120 | 120 |
| 176 | 176 | 220 | 176 | 220 | 264 | 264 | 264 | 264 | 264 |
| 48 | 48 | 60 | 48 | 60 | 72 | 72 | 72 | 72 | 72 |
| 100,8 | 100,8 | 132 | 100,8 | 132 | 158,4 | 158,4 | 158,4 | 158,4 | 158,4 |
| 48 | 48 | 60 | 48 | 60 | 72 | 72 | 72 | 72 | 72 |
| 100,8 | 100,8 | 132 | 100,8 | 132 | 158,4 | 158,4 | 158,4 | 158,4 | 158,4 |
| 0,032 | 0,024 | 0,016 | 0,028 | 0,021 | 0,014 | 0,012 | 0,011 | 0,008 | 0,005 |
| 0,044 | 0,033 | 0,021 | 0,036 | 0,028 | 0,019 | 0,016 | 0,015 | 0,010 | 0,006 |
| 0,015 | 0,010 | 0,008 | 0,012 | 0,009 | 0,007 | 0,006 | 0,005 | 0,004 | 0,003 |
| 0,047 | 0,034 | 0,022 | 0,038 | 0,030 | 0,020 | 0,017 | 0,016 | 0,011 | 0,007 |
| 0,035 | 0,026 | 0,018 | 0,030 | 0,023 | 0,016 | 0,014 | 0,012 | 0,009 | 0,006 |
| 325,1 | 383,3 | 384,4 | 436,8 | 528,8 | 604,4 | 633,7 | 705,6 | 772,5 | 750,1 |
| 0,031 | 0,022 | 0,014 | 0,025 | 0,021 | 0,013 | 0,012 | 0,010 | 0,007 | 0,005 |
| 0,031 | 0,023 | 0,014 | 0,026 | 0,021 | 0,015 | 0,012 | 0,009 | 0,008 | 0,005 |
| 0,028 | 0,039 | 0,031 | 0,019 | 0,022 | 0,018 | 0,023 | 0,021 | 0,021 | 0,011 |
| 570 | 750 | 1200 | 660 | 840 | 1320 | 1500 | 1680 | 2400 | 3600 |
| 285 | 375 | 600 | 330 | 420 | 660 | 750 | 840 | 1200 | 1800 |
| 570 | 750 | 1200 | 660 | 840 | 1320 | 1500 | 1680 | 2400 | 3600 |
| 1996 | 2128 | 2518 | 3340 | 3580 | 3912 | 4068 | 4224 | 4848 | 7128 |
| 6x95 | 6x125 | 6x200 | 2(6x55) | 2(6x70) | 2(6x110) | 2(6x125) | 2(6x140) | 2(6x200) | 3(6x200) |
| 27,7 | 36,2 | 54,7 | 35,9 | 44 | 63,5 | 71,1 | 78,6 | 108,8 | 162,8 |
| 33,7 | 43,8 | 66,5 | 42,4 | 52 | 76,5 | 85,8 | 95,2 | 132,4 | 198,2 |
| 0,168 | 0,130 | 0,086 | 0,148 | 0,107 | 0,073 | 0,067 | 0,060 | 0,038 | 0,029 |
| 0,154 | 0,153 | 0,146 | 0,144 | 0,090 | 0,091 | 0,090 | 0,100 | 0,086 | 0,061 |
| 0,221 | 0,167 | 0,107 | 0,189 | 0,136 | 0,092 | 0,084 | 0,077 | 0,046 | 0,034 |
| 0,197 | 0,193 | 0,181 | 0,176 | 0,111 | 0,113 | 0,112 | 0,128 | 0,106 | 0,075 |
| 0,066 | 0,050 | 0,033 | 0,059 | 0,044 | 0,029 | 0,025 | 0,023 | 0,016 | 0,011 |
| 0,071 | 0,054 | 0,035 | 0,063 | 0,047 | 0,031 | 0,027 | 0,025 | 0,017 | 0,012 |
| 0,065 | 0,059 | 0,053 | 0,061 | 0,040 | 0,035 | 0,034 | 0,044 | 0,032 | 0,023 |
| 0,091 | 0,067 | 0,043 | 0,077 | 0,058 | 0,038 | 0,033 | 0,030 | 0,020 | 0,013 |
| 0,098 | 0,073 | 0,046 | 0,083 | 0,062 | 0,041 | 0,036 | 0,033 | 0,022 | 0,015 |
| 0,089 | 0,080 | 0,070 | 0,080 | 0,052 | 0,047 | 0,044 | 0,059 | 0,041 | 0,028 |
| 0,026 | 0,022 | 0,014 | 0,022 | 0,016 | 0,012 | 0,011 | 0,010 | 0,008 | 0,005 |
| 0,037 | 0,032 | 0,022 | 0,029 | 0,023 | 0,018 | 0,015 | 0,014 | 0,011 | 0,008 |
| 0,036 | 0,035 | 0,028 | 0,033 | 0,022 | 0,020 | 0,018 | 0,018 | 0,014 | 0,010 |

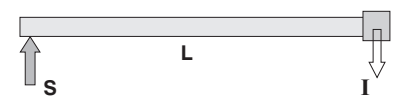


Voltage Drop Calculation

Generally Voltage drop of a busbar system can be calculated with the following formula.

$$\Delta U = \sqrt{3} \cdot L \cdot I \cdot (R \cdot \cos\phi + X \cdot \sin\phi) \cdot 10^{-3} [V]$$

- ΔU = Voltage Drop (V)
- L = Line Length (m)
- I = Line Current or Load (A)
- R = Resistance (m Ω /m)
- X = Reactance (m Ω /m)



S = Supply Point

- All phase conductor characteristics had been determined according to Annex BB of IEC / EN 61439-6.
- Fault-loop zero-sequences impedances had been determined according to Annex CC of IEC / EN 61439-6.
- Fault-loop resistances and impedances had been determined according to Annex DD of IEC / EN 61439-6.
- * IK10 corresponds to impact energy of 20J according to IEC 62262.

- BUSBAR TYPE
- CONDUCTOR MATERIAL
- BUSBAR CODE
- PROTECTION DEGREE
- CONDUCTOR CONFIGURATION
- UTILIZATION TYPE P - Plug-in / B - Bolt-on
- COMPONENT

KX A 17 5 04 - B - TR41

Busbar Type

Aluminium (Al) **A**
Copper (Cu) **C** CONDUCTOR MATERIAL

| KXA - Al Conductor | | KXC - Cu Conductor | | Conductor |
|--------------------|-------------|--------------------|-------------|-----------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | |
| *400 | 04 | *550 | 05 | 6x25 |
| *500 | 05 | *650 | 06 | 6x30 |
| *630 | 06 | *800 | 08 | 6x40 |
| 800 | 08 | 1000 | 10 | 6x55 |
| 1000 | 11 | - | - | 6x60 |
| - | - | 1250 | 12 | 6x70 |
| 1000 | 10 | 1350 | 14 | 6x80 |
| - | - | 1600 | 17 | 6x95 |
| 1250 | 12 | - | - | 6x110 |
| 1350 | 14 | 2000 | 23 | 6x125 |
| 1600 | 16 | - | - | 6x140 |
| 1600 | 17 | - | - | 6x160 |
| 2000 | 18 | - | - | 6x180 |
| 2000 | 20 | 2500 | 25 | 6x200 |
| 2500 | 29 | - | - | 6x230 |
| 2500 | 27 | - | - | 6x250 |
| - | - | 2000 | 22 | 2(6x55) |
| - | - | 2500 | 27 | 2(6x70) |
| 2500 | 25 | 3300 | 32 | 2(6x110) |
| - | - | 3600 | 36 | 2(6x125) |
| 3200 | 32 | 4000 | 40 | 2(6x140) |
| 3200 | 33 | - | - | 2(6x160) |
| 4000 | 40 | 5000 | 50 | 2(6x200) |
| 4000 | 41 | - | - | 2(6x180) |
| 5000 | 51 | - | - | 2(6x250) |
| 6000 | 60 | 6300 | 63 | 3(6x200) |

(*) Bolt-on tap-off box can not be used on the joints of mentioned ratings of busbars. Plug-in points can be at one side only.

Busbar Code

IP55 / IP65* **5** PROTECTION DEGREE

*Please call us for IP65 orders.
(IP65 is not recommended for outdoor applications. Please check CR catalog.)

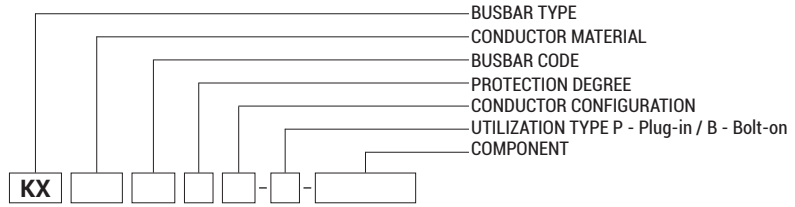
| Number of Conductors | Code | Conductor Configuration | | | | | | | | | |
|----------------------|------|-------------------------|----|----|----|----|----|------|-----|-------|--------------|
| | | L1 | L2 | L3 | N1 | N2 | PE | ½ PE | CPE | ½ CPE | PE (Housing) |
| 3 Conductors | 03 | ✓ | ✓ | ✓ | / | / | / | / | / | / | ✓ |
| 4 Conductors | 04 | ✓ | ✓ | ✓ | ✓ | / | / | / | / | / | ✓ |
| 4 ½ Conductors | 07 | ✓ | ✓ | ✓ | ✓ | / | / | ✓ | / | / | ✓ |
| 4 ½ Conductors | 08 | ✓ | ✓ | ✓ | ✓ | / | / | / | ✓ | ✓ | ✓ |
| 5 Conductors | 05 | ✓ | ✓ | ✓ | ✓ | / | / | ✓ | / | / | ✓ |
| 5 Conductors | 09 | ✓ | ✓ | ✓ | ✓ | / | / | / | ✓ | / | ✓ |
| 6 Conductors | 06 | ✓ | ✓ | ✓ | ✓ | ✓ | / | ✓ | / | ✓ | ✓ |

| | |
|-------------|--|
| *TYPE | Utilization Type |
| (B) Bolt-on | Energy is supplied from the joints. |
| (P) Plug-in | Energy is supplied from the joints and the plug-in points. |

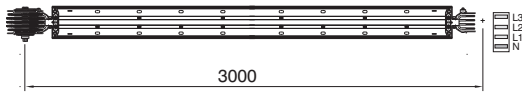
COMPONENTS

| | |
|--------------------------------------|------|
| Standard Length..... | STD |
| Special Length..... | X |
| Upwards Elbow..... | U |
| Downwards Elbow..... | D |
| Right Elbow..... | R |
| Left Elbow..... | L |
| Left Horizontal Offset..... | LH |
| Right Horizontal Offset..... | RH |
| Upwards Vertical Offset..... | UV |
| Downwards Vertical Offset..... | DV |
| Upwards Left Combined Offset..... | KUL |
| Upwards Right Combined Offset..... | KUR |
| Downwards Left Combined Offset..... | KDL |
| Downwards Right Combined Offset..... | KDR |
| Left Upwards Combined Offset..... | KLU |
| Right Upwards Combined Offset..... | KRU |
| Left Downwards Combined Offset..... | KLD |
| Right Downwards Combined Offset..... | KRD |
| End Closer..... | S |
| Reduction..... | RD |
| Left Side Feeder "T"..... | TYL |
| Right Side Feeder "T"..... | TYR |
| Central Feeder "T"..... | TO |
| Horizontal Expansion..... | YDT |
| Vertical Expansion..... | DDT |
| Phase Transposition Module..... | FDM |
| Panel Connection..... | P10 |
| Panel Connection..... | P11 |
| Upwards Panel Connection..... | PU20 |
| Upwards Panel Connection..... | PU21 |
| Downwards Panel Connection..... | PD20 |
| Downwards Panel Connection..... | PD21 |
| Right Panel Connection..... | PR30 |
| Right Panel Connection..... | PR31 |
| Left Panel Connection..... | PL30 |
| Left Panel Connection..... | PL31 |
| Panel Connection..... | P40 |
| Panel Connection..... | P41 |
| Transformer Connection..... | TR11 |
| Upwards Transformer Con..... | TU21 |
| Downwards Transformer Con..... | TD21 |
| Transformer Connection..... | TR31 |
| Transformer Connection..... | TR41 |
| Right Transformer Connection..... | TR51 |
| Left Transformer Connection..... | TL51 |
| Transformer Connection..... | TR61 |
| Transformer Connection..... | TR71 |
| Feeder Box..... | B10 |
| Feeder Box..... | B11 |
| Central Feeder Box..... | BO |
| Flexible..... | F |

►► Standard Straight Length



Bolt-on



Electrical energy up to 1000 A can be supplied from the joints of bolt-on type by bolt-on tap-off boxes.

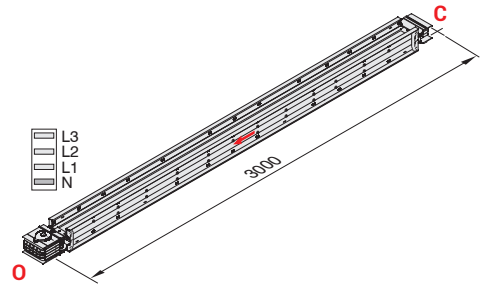
Note:

Busbar energy should be turned off, before installing bolt-on type tap-off boxes.

Bolt-on Standard Straight Length Busbar

Sample Order:
2500 A, Aluminium,
Bolt-on, IP 55, 4 Conductors

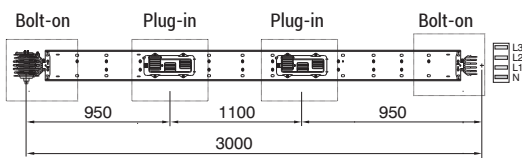
KXA 25504 - B - STD



Applications:

- As feeder or sub-feeder line,
- Where a load has to be supplied
- from the busbar.

Plug-in

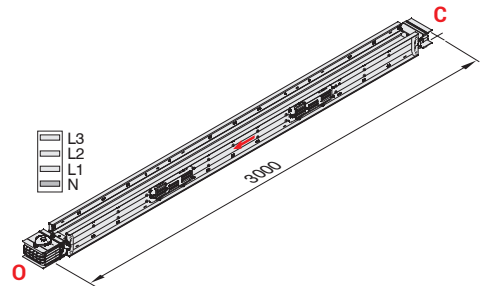


Electrical energy up to 1000 A can be supplied from the joints and up to 630 A can be supplied from the plus.

Plug-in Standard Straight Length Busbar

Sample Order:
1250 A, Copper, Plug-in, IP 55,
4 Conductors

KXC 12504 - P - STD

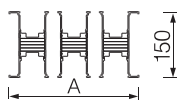
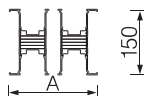
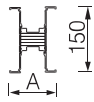


Applications:

- In application of bolt-on
- As vertical feeder line high rise buildings
- For frequent energy supply
- If continuous energy needed, while tap-offs installed.

Table For Outer Dimension of Busbars

| KXA - Al Conductor | | KXC - Cu Conductor | | A |
|--------------------|-------------|--------------------|-------------|------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | (mm) |
| *400 | 04 | *550 | 05 | 77,5 |
| *500 | 05 | *650 | 06 | 82,5 |
| *630 | 06 | *800 | 08 | 91 |
| 800 | 08 | 1000 | 10 | 106 |
| 1000 | 11 | - | - | 111 |
| - | - | 1250 | 12 | 121 |
| 1000 | 10 | 1350 | 14 | 131 |
| - | - | 1600 | 17 | 146 |
| 1250 | 12 | - | - | 161 |
| 1350 | 14 | 2000 | 23 | 176 |
| 1600 | 16 | - | - | 191 |
| 1600 | 17 | - | - | 211 |
| 2000 | 18 | - | - | 233 |
| 2000 | 20 | 2500 | 25 | 251 |
| 2500 | 29 | - | - | 281 |
| 2500 | 27 | - | - | 301 |
| - | - | 2000 | 22 | 202 |
| - | - | 2500 | 27 | 232 |
| 2500 | 25 | 3300 | 32 | 312 |
| - | - | 3600 | 36 | 342 |
| 3200 | 32 | 4000 | 40 | 372 |
| 3200 | 33 | - | - | 412 |
| 4000 | 40 | 5000 | 50 | 492 |
| 4000 | 41 | - | - | 454 |
| 5000 | 51 | - | - | 592 |
| 6000 | 60 | 6300 | 63 | 732 |



Special Straight Length

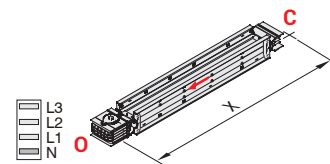
Special Straight Length in (cm)

Sample Order:
2500 A, Copper, Bolt-on, IP 55,
4 Conductors, 147 cm

KXC 25504 - B - X - 147

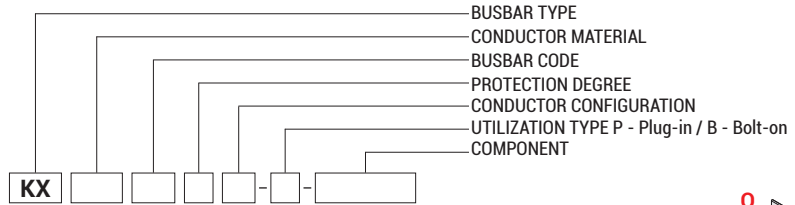
Note:

Bolt-on Minimum Length = 35cm
Plug-in Minimum Length = 100cm



Important Notice for the Tap-off box use;

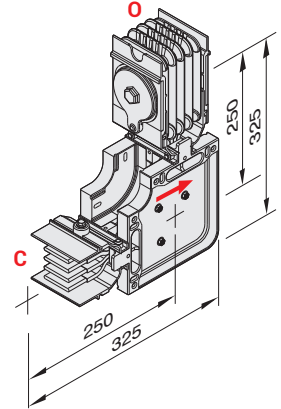
*It is not possible to install tap-off box at joint side for KXA 400A, KXA500A, KXA 630A, KXC 550A, KXC 650A and KXC 800A. KXA 400A, KXA500A, KXA 630A, KXC 550A, KXC 650A and KXC 800 busbar range may have plug-in windows at one side only. It is highly recommended to consider these points in your project designs.



Upwards Elbow - U

Sample Order:
3300 A, Copper, Bolt-on,
IP 55, 4 Conductors

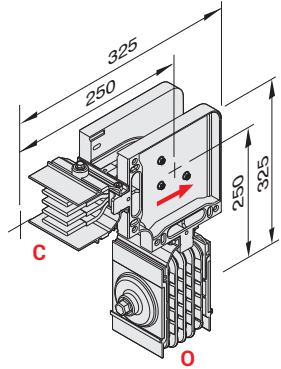
KXC 32504 - B - U



Downwards Elbow - D

Sample Order:
3300 A, Copper, Bolt-on,
IP 55, 4 Conductors

KXC 32504 - B - D

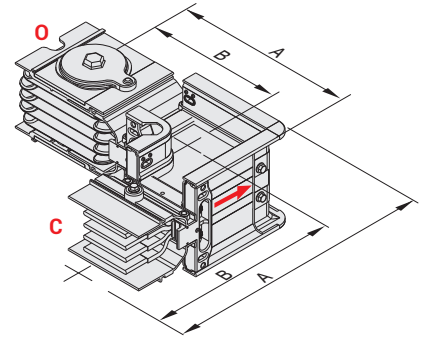


| KXA - Al Conductor | | KXC - Cu Conductor | | A | B |
|--------------------|-------------|--------------------|-------------|------|------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | (mm) | (mm) |
| *400 | 04 | *550 | 05 | 252 | 214 |
| *500 | 05 | *650 | 06 | 257 | 217 |
| *630 | 06 | *800 | 08 | 267 | 222 |
| 800 | 08 | 1000 | 10 | 282 | 229 |
| 1000 | 11 | - | - | 287 | 232 |
| - | - | 1250 | 12 | 297 | 236 |
| 1000 | 10 | 1350 | 14 | 307 | 241 |
| - | - | 1600 | 17 | 322 | 249 |
| 1250 | 12 | - | - | 337 | 256 |
| 1350 | 14 | 2000 | 23 | 352 | 264 |
| 1600 | 16 | - | - | 367 | 271 |
| 1600 | 17 | - | - | 387 | 281 |
| 2000 | 18 | - | - | 408 | 291 |
| 2000 | 20 | 2500 | 25 | 427 | 301 |
| 2500 | 29 | - | - | 457 | 316 |
| 2500 | 27 | - | - | 477 | 326 |
| - | - | 2000 | 22 | 377 | 276 |
| - | - | 2500 | 27 | 407 | 291 |
| 2500 | 25 | 3300 | 32 | 487 | 331 |
| - | - | 3600 | 36 | 517 | 346 |
| 3200 | 32 | 4000 | 40 | 547 | 361 |
| 3200 | 33 | - | - | 587 | 381 |
| 4000 | 40 | 5000 | 50 | 667 | 421 |
| 4000 | 41 | - | - | 627 | 401 |
| 5000 | 51 | - | - | 767 | 471 |
| 6000 | 60 | 6300 | 63 | 907 | 541 |

Left Elbow - L

Sample Order:
2000 A, Copper, Bolt-on,
IP 55, 4 Conductors

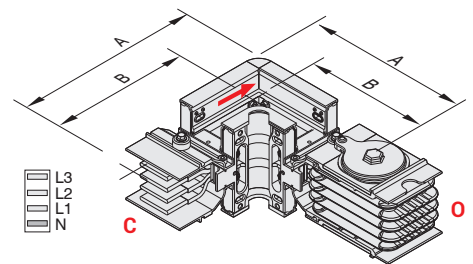
KXC 23504 - B - L



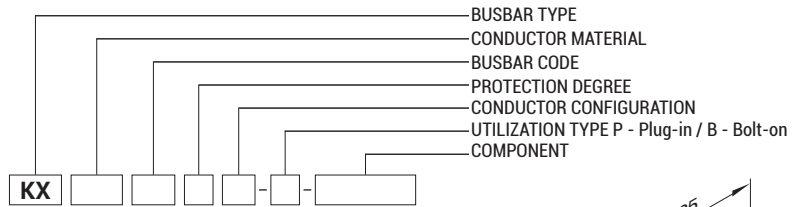
Right Elbow - R

Sample Order:
2000 A, Aluminium, Bolt-on,
IP 55, 4 Conductors

KXA 20504 - B - R



■ Special left or right elbows between 90° and 180° can be manufactured upon request.
■ The dimensions given above are minimum values. ■ Please call us for non-standard components.



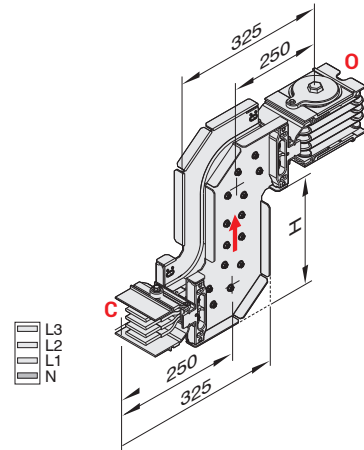
Upwards Vertical Offset - U



Sample Order:
H=25 cm, 2000 A, Aluminium
Bolt-on, IP 55, 5 Conductors

KXA 20505-B-UV25

Note:
H=min:25 cm max:49 cm



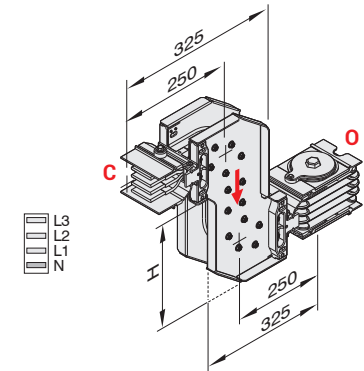
Downwards Vertical Offset - D



Sample Order:
H=25 cm, 2000 A, Aluminium
Bolt-on, IP 55, 5 Conductors

KXA 20505-B-DV25

Note:
H=min:25 cm max:49 cm



| KXA - Al Conductor | | KXC - Cu Conductor | | A | B | H _{max.} |
|--------------------|-------------|--------------------|-------------|------|------|-------------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | (mm) | (mm) | (mm) |
| *400 | 04 | *550 | 05 | 252 | 214 | 427 |
| *500 | 05 | *650 | 06 | 257 | 217 | 432 |
| *630 | 06 | *800 | 08 | 267 | 222 | 442 |
| 800 | 08 | 1000 | 10 | 282 | 229 | 457 |
| 1000 | 11 | - | - | 287 | 232 | 462 |
| - | - | 1250 | 12 | 297 | 236 | 472 |
| 1000 | 10 | 1350 | 14 | 307 | 241 | 482 |
| - | - | 1600 | 17 | 322 | 249 | 497 |
| 1250 | 12 | - | - | 337 | 256 | 512 |
| 1350 | 14 | 2000 | 23 | 352 | 264 | 527 |
| 1600 | 16 | - | - | 367 | 271 | 542 |
| 1600 | 17 | - | - | 387 | 281 | 562 |
| 2000 | 18 | - | - | 408 | 291 | 582 |
| 2000 | 20 | 2500 | 25 | 427 | 301 | 602 |
| 2500 | 29 | - | - | 457 | 316 | 632 |
| 2500 | 27 | - | - | 477 | 326 | 652 |
| - | - | 2000 | 22 | 377 | 276 | 552 |
| - | - | 2500 | 27 | 407 | 291 | 582 |
| 2500 | 25 | 3300 | 32 | 487 | 331 | 662 |
| - | - | 3600 | 36 | 517 | 346 | 692 |
| 3200 | 32 | 4000 | 40 | 547 | 361 | 722 |
| 3200 | 33 | - | - | 587 | 381 | 762 |
| 4000 | 40 | 5000 | 50 | 667 | 421 | 842 |
| 4000 | 41 | - | - | 627 | 401 | 802 |
| 5000 | 51 | - | - | 767 | 471 | 942 |
| 6000 | 60 | 6300 | 63 | 907 | 541 | 1082 |

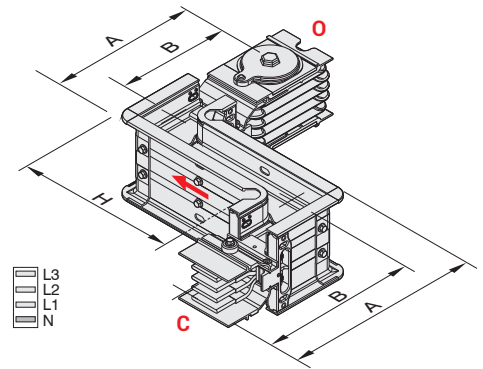
Left Horizontal Offset - L



Sample Order:
H=60 cm, 3300 A, Copper
Bolton, IP 55, 4 Conductors

KXC 32504-B-LH60

Note:
H=min:28 cm,
max: *Please see table.
Used, if two horizontal elbows
can not fit.



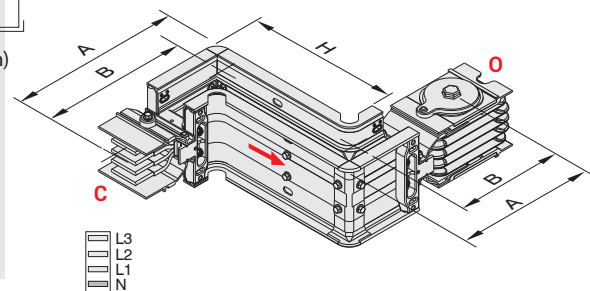
Right Horizontal Offset - R



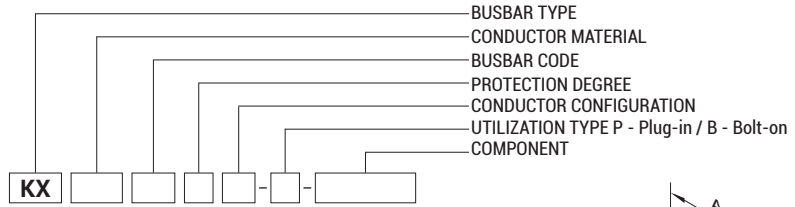
Sample Order:
H=60 cm, 3300 A, Copper
Bolton, IP 55, 4 Conductors

KXC 32504-B-RH60

Note:
H=min:28 cm,
max: *Please see table.
Used, if two horizontal elbows can not fit.



■ Special left or right elbows between 90° and 180° can be manufactured upon request.
■ The dimensions given above are minimum values. ■ Please call us for non-standard components.



