

NEW!

KX – THE FLEXIBLE CABLE JUNCTION BOXES FOR EX ENVIRONMENTS

hensel-electric.de/atex

HENSEL

WHEN SAFETY IS CRITICAL.

For electrical installation in potentially explosive atmospheres, or hazardous areas for short, according to European **Directive 2014/34/EU (also known as "ATEX directive")** specially tested products are required. The electrical specialist must select suitable equipment taking the operational environment into account.

It goes without saying that this equipment must meet the necessary quality requirements for explosion hazardous areas. At the same time, however, they should also be able to be used flexibly and be adaptable to the many challenges present on construction sites.

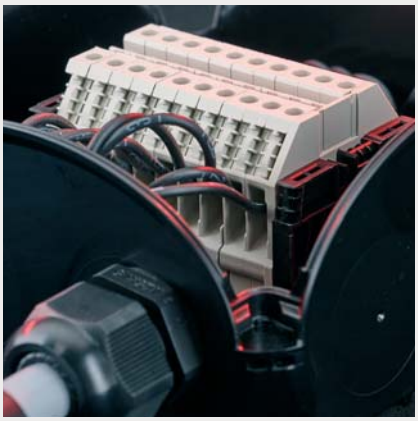


REQUIREMENTS CAN CHANGE QUICKLY. THE SOLUTION: FLEXIBLE PRODUCTS FOR CONSTRUCTION SITES.

Thanks to modern terminal technology and variable cable entry, many requirements can be solved on site with just a few product variants of the KX-series cable junction boxes – flexible and safe.










scheuch
EX

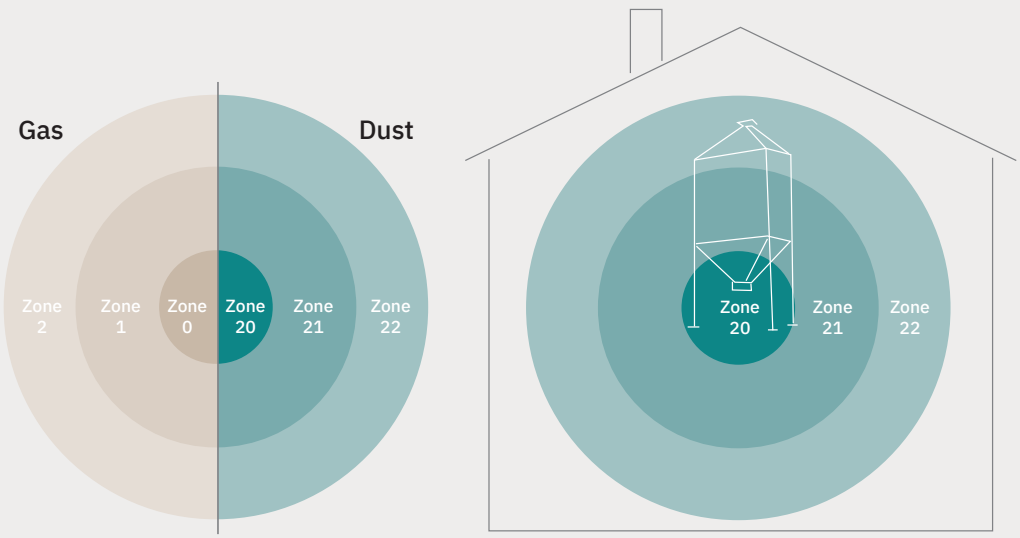
EQUIPMENT SELECTION FOR HAZARDOUS AREAS:



What requirements do Cable Junction Boxes need to comply with?

As well as being suitable for hazardous areas, the operational conditions of use, actual requirements and influences on the equipment must be taken into account. Approx. 80% of all electrical installations in hazardous areas are within Ex Zone 2 or 22.

Here, construction sites can present a challenge: Whether due to other installations or because the site owner changes things at short notice. If a cable junction box cannot be adjusted flexibly on site for example, if more cables need to enter and be terminated than originally planned, then a complex process of finding and procuring an alternative becomes necessary. This costs time and money.



Schematic representation of the Ex zones



Function and safety

Equipment in potentially explosive atmospheres must be procured and operated in such a way that no potential ignition hazards arise in operational conditions, for example thro

+ Avoiding electrostatic charge
+ Limiting surface temperatures
+ Protection against ingress of flammable and/or conductive dusts

For electrical devices in category 3 (zone 2 and 22) the manufacturer has to issue a declaration of conformity as a confirmation of the conformity assessment according to the ATEX directive 2014/34/EU.
Special tests have to be performed for this to verify the special product features regarding explosion protection. For category 2 and 1 (zone 1 and 21 resp. zone 0 and 20), an additional type examination certificate and a special certification and auditing process of the quality assessment system by a notified body are necessary.

