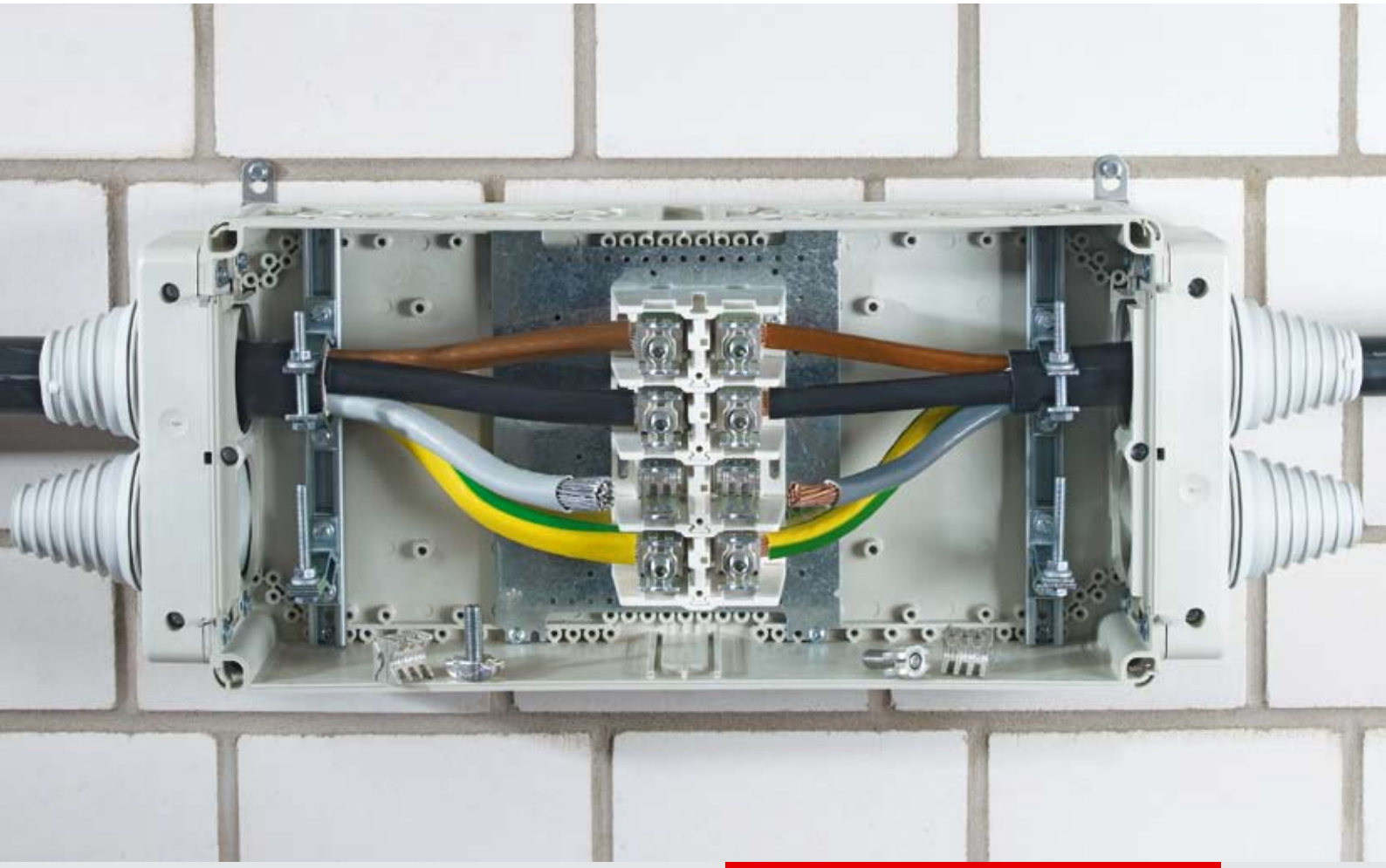
HENSEL

PASSION FOR POWER.



Product information as at: 03/2011

DK Cable junction boxes with terminals for copper and aluminium conductors

- separate clamping units for aluminium and copper conductors
- rated connecting capacity 1.5 up to 240 mm²
- degree of protection up to IP 65, for twisted cables IP 54 with cable glands