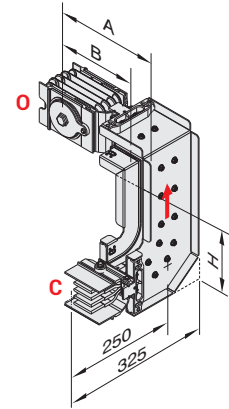
| KXA - Al Conductor | | KXC - Cu Conductor | | A | B |
|--------------------|-------------|--------------------|-------------|------|------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | (mm) | (mm) |
| *400 | 04 | *550 | 05 | 252 | 214 |
| *500 | 05 | *650 | 06 | 257 | 217 |
| *630 | 06 | *800 | 08 | 267 | 222 |
| 800 | 08 | 1000 | 10 | 282 | 229 |
| 1000 | 11 | - | - | 287 | 232 |
| - | - | 1250 | 12 | 297 | 236 |
| 1000 | 10 | 1350 | 14 | 307 | 241 |
| - | - | 1600 | 17 | 322 | 249 |
| 1250 | 12 | - | - | 337 | 256 |
| 1350 | 14 | 2000 | 23 | 352 | 264 |
| 1600 | 16 | - | - | 367 | 271 |
| 1600 | 17 | - | - | 387 | 281 |
| 2000 | 18 | - | - | 408 | 291 |
| 2000 | 20 | 2500 | 25 | 427 | 301 |
| 2500 | 29 | - | - | 457 | 316 |
| 2500 | 27 | - | - | 477 | 326 |
| - | - | 2000 | 22 | 377 | 276 |
| - | - | 2500 | 27 | 407 | 291 |
| 2500 | 25 | 3300 | 32 | 487 | 331 |
| - | - | 3600 | 36 | 517 | 346 |
| 3200 | 32 | 4000 | 40 | 547 | 361 |
| 3200 | 33 | - | - | 587 | 381 |
| 4000 | 40 | 5000 | 50 | 667 | 421 |
| 4000 | 41 | - | - | 627 | 401 |
| 5000 | 51 | - | - | 767 | 471 |
| 6000 | 60 | 6300 | 63 | 907 | 541 |

Upwards Left Combined Offset - K U L

Sample Order:
3300 A, Copper
Bolt-on, IP 55, 4 Conductors

KXC 32504 - B - KUL

Note:
H=min. 30 cm

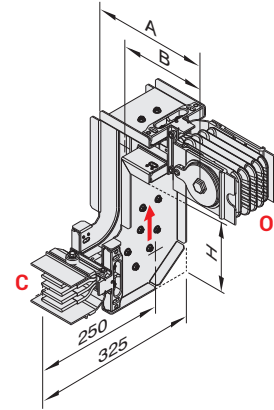


Upwards Right Combined Offset - K U R

Sample Order:
3200 A, Aluminium
Bolt-on, IP 55, 4 Conductors

KXA 33504 - B - KUR

Note:
H=min. 30 cm

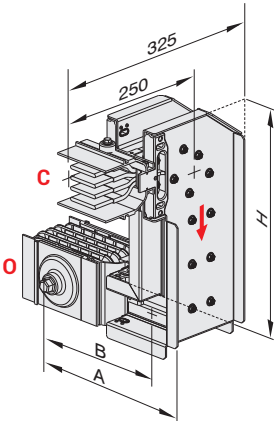


Downwards Left Combined Offset - K D L

Sample Order:
3300 A, Copper
Bolt-on, IP 55, 4 Conductors

KXC 32504 - B - KDL

Note:
H=min. 30 cm

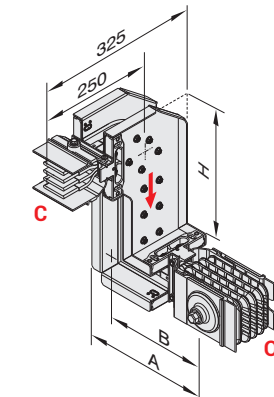


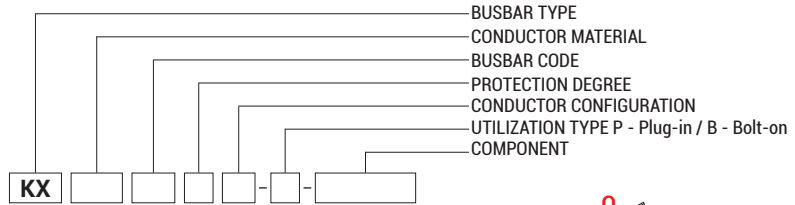
Downwards Right Combined Offset - K D R

Sample Order:
3200 A, Aluminium
Bolt-on, IP 55, 4 Conductors

KXA 33504 - B - KDR

Note:
H=min. 30 cm



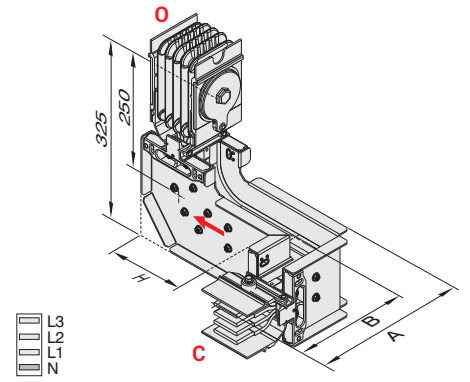


Left Upwards Combined Offset - K L U

Sample Order:
3200 A, Aluminium
Bolt-on, IP 55, 4 Conductors

KXA 33504 - B - KLU

Note:
H=min. 30 cm



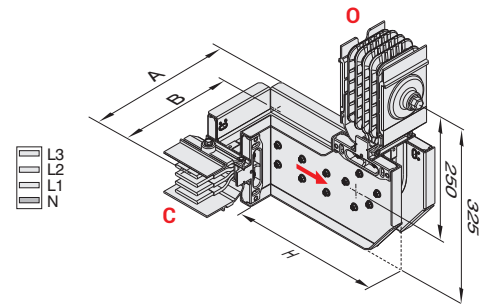
| KXA - Al Conductor | | KXC - Cu Conductor | | A | B |
|--------------------|-------------|--------------------|-------------|------|------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | (mm) | (mm) |
| *400 | 04 | *550 | 05 | 252 | 214 |
| *500 | 05 | *650 | 06 | 257 | 217 |
| *630 | 06 | *800 | 08 | 267 | 222 |
| 800 | 08 | 1000 | 10 | 282 | 229 |
| 1000 | 11 | - | - | 287 | 232 |
| - | - | 1250 | 12 | 297 | 236 |
| 1000 | 10 | 1350 | 14 | 307 | 241 |
| - | - | 1600 | 17 | 322 | 249 |
| 1250 | 12 | - | - | 337 | 256 |
| 1350 | 14 | 2000 | 23 | 352 | 264 |
| 1600 | 16 | - | - | 367 | 271 |
| 1600 | 17 | - | - | 387 | 281 |
| 2000 | 18 | - | - | 408 | 291 |
| 2000 | 20 | 2500 | 25 | 427 | 301 |
| 2500 | 29 | - | - | 457 | 316 |
| 2500 | 27 | - | - | 477 | 326 |
| - | - | 2000 | 22 | 377 | 276 |
| - | - | 2500 | 27 | 407 | 291 |
| 2500 | 25 | 3300 | 32 | 487 | 331 |
| - | - | 3600 | 36 | 517 | 346 |
| 3200 | 32 | 4000 | 40 | 547 | 361 |
| 3200 | 33 | - | - | 587 | 381 |
| 4000 | 40 | 5000 | 50 | 667 | 421 |
| 4000 | 41 | - | - | 627 | 401 |
| 5000 | 51 | - | - | 767 | 471 |
| 6000 | 60 | 6300 | 63 | 907 | 541 |

Right Upwards Combined Offset - K R U

Sample Order:
3300 A, Copper
Bolt-on, IP 55, 4 Conductors

KXC 32504 - B - KRU

Note:
H=min. 30 cm

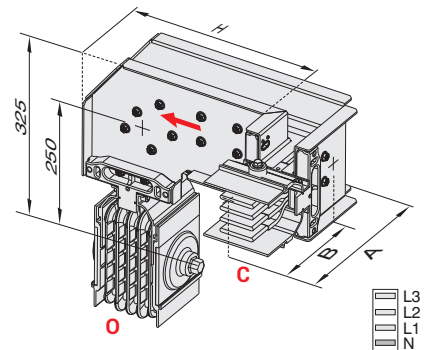


Left Downwards Combined Offset - K L D

Sample Order:
3200 A, Aluminium
Bolt-on, IP 55, 4 Conductors

KXA 33504 - B - KLD

Note:
H=min. 30 cm

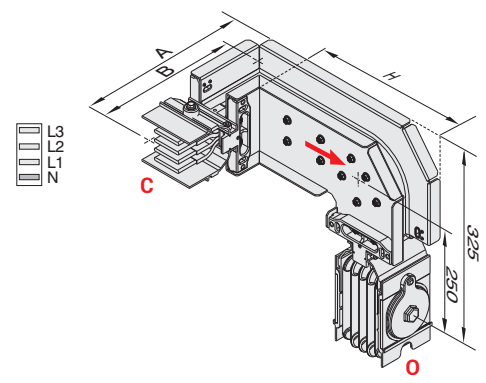


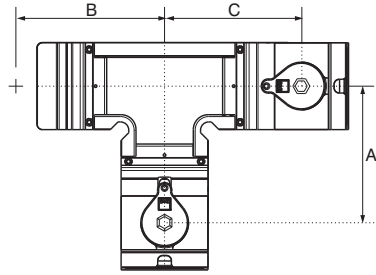
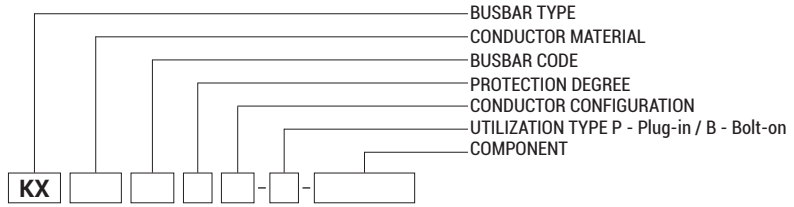
Right Downwards Combined Offset - K R D

Sample Order:
3300 A, Copper
Bolt-on, IP 55, 4 Conductors

KXC 32504 - B - KR D

Note:
H=min. 30 cm

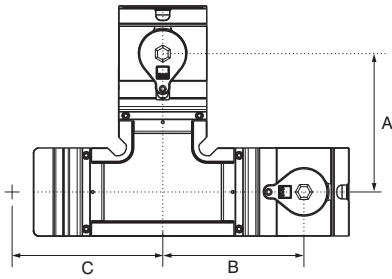
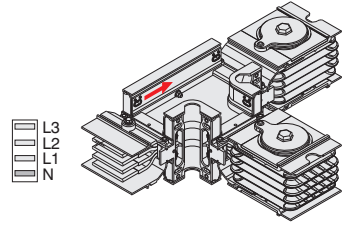




Right Side Feeder "T" - T Y R

Sample Order:
2500 A, Copper, Bolt-on,
IP 55, 4 Conductors

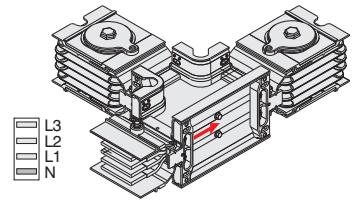
KXC 25504 - B - TYR



Left Side Feeder "T" - T Y L

Sample Order:
2500 A, Aluminium, Bolt-on,
IP 55, 4 Conductors

KXA 25504 - B - TYL

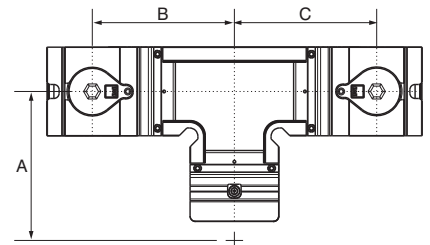
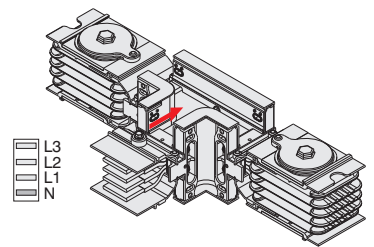


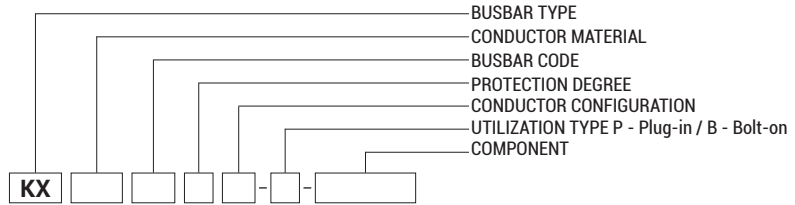
| KXA - Al Conductor | | KXC - Cu Conductor | | A | B | C |
|--------------------|-------------|--------------------|-------------|------|------|------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | (mm) | (mm) | (mm) |
| *400 | 04 | *550 | 05 | 214 | 214 | 214 |
| *500 | 05 | *650 | 06 | 216 | 216 | 216 |
| *630 | 06 | *800 | 08 | 221 | 221 | 221 |
| 800 | 08 | 1000 | 10 | 229 | 229 | 229 |
| 1000 | 11 | - | - | 232 | 232 | 232 |
| - | - | 1250 | 12 | 236 | 236 | 236 |
| 1000 | 10 | 1350 | 14 | 241 | 241 | 241 |
| - | - | 1600 | 17 | 249 | 249 | 249 |
| 1250 | 12 | - | - | 256 | 256 | 256 |
| 1350 | 14 | 2000 | 23 | 264 | 264 | 264 |
| 1600 | 16 | - | - | 271 | 271 | 271 |
| 1600 | 17 | - | - | 281 | 281 | 281 |
| 2000 | 18 | - | - | 291 | 291 | 291 |
| 2000 | 20 | 2500 | 25 | 301 | 301 | 301 |
| 2500 | 29 | - | - | 316 | 316 | 316 |
| 2500 | 27 | - | - | 326 | 326 | 326 |
| - | - | 2000 | 22 | 276 | 276 | 276 |
| - | - | 2500 | 27 | 291 | 291 | 291 |
| 2500 | 25 | 3300 | 32 | 331 | 331 | 331 |
| - | - | 3600 | 36 | 346 | 346 | 346 |
| 3200 | 32 | 4000 | 40 | 361 | 361 | 361 |
| 3200 | 33 | - | - | 381 | 381 | 381 |
| 4000 | 40 | 5000 | 50 | 421 | 421 | 421 |
| 4000 | 41 | - | - | 401 | 401 | 401 |
| 5000 | 51 | - | - | 471 | 471 | 471 |
| 6000 | 60 | 6300 | 63 | 541 | 541 | 541 |

Central Feeder "T" - T O

Sample Order:
3300 A, Copper, Bolt-on,
IP 55, 4 Conductors

KXC 32504 - B - TO





Reduction

Is used to change the busbar cross section.

NOTE:

Decisions and selection of reduction module and protection on lower side is under the customer's responsibility.

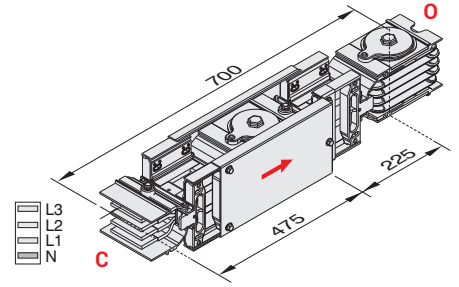
Reduction

- R D

Reduced Busbar Current

Sample Order:
2000A / 1600A, Aluminium,
Bolt-on, IP 55, 4 Conductors

KXA 20504 - B - RD17



Reducers Table

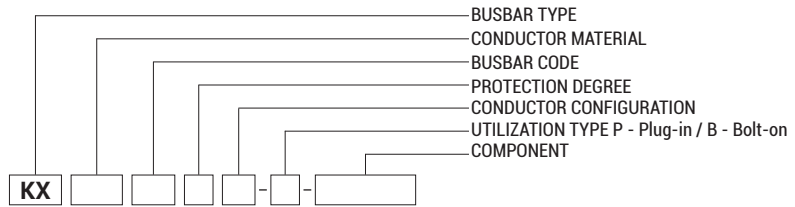
KXA - Al Conductor

| Rated Current | Reduced Busbar Current | | | | | | | | | | | | | | | | | | | |
|---------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | 04 | 05 | 06 | 08 | 11 | 10 | 12 | 14 | 16 | 17 | 18 | 20 | 25 | 29 | 27 | 32 | 33 | 40 | 41 | 51 |
| 500 | 05 | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 630 | 06 | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 800 | 08 | - | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1000 | 11 | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1000 | 10 | - | - | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1250 | 12 | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1350 | 14 | - | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1600 | 16 | - | - | - | - | ✓ | - | ✓ | - | - | - | - | - | - | - | - | - | - | - | - |
| 1600 | 17 | - | - | - | - | - | ✓ | - | ✓ | - | - | - | - | - | - | - | - | - | - | - |
| 2000 | 18 | - | - | - | - | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - |
| 2000 | 20 | - | - | - | - | - | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - |
| 2500 | 29 | - | - | - | - | - | - | - | - | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - |
| 2500 | 27 | - | - | - | - | - | - | - | - | - | ✓ | ✓ | ✓ | - | - | - | - | - | - | - |
| 2500 | 25 | - | - | - | - | - | - | - | - | - | - | ✓ | ✓ | - | - | - | - | - | - | - |
| 3200 | 32 | - | - | - | - | - | - | - | - | - | - | - | ✓ | ✓ | - | ✓ | - | - | - | - |
| 3200 | 33 | - | - | - | - | - | - | - | - | - | - | - | - | ✓ | ✓ | - | ✓ | - | - | - |
| 4000 | 40 | - | - | - | - | - | - | - | - | - | - | - | - | - | ✓ | ✓ | ✓ | ✓ | - | - |
| 4000 | 41 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | ✓ | ✓ | - | - |
| 5000 | 51 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | ✓ | ✓ | ✓ |
| 6000 | 60 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | ✓ | ✓ |

KXC - Cu Conductor

| Rated Current | Reduced Busbar Current | | | | | | | | | | | | | | | | | | | |
|---------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|--|--|--|
| | 05 | 06 | 08 | 10 | 12 | 14 | 17 | 22 | 23 | 25 | 27 | 32 | 36 | 40 | 50 | | | | | |
| 650 | 06 | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | | |
| 800 | 08 | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | | | | | |
| 1000 | 10 | - | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | | | | | |
| 1250 | 12 | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | | | | | |
| 1350 | 14 | - | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | - | | | | | |
| 1600 | 17 | - | - | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | | | | | |
| 2000 | 22 | - | - | - | - | - | ✓ | ✓ | - | - | - | - | - | - | - | | | | | |
| 2000 | 23 | - | - | - | - | - | - | ✓ | ✓ | - | - | - | - | - | - | | | | | |
| 2500 | 25 | - | - | - | - | - | - | - | ✓ | ✓ | - | - | - | - | - | | | | | |
| 2500 | 27 | - | - | - | - | - | - | - | - | ✓ | ✓ | - | - | - | - | | | | | |
| 3300 | 32 | - | - | - | - | - | - | - | - | - | ✓ | ✓ | - | - | - | | | | | |
| 3600 | 36 | - | - | - | - | - | - | - | - | - | - | ✓ | ✓ | ✓ | - | | | | | |
| 4000 | 40 | - | - | - | - | - | - | - | - | - | - | - | - | ✓ | ✓ | | | | | |
| 5000 | 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | ✓ | | | | | |
| 6300 | 63 | - | - | - | - | - | - | - | - | - | - | - | - | - | ✓ | | | | | |

■ The dimensions given above are minimum values. ■ Please call us for non-standard components.



Vertical Expansion

Used for vertical applications in multi storey buildings.

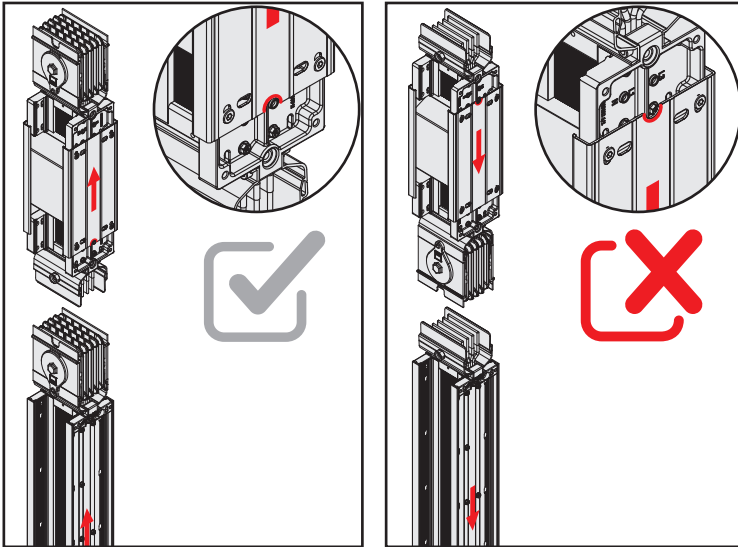
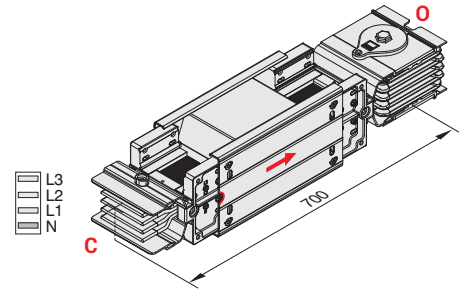
One vertical expansion unit is advised to be used at every floor between fixed support points.

Vertical Expansion

- D D T

Sample Order:
2000 A, Copper, Bolt-on,
IP 55, 4 Conductors

KXC 23504 - B - DDT



Horizontal Expansion

Used at every 40m in long horizontal straight lines and building expansion points.

Not:1) Horizontal expansion joint should be utilised if busbar line is crossing to adjacent through building expansion joints.

2) This module is used on the long busbar line (>75m.) where line is ended by end closure and is not fixed on the support rigidly.

3) Horizontal expansion joint has sufficient movement span of 54mm.

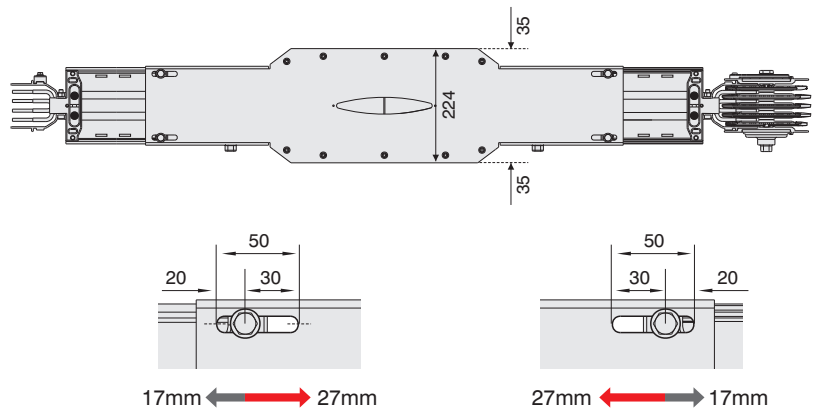
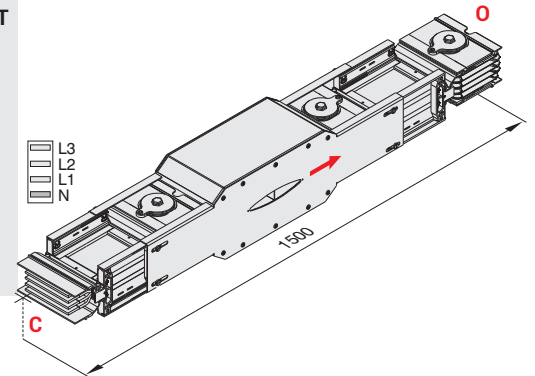
EAE requests to be consulted during design stage.

Horizontal Expansion

- Y D T

Sample Order:
2500 A, Aluminium, Bolt-on,
IP 55, 4 Conductors

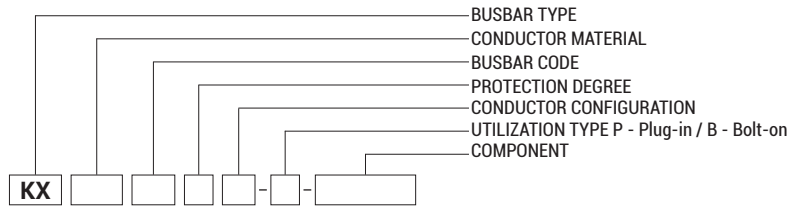
KXA 25504 - B - YDT



►► Phase Transposition Module

Phase Transposition Module

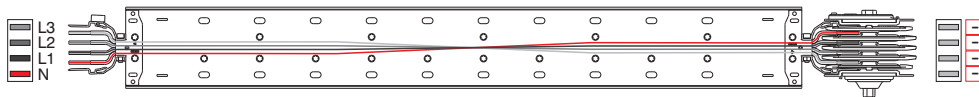
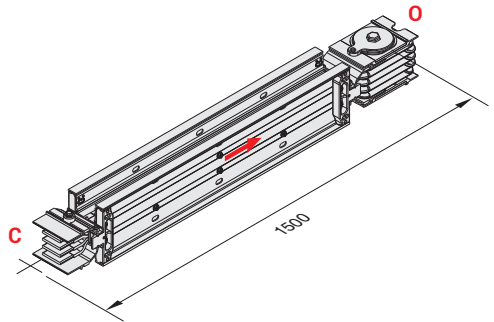
They used for transposition of phase sequence.



Phase Transposition - F D M Module

Sample Order:
2500 A, Aluminium, Bolt-on,
IP 55, 4 Conductors

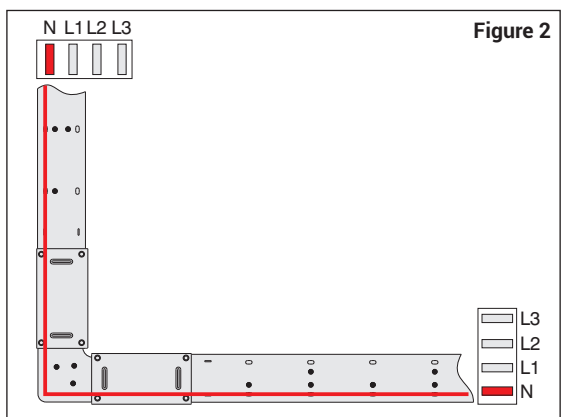
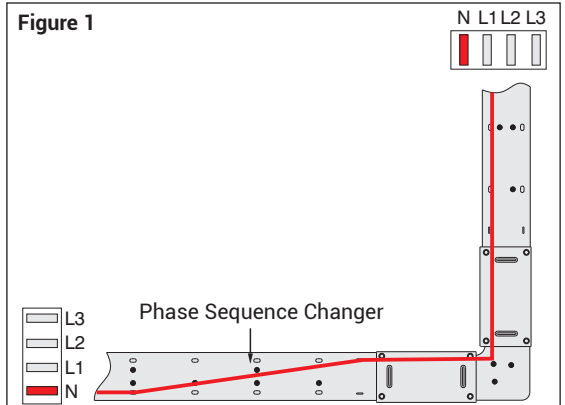
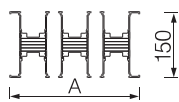
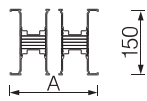
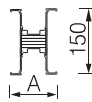
KXA 25504 - B - FDM



When installation of the Tap-Off Boxes needed after the phase changer box, an approval must be taken from the customer representative in advance.

FDM Dimension Table

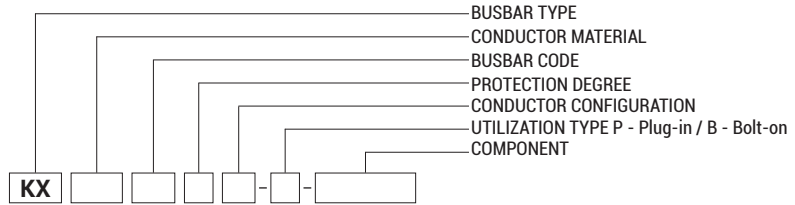
| KXA - Al Conductor | | KXC - Cu Conductor | | A (mm) |
|--------------------|-------------|--------------------|-------------|--------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | |
| *400 | 04 | *550 | 05 | 77,5 |
| *500 | 05 | *650 | 06 | 82,5 |
| *630 | 06 | *800 | 08 | 91 |
| 800 | 08 | 1000 | 10 | 106 |
| 1000 | 11 | - | - | 111 |
| - | - | 1250 | 12 | 121 |
| 1000 | 10 | 1350 | 14 | 131 |
| - | - | 1600 | 17 | 146 |
| 1250 | 12 | - | - | 161 |
| 1350 | 14 | 2000 | 23 | 176 |
| 1600 | 16 | - | - | 191 |
| 1600 | 17 | - | - | 211 |
| 2000 | 18 | - | - | 233 |
| 2000 | 20 | 2500 | 25 | 251 |
| 2500 | 29 | - | - | 281 |
| 2500 | 27 | - | - | 301 |
| - | - | 2000 | 22 | 202 |
| - | - | 2500 | 27 | 232 |
| 2500 | 25 | 3300 | 32 | 312 |
| - | - | 3600 | 36 | 342 |
| 3200 | 32 | 4000 | 40 | 372 |
| 3200 | 33 | - | - | 412 |
| 4000 | 40 | 5000 | 50 | 492 |
| 4000 | 41 | - | - | 454 |
| 5000 | 51 | - | - | 592 |
| 6000 | 60 | 6300 | 63 | 732 |



Vertical Shaft Application

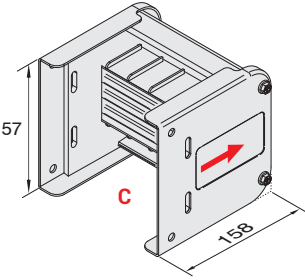
- 1- The neutral bar of KX busbar shall be at the bottom for horizontal busbar lines and on the left for vertical busbar lines. (Figure 1)
- 2- In order to maintain the neutral bar at the bottom and in the vertical busbar on the left, it is required to use the phase changing module. (Figure 2)

■ The dimensions given above are minimum values. ■ Please call us for non-standard components.



End Closer - S

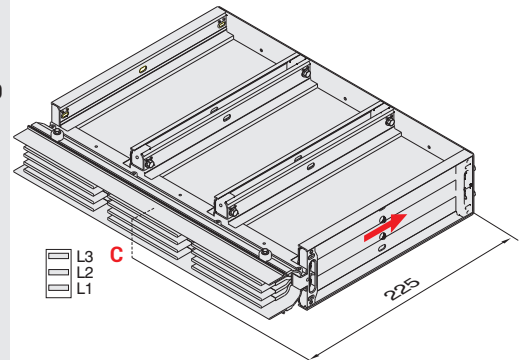
Sample Order:
2000 A, Aluminium, 2500 A, Copper
Bolt-on, IP 55, 4 / 4½ / 5 Conductors



KX 205A / 255C - B - S

End Closer - S 1 0

Sample Order:
6300 A, Copper
Bolt-on, IP 55, 3 Conductors



KXC 63503 - B - S 1 0

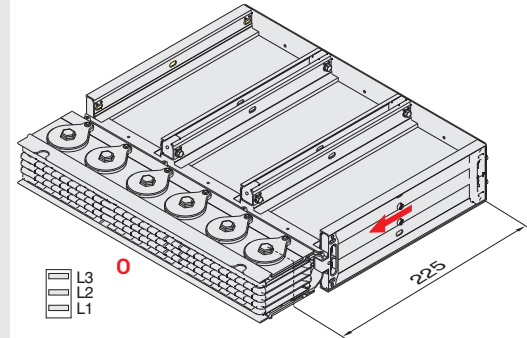
End Closer

Is used to close the end of busbar run.