Flexibility on the construction site

Nothing is as constant as change - construction sites demand flexibility. For example for the following situations:

+ More cable entries into the housing are required. The pre-installed cable glands are not sufficient.
+ More cables need to enter and be terminated per pole than planned - there is insufficient space on the terminal.







NEW EX CABLE JUNCTION BOXES AND CABLE GLANDS FOR EX ZONES 2 AND 22

with many benefits for the electrical specialist

CABLE JUNCTION BOXES FOR HAZARDOUS AREAS

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Flexible cable entry

allows easy adaptation to new installation situations on site

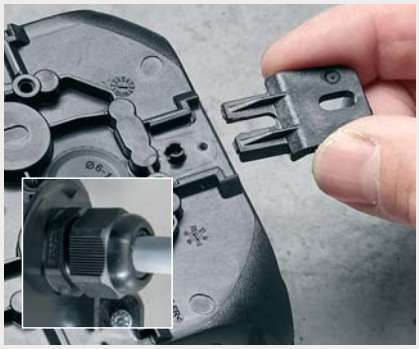
+ Smooth walls can be custom-drilled for cable entries.
+ Drill markings for easy positioning of the drill.
+ Depending on the box size a maximum of 7 to 10 cable entries can be created.



Flexible terminal technology

allows plenty of space for wiring

+ Modern terminal technology with 2 clamping units per pole also combines different conductor cross sections and conductor types in a single pole.
+ High-positioned terminal for more space for wiring, even when the maximum number of conductors are installed
+ Variable positioning of the terminal in the housing according to the position of the cable entry.
+ Integrated wire protection and protection against loosening.



Easy assembly

with pluggable external brackets

+ Plug-in external brackets always included
+ Easy marking due to optimal accessibility
+ Slotted holes for perfect alignment




IBExU Institut für Sicherheitstechnik GmbH
An-Institut der TU Bergakademie Freiberg
TYPE EXAMINATION CERTIFICATE - Translation
Type examination certificate number IBExU23ATEXB003 X | Issue 0
Product: Cable junction box
Type: KX....C and RX....T
Manufacturer: Gustav Hensel GmbH & Co. KG
Address: Gustav-Hensel-Str. 6
57368 Lennestadt
GERMANY
Ex
EX


EX





KX SERIES
CABLE JUNCTION BOXES FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES

suitable for Ex zone 2 and 22



FLEXIBLE – ROBUST
SAFE

IP 66

System properties

+ EEx marking for explosive gas atmospheres: II 3G Ex ec IIC T6 Gc
+ Ex marking for explosive dust atmospheres: II 3D Ex tc IIIC T85 Dc
+ With drill markings on the box walls for flexible positioning of the cable entries
+ Degree of protection IP 66, Ex cable glands available as an accessory
+ Suitable for areas with a high level of mechanical hazards
+ Can be closed quickly by a quarter turn - locked position well visible
+ With high-position terminal or terminal blocks
+ Various conductor cross sections and types
+ Terminals with wire protection including for flexible conductors without ferrules
+ Various terminal positions
+ Material: Polycarbonate
+ Burning behaviour: Glow wire test according to IEC 60695-2-11: 750°C, flame retardant, self-extinguishing
+ Colour: black, similar to RAL 9011

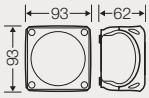
Ex cable junction boxes for use in potentially explosive atmospheres

Box walls without knockouts



KX 0202 C

0.75-2.5 mm², Cu 3~



- Terminal with 2 clamping units per pole
- 5-pole per pole 8 x 0.75-1 mm² r / f, 6 x 1.5 mm² r / f, 4 x 2.5 mm² r / f, 2 x 4 mm² r / f
- Rated current of the terminal depends on the conductor crosssection. For this see installation instructions or www.hensel-electric.de > Products
- for explosive environments, can be used on Zone 2 and 22
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- Cable entries can be custom-drilled, order AXM separately (see cable entry systems LES)
- Permitted size of the cable entry system: M20
- External brackets for wall fixing included

Rated insulation voltage	U_i = 690 V a.c./d.c.
Rated current	13,5 A (2,5 mm²) 10,6 A (1,5 mm²)
Tightening torque of terminal	0.5 Nm

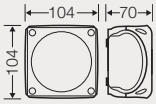
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KX 0404 C

1.5-4 mm², Cu 3~



- Terminal with 2 clamping units per pole
- 5-pole per pole 8 x 1.5 mm² r / f, 6 x 2.5 mm² r / f, 4 x 4 mm² r / f, 2 x 6 mm² r / f
- Rated current of the terminal depends on the conductor crosssection. For this see installation instructions or www.hensel-electric.de > Products
- for explosive environments, can be used on Zone 2 and 22
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- Cable entries can be custom-drilled, order AXM separately (see cable entry systems LES)
- Permitted size of the cable entry system: M20 and M25
- External brackets for wall fixing included