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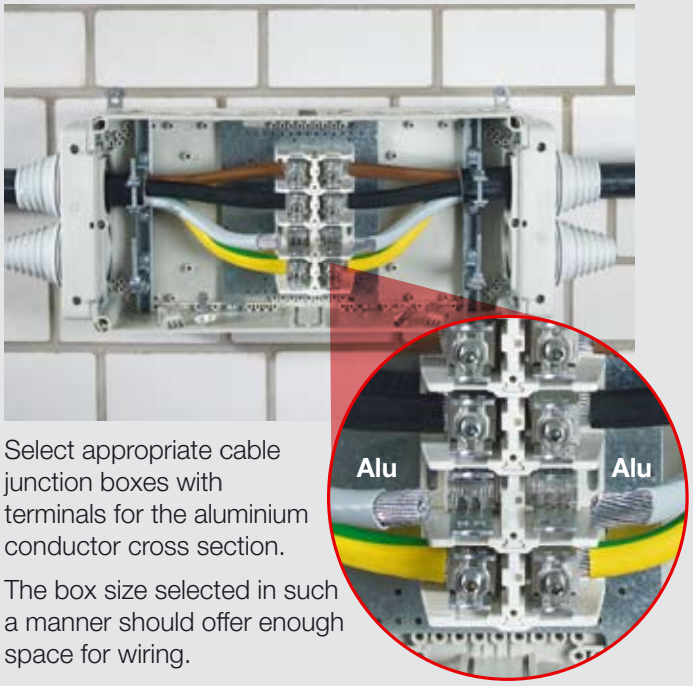
DK Cable junction boxes with terminals for copper and aluminium conductors

Connection of aluminium conductors in cable junction boxes of Hensel

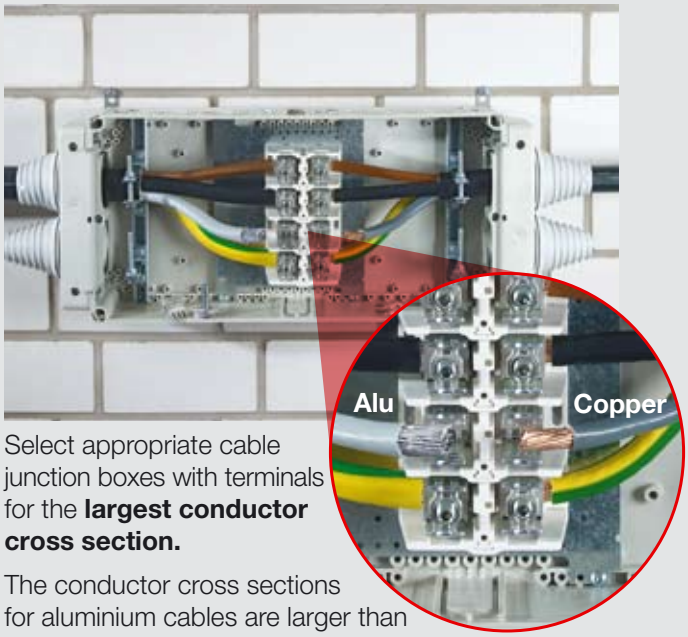
Connection of two aluminium conductors



Select appropriate cable junction boxes with terminals for the aluminium conductor cross section.

The box size selected in such a manner should offer enough space for wiring.

Connection of aluminium and copper conductors



Select appropriate cable junction boxes with terminals for the **largest conductor cross section.**

The conductor cross sections for aluminium cables are larger than copper cables with the same rated operating current.

Chemical basics

The special conducting characteristics of aluminium can be seen in the fact that the surface of an aluminium conductor is immediately covered in a **non-conducting oxide layer** upon exposure to oxygen. This characteristic leads to an increase in the temporary resistance between the aluminum conductors and the terminal body. This can lead to the terminal overheating and in the worst case fire.
Despite these special conditions, aluminium conductors can be connected if the following work procedures are taken into consideration: The terminal used is well suitable; aluminium conductors need to be appropriately prepared before being connected as well as terminals need to be re-tightened (torque) after the first 200 operating hours.

Hensel cable junction boxes for safe connection of aluminium copper conductors:

D 9041	1.5-2,5 mm²	Cu/Alu	5-pole[1)]
K 9061	1.5-4 mm²	Cu/Alu	5-pole[1)]
K 9351	6-16 mm²	Cu/Alu	5-pole[1)]
KF 9251	1.5-50 mm²	Cu/Alu	5-pole[1)]
KF 9501	1.5-50 mm²	Cu/Alu	5-pole[1)]
K 7051	2.5-50 mm²	Cu/Alu	5-pole[1)]
K 7042	10-95 mm²	Cu/Alu	4-pole[2)]
K 7052	10-95 mm²	Cu/Alu	5-pole[1)]
K 9951	6-95 mm²	Cu/Alu	5-pole[1)]
K 1204	16-150 mm²	Cu/Alu	4-pole[2)]
K 1205	16-150 mm²	Cu/Alu	5-pole[2)]
K 2404	25-240 mm²	Cu/Alu	4-pole[2)]
K 2405	25-240 mm²	Cu/Alu	5-pole[2)]
K 2401	35-240 mm²	Cu/Alu	5-pole[1)]

[1)] = conductors were pluged into clamping unit
[2)] = conductors can be inserted into the clamping unit from the front

Cable junction boxes for aluminium cables from Hensel can connect the various conductor cross sections and conductor types from aluminium and copper in a single terminal.