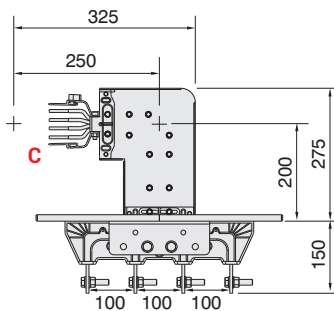
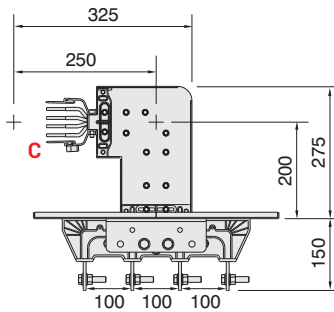
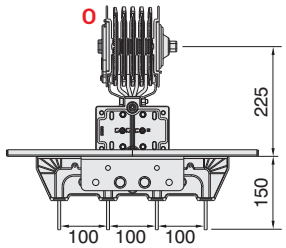
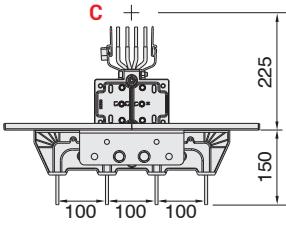
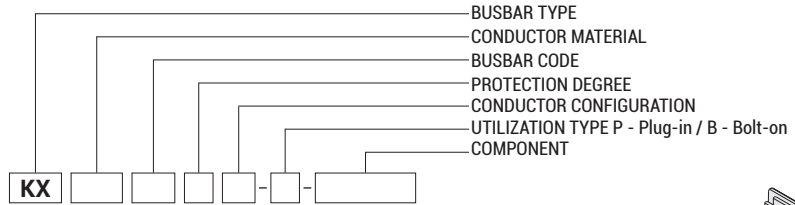
| KXA - Al Conductor | | KXC - Cu Conductor | | L1, L2, L3, N + Housing 04 | |
|--------------------|-------------|--------------------|-------------|----------------------------|----------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | Dimensions (mm) | Order Code |
| *400 | 04 | *550 | 05 | 6x25 | 3066129 |
| *500 | 05 | *650 | 06 | 6x30 | 3066131 |
| *630 | 06 | *800 | 08 | 6x40 | 3016698 |
| 800 | 08 | 1000 | 10 | 6x55 | 3016699 |
| 1000 | 11 | - | - | 6x60 | 3142393 |
| - | - | 1250 | 12 | 6x70 | 3016700 |
| 1000 | 10 | 1350 | 14 | 6x80 | 3016701 |
| - | - | 1600 | 17 | 6x95 | 3085740 |
| 1250 | 12 | - | - | 6x110 | 3016702 |
| 1350 | 14 | 2000 | 23 | 6x125 | 3016703 |
| 1600 | 16 | - | - | 6x140 | 3016704 |
| 1600 | 17 | - | - | 6x160 | 3016705 |
| 2000 | 18 | - | - | 6x180 | 3127358 |
| 2000 | 20 | 2500 | 25 | 6x200 | 3016706 |
| 2500 | 29 | - | - | 6x230 | 3135702 |
| 2500 | 27 | - | - | 6x250 | 3016710 |
| - | - | 2000 | 22 | 2(6x55) | 3016707 |
| - | - | 2500 | 27 | 2(6x70) | 3127358 |
| 2500 | 25 | 3300 | 32 | 2(6x110) | 3016709 |
| - | - | 3600 | 36 | 2(6x125) | 3016711 |
| 3200 | 32 | 4000 | 40 | 2(6x140) | 3016712 |
| 3200 | 33 | - | - | 2(6x160) | 3016713 |
| 4000 | 40 | 5000 | 50 | 2(6x200) | 3113536 |
| 4000 | 41 | - | - | 2(6x180) | 3188181 |
| 5000 | 51 | - | - | 2(6x250) | 3127359 |
| 6000 | 60 | 6300 | 63 | 3(6x200) | 3113537 |

End Closer - S 1 1

Sample Order:
5000 A, Copper,
Bolt-on, IP 55, 3 Conductors



KXC 50503 - B - S 1 1

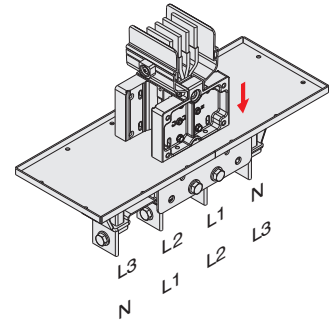


Panel Connection - P 1 0

Panel Feeder

Sample Order:
2500 A, Copper, Bolt-on, 4 Conductors for Panel Feeder

KXC 25504 - B - P10

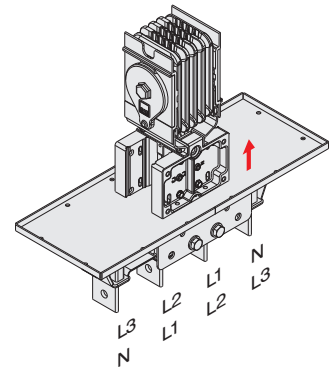


Panel Connection - P 1 1

Busbar Feeder

Sample Order:
2500 A, Copper, Bolt-on, 4 Conductors for Busbar Feeder

KXC 25504 - B - P11

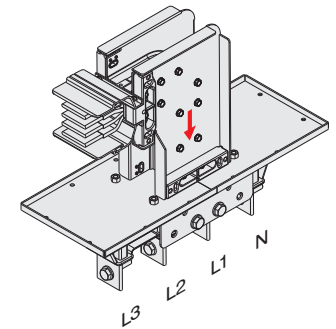


Upwards Panel Connection - P U 2 0

Panel Feeder

Sample Order:
3600 A, Copper, Bolt-on, 4 Conductors for Panel Feeder

KXC 36504 - B - PU20

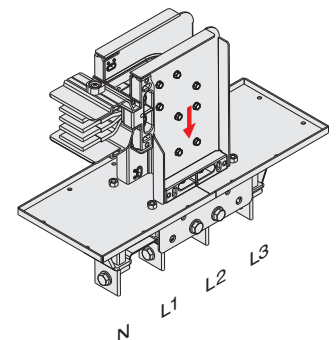


Downwards Panel Connection - P D 2 0

Panel Feeder

Sample Order:
4250 A, Copper, Bolt-on, 4 Conductors for Panel Feeder

KXC 43504 - B - PD20



For connection dimensions please refer to tables on pages 24 and 25.

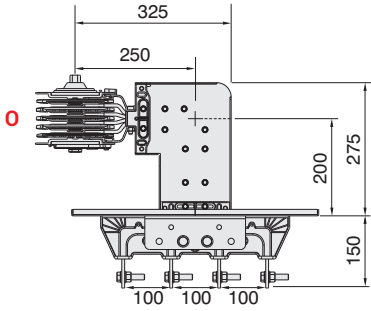
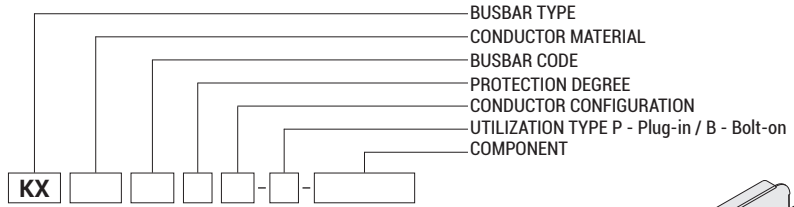
Note: Please contact with us for the dimensions of our 6 conductor solutions.

■ Do not hanger the relevant modules from the flanges.

■ Distance between conductors can vary in ± 5 mm.

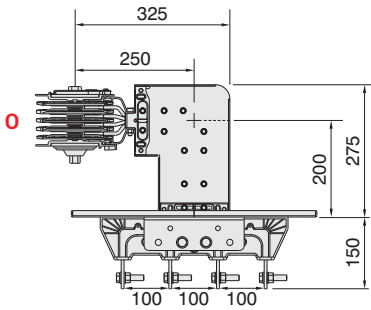
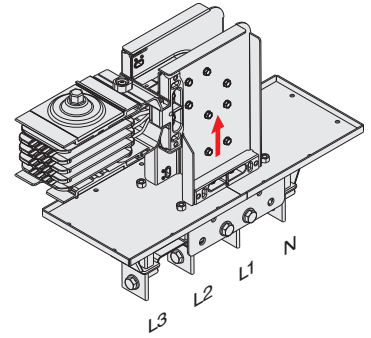
■ The dimensions given above are minimum values.

■ Please call us for non-standard components.



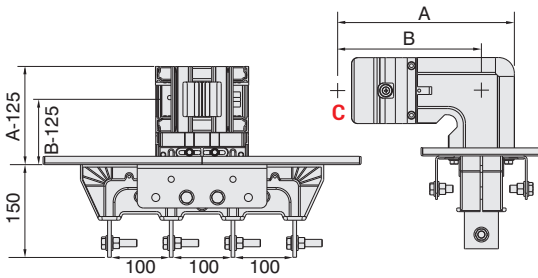
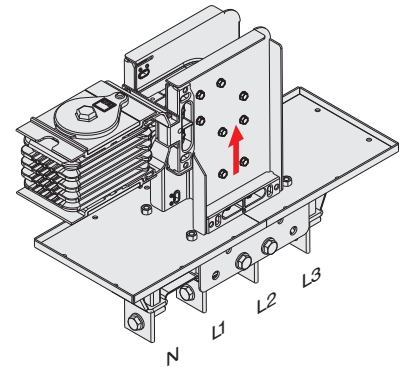
Upwards Busbar Connection Busbar Feeder - P U 2 1
 Sample Order:
 3600 A, Copper, Bolt-on, 4 Conductors for Busbar Feeder

KXC 36504 - B - PU21



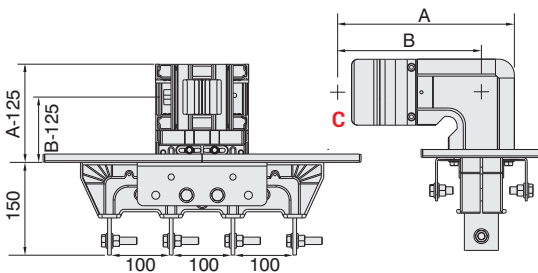
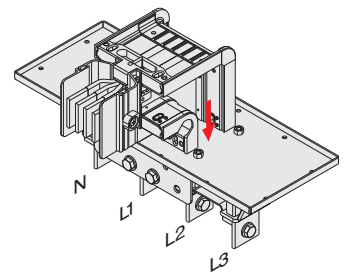
Downwards Busbar Connection Busbar Feeder - P D 2 1
 Sample Order:
 4250 A, Copper, Bolt-on, 4 Conductors for Busbar Feeder

KXC 43504 - B - PD21



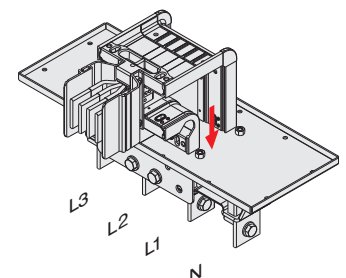
Right Panel Connection Panel Feeder - P R 3 0
 Sample Order:
 2500 A, Copper, Bolt-on, 4 Conductors for Panel Feeder

KXC 25504 - B - PR30



Left Panel Connection Panel Feeder - P L 3 0
 Sample Order:
 2500 A, Copper, Bolt-on, 4 Conductors for Panel Feeder

KXC 25504 - B - PL30



The "A" and "B" dimensions for PR30 and PL30 are the same dimensions as left and right elbows. Please refer to page 12 for the dimensions.

For connection dimensions please refer to tables on pages 24 and 25.

Note: Please contact with us for the dimensions of our 6 conductor solutions.

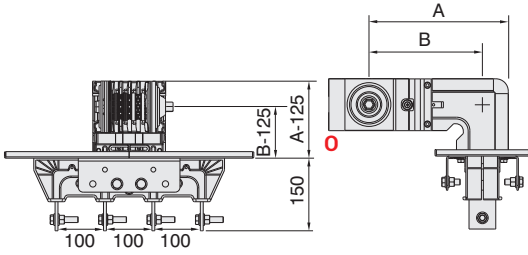
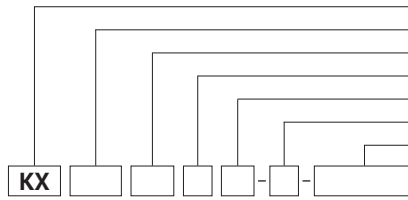
■ Do not hanger the relevant modules from the flanges.

■ Distance between conductors can vary in ± 5 mm.

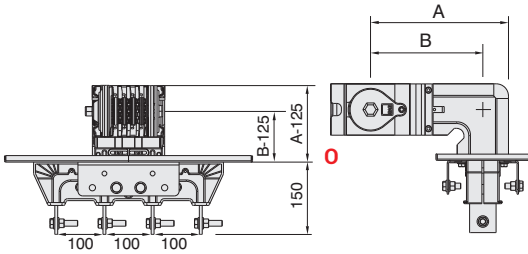
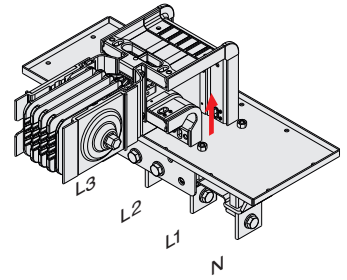
■ The dimensions given above are minimum values.

■ Please call us for non-standard components.

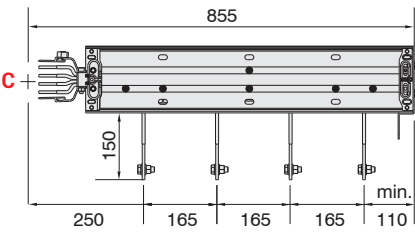
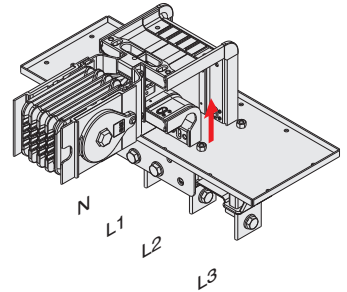
BUSBAR TYPE
 CONDUCTOR MATERIAL
 BUSBAR CODE
 PROTECTION DEGREE
 CONDUCTOR CONFIGURATION
 UTILIZATION TYPE P - Plug-in / B - Bolt-on
 COMPONENT



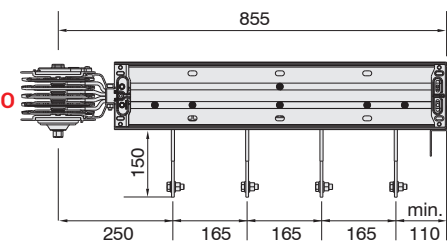
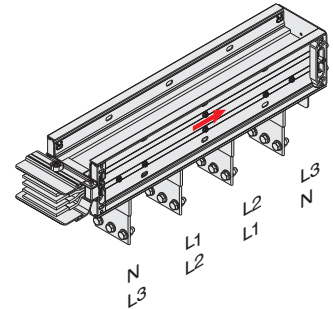
Right Panel Connection Busbar Feeder - P R 3 1
 Sample Order:
 2500 A, Copper, Bolt-on, 4 Conductors for Busbar Feeder
KXC 25504 - B - PR31



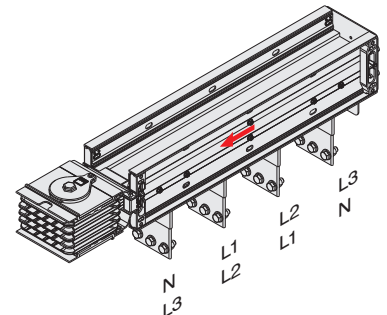
Left Panel Connection Busbar Feeder - P L 3 1
 Sample Order:
 2500 A, Copper, Bolt-on, 4 Conductors for Busbar Feeder
KXC 25504 - B - PL31



Panel Connection Panel Feeder - P 4 0
 Sample Order:
 3300 A, Copper, Bolt-on, 4 Conductors for Panel Feeder
KXC 32504 - B - P40



Panel Connection Busbar Feeder - P 4 1
 Sample Order:
 3300 A, Copper, Bolt-on, 4 Conductors for Busbar Feeder
KXC 32504 - B - P41



The "A" and "B" dimensions for PR31 and PL31 are the same dimensions as left and right elbows. Please refer to page 12 for the dimensions.

For connection dimensions please refer to tables on pages 24 and 25.

Note: Please contact with us for the dimensions of our 6 conductor solutions.

■ Distance between conductors can vary in ± 5 mm.

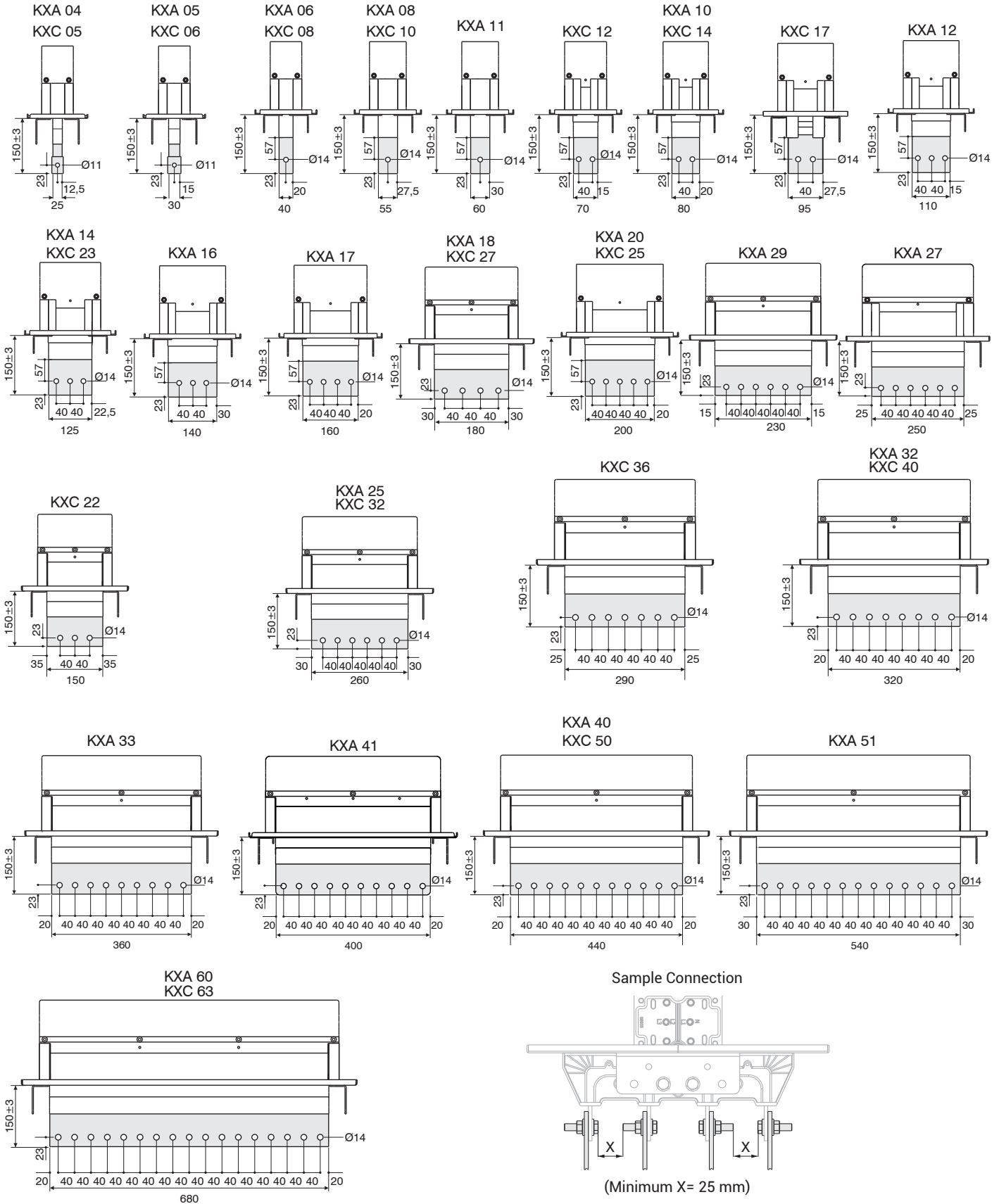
■ The dimensions given above are minimum values.

■ Do not hanger the relevant modules from the flanges.

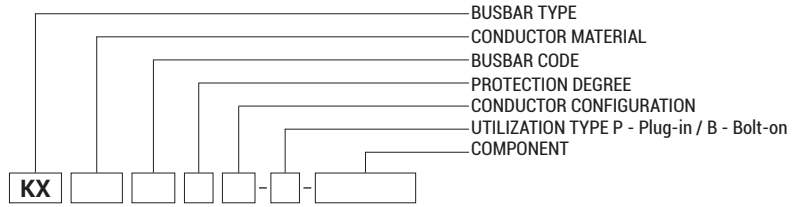
■ Please call us for non-standard components.

Panel Connection Units

Panel Connection Units (P10,P11,PU20, PD20, PU21, PD21, PL30,PR30,PL31,PR31,P40,P41)

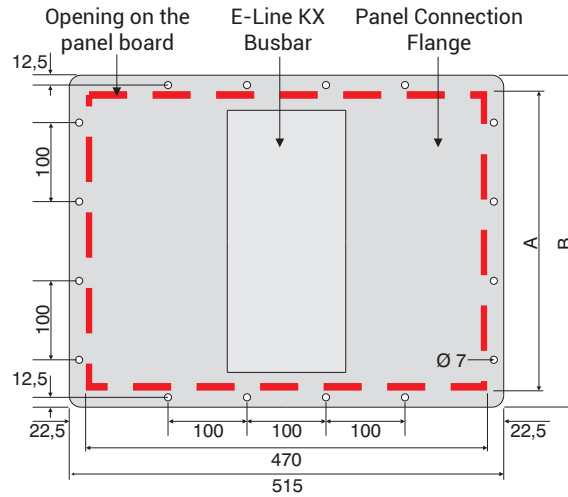
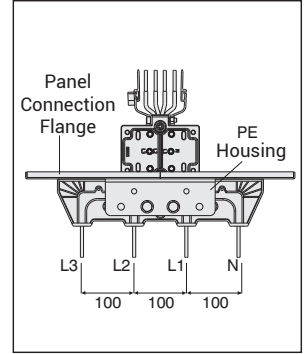
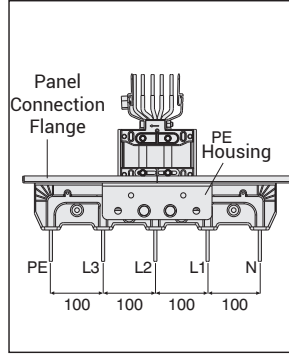
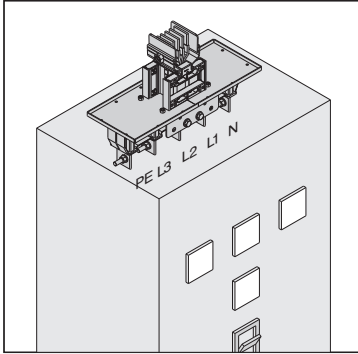


Note: Please contact with us for the dimensions of our 6 conductor solutions. ■ Do not hanger the relevant modules from the flanges.
 ■ Please call us for non-standard components. ■ Distance between conductors can vary in ± 5 mm. ■ The dimensions given above are minimum values.



Flange Dimensions

Panel Connection Units are supplied with suitable flange as standard.



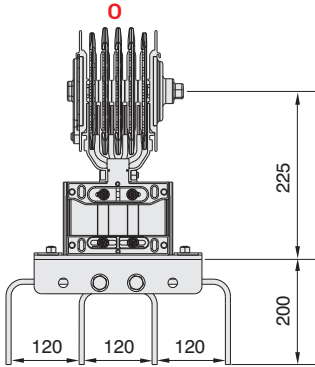
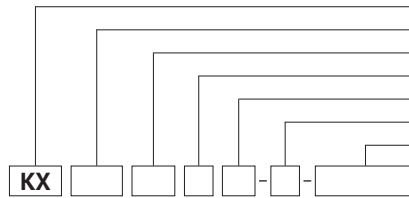
| Aluminium (Al) | | Copper (Cu) | | | | | | |
|----------------|-------------|---------------|-------------|----------------|--------|--------|------------------------------------|--------------------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | Conductor Size | A (mm) | B (mm) | Number of the holes along B length | * M6 Bolt/ Nut Set (pcs) |
| 400 | 04 | 550 | 05 | 6x25 | 120 | 165 | 2 | 12 |
| 500 | 05 | 650 | 06 | 6x30 | 125 | 170 | 2 | 12 |
| 630 | 06 | 800 | 08 | 6x40 | 135 | 180 | 2 | 12 |
| 800 | 08 | 1000 | 10 | 6x55 | 150 | 195 | 2 | 12 |
| 1000 | 11 | - | - | 6x60 | 155 | 200 | 2 | 12 |
| - | - | 1250 | 12 | 6x70 | 165 | 210 | 2 | 12 |
| 1000 | 10 | 1350 | 14 | 6x80 | 175 | 220 | 2 | 12 |
| - | - | 1600 | 17 | 6x95 | 190 | 235 | 3 | 14 |
| 1250 | 12 | - | - | 6x110 | 205 | 250 | 3 | 14 |
| 1350 | 14 | 2000 | 23 | 6x125 | 220 | 265 | 3 | 14 |
| 1600 | 16 | - | - | 6x140 | 235 | 280 | 3 | 14 |
| 1600 | 17 | - | - | 6x160 | 255 | 300 | 3 | 14 |
| 2000 | 18 | - | - | 6x180 | 275 | 320 | 3 | 14 |
| 2000 | 20 | 2500 | 25 | 6x200 | 295 | 340 | 4 | 16 |
| 2500 | 29 | - | - | 6x230 | 325 | 370 | 4 | 16 |
| 2500 | 27 | - | - | 6x250 | 345 | 390 | 4 | 16 |
| - | - | 2000 | 22 | 2(6x55) | 245 | 290 | 3 | 14 |
| - | - | 2500 | 27 | 2(6x70) | 275 | 320 | 3 | 14 |
| 2500 | 25 | 3300 | 32 | 2(6x110) | 355 | 400 | 4 | 16 |
| - | - | 3600 | 36 | 2(6x125) | 385 | 430 | 4 | 16 |
| 3200 | 32 | 4000 | 40 | 2(6x140) | 415 | 460 | 5 | 18 |
| 3200 | 33 | - | - | 2(6x160) | 455 | 500 | 5 | 18 |
| 4000 | 40 | 5000 | 50 | 2(6x200) | 535 | 580 | 6 | 20 |
| 4000 | 41 | - | - | 2(6x180) | 495 | 540 | 5 | 19 |
| 5000 | 51 | - | - | 2(6x250) | 635 | 680 | 7 | 22 |
| 6000 | 60 | 6300 | 63 | 3(6x200) | 775 | 820 | 8 | 24 |

* Bolt and nut sets are supplied together with related product as per the quantities below.

Note: Please contact with us for the dimensions of our 6 conductor solutions.

■ Do not hang the relevant modules from the flanges.

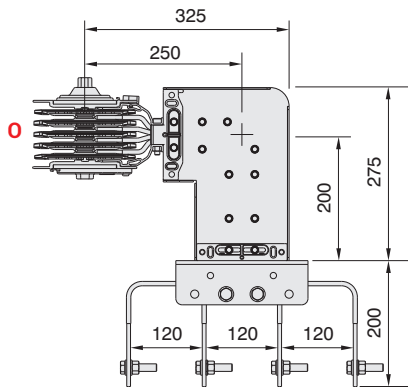
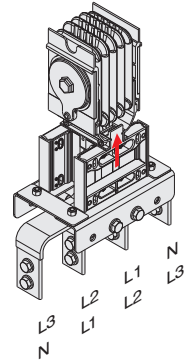
- BUSBAR TYPE
- CONDUCTOR MATERIAL
- BUSBAR CODE
- PROTECTION DEGREE
- CONDUCTOR CONFIGURATION
- UTILIZATION TYPE P - Plug-in / B - Bolt-on
- COMPONENT



Transformer Connection - T R 1 1

Sample Order:
2500 A, Aluminium,
Bolt-on, 4 Conductors

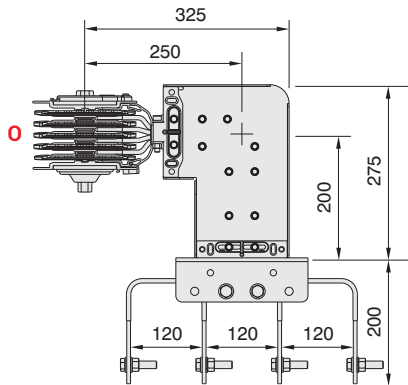
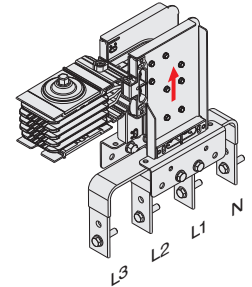
KXA 25504 - B - TR11



Upwards Transformer Connection - T U 2 1

Sample Order:
2500 A, Copper, Bolt-on,
4 Conductors

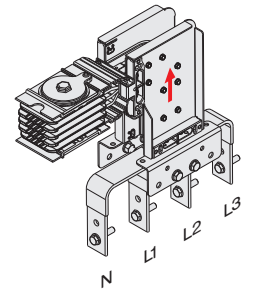
KXC 25504 - B - TU21-120



Downwards Transformer Connection - T D 2 1

Sample Order:
2500 A, Aluminium, Bolt-on,
4 Conductors

KXA 25504 - B - TD21

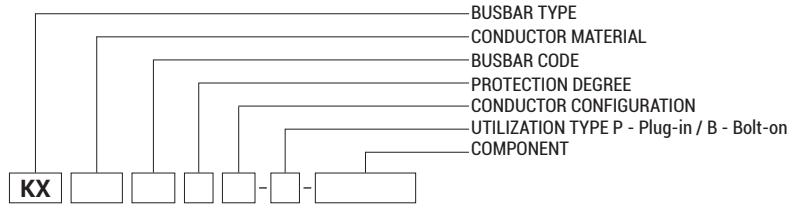


For connection dimensions please refer to tables on pages 29 and 30.

Note: Please contact with us for the dimensions of our 6 conductor solutions.

■ Do not hanger the relevant modules from the flanges.

■ Distance between conductors can vary in ± 5 mm. ■ The dimensions given above are minimum values. ■ Please call us for non-standard components.



For transformer and panel connection applications EAE design and planning department can prepare your projects upon request.

For the design, the following information is required;

- Plan of transformer and panel board room, heights.
- Transformer dimensions, distance between bushings.

A and B dimensions of TR51 and TL51 are same as left and right elbows. Please refer to page 12 for the dimensions.

For connection dimensions please refer to tables on pages 29 and 30.

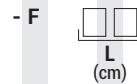
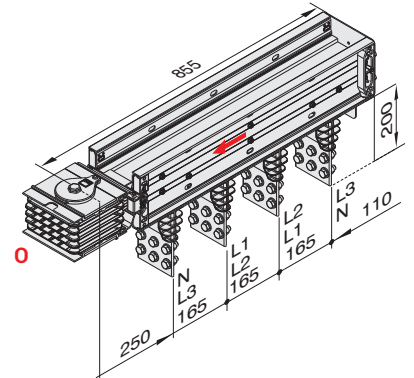
Flexibles are used for

- Transformer - busbar,
- Panel - busbar connections.

