

Explosion-proof junction boxes RIZUR-KC



Intended use

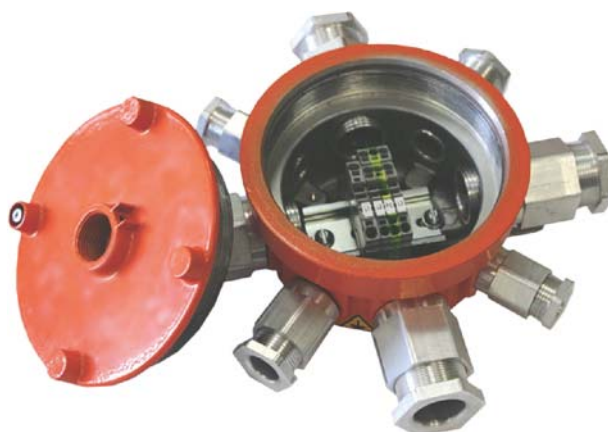
Explosion-proof junction boxes RIZUR-KC are manufactured according to TU 27.12.31-001-27965004-2017 and are designed for the joint and distribution of power cables in the AC and DC circuits of the automation and telemechanics systems. Operational safety of RIZUR-KC junction boxes at the hazardous objects 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.



- **ООО «НПО 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 stainless steel RIZUR-KC-N (Exe)



Design description

RIZUR-KC-N housing is made of sheet corrosion-resistant stainless steel. The box consists of a housing and a cover, connected with screws. Inside the housing, there's a mounting panel for DIN-rails and terminals, grounding studs, and other types of electric equipment. Side walls of the box can have explosion-proof cable glands for different types of cables, sockets, plugs, valves, etc.

All of the fastenings are made of corrosion-resisting steel.

Explosion protection marking

1Ex e IIC T6 Gb/Ex tb IIIC T80°C Db

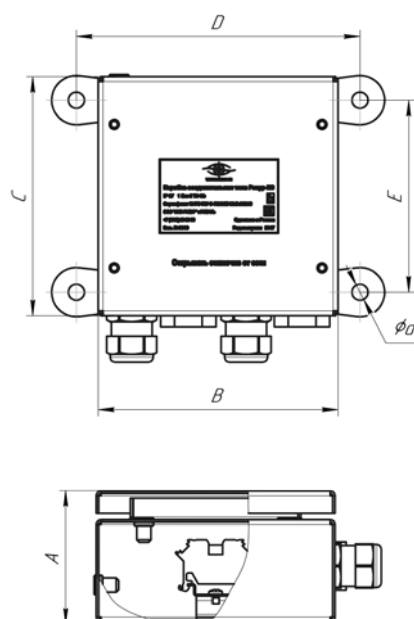
or 1Ex e IIC T5 Gb/Ex tb IIIC T95°C Db

or 0Ex ia IIC T6 Ga X, 1Ex ib IIC T6 Gb X, 2Ex ic IIC T6 Gc X

Dimensional specifications of RIZUR-KC-N (Exe)

Design variant	Overall dimensions (A x B x C), mm	Installation dimensions (D x E x ϕ d), mm
RIZUR-KC-N-151508	150 x 150 x 80	190 x 120 x 10
RIZUR-KC-N-301508	300 x 150 x 80	340 x 120 x 10
RIZUR-KC-N-342315	340 x 230 x 150	380 x 200 x 10
RIZUR-KC-N-453415	450 x 340 x 150	490 x 330 x 10
RIZUR-KC-N-534315	530 x 430 x 150	570 x 400 x 10

* Upon an agreement with a customer the dimensions of the stainless steel explosion-proof boxes can be different.



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)

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Please, attach an inquiry form to the order code information

1. Design variant

RIZUR-KC-X-XXXXXX

Please, specify the design variant of the terminal box (pages 5-11 of this catalogue)

2. Type and number of the terminals

P25 (X)	Spring 2,5 mm ² , X-specify the necessary amount
P40 (X)	Spring 4,0 mm ² , X-specify the necessary amount
V25 (X)	Screw 2,5 mm ² , X-specify the necessary amount
V40 (X)	Screw 4,0 mm ² , X-specify the necessary amount
Y (X)	Other (specified in written form outside the order code), X-specify the necessary amount

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.

3. Type, location, and number of the cable glands on A side

A (0)	Without cable glands
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.

4. Type, location, and number of the cable glands on B side

B (0)	Without cable glands
B (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.

5. Type, location, and number of the cable glands on C side

C (0)	Without cable glands
C (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.

6. Type, location, and number of the cable glands on D side

D (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

* 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				ø cable, mm	ø 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)								