Rated insulation voltage	U_i = 690 V a.c./d.c.
Rated current	18,4 A (4 mm²) 13,9 A (2,5 mm²) 11,5 A (1,5 mm²)
Tightening torque of terminal	0.7 Nm

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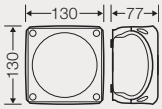
Ex cable junction boxes for use in potentially explosive atmospheres

Box walls without knockouts



KX 0606 C

1.5-6 mm², Cu 3~



- Terminal with 2 clamping units per pole
- 5-pole per pole 6 x 1.5 mm² r / f, 4 x 2.5 mm² r / f, 4 x 4 mm² r / f, 4 x 6 mm² r / f, 2 x 10 mm² r / f
- Rated current of the terminal depends on the conductor crosssection. For this see installation instructions or www.hensel-electric.de > Products
- for explosive environments, can be used on Zone 2 and 22
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- Cable entries can be custom-drilled, order AXM separately (see cable entry systems LES)
- Permitted size of the cable entry system: M20 to M32
- External brackets for wall fixing included

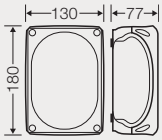
Rated insulation voltage	U_i = 690 V a.c./d.c.
Rated current	23,7 A (6 mm²) 19,6 A (4 mm²) 14,7 A (2,5 mm²)
Tightening torque of terminal	1.5 Nm

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KX 1010 C

2.5-10 mm², Cu 3~



- Terminal with 2 clamping units per pole
- 5-pole per pole 6 x 2.5 mm² r / f, 4 x 4 mm² r / f, 4 x 6 mm² r / f, 4 x 10 mm² r / f, 2 x 16 mm² r / f
- Rated current of the terminal depends on the conductor crosssection. For this see installation instructions or www.hensel-electric.de > Products
- for explosive environments, can be used on Zone 2 and 22
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- Cable entries can be custom-drilled, order AXM separately (see cable entry systems LES)
- Permitted size of the cable entry system: M20 and M32
- External brackets for wall fixing included

Rated insulation voltage	U_i = 690 V a.c./d.c.
Rated current	32,3 A (10 mm²) 24,1 A (6 mm²) 20 A (4 mm²)
Tightening torque of terminal	2.0 Nm

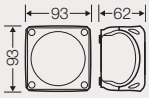
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Ex cable junction boxes with terminal blocks for use in potentially explosive environments
Box walls without knockouts



RX 0203 T

0.5-4 mm², Cu



- 3 terminal blocks WKM 2.5/15
- per terminal 2 x 0.5-2.5 mm² f or 2 x 0.5-4 mm² sol, for detailed terminal allocation see technical appendix DK Cable junction boxes
- Terminal blocks from Wieland
- Neutral terminal labelling
- for explosive environments, can be used on Zone 2 and 22
- Cable entries can be custom-drilled, order AXM separately (see cable entry systems LES)
- Permitted size of the cable entry system: M20
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- External brackets for wall fixing included

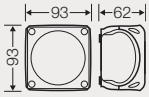
Rated insulation voltage	U_i = 275 V a.c./d.c.
Rated current	13,1 A (4 mm²) 11,5 A (2,5 mm²) 9,8 A (1,5 mm²)
Tightening torque of terminal	0.4 Nm

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RX 0205 T

0.5-4 mm², Cu



- 5 terminal blocks WKM 2.5/15
- per terminal 2 x 0.5-2.5 mm² f or 2 x 0.5-4 mm² sol, for detailed terminal allocation see technical appendix DK Cable junction boxes
- Terminal blocks from Wieland
- Neutral terminal labelling
- for explosive environments, can be used on Zone 2 and 22
- Cable entries can be custom-drilled, order AXM separately (see cable entry systems LES)
- Permitted size of the cable entry system: M20
- „Outdoor - harsh environment and (or) outdoor“ resistant to the effects of weather (such as UV radiation due to solar irradiation, protected against rainwater, temperature resistant, impact-resistant etc.)
- External brackets for wall fixing included

Rated insulation voltage	U_i = 275 V a.c./d.c.
Rated current	12,3 A (4 mm²) 10,6 A (2,5 mm²) 9 A (1,5 mm²)
Tightening torque of terminal	0.4 Nm

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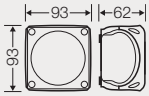
MORE INFORMATION HENSEL-ELECTRIC.DE

Ex cable junction boxes with terminal blocks for use in potentially explosive environments
Box walls without knockouts