Transformer Connection - T R 3 1

Sample Order:
2500 A, Copper, Bolt-on,
4 Conductors

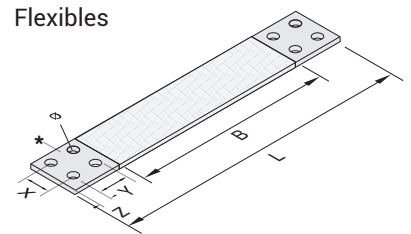
KXC 25504 - B - TR31



Sample Order:
800 A, Aluminium

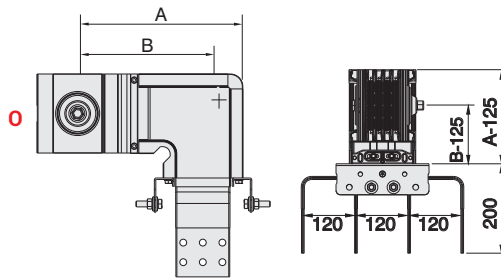
KXA 0800 - F40

B=.....mm
X=.....mm
Y=.....mm
Z=.....mm
Ø=.....mm



Flexibles

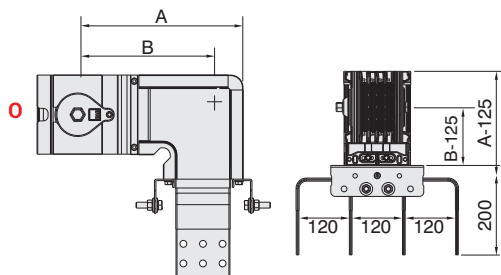
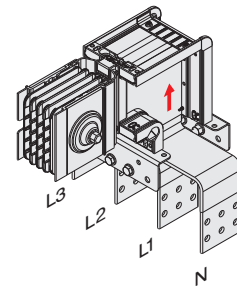
- This side is punched according to the needs of the customer.



Right Transformer Connection - T R 5 1

Sample Order:
2500 A, Copper, Bolt-on,
4 Conductors

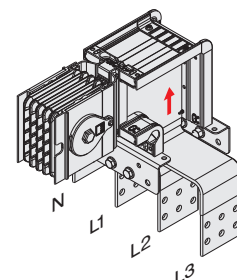
KXC 25504 - B - TR51



Left Transformer Connection - T L 5 1

Sample Order:
2500 A, Aluminium,
Bolt-on, 4 Conductors

KXA 25504 - B - TL51

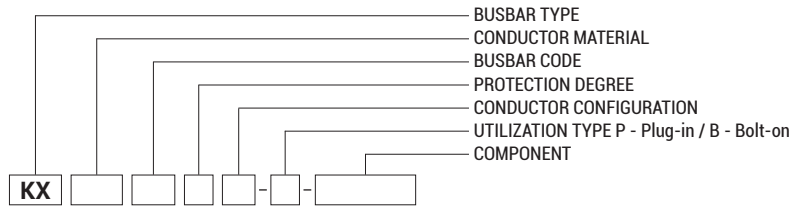


A and B dimensions of TR51 and TL51 are same as left and right elbows. Please refer to page 12 for the dimensions.

Note: Please contact with us for the dimensions of our 6 conductor solutions.

■ Do not hanger the relevant modules from the flanges.

■ Distance between conductors can vary in ±5 mm. ■ The dimensions given above are minimum values. ■ Please call us for non-standard components.



For transformer and panel connection applications EAE design and planning department can prepare your projects upon request.

For the design, the following information is required;

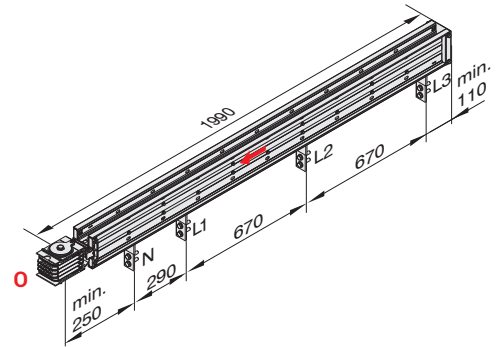
- Plan of transformer and panel board room, heights.
- Transformer dimensions, distance between bushings.

For connection dimensions please refer to tables on pages 29 and 30.

Transformer Connection - T R 4 1

Sample Order:
2500 A, Copper, Bolt-on, 4 Conductors

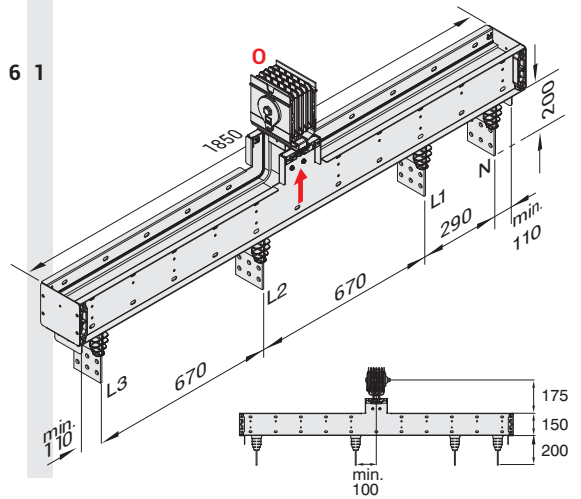
KXC 25504 - B - TR41



Transformer Connection - T R 6 1

Sample Order:
2500 A, Copper, Bolt-on, 4 Conductors

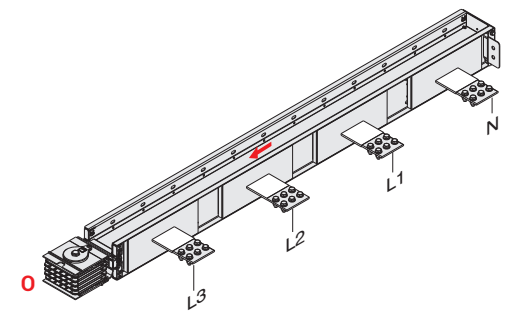
KXC 36504 - B - TR61



Transformer Connection - T R 7 1

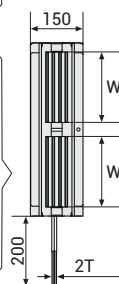
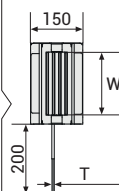
Sample Order:
4000 A, Copper, Bolt-on, 4 Conductors

KXC 40504 - B - TR71

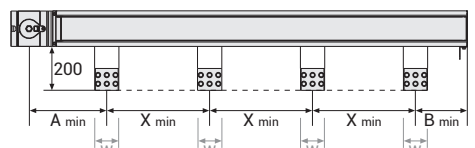
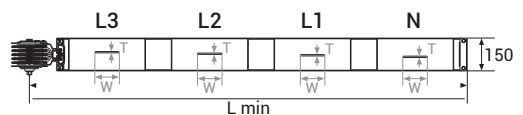


TR71 Dimension Table

| KXA - Al Conductor | | KXC - Cu Conductor | | Conductor (*) T x W | A (mm) | B (mm) | X (mm) | L (mm) |
|--------------------|-------------|--------------------|-------------|------------------------|--------|--------|--------|--------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | | | | | |
| * 400 | 04 | *550 | 05 | 6x25 | 263 | 123 | 85 | 715 |
| * 500 | 05 | *650 | 06 | 6x30 | 265 | 125 | 90 | 730 |
| * 630 | 06 | *800 | 08 | 6x40 | 270 | 130 | 100 | 760 |
| 800 | 08 | 1000 | 10 | 6x55 | 278 | 138 | 115 | 805 |
| 1000 | 11 | - | - | 6x60 | 280 | 140 | 120 | 820 |
| - | - | 1250 | 12 | 6x70 | 285 | 145 | 130 | 850 |
| 1000 | 10 | 1350 | 14 | 6x80 | 290 | 150 | 140 | 880 |
| - | - | 1600 | 17 | 6x95 | 298 | 158 | 155 | 925 |
| 1250 | 12 | - | - | 6x110 | 305 | 165 | 170 | 970 |
| 1350 | 14 | 2000 | 23 | 6x125 | 313 | 173 | 185 | 1015 |
| 1600 | 16 | - | - | 6x140 | 320 | 180 | 200 | 1060 |
| 1600 | 17 | - | - | 6x160 | 330 | 190 | 220 | 1120 |
| 2000 | 18 | - | - | 6x180 | 340 | 200 | 240 | 1180 |
| 2000 | 20 | 2500 | 25 | 6x200 | 350 | 210 | 260 | 1240 |
| 2500 | 29 | - | - | 6x230 | 365 | 225 | 290 | 1330 |
| 2500 | 27 | - | - | 6x250 | 375 | 235 | 310 | 1390 |
| - | - | 2000 | 22 | 2(6x55) | 278 | 138 | 115 | 805 |
| - | - | 2500 | 27 | 2(6x70) | 285 | 145 | 130 | 850 |
| 2500 | 25 | 3300 | 32 | 2(6x110) | 305 | 165 | 170 | 970 |
| - | - | 3600 | 36 | 2(6x125) | 313 | 173 | 185 | 1015 |
| 3200 | 32 | 4000 | 40 | 2(6x140) | 320 | 180 | 200 | 1060 |
| 3200 | 33 | - | - | 2(6x160) | 330 | 190 | 220 | 1120 |
| 4000 | 40 | 5000 | 50 | 2(6x200) | 350 | 210 | 260 | 1240 |
| 4000 | 41 | - | - | 2(6x180) | 340 | 200 | 240 | 1180 |
| 5000 | 51 | - | - | 2(6x250) | 375 | 235 | 310 | 1390 |



Transformer Connection - T R 7 1



(*) Note: The conductor cross-sectional values (T x W) are the same as the transformer connection conductor dimensions.

Sample (*): Single Line
2000 A, Copper, Bolt-on,
6x125 = T x W
T=6 W=125

Sample (*): Double Line
4000 A, Copper, Bolt-on,
2(6x140) = T x W
2T=12 W=140

Note: Please contact with us for the dimensions of our 6 conductor solutions.

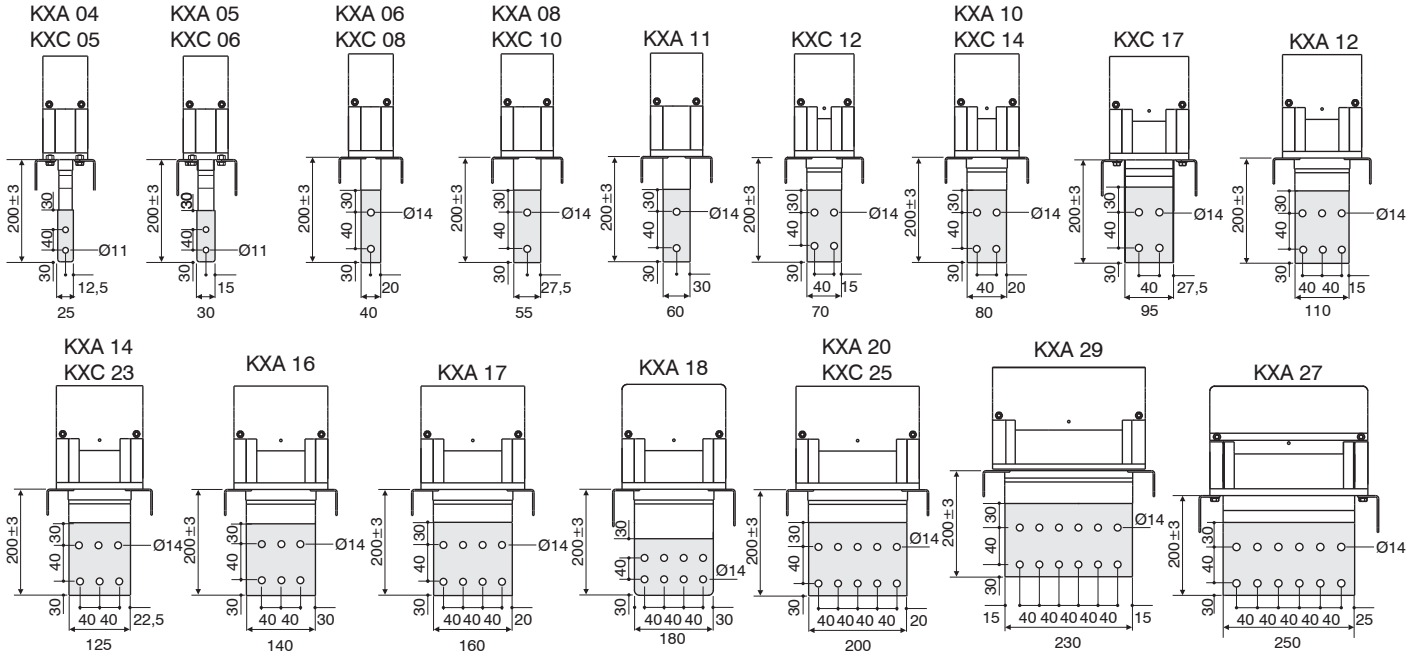
Do not hanger the relevant modules from the flanges.

Distance between conductors can vary in ±5 mm. The dimensions given above are minimum values. Please call us for non-standard components.

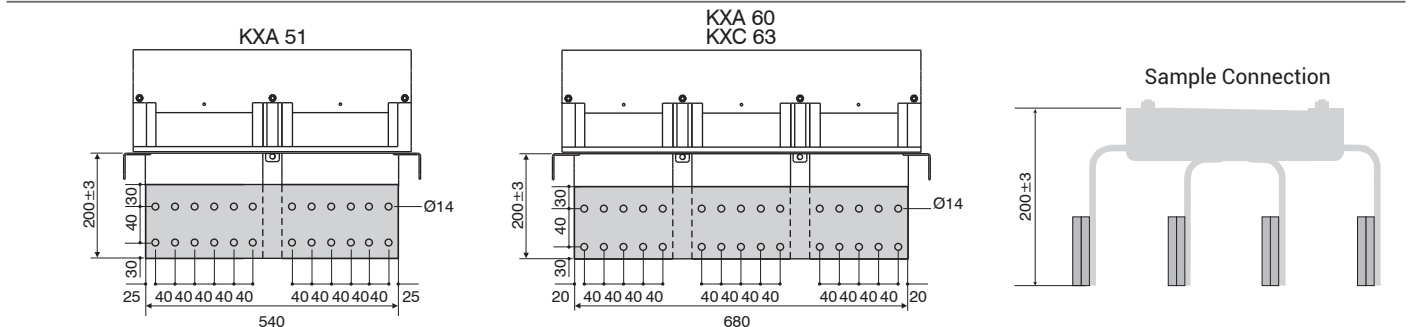
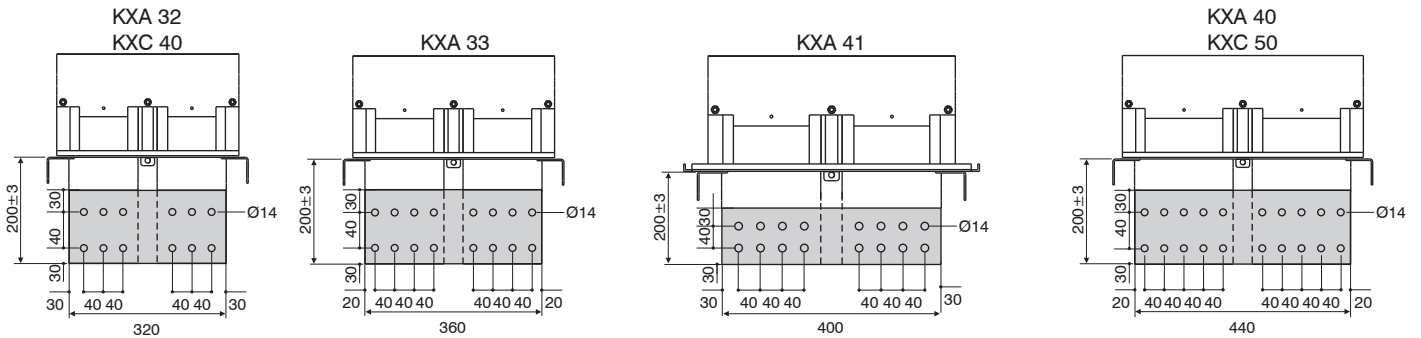
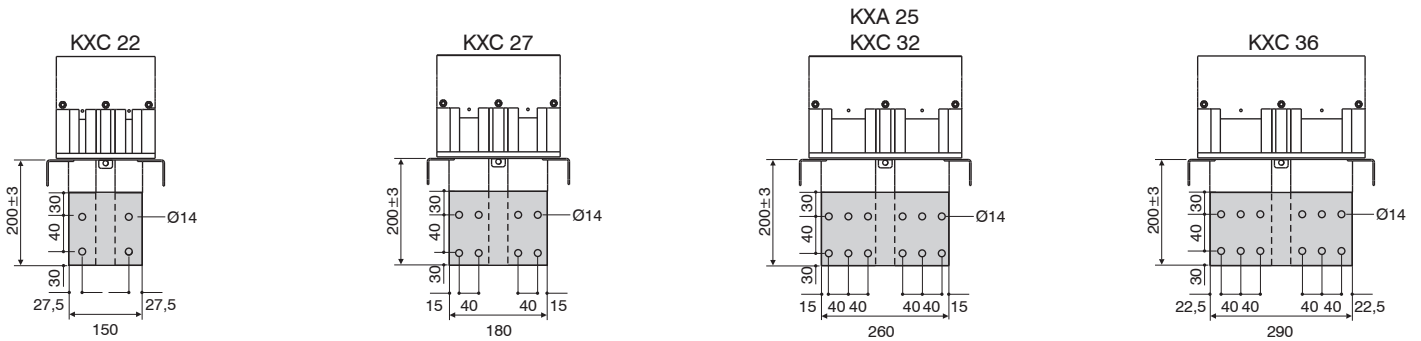
Transformer Connection Units

Transformer Connection Units (TR31, TR41, TR61, TR71)

Note: No flange supplied with transformer connection units.



■ Consider the dimensions given above for TR71 Transformer Modules.



Note: Please contact with us for the dimensions of our 6 conductor solutions.

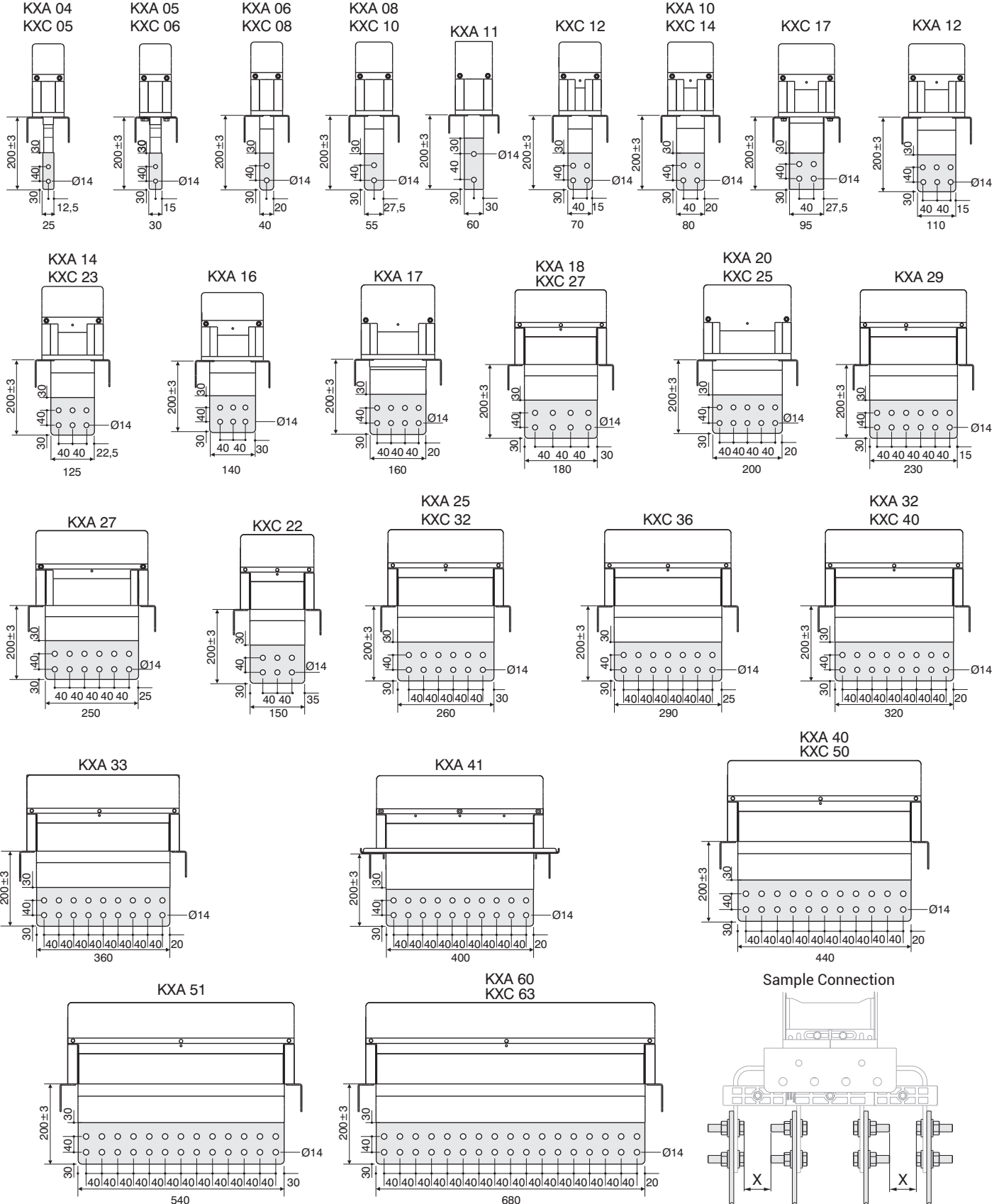
■ Do not hanger the relevant modules from the flanges.

■ Distance between conductors can vary in ± 5 mm. ■ The dimensions given above are minimum values. ■ Please call us for non-standard components.

Transformer Connection Units

Transformer Connection Units (TR11, TU21, TD21, TR51, TL51)

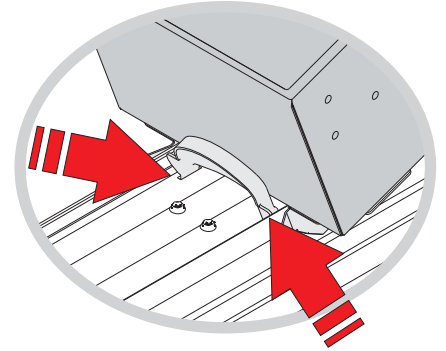
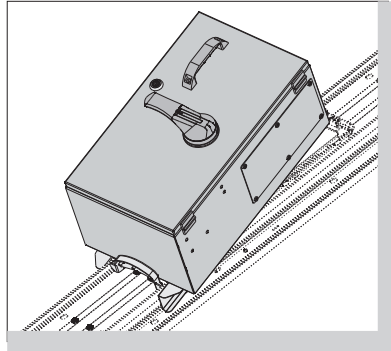
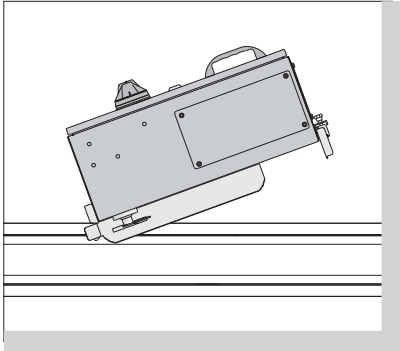
Note: No flange supplied with transformer connection units.



Note: Please contact with us for the dimensions of our 6 conductor solutions. ■ Please call us for non-standard components. (Minimum X= 25 mm)
 ■ Distance between conductors can vary in ±5 mm. ■ The dimensions given above are minimum values. ■ Do not hanger the relevant modules from the flanges.

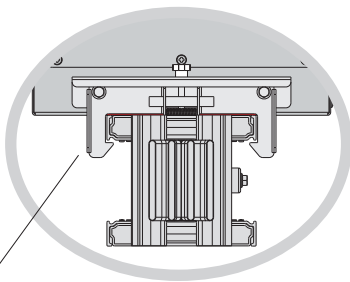
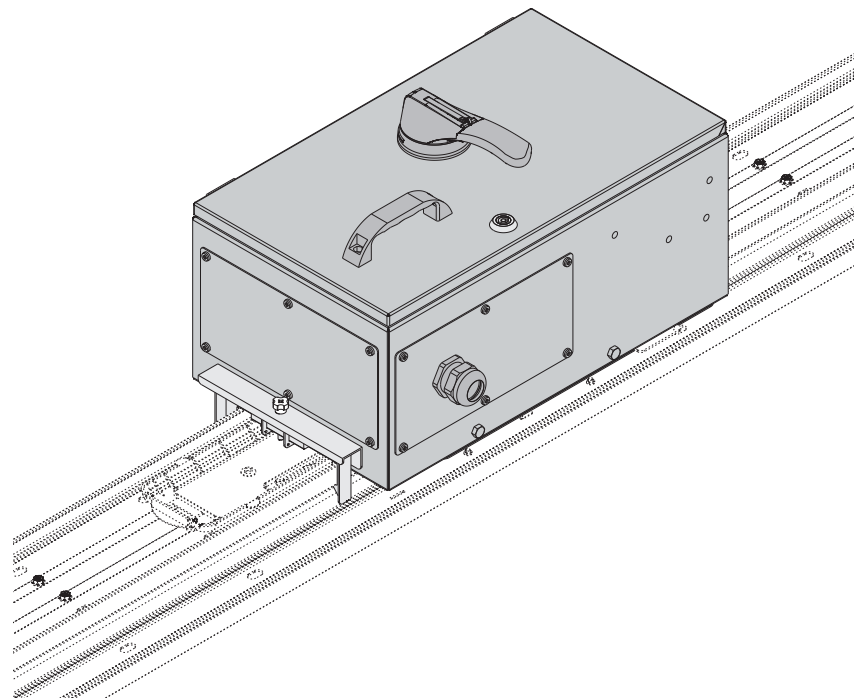
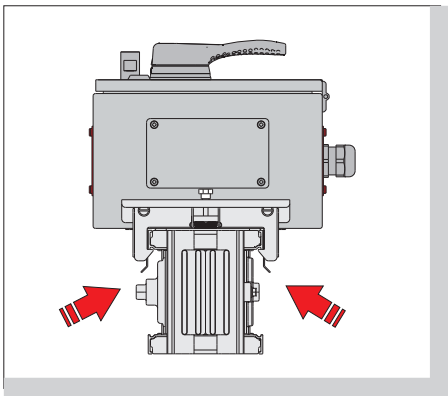
Easy Installation System of Tap-off Boxes

The patented hinge system is designed to allow the installation of plug-in tap-off boxes simply and easily.

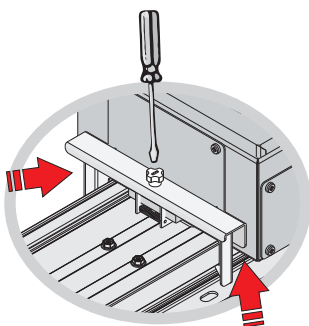


Fixing System of Tap-off Boxes to Busbars

Hook system, which is used for fixing of tap-off boxes on busbars.



Locking Point



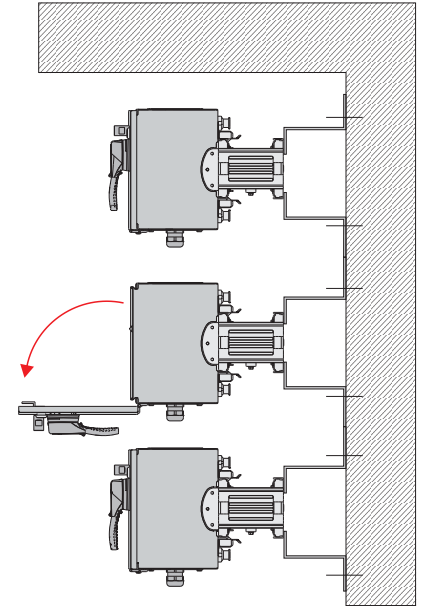
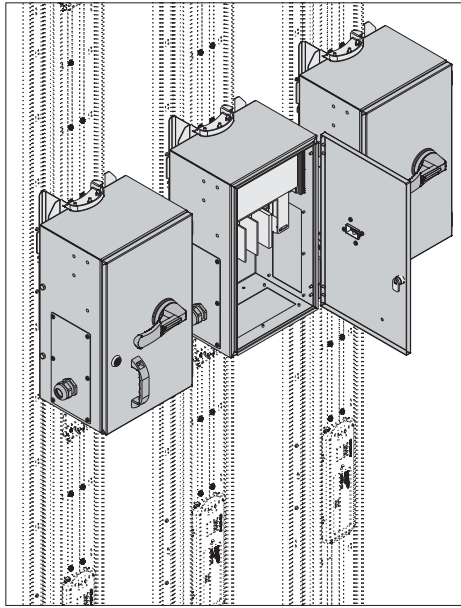
Universal Tap-off Boxes

Tap off boxes can be equipped with any brand of switches, circuit breakers and etc. Please inform EAE the type and brand of chosen MCCB, when ordering.

- Please call us for non-standard components.
- When requesting special size tap off boxes, make sure that the distance between the two plug point does not prevent the installation of the tap off boxes.

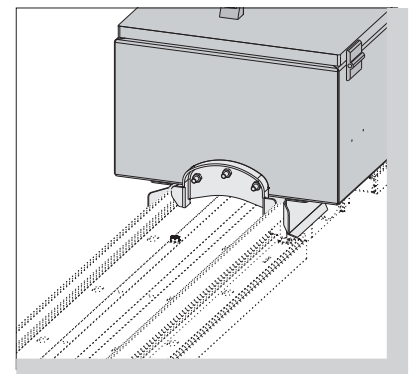
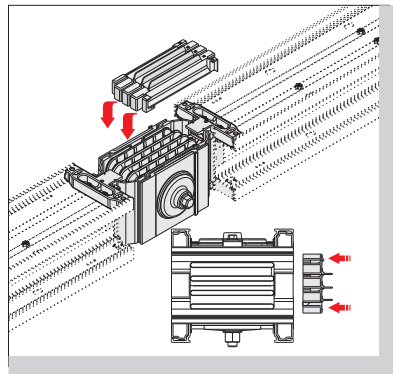
Side Opening Box Lids

A new generation of tap-off box with side opening lids enables easier connection to protective devices and maintenance.



