



Explosion-proof junction boxes RIZUR-KC



Intended use

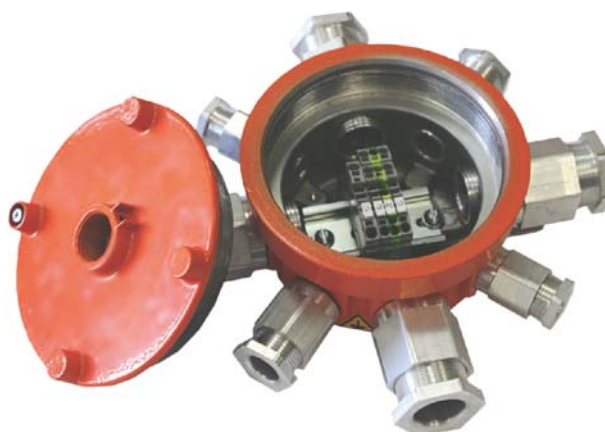
Explosion-proof junction boxes RIZUR-KC are manufactured according to TU 27.12.31-001-27965004-2017 and are designed for the joint and distribution of power cables in the AC and DC circuits of the automation and telemechanics systems. Operational safety of RIZUR-KC junction boxes at the hazardous objects is confirmed by the conformity certificates of the Customs Union «Safety of equipment intended for use in explosive atmospheres» №TS RU C-RU.ME92.B.00219 and №TC RU C-RU.ME92.B.00933.

Design description

Explosion-proof junction boxes RIZUR-KC have a housing and a cover made of materials resistant to the negative impact of the environment and various chemicals, including hydrochloric acid and hydrogen sulphide vapor. RIZUR-KC sealing system has a labyrinth form and provides ingress protection IP66 and higher.

Inside the box, there're explosion-proof spring/screw/block-type terminals with either «e» or «ia» ex-protection (depending on the design variant). The box is equipped by cable glands for different types of cables that fix the cable and prevent the box from moisture and dust penetration.

The number of cable glands and terminals, their dimensions and location are agreed upon with the manufacturer.



- **OOO «NPO RIZUR» can design and manufacture explosion-proof junction boxes with non-standard dimensions in accordance with the Customer's technical requirements.**

Application area

Junction boxes RIZUR-KC are installed in hazardous areas of inside and outside facilities in accordance with the markings, industry safety requirements, and recommendations of the manufacturer. The material and special coatings allow RIZUR-KC to be used in wet and dust-filled rooms with a highly aggressive environment, off-shore facilities, and watercraft.

Junction boxes RIZUR-KC have a wide range of applications:

- crude-oil production and transportation,
- natural gas production and transportation,
- oil refineries,
- chemical plants,
- ferrous and non-ferrous industry,
- pulp and paper industry,
- food industry,
- power industry (TPP, HEP, SDPP, boiler systems),
- maritime and river transport,
- waste disposal,
- sewerage system,
- water supply system.

Technical specifications

| | |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Explosion protection marking | 1Ex e IIC T6 Gb/Ex tb IIIC T80°C Db or 1Ex e IIC T5 Gb/Ex tb IIIC T95°C Db or 1Ex e IIC T4 Gb/Ex tb IIIC T130°C Db or 1Ex d IIC T6 Gb/Ex tb IIIC T80°C Db or 1Ex d IIC T5 Gb/Ex tb IIIC T95°C Db or 1Ex d IIC T4 Gb/Ex tb IIIC T130°C Db or 1Ex d IIB T6 Gb/Ex tb IIIC T80°C Db or 1Ex d IIB T5 Gb/Ex tb IIIC T95°C Db or 1Ex d IIB T4 Gb/Ex tb IIIC T130°C Db or 0Ex ia IIC T6 Ga X, 1Ex ib IIC T6 Gb X, 2Ex ic IIC T6 Gc X |
| Ingress protection, IP | IP65 or IP66 or IP67 or IP68 |
| Nominal voltage, V | 380 V (other designs are possible upon an agreement with the manufacturer) |
| Nominal current, A (for a group of terminals) | 24 A (other designs are possible upon an agreement with the manufacturer) |
| Operating position | Any kind |
| Ambient temperature, °C | -60 °C....+85°C |
| Cable glands location | Upon the customer's specification (it's possible to supply just the housing without cable glands or terminals) |
| Housing dimensions | Depending on the design version of the junction box and the number of cable glands and terminals |