RX 0207 T

0.5-4 mm², Cu



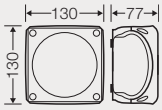
- 7 terminal blocks WKM 2.5/15
- per terminal 2 x 0.5-2.5 mm² f or 2 x 0.5-4 mm² sol, for detailed terminal allocation see technical appendix DK Cable junction boxes
- Terminal blocks from Wieland
- Neutral terminal labelling
- for explosive environments, can be used on Zone 2 and 22
- Cable entries can be custom-drilled, order AXM separately (see cable entry systems LES)
- Permitted size of the cable entry system: M20
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- External brackets for wall fixing included

Rated insulation voltage	U_i = 275 V a.c./d.c.
Rated current	11,5 A (4 mm²) 9,8 A (2,5 mm²) 8,2 A (1,5 mm²)
Tightening torque of terminal	0.4 Nm

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RX 0610 T

0.5-6 mm², Cu



- 10 terminal blocks WT 4
- per terminal 2 x 0.5-6 mm² sol / f, for detailed terminal allocation see technical appendix DK Cable junction boxes
- Terminal blocks from Wieland
- Connector plug for terminal blocks: Manufacturer Wieland IVB WKF 4
- Neutral terminal labelling
- for explosive environments, can be used on Zone 2 and 22
- Cable entries can be custom-drilled, order AXM separately (see cable entry systems LES)
- Permitted size of the cable entry system: M20 to M32
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- External brackets for wall fixing included

Rated insulation voltage	U_i = 690 V a.c./d.c.
Rated current	12,3 A (6 mm²) 10,6 A (4 mm²) 9 A (2,5 mm²)
Tightening torque of terminal	0.5 Nm

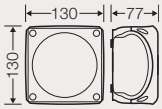
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Ex cable junction boxes with terminal blocks for use in potentially explosive environments
Box walls without knockouts



RX 0614 T

0.5-6 mm², Cu



- 14 terminal blocks WT 4
- per terminal 2 x 0.5-6 mm² sol / f,
  for detailed terminal allocation see technical appendix DK Cable junction boxes
- Terminal blocks from Wieland
- Connector plug for terminal blocks: Manufacturer Wieland IVB WKF 4
- Neutral terminal labelling
- for explosive environments, can be used on Zone 2 and 22
- Cable entries can be custom-drilled, order AXM separately
  (see cable entry systems LES)
- Permitted size of the cable entry system: M20 to M32
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- External brackets for wall fixing included

Rated insulation voltage	U_i = 690 V a.c./d.c.
Rated current	11,5 A (6 mm²) 9,8 A (4 mm²) 8,2 A (2,5 mm²)
Tightening torque of terminal	0.5 Nm

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MORE INFORMATION HENSEL-ELECTRIC.DE



AXM 20

Ex cable glands for Ex zones 2 and 22 for knockouts M 20

+ Sealing range Ø 8-13 mm
+ ISO thread M 20 x 1.5
+ Bore-hole Ø 20.2 mm
+ Wall thickness up to 3 mm
+ with strain relief and locknut
+ for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
+ Glow wire test IEC 60695-2-11: 960°C
+ Colour: black, RAL 9005

Tightening torque	4 Nm



AXM 25

Ex cable glands for Ex zones 2 and 22 for knockouts M 25

+ Sealing range Ø 10-17 mm
+ ISO thread M 25 x 1.5
+ Bore-hole Ø 25.2 mm
+ Wall thickness up to 3 mm
+ with strain relief and locknut
+ for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
+ Glow wire test IEC 60695-2-11: 960°C
+ Colour: black, RAL 9005

Tightening torque	6 Nm



AXM 32

Ex cable glands for Ex zones 2 and 22 for knockouts M 32

+ Sealing range Ø 14-21 mm
+ ISO thread M 32 x 1.5
+ Bore-hole Ø 32.3 mm
+ Wall thickness up to 3 mm
+ with strain relief and locknut
+ for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
+ Glow wire test IEC 60695-2-11: 960°C
+ Colour: black, RAL 9005

Tightening torque	6 Nm

PRODUCT OVERVIEW
CABLE JUNCTION BOXES

The most suitable solution for every application



DK serie: IP 66
for protected installation
elastic membranes or
metric knockouts



KF serie: IP 66 / IP 67 / IP 69
weatherproof, for unprotected
outdoor installation
metric knockouts



WP serie: IP 66 / IP 68 / IP 69
submersion up to 20 meters, 168 hours
waterproof, encapsulating for
extreme applications
metric knockouts



FK serie:
E30/E60/E90 intrinsic fire resistance
PH120 insulation integrity



KX serie:
for use in potentially explosive
atmospheres
Suitable for Ex zone 2 and 22

FOR A SAFE ELECTRIC FUTURE.



NEW!

NO COMPROMISES, FULL FLEXIBILITY.

The new KX series cable junction boxes from HENSEL for hazardous areas.
As usual with full flexibility and unique installation comfort of the HENSEL-box. Made for daily work on the construction site.



hensel-electric.de/atex

HENSEL

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