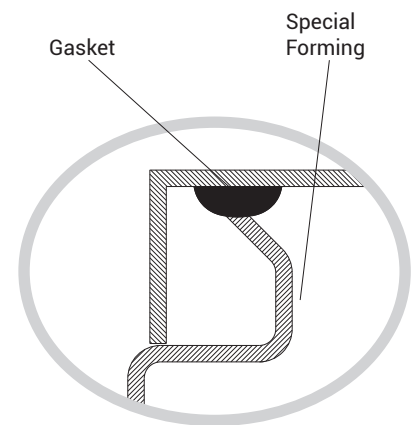
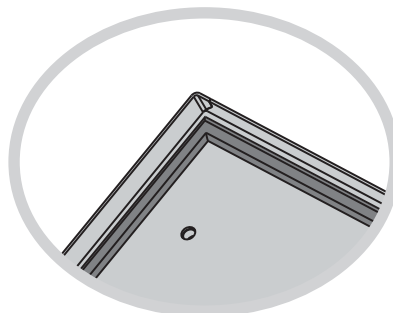
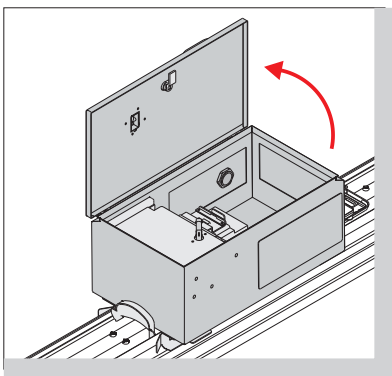
Bolt-on Tap-off Boxes

- Bolt-on tap-off boxes are designed to be installed at the joints without removing the joint block.
- The range of tap off boxes from 160A upto 1.000A.
- Busbar run must be de-energized before installing bolt-on tap-off boxes.



Effective Gasket

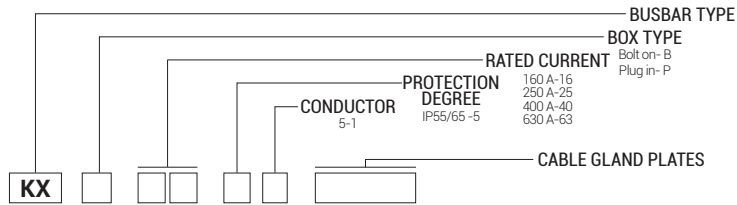
- Protection from dust and humidity due to effective gasket system.
- High IP Protection due to special forming.



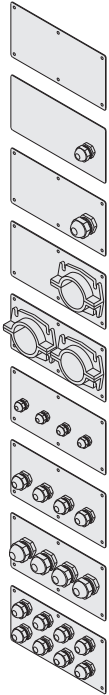
■ Please call us for non-standard components.

■ When requesting special size tap off boxes, make sure that the distance between the two plug point does not prevent the installation of the tap off boxes.

▶▶ Tap-off Boxes with Fused Switches (Bolt-on-KXB)



Cable Gland Plates



| Mat. | Cable Gland Type | Order Code | Inner Diameter (mm) |
|-------|------------------|------------|---------------------|
| Sheet | ---- | RP0 | ---- |
| Sheet | M32 | RP1 | 25 |
| Sheet | M40 | RP2 | 32 |
| Sheet | Special | RP3 | 63 |
| AL | 2xSpecial | RP4 | 63 |
| AL | 4xM25 | RP5 | 18 |
| AL | 4xM32 | RP6 | 25 |
| AL | 4xM40 | RP7 | 32 |
| AL | 8xM32 | RP8 | 25 |

Notes:

EAE Bolt-on Tap Off Boxes are secured with an interlocking mechanism. This protects against attaching them to or removing them from the busbar in the "ON" position. When in the "OFF" position they are safe to attach to or remove from the busbar.

- Tap off boxes shall not be used empty. Fused switches, MCCBs or similar protection devices must be installed into tap-off boxes before they are installed to the busbar runs.

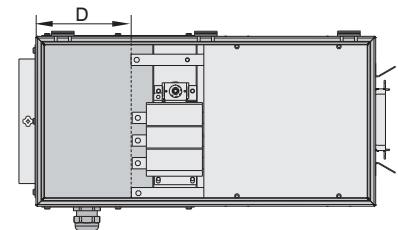
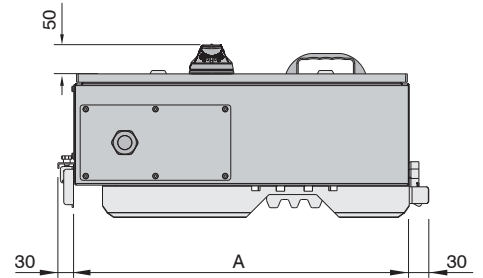
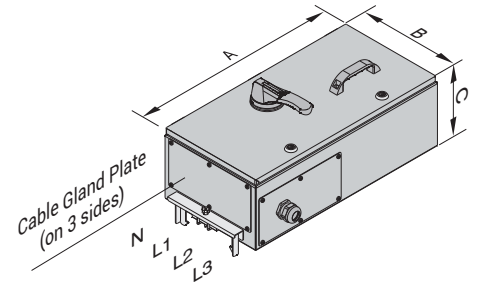
Bolt-on Tap-off Boxes

- KX B 1 6 5 1
- KX B 2 5 5 1
- KX B 4 0 5 1
- KX B 6 3 5 1

Sample Order:

Bolt-on / 630 A / IP-55 / 5 Conductors

KXB 6351



Bolt-on tap-off box can not be used on the joints of mentioned ranges of busbars.

| Tap-off Boxes | A (mm) | B (mm) | C (mm) | D (mm) | Fuse Size | Standard Gland |
|---------------|--------|--------|--------|--------|-----------|----------------|
| KXB 16 | 750 | 380 | 240 | 265 | NH00 | RP2 |
| KXB 25 | 750 | 380 | 240 | 265 | NH 1 | RP3 |
| KXB 40 | 850 | 420 | 260 | 265 | NH 3 | RP4 |
| KXB 63 | 850 | 420 | 260 | 265 | NH 3 | RP4 |

| KXA - Al Conductor | | KXC - Cu Conductor | | Bolt-on Tap-off Box |
|--------------------|-------------|--------------------|-------------|---------------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | |
| 400 | 04 | 550 | 05 | x |
| 500 | 05 | 650 | 06 | x |
| 630 | 06 | 800 | 08 | x |

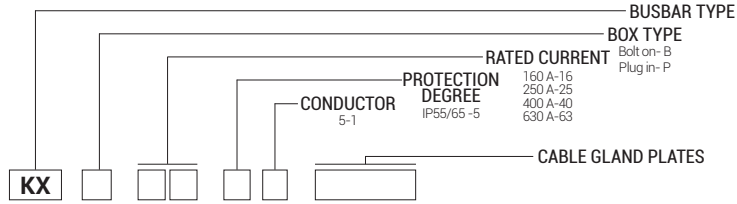
| Gland Type | Max. External Diameter of Cable Cross-section (mm) |
|-----------------|--|
| M25 | Ø 18 |
| M32 | Ø 26 |
| M40 | Ø 33 |
| M50 | Ø 39 |
| M63 | Ø 45 |
| Special for EAE | Ø 60 |

***Tap-off boxes can be equipped with any brand of switches and etc.**

■ Please call us for non-standard components.

■ When requesting special size tap off boxes, make sure that the distance between the two plug point does not prevent the installation of the tap off boxes.

▶▶ Tap-off Boxes with Fused Switches (Plug-in-KXP)



Cable Gland Plates

| Mat. | Cable Gland Type | Order Code | Inner Diameter (mm) |
|-------|------------------|------------|---------------------|
| Sheet | ---- | RP0 | ---- |
| Sheet | M32 | RP1 | 25 |
| Sheet | M40 | RP2 | 32 |
| Sheet | Special | RP3 | 63 |
| AL | 2xSpecial | RP4 | 63 |
| AL | 4xM25 | RP5 | 18 |
| AL | 4xM32 | RP6 | 25 |
| AL | 4xM40 | RP7 | 32 |
| AL | 8xM32 | RP8 | 25 |

Notes:

EAE Plug-in Tap Off Boxes are secured with an interlocking mechanism. This protects against attaching them to or removing them from the busbar in the "ON" position. When in the "OFF" position they are safe to attach to or remove from the busbar.

- Tap off boxes shall not be used empty. Fused switches, MCCBs or similar protection devices must be installed into tap-off boxes before they are installed to the busbar runs.

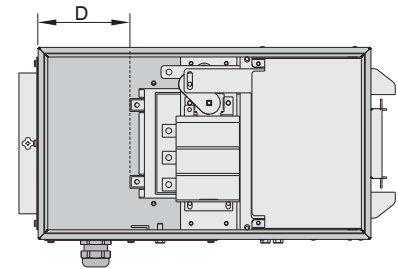
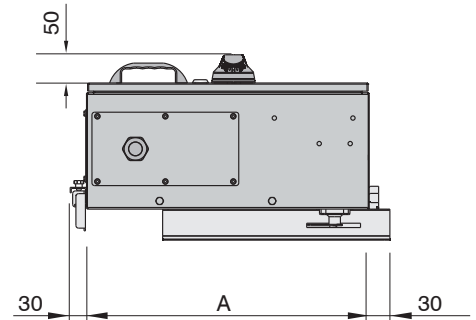
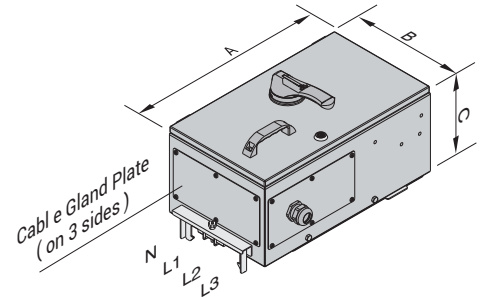
Plug-in Tap-off Boxes

KX P 1 6 5 1
 KX P 2 5 5 1
 KX P 4 0 5 1
 KX P 6 3 5 1

Sample Order:

Plug-in / 630 A / IP-55
 5 Conductors

KXP 6351



| Tap-off Boxes | A (mm) | B (mm) | C (mm) | D (mm) | Fuse Size | Standard Gland |
|---------------|--------|--------|--------|--------|-----------|----------------|
| KXP 16 | 520 | 300 | 210 | 250 | NH00 | RP2 |
| KXP 25 | 670 | 380 | 270 | 310 | NH 1 | RP3 |
| KXP 40 | 750 | 420 | 300 | 285 | NH 3 | RP4 |
| KXP 63 | 750 | 420 | 300 | 285 | NH 3 | RP4 |

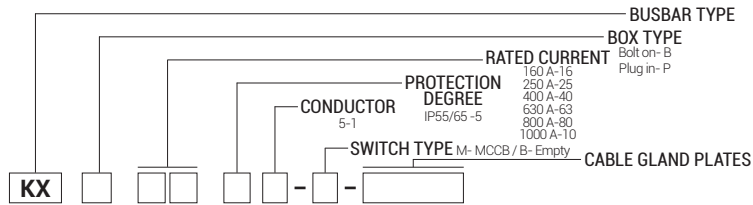
| Gland Type | Max. External Diameter of Cable Cross-section (mm) |
|-----------------|--|
| M25 | Ø 18 |
| M32 | Ø 26 |
| M40 | Ø 33 |
| M50 | Ø 39 |
| M63 | Ø 45 |
| Special for EAE | Ø 60 |

*Tap-off boxes can be equipped with any brand of switches and etc.

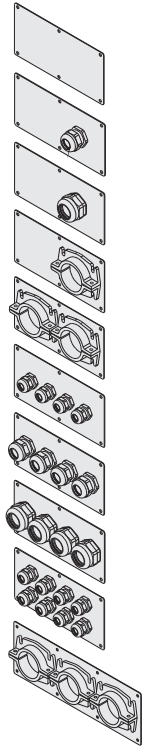
■ Please call us for non-standard components.

■ When requesting special size tap off boxes, make sure that the distance between the two plug point does not prevent the installation of the tap off boxes.

▶▶ Tap-off Boxes for MCCB's (KXB)

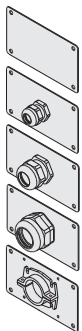


Cable Gland Plates



| Mat. | Cable Gland Type | Order Code | Inner Diameter (mm) |
|-------|------------------|------------|---------------------|
| Sheet | ---- | RP0 | ---- |
| Sheet | M32 | RP1 | 25 |
| Sheet | M40 | RP2 | 32 |
| Sheet | Special | RP3 | 63 |
| AL | 2xSpecial | RP4 | 63 |
| AL | 4xM25 | RP5 | 18 |
| AL | 4xM32 | RP6 | 25 |
| AL | 4xM40 | RP7 | 32 |
| AL | 8xM32 | RP8 | 25 |
| AL | 3xSpecial | RP9 | 63 |

Special Cable Gland Plates



| Mat. | Cable Gland Type | Order Code | Inner Diameter (mm) |
|-------|------------------|------------|---------------------|
| Sheet | ---- | RPK0 | ---- |
| Sheet | M25 | RPK1 | 18 |
| Sheet | M32 | RPK2 | 25 |
| Sheet | M40 | RPK3 | 32 |
| Sheet | 1xSpecial | RPK4 | 63 |

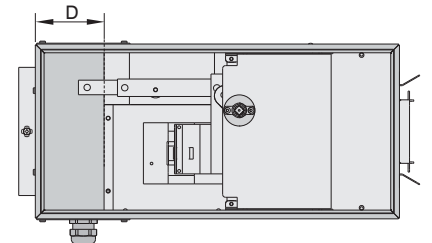
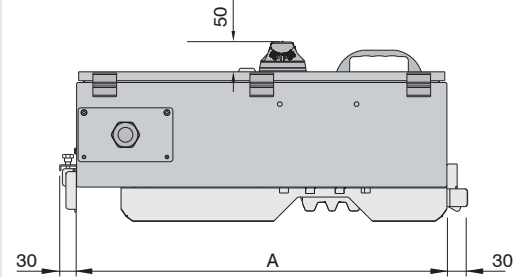
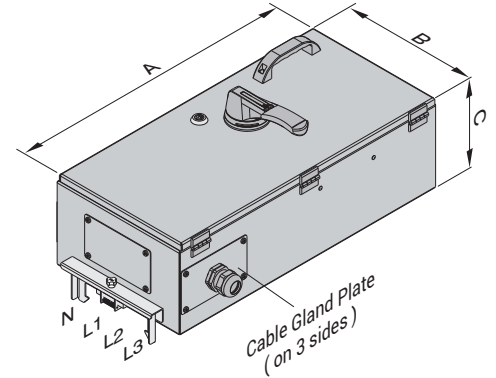
Bolt-on Tap-off Boxes

- KX B 1 6 5 1 - B
- KX B 2 5 5 1 - B
- KX B 4 0 5 1 - B
- KX B 6 3 5 1 - B
- KX B 1 6 5 1 - M
- KX B 2 5 5 1 - M
- KX B 4 0 5 1 - M
- KX B 6 3 5 1 - M

Sample Order:

Bolt-on / 630 A / IP-55
5 conductors, empty tap-off box

KXB 6351 - B



- KX B 8 0 5 1 - B
- KX B 1 0 5 1 - B
- KX B 8 0 5 1 - M
- KX B 1 0 5 1 - M

Sample Order:

Bolt-on / 800 A / IP-55 /
5 conductors, empty tap-off box

KXB 8051 - B

Bolt-on tap-off box can not be used on the joints of mentioned ranges of busbars.

| Tap-off Boxes | A (mm) | B (mm) | C (mm) | *D (mm) | Standard Gland |
|---------------|--------|--------|--------|---------|----------------|
| KXB 16 | 650 | 300 | 220 | 130 | RPK3 |
| KXB 25 | 650 | 300 | 220 | 130 | RPK4 |
| KXB 40 | 800 | 300 | 220 | 210 | RP4 |
| KXB 63 | 800 | 300 | 220 | 210 | RP4 |
| KXB 80 | 1100 | 450 | 275 | 385 | RP9 |
| KXB 10 | 1100 | 450 | 275 | 385 | RP9 |

* D value varies as per the used switch.

* Tap-off boxes can be equipped with any brand of MCCB's.

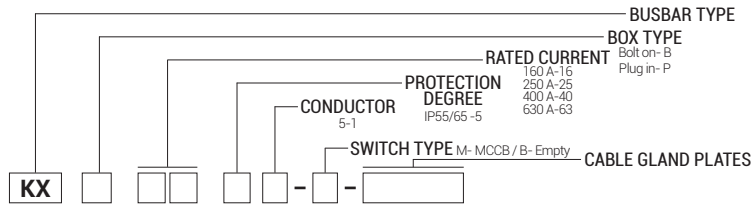
■ Please call us for non-standard components.

■ When requesting special size tap off boxes, make sure that the distance between the two plug point does not prevent the installation of the tap off boxes.

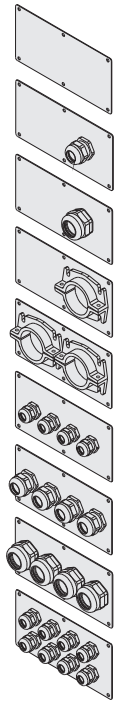
| KXA - Al Conductor | | KXC - Cu Conductor | | Bolt-on Tap-off Box |
|--------------------|-------------|--------------------|-------------|---------------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | |
| 400 | 04 | 550 | 05 | x |
| 500 | 05 | 650 | 06 | x |
| 630 | 06 | 800 | 08 | x |

| Gland Type | Max. External Diameter of Cable Cross-section (mm) |
|-----------------|--|
| M25 | Ø 18 |
| M32 | Ø 26 |
| M40 | Ø 33 |
| M50 | Ø 39 |
| M63 | Ø 45 |
| Special for EAE | Ø 60 |

▶▶ Tap-off Boxes for MCCB's (KXP)



Cable Gland Plates



| Mat. | Cable Gland Type | Order Code | Inner Diameter (mm) |
|-------|------------------|------------|---------------------|
| Sheet | ---- | RP0 | ---- |
| Sheet | M32 | RP1 | 25 |
| Sheet | M40 | RP2 | 32 |
| Sheet | Special | RP3 | 63 |
| AL | 2xSpecial | RP4 | 63 |
| AL | 4xM25 | RP5 | 18 |
| AL | 4xM32 | RP6 | 25 |
| AL | 4xM40 | RP7 | 32 |
| AL | 8xM32 | RP8 | 25 |

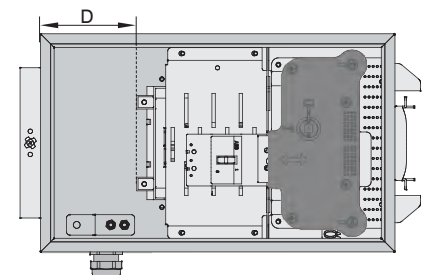
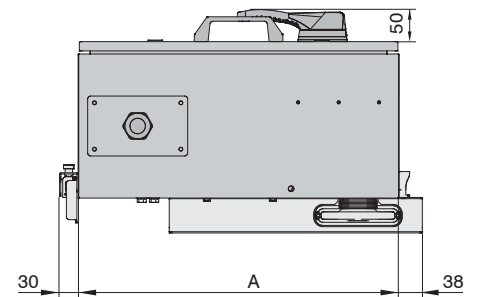
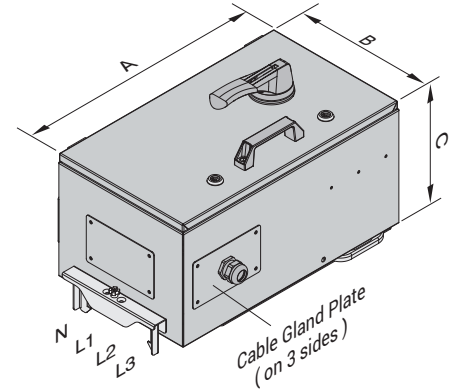
Plug-in Tap-off Boxes

- KX P 1 6 5 1 - B
- KX P 2 5 5 1 - B
- KX P 4 0 5 1 - B
- KX P 6 3 5 1 - B
- KX P 1 6 5 1 - M
- KX P 2 5 5 1 - M
- KX P 4 0 5 1 - M
- KX P 6 3 5 1 - M

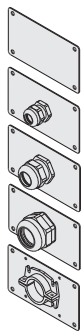
Sample Order:

Plug-in / 400 A / IP-55 / 5 conductors, empty tap-off box

KXP 4051 - B



Special Cable Gland Plates



| Mat. | Cable Gland Type | Order Code | Inner Diameter (mm) |
|-------|------------------|------------|---------------------|
| Sheet | ---- | RPK0 | ---- |
| Sheet | M25 | RPK1 | 18 |
| Sheet | M32 | RPK2 | 25 |
| Sheet | M40 | RPK3 | 32 |
| Sheet | 1xSpecial | RPK4 | 63 |

| Tap-off Boxes | A (mm) | B (mm) | C (mm) | D (mm) | Standard Gland |
|---------------|--------|--------|--------|--------|----------------|
| KXP 16 | 520 | 320 | 250 | 150 | RPK3 |
| KXP 25 | 520 | 320 | 250 | 150 | RPK4 |
| KXP 40 | 700 | 320 | 250 | 255 | RP4 |
| KXP 63 | 700 | 320 | 250 | 255 | RP4 |

| Gland Type | Max. External Diameter of Cable Cross-section (mm) |
|-----------------|--|
| M25 | Ø 18 |
| M32 | Ø 26 |
| M40 | Ø 33 |
| M50 | Ø 39 |
| M63 | Ø 45 |
| Special for EAE | Ø 60 |

* D value varies as per the used switch.

*Tap-off boxes can be equipped with any brand of switches and etc.

■ Please call us for non-standard components.

■ When requesting special size tap off boxes, make sure that the distance between the two plug point does not prevent the installation of the tap off boxes.

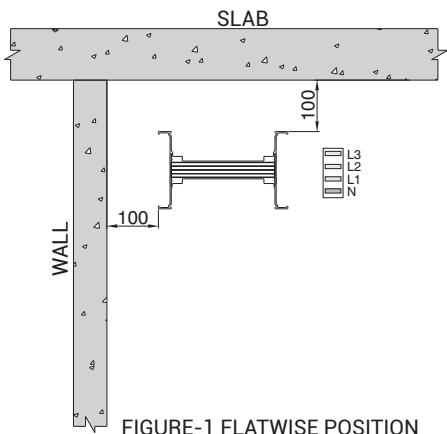


FIGURE-1 FLATWISE POSITION

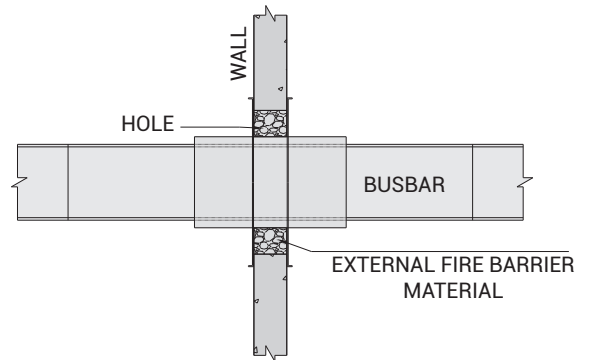


FIGURE-5 SAMPLE WALL CROSSING WITH FIRE BARRIER

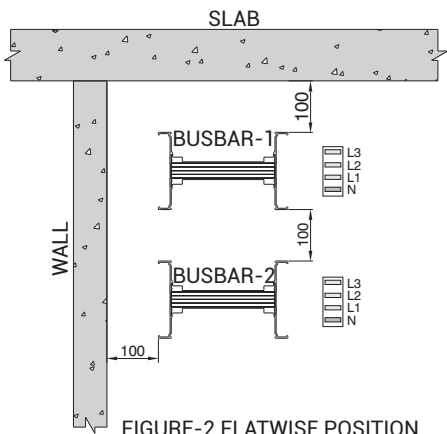


FIGURE-2 FLATWISE POSITION

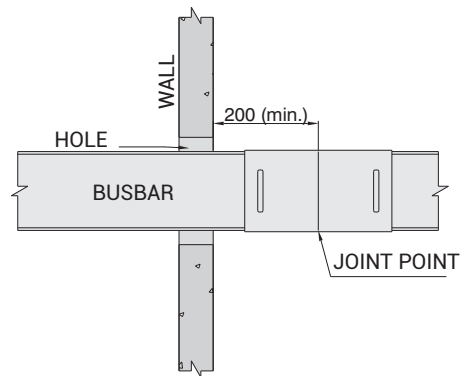


FIGURE-6 STANDARD WALL CROSSING

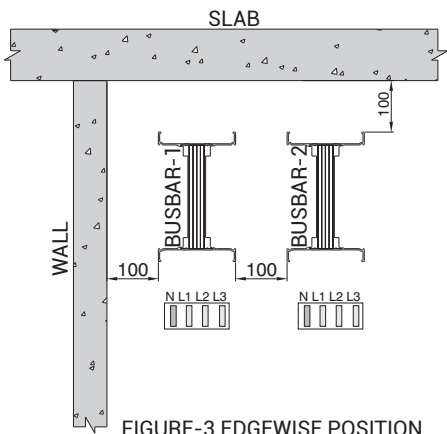


FIGURE-3 EDGEWISE POSITION

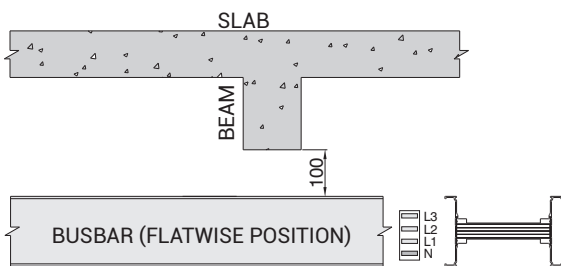
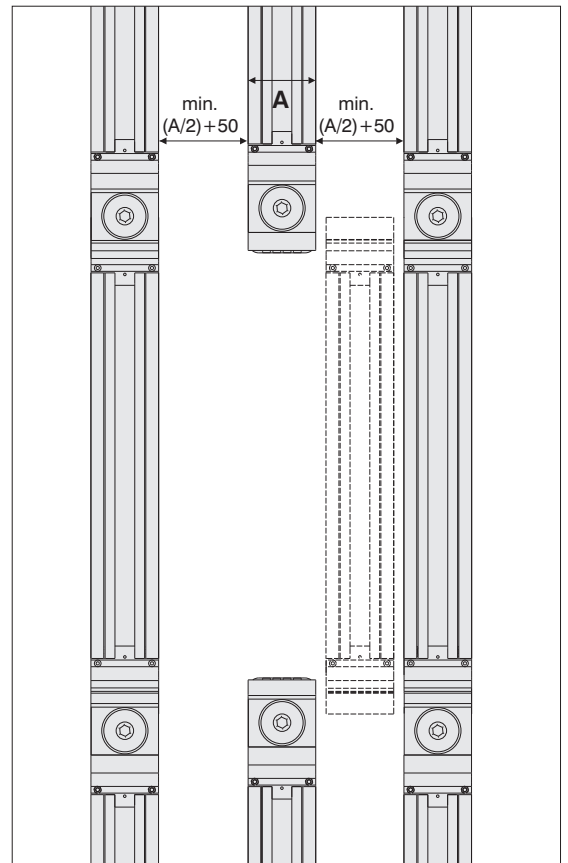


FIGURE-4 CROSSING UNDER A BEAM HORIZONTAL POSITION



MINIMUM DISTANCE BETWEEN BUSBAR RUNS IN HORIZONTAL APPLICATIONS.

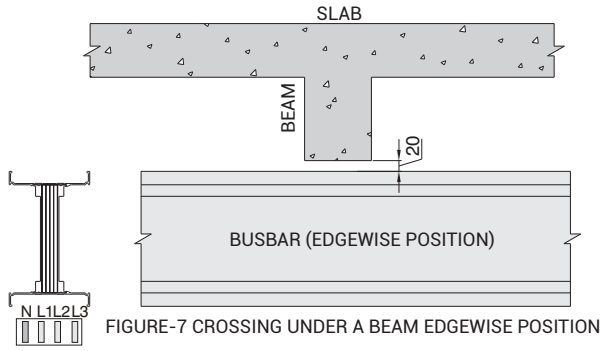


FIGURE-7 CROSSING UNDER A BEAM EDGEWISE POSITION

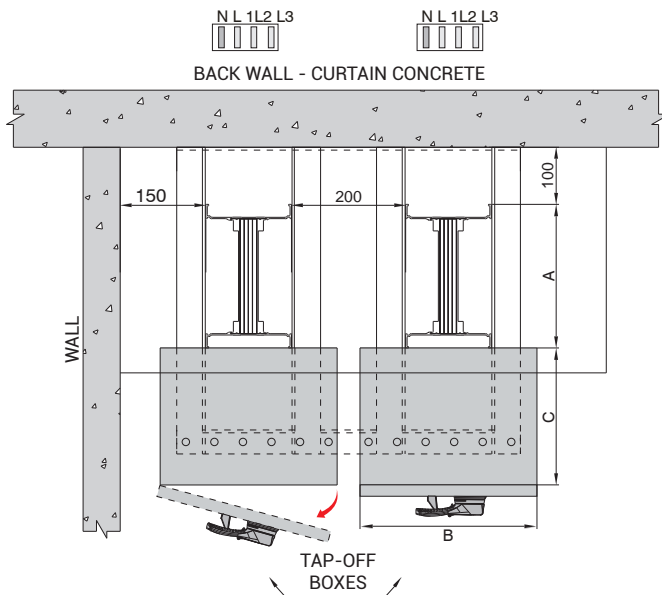


FIGURE-8 MINIMUM DIMENSIONS BETWEEN 2 TAP-OFF BOXES

| KXA - Al Conductor | | KXC - Cu Conductor | | A (mm) |
|--------------------|-------------|--------------------|-------------|--------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | |
| * 400 | 04 | *550 | 05 | 77,5 |
| * 500 | 05 | *650 | 06 | 82,5 |
| * 630 | 06 | *800 | 08 | 91 |
| 800 | 08 | 1000 | 10 | 106 |
| 1000 | 11 | - | - | 111 |
| - | - | 1250 | 12 | 121 |
| 1000 | 10 | 1350 | 14 | 131 |
| - | - | 1600 | 17 | 146 |
| 1250 | 12 | - | - | 161 |
| 1350 | 14 | 2000 | 23 | 176 |
| 1600 | 16 | - | - | 191 |
| 1600 | 17 | - | - | 211 |
| 2000 | 18 | - | - | 233 |
| 2000 | 20 | 2500 | 25 | 251 |
| 2500 | 29 | - | - | 281 |
| 2500 | 27 | - | - | 301 |
| - | - | 2000 | 22 | 202 |
| - | - | 2500 | 27 | 232 |
| 2500 | 25 | 3300 | 32 | 312 |
| - | - | 3600 | 36 | 342 |
| 3200 | 32 | 4000 | 40 | 372 |
| 3200 | 33 | - | - | 412 |
| 4000 | 40 | 5000 | 50 | 492 |
| 4000 | 41 | - | - | 454 |
| 5000 | 51 | - | - | 592 |
| 6000 | 60 | 6300 | 63 | 732 |



NOTE : In order to accommodate the busbar systems in the riser shaft;

MDM = Minimum Distance from the wall

"A" dimension = All dimensions are for standard modules .