Explosion-proof junction boxes from aluminium alloy RIZUR-KC-DC (Exd-IIC)



Design description

The housing of the RIZUR-KC-DC is made of aluminium alloy by a method of casting under pressure. The box consists of a housing and a cover with an explosion-proof threaded connection. The box is painted with powder paint. Inside the housing, there's a mounting panel and DIN-rails with terminals, grounding studs, and other types of explosion-proof equipment. For different types of cables there're can be explosion-proof cable glands installed in the side walls of the box. At the bottom wall there're c-channels installed with openings for the assembly bolts. All of the fastenings are made of corrosion-resisting steel.

Explosion protection is ensured by a protection class «d» - explosion-proof enclosure.

Explosion protection marking

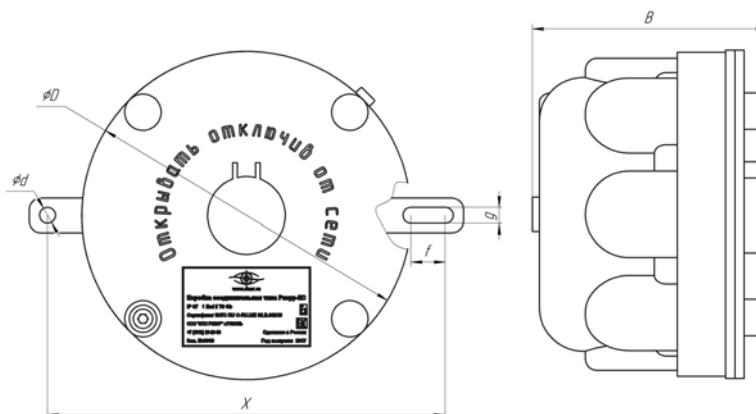
1Ex d IIC T6 Gb/Ex tb IIIC T80°C Db

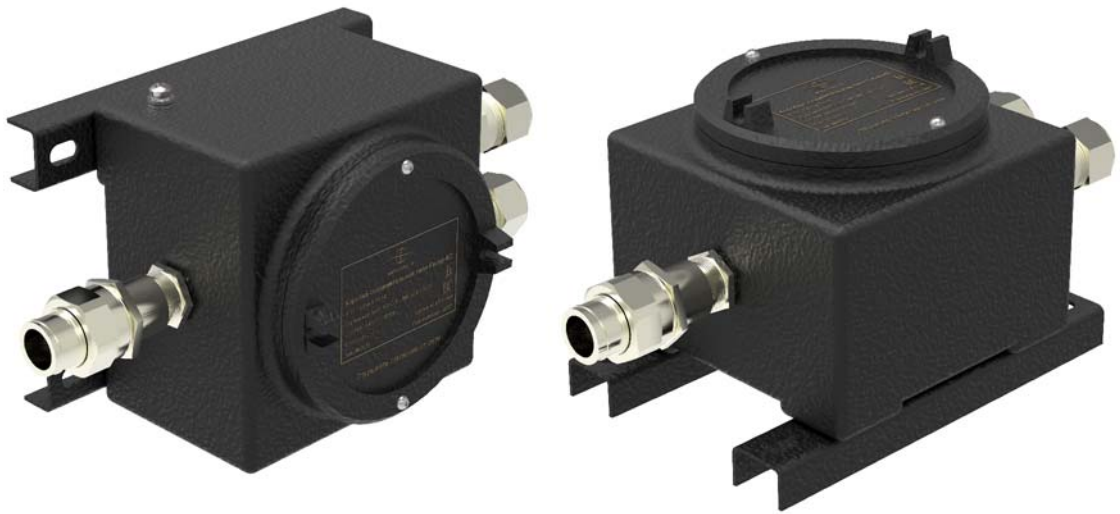
or 1Ex d IIC T5 Gb/Ex tb IIIC T95°C Db

or 1Ex d IIC T4 Gb/Ex tb IIIC T130°C Db

Dimensional specifications of RIZUR-KC-DC (Exd-IIC)

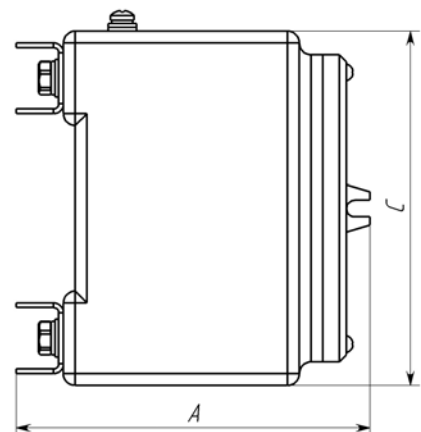
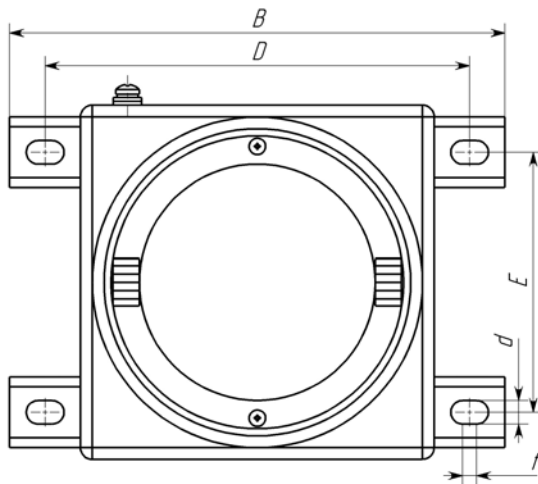
| Design variant | RIZUR-KC-DC-111109 | RIZUR-KC-DC-141410 |
|----------------------------------------------|--------------------|--------------------|
| Overall dimensions (Ø D x B),mm | 112 x 88 | 144 x 102 |
| Installation dimensions (X x ø d x f x g) mm | 140 x 7 x 8 x 7 | 174 x 7 x 8 x 7 |





Dimensional specifications of RIZUR-KC-DC (Exd-IIC)

| Design variant | Overall dimensions (A x B x C), mm | Installation dimensions (D x E x ϕ d), mm |
|--------------------|------------------------------------|------------------------------------------------|
| RIZUR-KC-DC-151512 | 150 x 150 x 120 | 154 x 114 x 10 |
| RIZUR-KC-DC-212113 | 215 x 215 x 130 | 247 x 175 x 10 |
| RIZUR-KC-DC-272716 | 270 x 270 x 160 | 295 x 226 x 10 |
| RIZUR-KC-DC-313116 | 310 x 310 x 160 | 360 x 256 x 12 |
| RIZUR-KC-DC-404016 | 400 x 400 x 160 | 444 x 340 x 12 |
| RIZUR-KC-DC-444416 | 440 x 440 x 160 | 480 x 380 x 12 |



Order code for explosion-proof junction box

RIZUR-KC

Ordering information:

RIZUR-KC-111109 - P25(7) - A(KVVB/1; 3G-20/1) - B(KVVB/1) - V(0) - G(0)