"C" dimension = Please see page 32-35 and special dimension for Tap-off box "C" dimension

"B" dimension = Max. opening distance for Tap-off box cover.

Shaft Dimension = $MDM + A + C + B + 100mm$

Shown as (Figure-8)

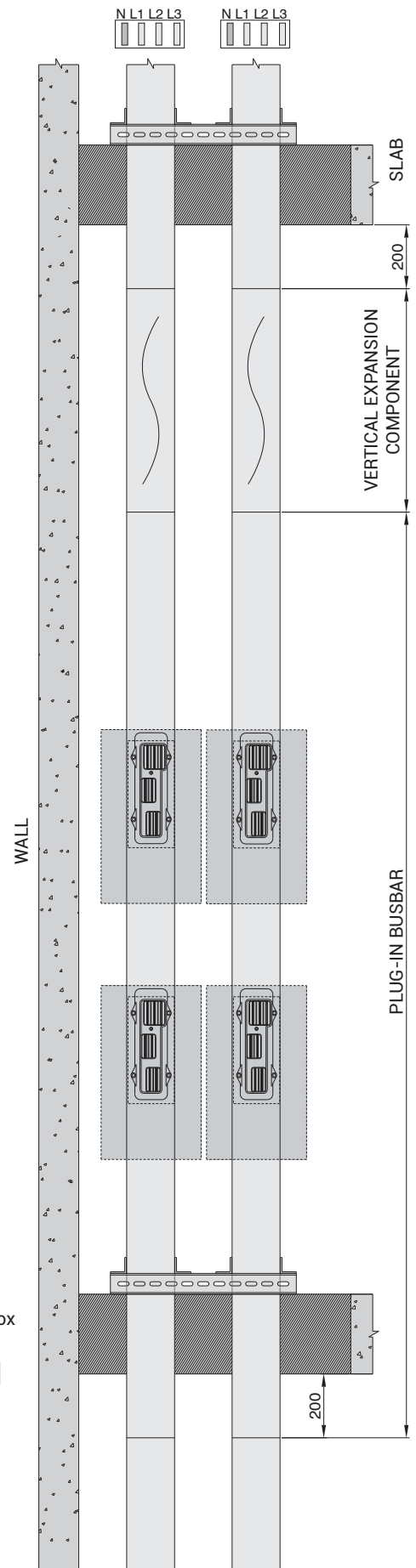
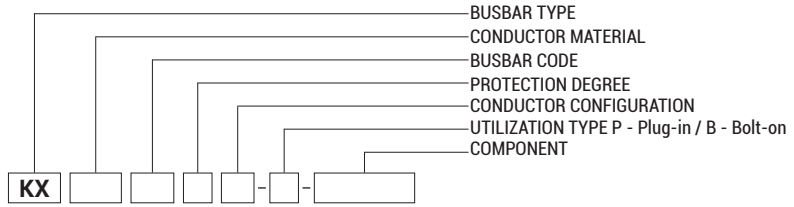


FIGURE-9 MINIMUM DIMENSIONS BETWEEN 2 RISERS

■ The dimensions given above are minimum values. ■ All measures are given in mm.

►► Feeder Boxes (B10,B11)



Cable Gland Plates

| Busbar Housing Type | Cable Gland Plate | Type |
|---------------------|-------------------|------|
| | | 1 |
| | | 2 |
| | | 3 |
| | | 2 |
| | | 3 |
| | | 4 |

Feeder Box B10 - B 1 0

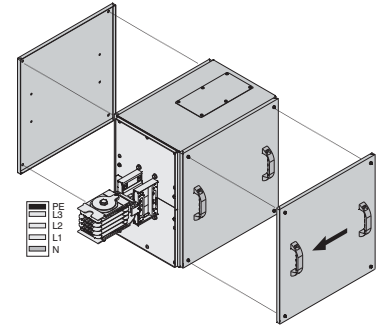
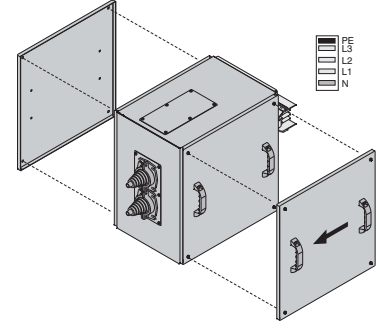
Sample Order:
3200 A, Aluminium, Bolt-on
4 Conductors

KXA 33504 - B - B10

Feeder Box B11 - B 1 1

Sample Order:
3600 A, Copper, Bolt-on,
4 Conductors

KXC 36504 - B - B11



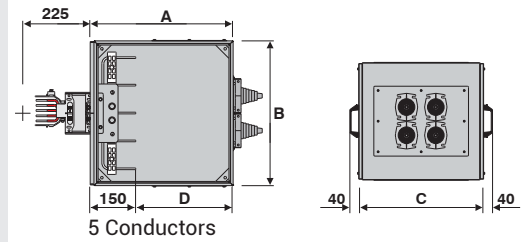
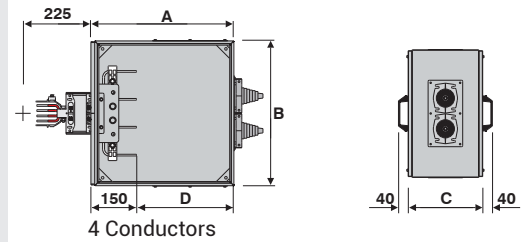
Ampere Ratings

| KXA - Al Conductor | | KXC - Cu Conductor | | A | B | C | D | Cable Gland Type |
|--------------------|-------------|--------------------|-------------|------|------------|------|------|------------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | (mm) | (mm) | (mm) | (mm) | |
| * 400 | 04 | * 550 | 05 | 500 | 520 / 620* | 355 | 350 | 1 |
| * 500 | 05 | * 650 | 06 | 500 | 520 / 620* | 355 | 350 | 1 |
| * 630 | 06 | * 800 | 08 | 500 | 520 / 620* | 355 | 350 | 1 |
| 800 | 08 | 1000 | 10 | 500 | 520 / 620* | 355 | 350 | 1 |
| 1000 | 11 | - | - | 500 | 520 / 620* | 355 | 350 | 1 |
| - | - | 1250 | 12 | 500 | 520 / 620* | 355 | 350 | 1 |
| 1000 | 10 | 1350 | 14 | 500 | 520 / 620* | 355 | 350 | 1 |
| - | - | 1600 | 17 | 500 | 520 / 620* | 355 | 350 | 1 |
| 1250 | 12 | - | - | 500 | 520 / 620* | 355 | 350 | 1 |
| 1350 | 14 | 2000 | 23 | 500 | 520 / 620* | 555 | 350 | 2 |
| 1600 | 16 | - | - | 500 | 520 / 620* | 555 | 350 | 2 |
| 1600 | 17 | - | - | 500 | 520 / 620* | 555 | 350 | 2 |
| 2000 | 18 | - | - | 500 | 520 / 620* | 555 | 350 | 2 |
| 2000 | 20 | 2500 | 25 | 500 | 520 / 620* | 555 | 350 | 3 |
| 2500 | 29 | - | - | 500 | 520 / 620* | 555 | 350 | 2 |
| 2500 | 27 | - | - | 500 | 520 / 620* | 555 | 350 | 2 |
| - | - | 2000 | 22 | 500 | 520 / 620* | 555 | 350 | 2 |
| - | - | 2500 | 27 | 500 | 520 / 620* | 555 | 350 | 3 |
| 2500 | 25 | 3300 | 32 | 500 | 520 / 620* | 555 | 350 | 3 |
| - | - | 3600 | 36 | 500 | 520 / 620* | 770 | 550 | 3 |
| 3200 | 32 | 4000 | 40 | 700 | 520 / 620* | 770 | 550 | 3 |
| 3200 | 33 | - | - | 700 | 520 / 620* | 770 | 550 | 3 |
| 4000 | 40 | 5000 | 50 | 700 | 520 / 620* | 770 | 550 | 3 |
| 4000 | 41 | - | - | 700 | 520 / 620* | 770 | 550 | 3 |
| 5000 | 51 | - | - | 700 | 520 / 620* | 770 | 550 | 3 |
| 6000 | 60 | 6300 | 63 | 700 | 520 / 620* | 1100 | 550 | 4 |

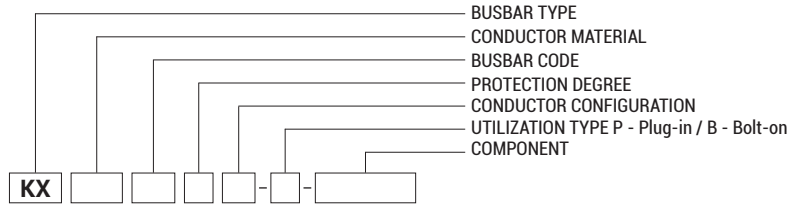
*The values are given for 08 and 09 codes clean earth models.

■ The dimensions given above are minimum values.

■ Please call us for special applications or for applications with MCCB's.



►► Feeder Boxes (Central Feeder Boxes BO)



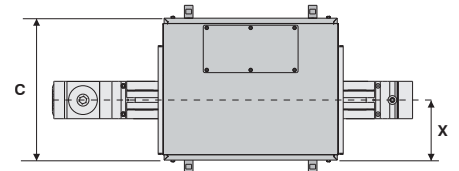
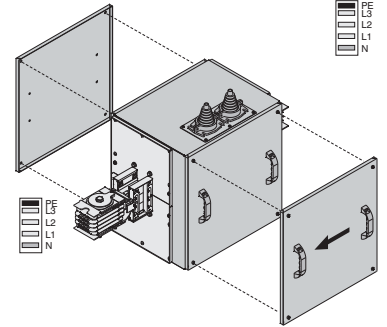
Cable Gland Plates

| Busbar Housing Type | Cable Gland Plate | Type |
|---------------------|-------------------|------|
| | | 1 |
| | | 2 |
| | | 3 |
| | | 2 |
| | | 3 |
| | | 4 |

Central Feeder Box - B O

Sample Order:
 2500 A, Aluminium, Bolt-on
 4Conductor

KXA 25504 - B - BO



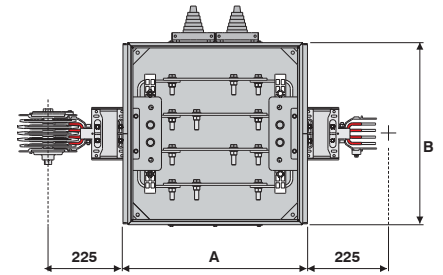
Ampere Ratings

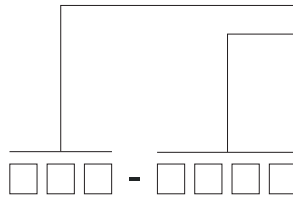
| KXA - Al Conductor | | KXC - Cu Conductor | | A | B | C | X | Cable Gland Type |
|--------------------|-------------|--------------------|-------------|------|------------|------|-------|------------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | (mm) | (mm) | (mm) | (mm) | |
| * 400 | 04 | *550 | 05 | 500 | 520 / 620* | 405 | 175 | 1 |
| * 500 | 05 | *650 | 06 | 500 | 520 / 620* | 405 | 175 | 1 |
| * 630 | 06 | *800 | 08 | 500 | 520 / 620* | 405 | 175 | 1 |
| 800 | 08 | 1000 | 10 | 500 | 520 / 620* | 405 | 175 | 1 |
| 1000 | 11 | - | - | 500 | 520 / 620* | 405 | 175 | 1 |
| - | - | 1250 | 12 | 500 | 520 / 620* | 405 | 175 | 1 |
| 1000 | 10 | 1350 | 14 | 500 | 520 / 620* | 405 | 175 | 1 |
| - | - | 1600 | 17 | 500 | 520 / 620* | 405 | 175 | 1 |
| 1250 | 12 | - | - | 500 | 520 / 620* | 805 | 277,5 | 1 |
| 1350 | 14 | 2000 | 23 | 500 | 520 / 620* | 805 | 277,5 | 2 |
| 1600 | 16 | - | - | 500 | 520 / 620* | 805 | 277,5 | 2 |
| 1600 | 17 | - | - | 500 | 520 / 620* | 805 | 277,5 | 2 |
| 2000 | 18 | - | - | 500 | 520 / 620* | 805 | 277,5 | 2 |
| 2000 | 20 | 2500 | 25 | 500 | 520 / 620* | 805 | 277,5 | 3 |
| 2500 | 29 | - | - | 500 | 520 / 620* | 805 | 277,5 | 2 |
| 2500 | 27 | - | - | 500 | 520 / 620* | 805 | 277,5 | 2 |
| - | - | 2000 | 22 | 500 | 520 / 620* | 805 | 277,5 | 2 |
| - | - | 2500 | 27 | 500 | 520 / 620* | 805 | 277,5 | 3 |
| 2500 | 25 | 3300 | 32 | 500 | 520 / 620* | 805 | 277,5 | 3 |
| - | - | 3600 | 36 | 500 | 520 / 620* | 805 | 277,5 | 3 |
| 3200 | 32 | 4000 | 40 | 700 | 520 / 620* | 1005 | 385 | 3 |
| 3200 | 33 | - | - | 700 | 520 / 620* | 1005 | 385 | 3 |
| 4000 | 40 | 5000 | 50 | 700 | 520 / 620* | 1005 | 385 | 3 |
| 4000 | 41 | - | - | 700 | 520 / 620* | 1005 | 385 | 3 |
| 5000 | 51 | - | - | 700 | 520 / 620* | 1005 | 385 | 3 |
| 6000 | 60 | 6300 | 63 | 700 | 520 / 620* | 1005 | 385 | 4 |

*The values are given for 08 and 09 codes clean earth models.

■ The dimensions given above are minimum values.

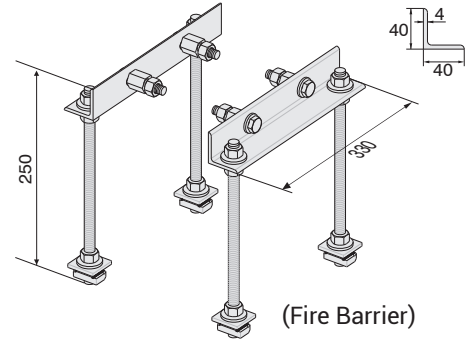
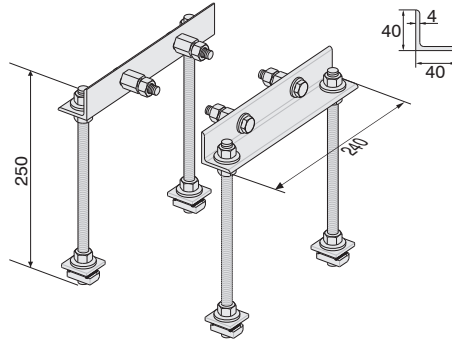
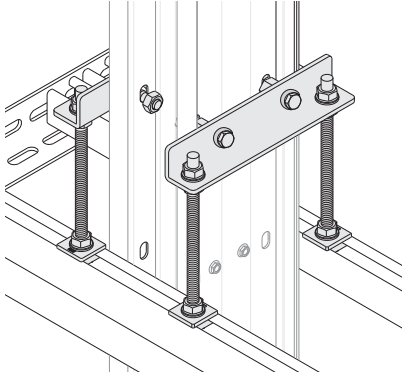
■ Please call us for special applications or for applications with MCCB's.





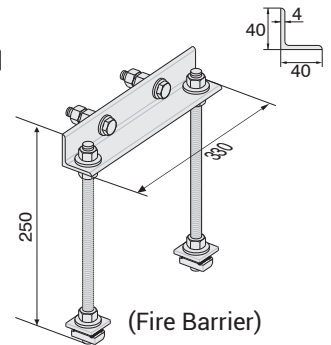
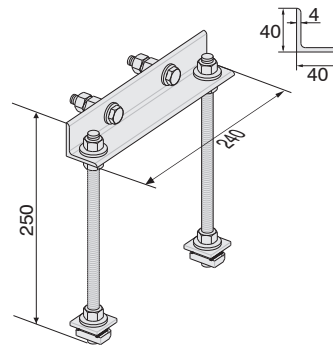
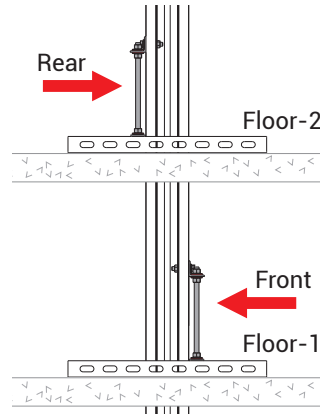
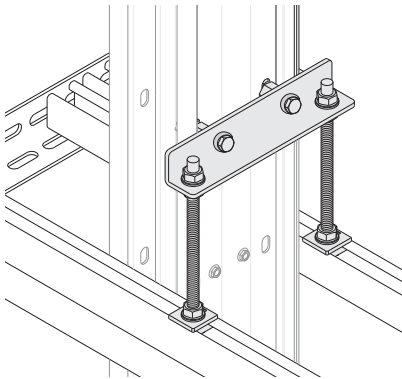
Supports

| Description | Order Code |
|--|------------|
| KX Vertical Riser Fixing Unit | 3048475 |
| KX Vertical Riser Fixing Unit (Fire Barrier) | 3048707 |



| Description | Order Code |
|--|------------|
| * KX Vertical Riser Fixing Unit | 3305415 |
| * KX Vertical Riser Fixing Unit (Fire Barrier) | 3305419 |

Installation Illustration

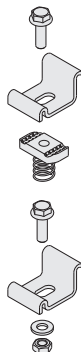


■ *KX Vertical Shaft Suspension Kit should be mounted individually on the Front and Rear sides of each floor for the Busbar, as shown above.

*It is valid for the specified sections.

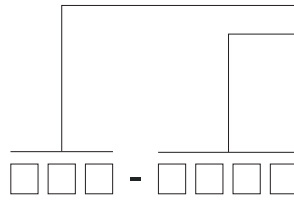
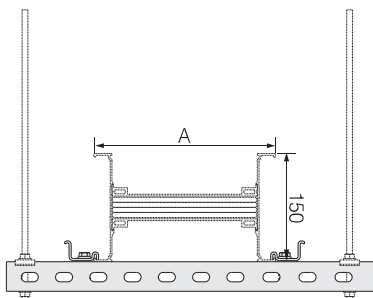
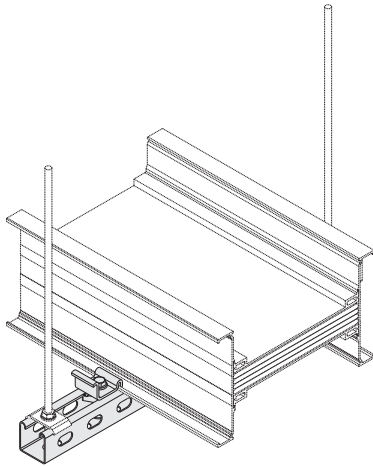
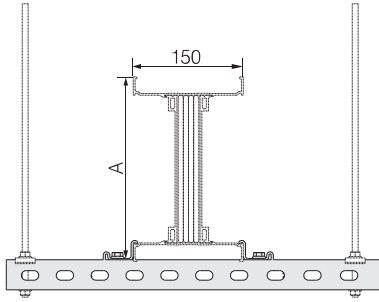
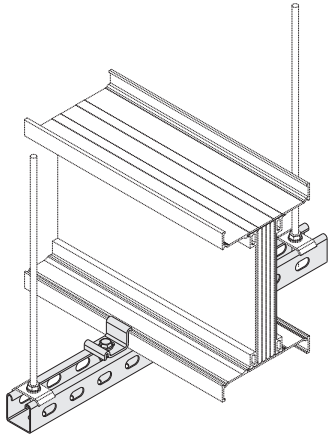
| | | |
|----------|----------|------|
| * KXA 04 | * KXC 05 | 6x25 |
| * KXA 05 | * KXC 06 | 6x30 |
| * KXA 06 | * KXC 08 | 6x40 |

Fixing Elements



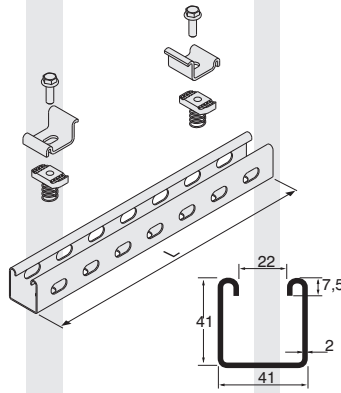
| Description | Order Code |
|---|------------|
| KX Fixing Clamp for Binrak (Unistrut) Channel | 2011227 |

| Description | Order Code |
|---|------------|
| KX Fixing Clamp for Steel Angle Profile | 2011226 |

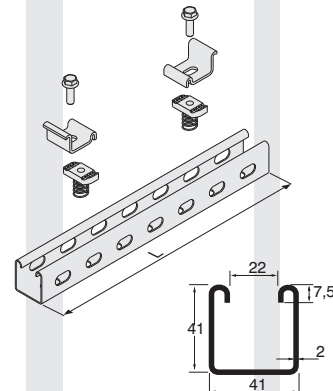


Supports

KX - BRA HANGER SET FOR EDGEWISE APPLICATION TO BINRAK (UNISTRUT) CHANNEL

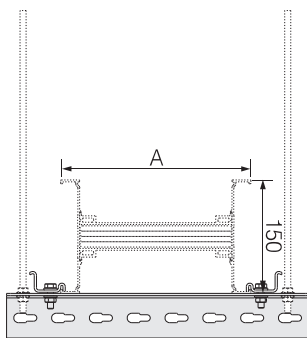
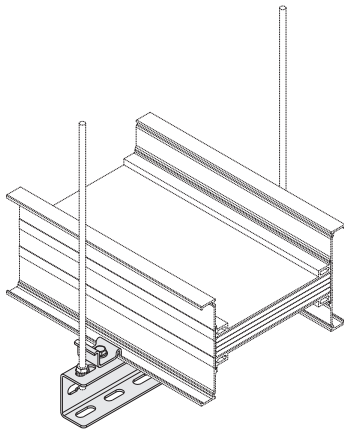
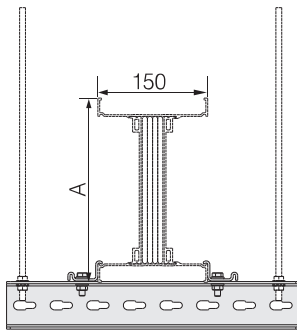
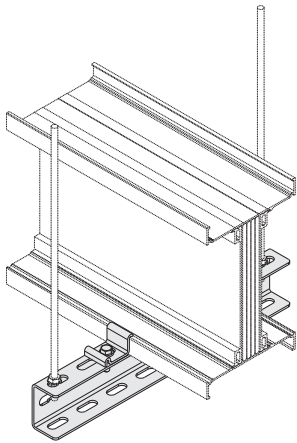
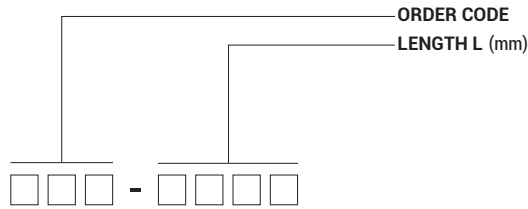


KX - BRA HANGER SET FOR FLATWISE APPLICATION TO BINRAK (UNISTRUT) CHANNEL



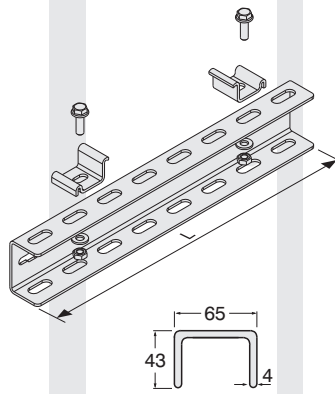
| Al Conductor | | Cu Conductor | | L (mm) | A (mm) | Order Code |
|---------------|-------------|---------------|-------------|--------|--------|------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | | | |
| 400 | 04 | 550 | 05 | 350 | 77,5 | 3025373 |
| 500 | 05 | 650 | 06 | | 82,5 | |
| 630 | 06 | 800 | 08 | | 91 | |
| 800 | 08 | 1000 | 10 | | 106 | |
| 1000 | 11 | - | - | | 111 | |
| - | - | 1250 | 12 | | 121 | |
| 1000 | 10 | 1350 | 14 | | 131 | |
| - | - | 1600 | 17 | | 146 | |
| 1250 | 12 | - | - | | 161 | |
| 1350 | 14 | 2000 | 23 | | 176 | |
| 1600 | 16 | - | - | | 191 | |
| 1600 | 17 | - | - | 211 | | |
| 2000 | 18 | - | - | 233 | | |
| 2000 | 20 | 2500 | 25 | 251 | | |
| 2500 | 29 | - | - | 281 | | |
| 2500 | 27 | - | - | 301 | | |

| Al Conductor | | Cu Conductor | | L (mm) | A (mm) | Order Code |
|---------------|-------------|---------------|-------------|--------|--------|------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | | | |
| 400 | 04 | 550 | 05 | 300 | 77,5 | 3025372 |
| 500 | 05 | 650 | 06 | | 82,5 | |
| 630 | 06 | 800 | 08 | | 91 | |
| 800 | 08 | 1000 | 10 | | 106 | |
| 1000 | 11 | - | - | | 111 | |
| - | - | 1250 | 12 | 350 | 121 | 3025373 |
| 1000 | 10 | 1350 | 14 | | 131 | |
| - | - | 1600 | 17 | 400 | 146 | 3025374 |
| 1250 | 12 | - | - | | 161 | |
| 1350 | 14 | 2000 | 23 | | 176 | |
| 1600 | 16 | - | - | 450 | 191 | 3025375 |
| 1600 | 17 | - | - | | 211 | |
| 2000 | 18 | - | - | 450 | 233 | 3025375 |
| 2000 | 20 | 2500 | 25 | | 251 | |
| 2500 | 29 | - | - | | 281 | |
| 2500 | 27 | - | - | 301 | | |

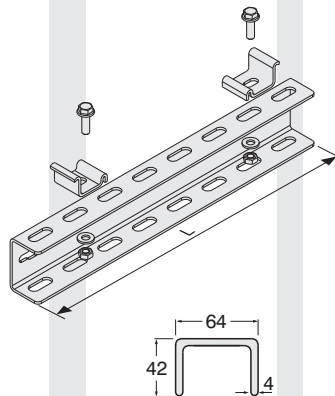


Supports

KX - UT HANGER SET FOR EDGEWISE APPLICATION TO NPU CHANNEL

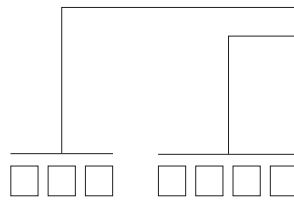
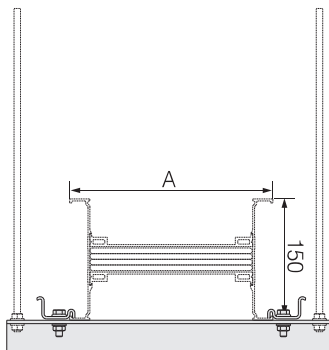
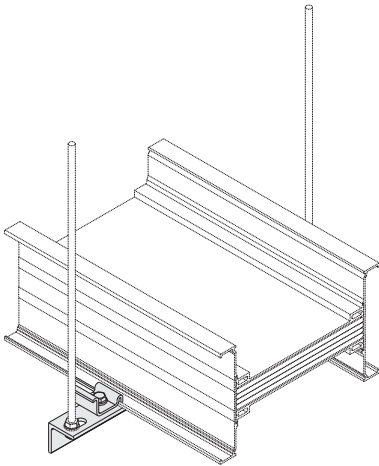
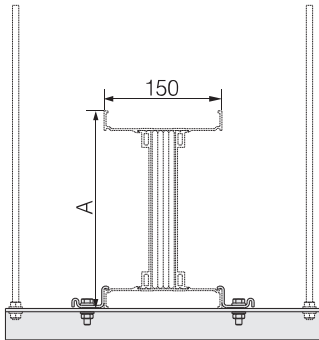
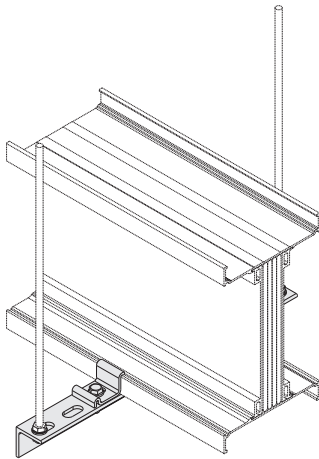