1
2
3
4
5
6

Please, attach an inquiry form to the order code information

| 1. Design variant | | 4. Type, location, and number of the cable glands on B side | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| RIZUR-KC-X-XXXXXX | Please, specify the design variant of the terminal box (pages 5-11 of this catalogue) | B (0) | Without cable glands |
| 2. Type and number of the terminals | | B (X1/Y X2/Y.....Xn/Y) | X1...Xn - cable gland variant * Y - the number of cable glands of this type |
| P25 (X) | Spring 2,5 mm ² , X-specify the necessary amount | * Instead of the cable gland, there can be an adapter, a plug or a drain/vent valve installed. In this case, please, specify the installed product code. | |
| P40 (X) | Spring 4,0 mm ² , X-specify the necessary amount | 5. Type, location, and number of the cable glands on C side | |
| V25 (X) | Screw 2,5 mm ² , X-specify the necessary amount | C (0) | Without cable glands |
| V40 (X) | Screw 4,0 mm ² , X-specify the necessary amount | C (X1/Y X2/Y.....Xn/Y) | X1...Xn - cable gland variant * Y - the number of cable glands of this type |
| Y (X) | Other (specified in written form outside the order code), X-specify the necessary amount | * Instead of the cable gland, there can be an adapter, a plug or a drain/vent valve installed. In this case, please, specify the installed product code. | |
| Necessary quantity and type of the jumpers, earthing terminals, terminal markings, the side for the grounding stud location (for the RIZUR-KC-P junction boxes) is specified outside the order code. | | 6. Type, location, and number of the cable glands on D side | |
| 3. Type, location, and number of the cable glands on A side | | D (0) | Without cable glands |
| A (0) | Without cable glands | D (X1/Y X2/Y.....Xn/Y) | X1...Xn - cable gland variant * Y - the number of cable glands of this type |
| A (X1/Y X2/Y.....Xn/Y) | X1...Xn - cable gland variant * Y - the number of cable glands of this type | * Instead of the cable gland, there can be an adapter, a plug or a drain/vent valve installed. In this case, please, specify the installed product code. | |
| * Instead of the cable gland, there can be an adapter, a plug or a drain/vent valve installed. In this case, please, specify the installed product code. | | | |



INQUIRY FORM

TU 27.12.31-001-27965004-2017

Junction boxes RIZUR-KC

| | | | | | | | | |
|--------------------------------------------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------|--------------|-----------------|-----------|
| Company name | | | | | | | | |
| Name of installation object | | | | | | | | |
| Contact person, position | | | | | | | | |
| Contact info, phone, e-mail | | | | | | | | |
| Quantity of the products pcs | | | | | | | | |
| Min. and max. operating temperature | | from _____ to _____ °C | | | | | | |
| Space restrictions (if any), HxWxD | | _____ x _____ x _____ mm | | | | | | |
| Explosion protection type | | <input type="checkbox"/> 1ExellT6Gb <input type="checkbox"/> 1ExdllCT6Gb | | | | | | |
| Ingress protection | | <input type="checkbox"/> IP66 (standard) <input type="checkbox"/> IP67 | | | | | | |
| Housing material | | <input type="checkbox"/> Aluminium alloy (standard) <input type="checkbox"/> Glass- reinforced polyester <input type="checkbox"/> Stainless steel | | | | | | |
| Nominal voltage | | _____ V, AC _____ V, DC | | | | | | |
| Terminals | Section, mm ² | Terminals type | | | Q-ty, pcs | | | |
| | | Spring | | Screw | | | | |
| | 0,2-2,5 | <input type="checkbox"/> | | <input type="checkbox"/> | | | | |
| | 0,2-4,0 | <input type="checkbox"/> | | <input type="checkbox"/> | | | | |
| | 0,2-6,0 | <input type="checkbox"/> | | <input type="checkbox"/> | | | | |
| | —-— | <input type="checkbox"/> | | <input type="checkbox"/> | | | | |
| Cable glands | Installation side | | | | ∅ cable, mm | ∅ armour, mm | Metal hose size | Q-ty, pcs |
| | A | B | C | D | | | | |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Painting of RIZUR-KC (upon a customer's request) | | RAL _____ (only for the aluminium alloy and stainless steel housings) | | | | | | |
| Additional information | | | | | | | | |
| Order code in accordance with the ordering information in the catalogue (preferably) | | | | | | | | |