KX - UT HANGER SET FOR FLATWISE APPLICATION TO NPU CHANNEL



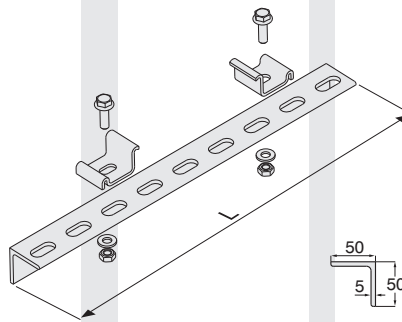
| KXA - Al Conductor | | KXC - Cu Conductor | | L (mm) | A (mm) | Order Code |
|--------------------|-------------|--------------------|-------------|--------|--------|------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | | | |
| * 400 | 04 | *550 | 05 | 350 | 77,5 | 3025348 |
| * 500 | 05 | *650 | 06 | | 82,5 | |
| * 630 | 06 | *800 | 08 | | 91 | |
| 800 | 08 | 1000 | 10 | | 106 | |
| 1000 | 11 | - | - | | 111 | |
| - | - | 1250 | 12 | | 121 | |
| 1000 | 10 | 1350 | 14 | | 131 | |
| - | - | 1600 | 17 | | 146 | |
| 1250 | 12 | - | - | | 161 | |
| 1350 | 14 | 2000 | 23 | | 176 | |
| 1600 | 16 | - | - | | 191 | |
| 1600 | 17 | - | - | | 211 | |
| 2000 | 18 | - | - | | 233 | |
| 2000 | 20 | 2500 | 25 | | 251 | |
| 2500 | 29 | - | - | | 281 | |
| 2500 | 27 | - | - | | 301 | |
| - | - | 2000 | 22 | | 202 | |
| - | - | 2500 | 27 | | 232 | |
| 2500 | 25 | 3300 | 32 | | 312 | |
| - | - | 3600 | 36 | | 342 | |
| 3200 | 32 | 4000 | 40 | | 372 | |
| 3200 | 33 | - | - | 412 | | |
| 4000 | 40 | 5000 | 50 | 492 | | |
| 4000 | 41 | - | - | 454 | | |
| 5000 | 51 | - | - | 592 | | |
| 6000 | 60 | 6300 | 63 | 732 | | |

| KXA - Al Conductor | | KXC - Cu Conductor | | L (mm) | A (mm) | Order Code |
|--------------------|-------------|--------------------|-------------|--------|--------|------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | | | |
| * 400 | 04 | *550 | 05 | 300 | 77,5 | 3025347 |
| * 500 | 05 | *650 | 06 | | 82,5 | |
| * 630 | 06 | *800 | 08 | | 91 | |
| 800 | 08 | 1000 | 10 | | 106 | |
| 1000 | 11 | - | - | | 111 | |
| - | - | 1250 | 12 | 350 | 121 | 3025348 |
| 1000 | 10 | 1350 | 14 | | 131 | |
| - | - | 1600 | 17 | 400 | 146 | 3025349 |
| 1250 | 12 | - | - | | 161 | |
| 1350 | 14 | 2000 | 23 | 450 | 176 | 3025350 |
| 1600 | 16 | - | - | | 191 | |
| 1600 | 17 | - | - | 500 | 211 | 3025351 |
| 2000 | 18 | - | - | | 233 | |
| 2000 | 20 | 2500 | 25 | 550 | 251 | 3025352 |
| 2500 | 29 | - | - | | 281 | |
| 2500 | 27 | - | - | 600 | 301 | 3025353 |
| - | - | 2000 | 22 | | 202 | |
| - | - | 2500 | 27 | 700 | 232 | 3025354 |
| 2500 | 25 | 3300 | 32 | | 312 | |
| - | - | 3600 | 36 | 800 | 342 | 3134130 |
| 3200 | 32 | 4000 | 40 | | 372 | |
| 3200 | 33 | - | - | 900 | 412 | 3025355 |
| 4000 | 40 | 5000 | 50 | | 492 | |
| 4000 | 41 | - | - | 454 | | |
| 5000 | 51 | - | - | 592 | | |
| 6000 | 60 | 6300 | 63 | 732 | | |

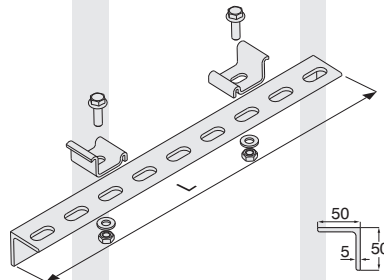


Supports

KX HANGER SET FOR EDGEWISE APPLICATION TO STEEL ANGLE PROFILE

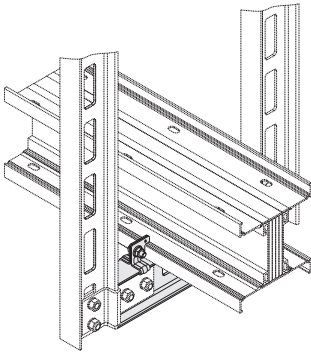
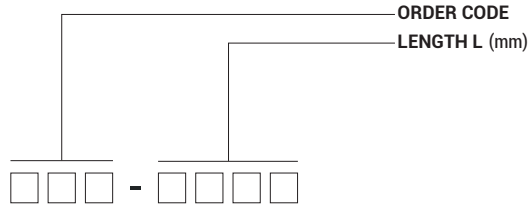
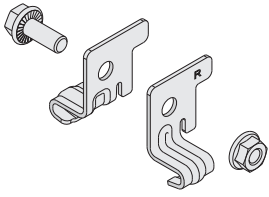


KX HANGER SET FOR FLATWISE APPLICATION TO STEEL ANGLE PROFILE



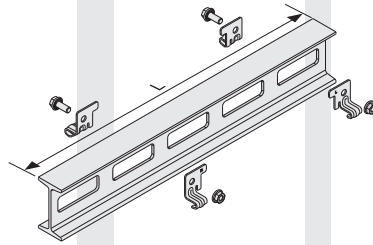
| Al Conductor | | Cu Conductor | | L | A | Order Code |
|---------------|-------------|---------------|-------------|------|------|------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | (mm) | (mm) | |
| 400 | 04 | 550 | 05 | 350 | 77,5 | 3025344 |
| 500 | 05 | 650 | 06 | | 82,5 | |
| 630 | 06 | 800 | 08 | | 91 | |
| 800 | 08 | 1000 | 10 | | 106 | |
| 1000 | 11 | - | - | | 111 | |
| - | - | 1250 | 12 | | 121 | |
| 1000 | 10 | 1350 | 14 | | 131 | |
| - | - | 1600 | 17 | | 146 | |
| 1250 | 12 | - | - | | 161 | |
| 1350 | 14 | 2000 | 23 | | 176 | |
| 1600 | 16 | - | - | | 191 | |
| 1600 | 17 | - | - | | 211 | |
| 2000 | 18 | - | - | | 233 | |
| 2000 | 20 | 2500 | 25 | | 251 | |
| 2500 | 29 | - | - | | 281 | |
| 2500 | 27 | - | - | | 301 | |

| Al Conductor | | Cu Conductor | | L | A | Order Code |
|---------------|-------------|---------------|-------------|------|------|------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | (mm) | (mm) | |
| 400 | 04 | 550 | 05 | 300 | 77,5 | 3025343 |
| 500 | 05 | 650 | 06 | | 82,5 | |
| 630 | 06 | 800 | 08 | | 91 | |
| 800 | 08 | 1000 | 10 | | 106 | |
| 1000 | 11 | - | - | 350 | 111 | 3025344 |
| - | - | 1250 | 12 | | 121 | |
| 1000 | 10 | 1350 | 14 | | 131 | |
| - | - | 1600 | 17 | | 146 | |
| 1250 | 12 | - | - | 400 | 161 | 3025345 |
| 1350 | 14 | 2000 | 23 | | 176 | |
| 1600 | 16 | - | - | | 191 | |
| 1600 | 17 | - | - | | 211 | |
| 2000 | 18 | - | - | 450 | 233 | 3025346 |
| 2000 | 20 | 2500 | 25 | | 251 | |
| 2500 | 29 | - | - | | 281 | |
| 2500 | 27 | - | - | | 301 | |

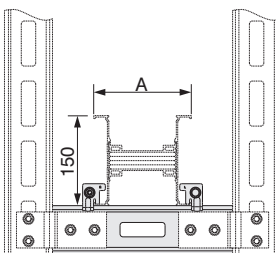
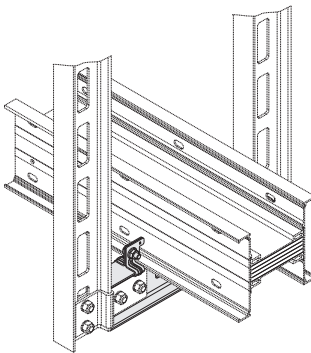
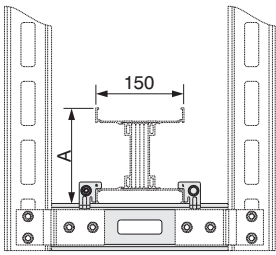


Supports

**KX - IDY TWO-WAY
FOR EDGEWISE
APPLICATION
TO NPI CHANNEL**



**KX - IDY TWO-WAY
FOR FLATWISE
APPLICATION
TO NPI CHANNEL**

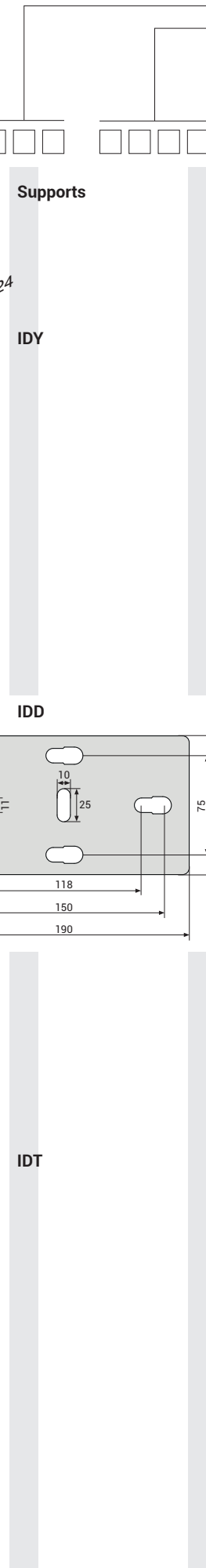
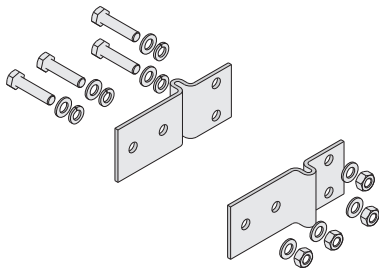
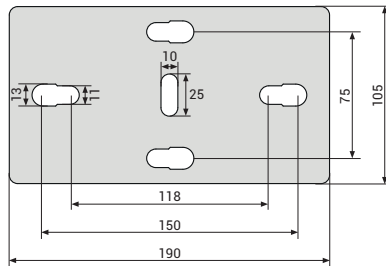
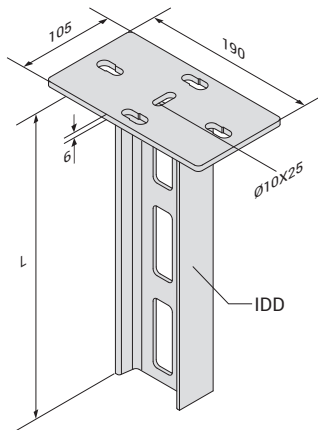
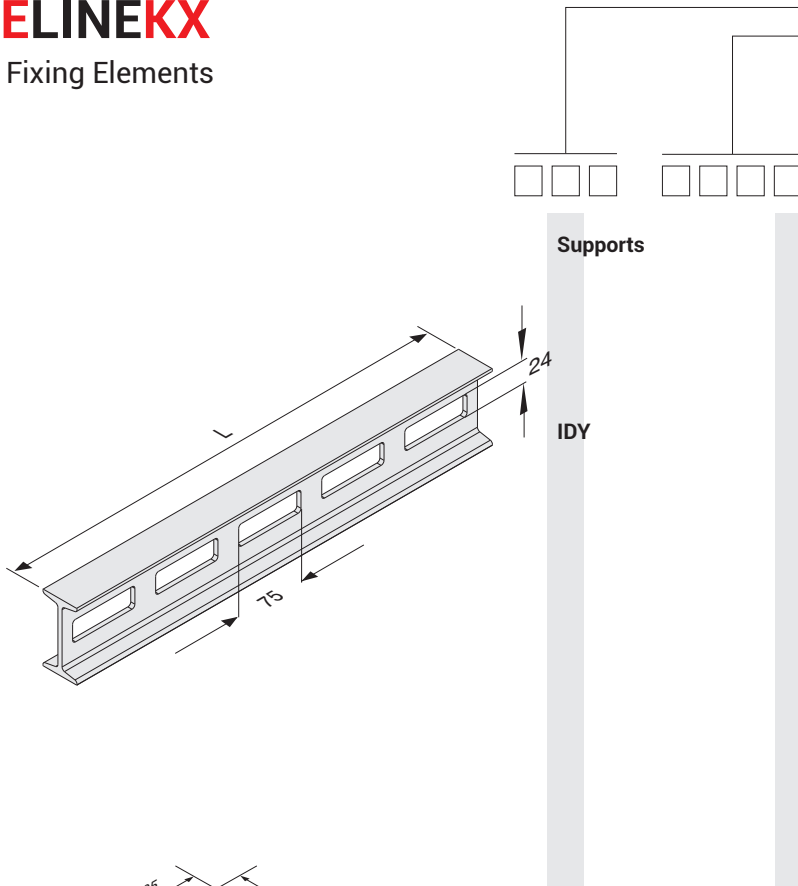


| Description | Order Code |
|--------------------|------------|
| KX IDY Support Set | 2054590 |

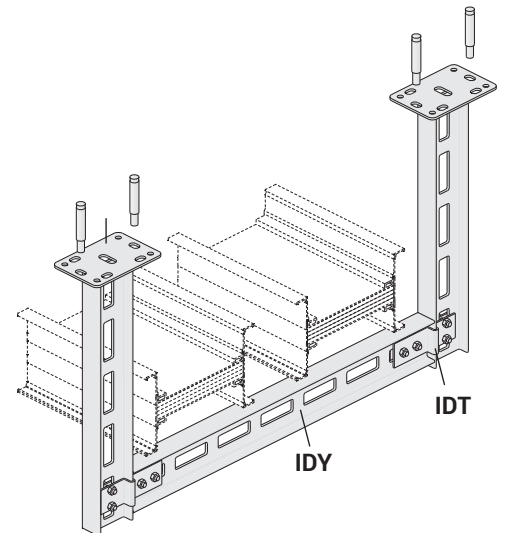
| KXA - Al Conductor | | KXC - Cu Conductor | | L | A | Order Code |
|--------------------|-------------|--------------------|-------------|------|------|------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | (mm) | (mm) | |
| * 400 | 04 | *550 | 05 | 300 | 77,5 | 3113547 |
| * 500 | 05 | *650 | 06 | | 82,5 | |
| * 630 | 06 | *800 | 08 | | 91 | |
| 800 | 08 | 1000 | 10 | | 106 | |
| 1000 | 11 | - | - | | 111 | |
| - | - | 1250 | 12 | | 121 | |
| 1000 | 10 | 1350 | 14 | | 131 | |
| - | - | 1600 | 17 | | 146 | |
| 1250 | 12 | - | - | | 161 | |
| 1350 | 14 | 2000 | 23 | | 176 | |
| 1600 | 16 | - | - | | 191 | |
| 1600 | 17 | - | - | | 211 | |
| 2000 | 18 | - | - | | 233 | |
| 2000 | 20 | 2500 | 25 | | 251 | |
| 2500 | 29 | - | - | | 281 | |
| 2500 | 27 | - | - | | 301 | |
| - | - | 2000 | 22 | | 202 | |
| - | - | 2500 | 27 | | 232 | |
| 2500 | 25 | 3300 | 32 | | 312 | |
| - | - | 3600 | 36 | | 342 | |
| 3200 | 32 | 4000 | 40 | | 372 | |
| 3200 | 33 | - | - | | 412 | |
| 4000 | 40 | 5000 | 50 | | 492 | |
| 4000 | 41 | - | - | | 454 | |
| 5000 | 51 | - | - | 592 | | |
| 6000 | 60 | 6300 | 63 | 732 | | |

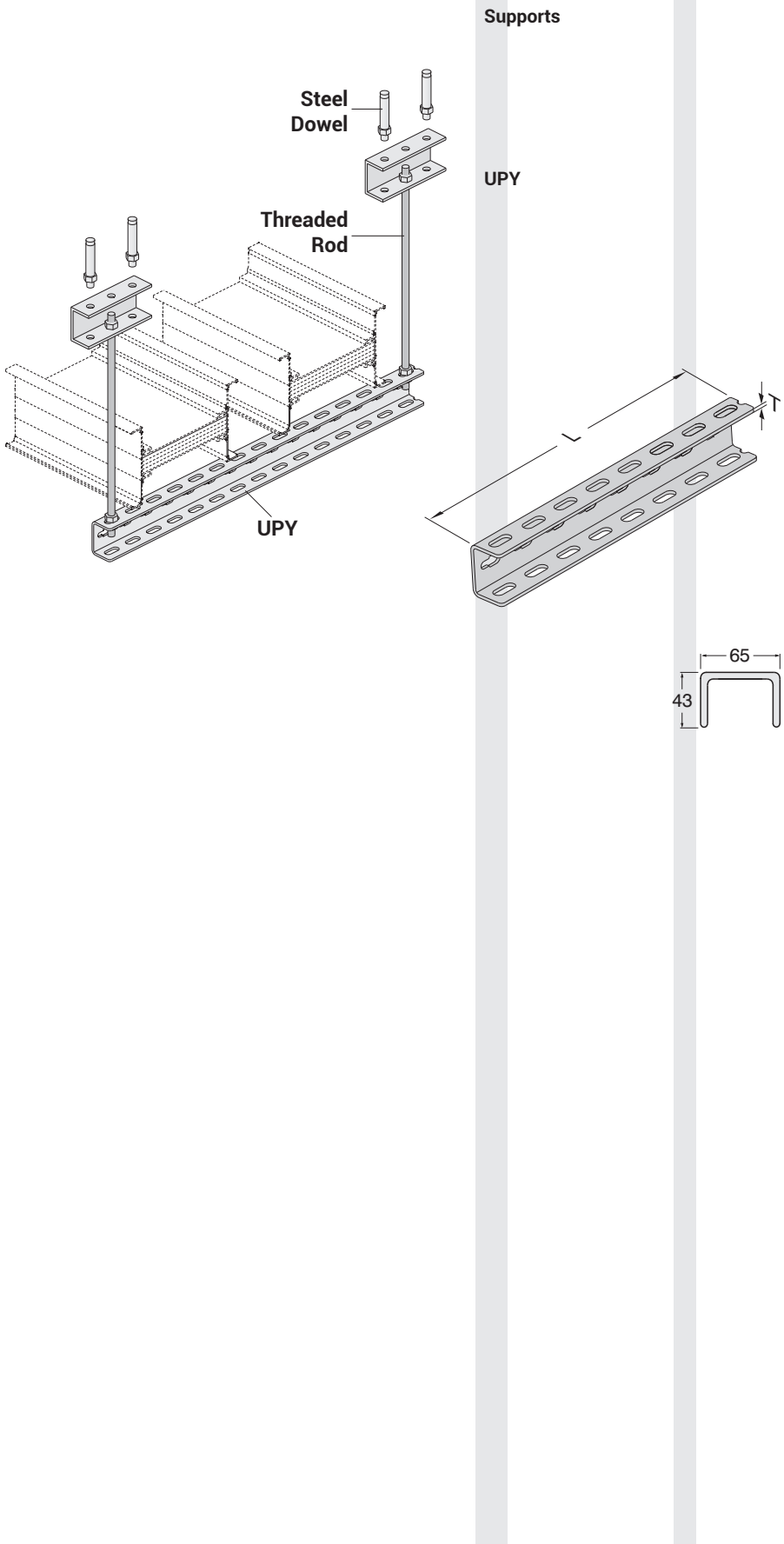
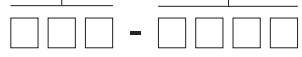
| KXA - Al Conductor | | KXC - Cu Conductor | | L | A | Order Code |
|--------------------|-------------|--------------------|-------------|------|---------|------------|
| Rated Current | Busbar Code | Rated Current | Busbar Code | (mm) | (mm) | |
| * 400 | 04 | *550 | 05 | 300 | 77,5 | 3113547 |
| * 500 | 05 | *650 | 06 | | 82,5 | |
| * 630 | 06 | *800 | 08 | | 91 | |
| 800 | 08 | 1000 | 10 | | 106 | |
| 1000 | 11 | - | - | | 111 | |
| - | - | 1250 | 12 | | 121 | |
| 1000 | 10 | 1350 | 14 | | 131 | |
| - | - | 1600 | 17 | | 146 | |
| 1250 | 12 | - | - | | 161 | |
| 1350 | 14 | 2000 | 23 | | 176 | |
| 1600 | 16 | - | - | | 191 | |
| 1600 | 17 | - | - | | 211 | |
| 2000 | 18 | - | - | 233 | | |
| 2000 | 20 | 2500 | 25 | 251 | | |
| 2500 | 29 | - | - | 281 | | |
| 2500 | 27 | - | - | 301 | | |
| - | - | 2000 | 22 | 202 | | |
| - | - | 2500 | 27 | 232 | | |
| 2500 | 25 | 3300 | 32 | 312 | 3113548 | |
| - | - | 3600 | 36 | 342 | | |
| 3200 | 32 | 4000 | 40 | 372 | | |
| 3200 | 33 | - | - | 412 | 3113549 | |
| 4000 | 40 | 5000 | 50 | 492 | | |
| 4000 | 41 | - | - | 454 | | |
| 5000 | 51 | - | - | 592 | 3113550 | |
| 6000 | 60 | 6300 | 63 | 732 | | |
| 5000 | 51 | - | - | 700 | 592 | 3134127 |
| 6000 | 60 | 6300 | 63 | 900 | 732 | 3113553 |

■ Please call us for non-standard components. ■ The span between supports should be 1.5m



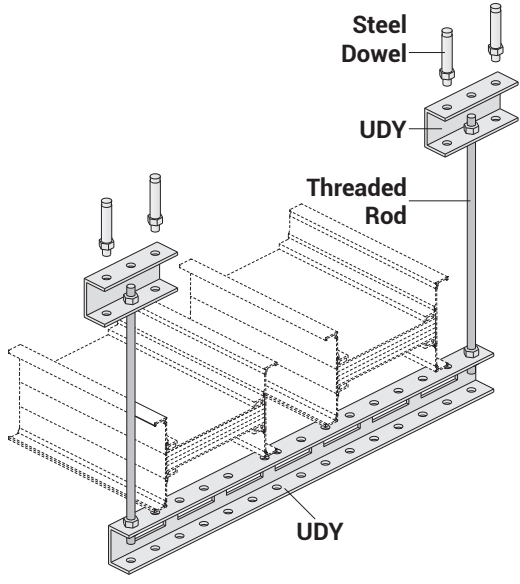
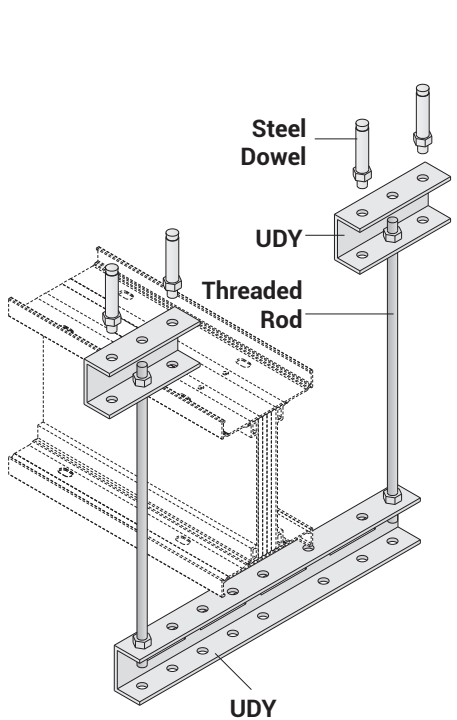
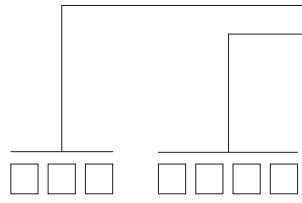
| Description | L (mm) | Order Code |
|---------------------|--------|------------|
| IDY 300 | 300 | 3008242 |
| IDY 400 | 400 | 3008290 |
| IDY 500 | 500 | 3008289 |
| IDY 600 | 600 | 3008288 |
| IDY 700 | 700 | 3008287 |
| IDY 800 | 800 | 3008286 |
| IDY 900 | 900 | 3008285 |
| IDY 1000 | 1000 | 3008284 |
| IDY 1100 | 1100 | 3008283 |
| IDY 1200 | 1200 | 3008282 |
| IDY 1300 | 1300 | 3008236 |
| IDY 1400 | 1400 | 3008281 |
| IDY 1500 | 1500 | 3008280 |
| IDY 1600 | 1600 | 3008241 |
| IDY 1700 | 1700 | 3008240 |
| IDY 1800 | 1800 | 3008239 |
| IDY 1900 | 1900 | 3008238 |
| IDY 2000 | 2000 | 3008237 |
| IDD 300 | 300 | 3008314 |
| IDD 400 | 400 | 3008313 |
| IDD 500 | 500 | 3008312 |
| IDD 600 | 600 | 3008311 |
| IDD 700 | 700 | 3008310 |
| IDD 800 | 800 | 3008309 |
| IDD 900 | 900 | 3008308 |
| IDD 1000 | 1000 | 3008307 |
| IDD 1100 | 1100 | 3008306 |
| IDD 1200 | 1200 | 3008305 |
| IDD 1300 | 1300 | 3008304 |
| IDD 1400 | 1400 | 3008303 |
| IDD 1500 | 1500 | 3008302 |
| IDD 1600 | 1600 | 3008301 |
| IDD 1700 | 1700 | 3008300 |
| IDD 1800 | 1800 | 3008299 |
| IDD 1900 | 1900 | 3008298 |
| IDD 2000 | 2000 | 3008297 |
| IDT Support Fitting | - | 3008279 |



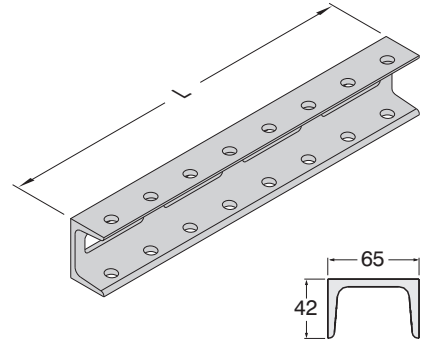


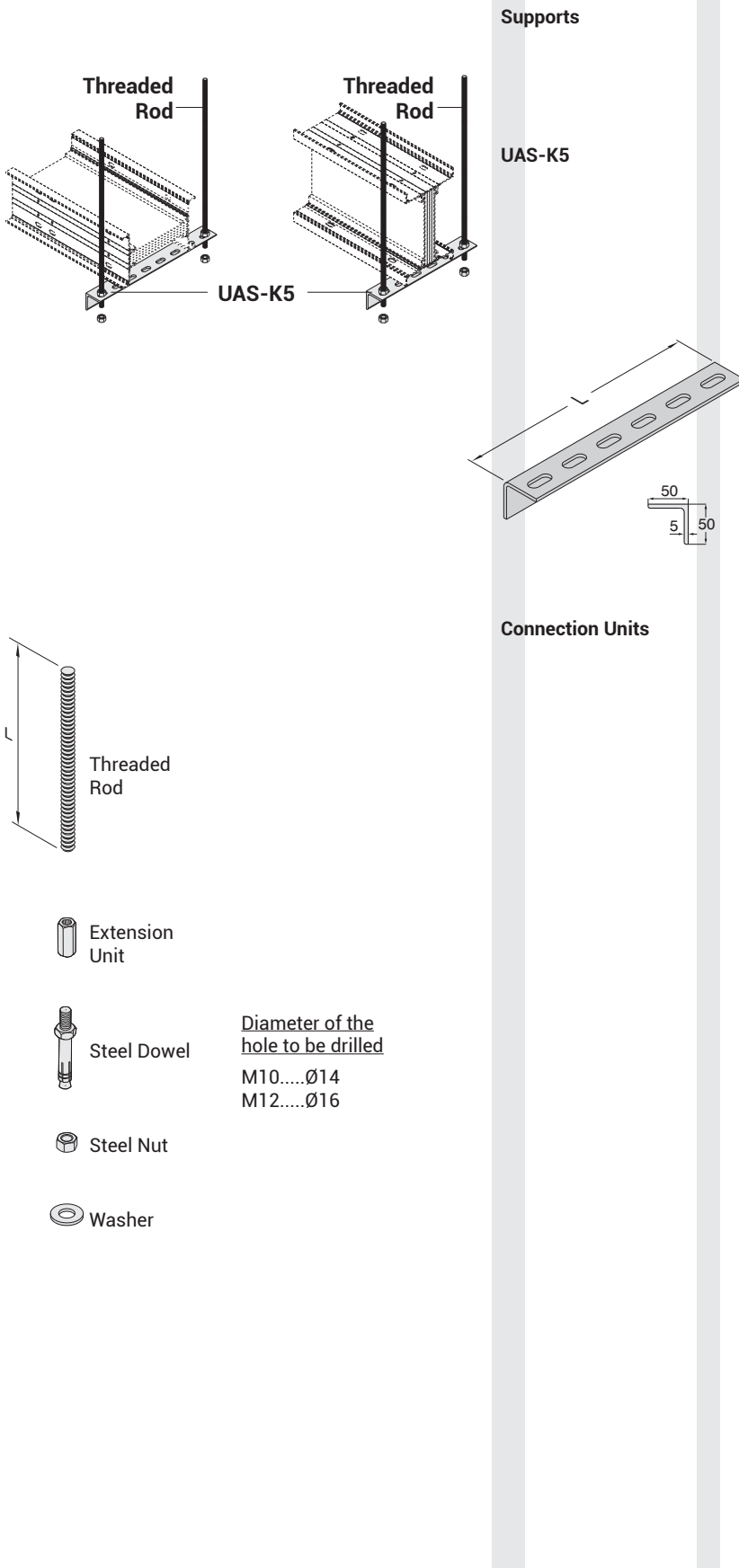
| Description | T (mm) | L (mm) | Order Code |
|-------------|--------|--------|------------|
| UPY 300 | 4 | 300 | 3004487 |
| UPY 400 | 4 | 400 | 3004489 |
| UPY 500 | 4 | 500 | 3004491 |
| UPY 600 | 4 | 600 | 3004493 |
| UPY 700 | 4 | 700 | 3004495 |
| UPY 800 | 4 | 800 | 3004496 |
| UPY 900 | 4 | 900 | 3004497 |
| UPY 1000 | 4 | 1000 | 3004498 |
| UPY 1100 | 4 | 1100 | 3004499 |
| UPY 1200 | 4 | 1200 | 3004500 |
| UPY 1500 | 4 | 1500 | 3004503 |

■ Please call us for non-standard components. ■ The span between supports should be 1.5m



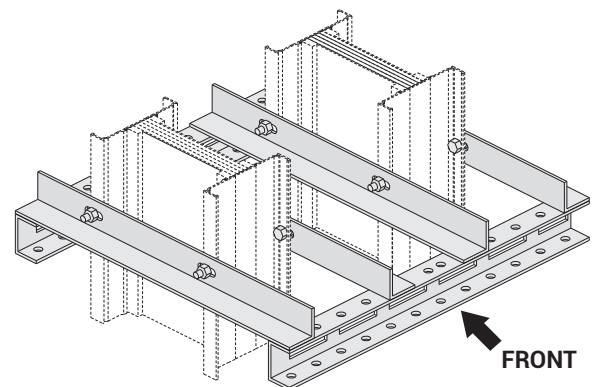
| Description | L (mm) | Order Code |
|-------------|--------|------------|
| UDY 300 | 300 | 3008023 |
| UDY 400 | 400 | 3008024 |
| UDY 500 | 500 | 3008025 |
| UDY 600 | 600 | 3008026 |
| UDY 700 | 700 | 3008027 |
| UDY 800 | 800 | 3008028 |
| UDY 900 | 900 | 3008029 |
| UDY 1000 | 1000 | 3008030 |
| UDY 1100 | 1100 | 3008031 |
| UDY 1200 | 1200 | 3008032 |
| UDY 1300 | 1300 | 3008033 |
| UDY 1400 | 1400 | 3008034 |
| UDY 1500 | 1500 | 3008035 |
| UDY 1600 | 1600 | 3008036 |
| UDY 1700 | 1700 | 3008037 |
| UDY 1800 | 1800 | 3008038 |
| UDY 1900 | 1900 | 3008039 |
| UDY 2000 | 2000 | 3008040 |



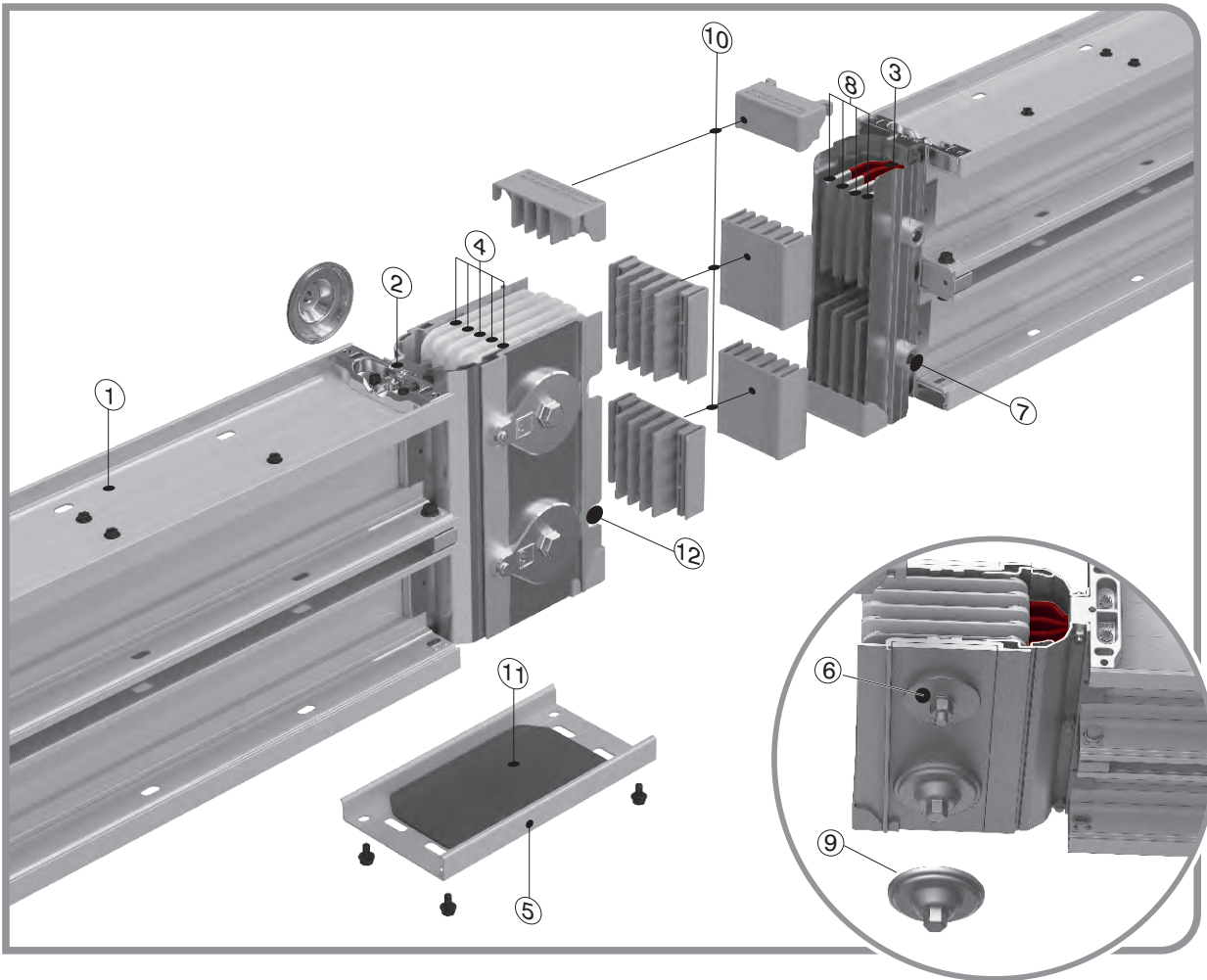


| Description | L (mm) | Order Code |
|---------------------|--------|------------|
| UAS-K5 Supports (1) | 200 | 3005324 |
| UAS-K5 Supports (2) | 250 | 3005323 |
| UAS-K5 Supports (3) | 300 | 3005322 |
| UAS-K5 Supports (4) | 350 | 3005321 |
| UAS-K5 Supports (5) | 400 | 3005320 |
| UAS-K5 Supports (6) | 500 | 3005319 |
| UAS-K5 Supports (7) | 600 | 3005318 |
| UAS-K5 Supports (8) | 700 | 3005317 |
| UAS-K5 Supports (9) | 1100 | 3005316 |

| Description | L (mm) | Order Code |
|------------------------------|--------|------------|
| BRA 12-05 Threaded Rod (M10) | 500 | 5000037 |
| BRA 12-10 Threaded Rod (M10) | 1000 | 5000032 |
| BRA 14-05 Threaded Rod (M12) | 500 | 5000026 |
| BRA 14-10 Threaded Rod (M12) | 1000 | 5000034 |
| BRA 13 Extension Unit (M10) | - | 1004312 |
| BRA 13 Extension Unit (M12) | - | 1004282 |
| BRA 9 Steel Dowel (M10) | - | 5000023 |
| BRA 9 Steel Dowel (M12) | - | 5000022 |
| M10 Steel Nut | - | 1000522 |
| M12 Steel Nut | - | 1000964 |
| M10 Washer | - | 1000504 |
| M12 Washer | - | 1000505 |



Vertical Riser Application
Sample Order Hanging
(Special to project)



1. Extruded Aluminium Housing
2. PE Fixing Piece
3. Insulation Layers (Epoxy+B class polyester film)
4. Joint Insulators
5. Joint Cover
6. Belleville
7. Alignment Pin (removable)
8. Conductors
9. IP55 Nut Locking Piece
10. Protection Plastic
11. IP55 Joint Cover Gasket
12. Alignment Pin Slot

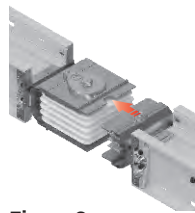


Figure 3

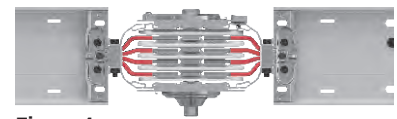


Figure 4 Joint assembly

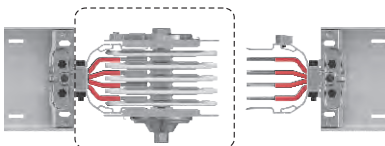


Figure 1 Block Joint

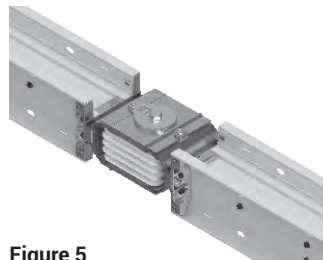


Figure 5

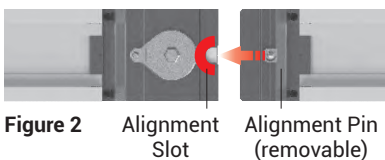


Figure 2 Alignment Slot Alignment Pin (removable)

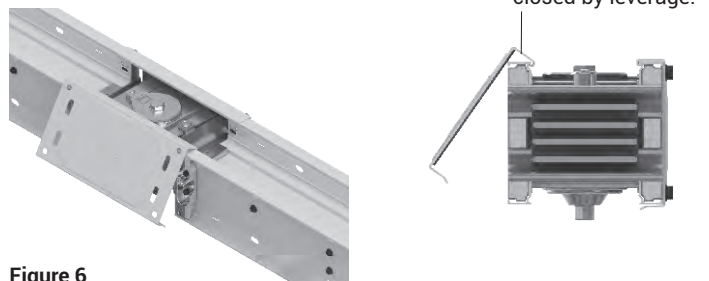


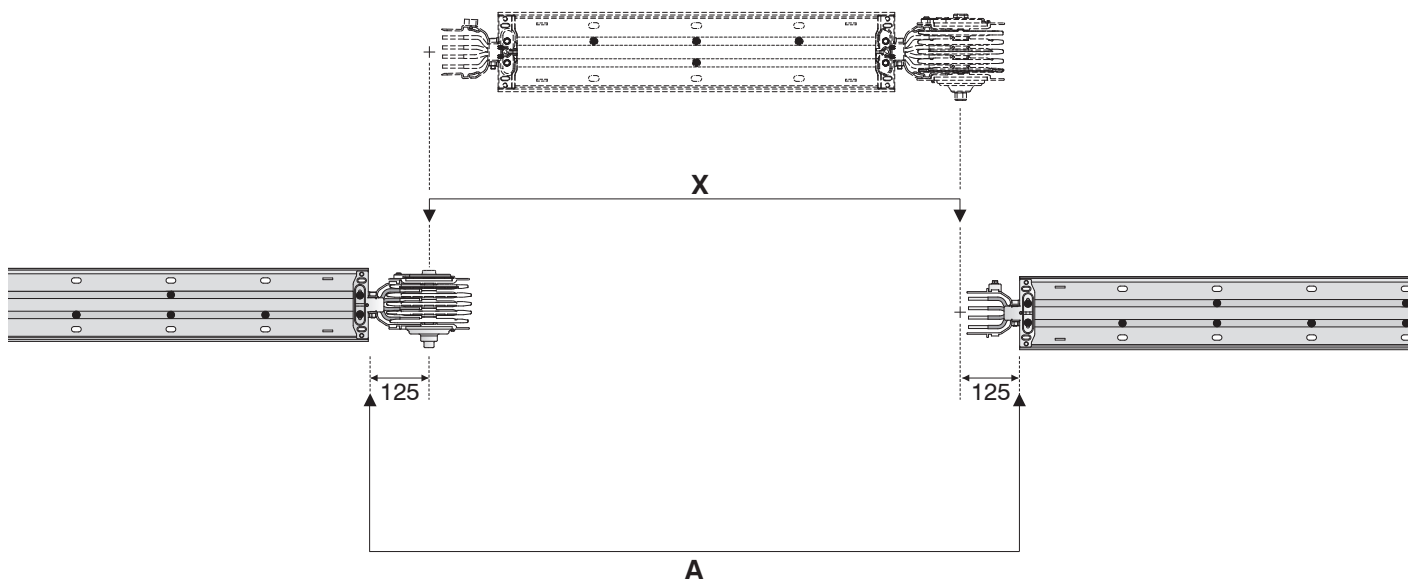
Figure 6

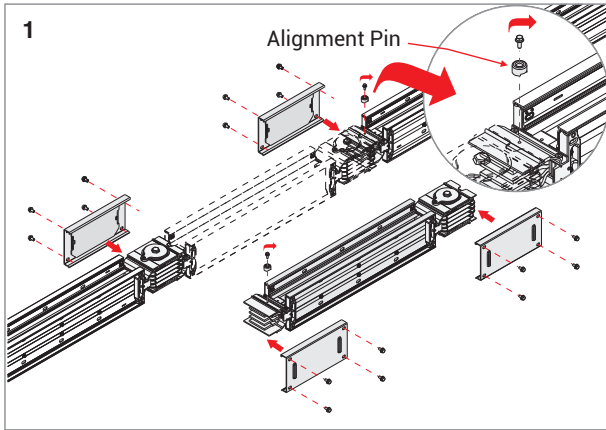
The joint cover is closed by leverage.

After installation of standard busbar 3m lengths, you will be in need of special lengths which are smaller than 3m. The minimum length for these special elements can be 350 mm. Please measure the lengths of these modules as shown below.

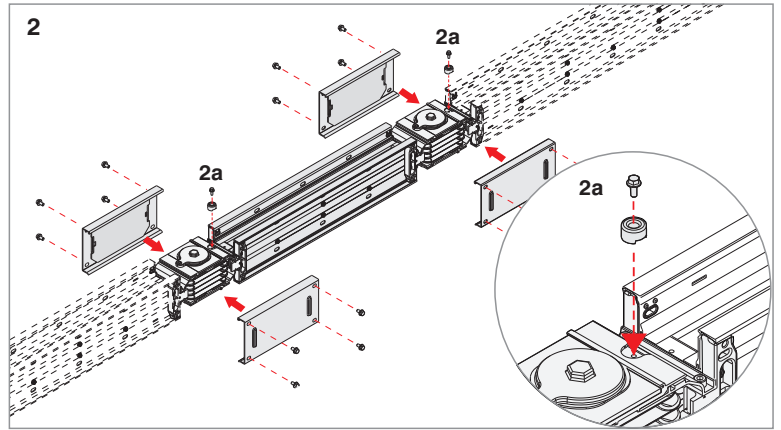
Length A is measured between housing of 2 busbars in cm. A. The special length is calculated by deducting 250mm from this measured length.

$X = A - 250$ (mm) X = Length of Special Busbar (The busbar module will be manufactured as per X value.)

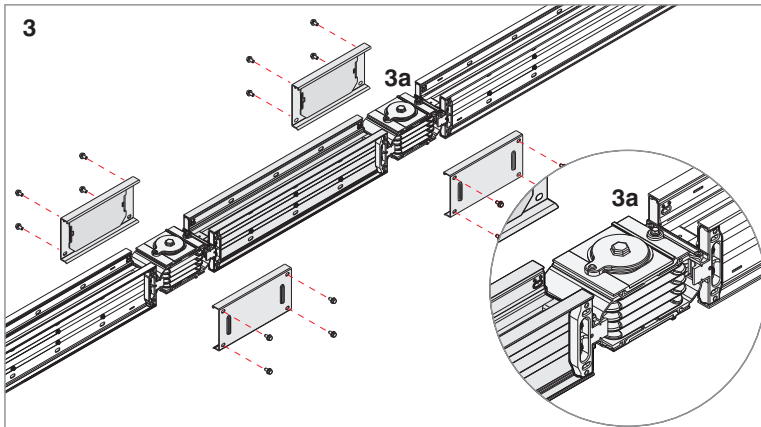




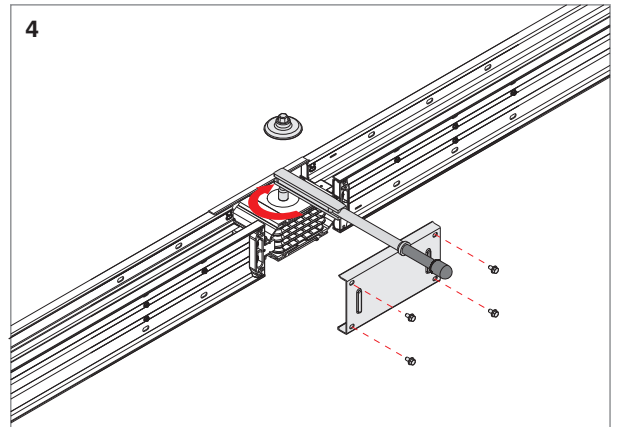
1- Remove Alignment Pin on the busbar, without block joint.



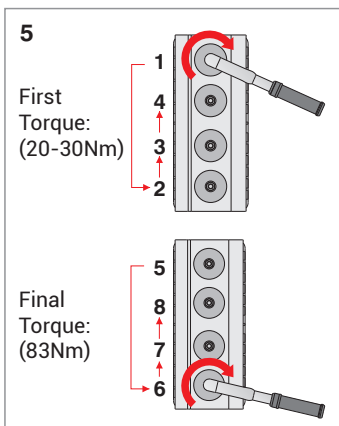
2- Insert the piece aligning conductors correctly. Fix back the Alignment pin.



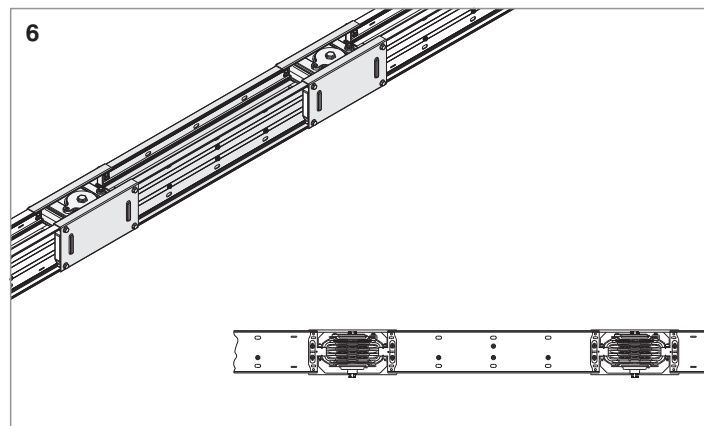
3- Make sure busbar piece is aligned according to alignment pin.



4- Fix one of the joint cover to stabilize joint. Apply 83Nm to the main bolt.



5- If there are more than one bolt for the same phase, bolts shall be tightened by hand approximately 20-30Nm as per above sequence, then 83Nm shall be applied at final torque with the same sequence.



6- Fix the remaining joint cover. Joint installation is completed.

Note: If the final joint cover does not close correctly, it indicates the busbar is not completely aligned. Release the bolts and reapply the sequence from figure 4 to complete the joint.

Please check related installation manual for details.

CE DECLARATION OF CONFORMITY

Product Group E-Line KX Busbar Energy Distribution System

Manufacturer EAE Elektrik Asansor End. Insaat San. ve Tic. A.S.
Akcaburgaz Mahallesi, 3114. Sokak,
No:10 34522 Esenyurt-Istanbul

The objects of the declaration described below is in conformity with the relevant Union harmonisation legislation. This declaration of conformity is issued under the sole responsibility of the manufacturer.

Standard :**TS EN 61439-6**

Low-voltage switchgear and controlgear assemblies - Part 6: Busbar trunking systems

CE - Directive

2014/35/EU "The Low Voltage Directive"

2014/30/EU "Electromagnetic Compatibility (EMC) Directive"

2011/65/EU "Restriction of the use of certain hazardous substances (RoHS)"





Technical Document Preparation Official:EAE Elektrik Asansor End. Insaat San. ve Tic. A.S.
Akcaburgaz Mahallesi, 3114. Sokak, No:10 34522 Esenyurt-Istanbul

Mustafa AKÇELİK

Date

20.04.2024

Document Authorized SignatoryElif Gamze KAYA OK
Deputy General Manager

| | | |
|---|--|---|
|  | <p>TEST CERTIFICATE</p> <p>Subject: Low-voltage busbar trunking system</p> <p>Requirements: IEC 61439-6: 2012</p> <p>Product: Ui 1000 V, Uimp 25 kA - 1 s</p> <p>IP: IP55</p> <p>Joint and straight</p> <p>Attestation does not reduce with the</p> |  |
|  | <p>TEST CERTIFICATE</p> <p>Subject: Design verification</p> <p>Requirements: IEC 61439-6: 2012</p> <p>Product: Ui 1000 V, Uimp 25 kA - 1 s</p> <p>IP: IP55</p> <p>Joint and straight</p> <p>Attestation does not reduce with the</p> |  |
|  | <p>TEST CERTIFICATE</p> <p>Subject: Design verification</p> <p>Requirements: IEC 61439-6: 2012</p> <p>Product: Ui 1000 V, Uimp 25 kA - 1 s</p> <p>IP: IP55</p> <p>Joint and straight</p> <p>Attestation does not reduce with the</p> |  |
|  | <p>TEST CERTIFICATE</p> <p>Subject: Design verification</p> <p>Requirements: IEC 61439-6: 2012</p> <p>Product: Ui 1000 V, Uimp 25 kA - 1 s</p> <p>IP: IP55</p> <p>Joint and straight</p> <p>Attestation does not reduce with the</p> |  |

CERTIFICATE

EAE Elektrik As Insaat San. ve T Akçaburgaz Ma 34510 Esenyur Turkey

For the product:

Low-voltage busbar trunking system

EAE

KXA06

Ui 1000 V, Uimp 25 kA - 1 s for more details

z, IP55

EAE Elektrik As Insaat San. ve T Akçaburgaz Ma 34510 Esenyur Turkey

Subject:

Design verification

Requirements:

IEC 61439-6: 2012
Clauses: 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 10.10, 10.11, 10.12, 10.13, 10.14, 10.15, 10.16, 10.17, 10.18, 10.19, 10.20, 10.21, 10.22, 10.23, 10.24, 10.25, 10.26, 10.27, 10.28, 10.29, 10.30, 10.31, 10.32, 10.33, 10.34, 10.35, 10.36, 10.37, 10.38, 10.39, 10.40, 10.41, 10.42, 10.43, 10.44, 10.45, 10.46, 10.47, 10.48, 10.49, 10.50, 10.51, 10.52, 10.53, 10.54, 10.55, 10.56, 10.57, 10.58, 10.59, 10.60, 10.61, 10.62, 10.63, 10.64, 10.65, 10.66, 10.67, 10.68, 10.69, 10.70, 10.71, 10.72, 10.73, 10.74, 10.75, 10.76, 10.77, 10.78, 10.79, 10.80, 10.81, 10.82, 10.83, 10.84, 10.85, 10.86, 10.87, 10.88, 10.89, 10.90, 10.91, 10.92, 10.93, 10.94, 10.95, 10.96, 10.97, 10.98, 10.99, 10.100

10, 10.11, 10.101, 10.102

Busbar trunking

Attestation is granted on accordance with IEC 61439-6: 2012

Attestation does not reduce with the

number 2013

10, 10.11, 10.101, 10.102

joint and straight

Attestation is granted on accordance with IEC 61439-6: 2012

Attestation does not reduce with the

number 2013

DEKRA Certification B.V.

For this certificate and adjacent

V. Meander 1051, 6825 ED Arnhem, The Netherlands
+31 88 96 83000 +31 88 96 83100 www.dekra-certification.com Company registration 09085396

400A ... 6300A COMPACT BUSBAR PRODUCT OVERVIEW (E-LINE KX)

1- Standards & Certification:

- Busbar system shall be designed and manufactured as per IEC 61439-6 standard, which requires below listed tests. Each busbar rating shall have a separate type test certificate from an independent internationally accredited laboratory including below tests:
 - 10.2- Strength of material and parts, 10.2.2- Resistance to corrosion, 10.2.3- Properties of insulating materials, 10.2.3.1- Verification of thermal stability of enclosures, 10.2.3.2- Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects, 10.2.6- Mechanical impact, 10.2.7- Marking, 10.2.101- Ability to withstand mechanical loads.
 - 10.2.101.1- Test procedure for a straight busbar trunking unit, 10.2.101.2- Test procedure for a joint, 10.2.101.3- Resistance of the enclosure to crushing, 10.3- Degree of protection of assembly, 10.4- Clearances and creepage distances, 10.5- Protection against electric shock and integrity of protective circuits, 10.5.2- Effective earth continuity between the exposed conductive parts of the assembly and the protective circuit, 10.5.3- Short-circuit withstand strength of the protective circuit, 10.9- Dielectric properties, 10.9.2- Power-frequency withstand voltage, 10.9.3- Impulse withstand voltage, 10.10- Verification of temperature rise, 10.11- Shortcircuit withstand strength, 10.101- Resistance to flame propagation, 10.102- Fire resistance in building penetrations, Annex BB Phase conductor characteristics, Annex CC Fault-loop zero-sequences impedances, Annex DD Fault-loop resistances and reactances.
- Busbar system shall have CE marking.
- The manufacturer of busbar system shall have ISO 9001 and ISO 14001 certification.
- Each product shall have a "Type Label" including coding system, which identifies the brand, type of the unit, number of conductors and electrical details. The same coding shall be on the related certificate and catalogue.

2- Electrical Characteristics

- Busbar systems nominal insulation voltage shall be 1000 V.
- As per ampere rates, minimum short circuit values shall be as given below;

| | | | |
|----------------------------------|--|-------------------------------|--|
| For Aluminium Conductors; | 400-500A :1 sec/rms 16kA, Peak 32kA | For Copper Conductors; | 550-650A :1 sec/rms 24kA, Peak 50,4kA |
| | 630A :1 sec/rms 25kA, Peak 52,5kA | | 800A :1 sec/rms 40kA, Peak 84kA |
| | 800-1000A :1 sec/rms 35kA, Peak 73,5kA | | 1000A :1 sec/rms 50kA, Peak 105kA |
| | 1000A :1 sec/rms 50kA, Peak 105kA | | 1250-1350A :1 sec/rms 60kA, Peak 132kA |
| | 1250-1350-1700A :1 sec/rms 60kA, Peak 132kA | | 1600-2000A :1 sec/rms 80kA, Peak 176kA |
| | 1600-2000-2500A :1 sec/rms 80kA, Peak 176kA | | 2500A :1 sec/rms 100kA, Peak 220kA |
| | 2500-3200A :1 sec/rms 100kA, Peak 220kA | | 3300A and above :1 sec/rms 120kA, Peak 264kA |
| | 3200A and above :1 sec/rms 120kA, Peak 264kA | | |

2.1- Housing

- Busbar system shall have "Sandwich-Compact" structure. Conductors shall be packed and placed into the housing without leaving air gap in order to provide low reactance.
- Housing shall be made of thermal processed, extruded aluminium, RAL7038-Electrostatic painted.
- Compact structure of the housing shall be provided by M6 screws applied at every 19cm along the entire length.
- The sandwich-compact structure shall continue at the plug-in points too. There shall not be air gap between conductors at the plug-in points.

2.2- Conductors

- Aluminium or Copper conductors shall be epoxy coated and tin plated at the joints upon the wire configuration and required numbers, which are described below.
- Compact busbar system shall have aluminium conductors between 400A – 6000A.
- Compact busbar system shall have copper conductors between 550A – 6300A.
- Compact busbar system shall have the following number of conductors and wire configuration;
 - a) 4 Conductors: (4 full size conductors + PE (housing)).
 - b) 4 ½ Conductors: (4 full size conductors + PE (50% earth conductor + housing)),
 - c) 5 Conductors: (5 full size conductors + PE (100% earth conductor + housing)),
- Phase conductors and neutral conductor shall have the same cross-section and they shall be insulated.
- Aluminium conductors shall be of EC grade aluminium. Minimum conductivity shall be 34m/mm².Ω.
- Copper conductors shall be minimum 99,95% electrolytic copper. Minimum conductivity shall be 56m/mm².Ω.

2.3- Insulation

- Insulation system shall be suitable for 1.000V continuous operation. Conductors shall be minimum thermo-set epoxy coated. Conductor size shall be designed so that temperature rise on the conductors shall not exceed 130C degree at nominal current, which helps to global heating problem. With this reason, insulation class shall be "B class".

2.4- Joint Structure

- Electrical and mechanical connection shall be made by placing conductor joints into the joint blocks of the connected conductors and followed by tightening and fastening of the joint bolts.

2.5- Protection

- Protection degree of the housing and joints shall be IP55/IP65. Call our company for your IP65 orders. (IP65 is not recommended for outdoor applications. Please check CR catalog.)

2.6- Accessories

- Busbar system shall have all necessary accessories (elbows, offsets, panel-transformer connections, reductions, etc.) Manufacturer shall supply special dimensioned units in short time, if the project conditions requires.
- For horizontal runs, a horizontal expansion unit shall be used at every 40m and expansion points of the building.
- For vertical applications, a vertical expansion unit shall be used at every floor. Busbar system shall be rigidly fixed by supports at every floor.


3- Tap Off Boxes

- Both, Feeder and Plug-in busbar systems shall be suitable for bolt-on type tap off box connections at the joints up to 1.000A.
- Bolt-on tap off boxes shall be installed to the joints without changing or adding any piece. Bolt-on tap off boxes shall be able to be moved between different rated busbars.
- Plug-In busbars shall have minimum 2 plug-in points on each 300cm length. Plug-in tap off box sizes shall be up to 630A. Unused plug-in points shall have covers, which can provide IP55 protection degree.
- Plug-in tap off boxes shall be suitable to install or removed from busbars without switching off the power on the busbar.
- Contacts of plug-in tap off box shall be plated by silver.
- Tap off boxes shall be manufactured of sheet steel and epoxy painted RAL7035 colour.
- Plug-in tap off boxes shall have electromechanical safety interlock system. Which means;
 - a-) Electromechanical interlock mechanism shall ensure that the tap off box cannot be removed mechanically from the busbar, when the switch is at "ON" position.
 - b-) Electromechanical interlock mechanism shall ensure that, cover of the box can be opened only, when the switch is at "OFF" position.
 - c-) When the cover is opened, inside protection degree shall be minimum IP2X against accessing to live conductors.
 - d-) While inserting the contacts of plug-in tap off box, earth contact shall make the first touch. While removing, it shall be disconnected last.
- Tap off boxes shall be suitable for any brand of MCCBs. Electromechanical interlock mechanism shall be suitable for all these MCCBs too.

4- Installation and Commissioning

- Busbar systems shall be installed as per Single-Line drawings respect to required ampere rates and manufacturer installation guide (torque values, lockers, etc.). Electrical installator shall run an insulation test after installation according to manufacturers test procedures. The results of the test shall be reported to the manufacturer. Minimum insulation value shall be 1 Mohm.

| Component List | | |
|----------------|-----------|----------|
| Item | Component | Quantity |
| | | |
| | | |
| | | |
| Company | : | |
| Project | : | |
| Project No | : | |
| Prepared by | : | |
| | : | |
| | : | |
| | : | |



Please duplicate this page for your own use.

PRODUCT TYPES



BUSBAR ENERGY DISTRIBUTION SYSTEMS



CABLE TRAYS



TROLLEY BUSBAR ENERGY DISTRIBUTION SYSTEMS



INDOOR SOLUTIONS



SUPPORT SYSTEMS



EAE Elektrik A.S.
Head Office
Akcaburgaz Mahallesi,
3114. Sokak, No: 10 34522
Esenyurt – Istanbul – TURKEY
Tel: +90 (212) 866 20 00
Fax: +90 (212) 886 24 00

EAE DL 3 Factory
Busbar
Gebze IV Istanbul Makine ve Sanayicileri
Organize Bolgesi, 6. Cadde,
No: 6 41455 Demirciler Koyu,
Dilovası – Kocaeli – TURKEY
Tel: +90 (262) 999 05 55
Fax: +90 (262) 502 05 69

Please visit our website for the updated version of our catalogues.
www.eaeelectric.com



Catalog 12- EN. / Rev 24 500 Pcs. 20.11.2024
D.S.

EAE has full right to make any revisions or changes on this catalogue without any prior notice.

