



Stainless Steel (Ex) Enclosures





#### WHAT IS ATEX?

ATEX is an abbreviation for "ATmospheres EXplosible". At the same time it is a safety standard – a set of EU directives concerned with all equipment installed in potentially explosive atmospheres (both gas and dust).

ATEX harmonises various national technical and legal requirements across Europe to ensure a very high level of safety.

The aim of directive 2014/34/EU is to allow the free trade of 'ATEX' equipment and protective systems within the EU by removing the need for separate testing and documentation for each member state.



Directive 2014/34/FU concerning equipment and protective systems intended for use in potentially explosive atmospheres.



Directive 99/92/EC on minimum requirements for improving the health and safety protection of workers potentially at risk from explosive atmospheres.

## **HOW IS POTENTIALLY EXPLOSIVE** ATMOSPHERE DEFINED IN ATEX?

Explosive atmosphere is a mixture of flammable substances in form of gases, vapour, mists or dusts with air under atmospheric conditions in which after ignition the combustion spreads to the entire unburned mixture.

An atmosphere which could become explosive due to operational conditions is called a **Potentially Explosive Atmosphere.** 

## CLASSIFICATION OF EXPLOSIVE ATMOSPHERE:

	Category	Atmosphere	Zones	Presence of Explosive Atmospher e	
Group I (Mining Industries)	M1	Cas and Dust		oment will be energised	
	M2	Gas and Dust	Equipment will be de-energised		
Group II (Surface Industries)	1	Gas	0	Always	
		Dust	20		
	2	Gas	1	Occasionally	
		Dust	21	Occasionally	
	3	Gas	2	Darok	
		Dust	22	Rarely	

#### **ATEX AND IECEX MARKINGS:**

(€0539 Ex II 2 GD

( 6 0539 - Compliance with European Directive and Notifying body number

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- ATEX Symbol or Marking for Explosive atmosphere

II 2

- Equipment Group - Equipment category

G/D

- Environment (Gas or Dust)

Ex e IIC T6/T5 Gb

Ex e - Increased Safety

IIC - Gas Group

Gb

**T6/T5** - Temperature

class (T1-T6) - Equipment Protection

I evel

Ex tb IIIC T85°C/T100°C Db

Ex tb - Protection by dust

IIIC - Dust type

T85°C/T100°C - Temperature class (°C)

Db Equipment

**Protection Level** 

# STAINLESS STEEL ENCLOSURES IN BRIEF:

- Stainless Steel Enclosures are available as empty enclosures or equipped with suitable number of terminal blocks.
- Enclosures material thickness ranges between 1.2mm to 2mm.
- The enclosures material is either 304 stainless steel which contains at least 10.5% Chromium (Cr) which acts as a protective layer that shields the material from humidity in the air or 316
- stainless steel containing Molybdenum (Mo), which provides excellent corrosion resistance especially against chlorides.
- Available in 45 sizes.
- Customer specific dimensioning also available.
- Numerous optional accessories such as DIN Rail, Mounting Plates, External Mounting brackets, Hinges.



# Add Ons:

- Customer Specific dimensioning with ATEX Certification
- Machining
- Colour Services
- Assembly of Components
- Gland plates can be fitted to any or all four sides.

## Technical Data for Empty Enclosure (U):

#### **COMPONENT**

II 2G Ex eb IIC Gb II 2D Ex tb IIIC Db IP66

**SIRA 18 ATEX 3261U IECEX SIR 18.0070U** 

# **PRODUCT DESCRIPTION**

Model No.	Model No.	Dimensions (		(mm)
(Component)	(Equipment)	Length	Width	Height
SRJ 101060	EXSRJ 101060	100	100	60
SRJ 111165	EXSRJ 111165	110	110	65
SRJ 141493	EXSRJ 141493	143	143	93
SRJ 151590	EXSRJ 151590	150	150	90
SRJ 191910	EXSRJ 191910	190	190	100
SRJ 191918	EXSRJ 191918	193	193	186
SRJ 221613	EXSRJ 221613	220	165	130
SRJ 211613	EXSRJ 211613	218	168	130
SRJ 211621	EXSRJ 211621	218	168	210
SRJ 372115	EXSRJ 372115	377	218	156
SRJ 372121	EXSRJ 372121	377	218	210
SRJ 231513	EXSRJ 231513	229	152	130
SRJ 262615	EXSRJ 262615	260	265	150
SRJ 262620	EXSRJ 262620	260	265	200
SRJ 303015	EXSRJ 303015	306	306	150
SRJ 303020	EXSRJ 303020	306	306	200
SRJ 352615	EXSRJ 352615	350	265	150
SRJ 352620	EXSRJ 352620	350	265	200
SRJ 373715	EXSRJ 373715	377	377	156
SRJ 373721	EXSRJ 373721	377	377	210
SRJ 453815	EXSRJ 453815	458	382	150
SRJ 453820	EXSRJ 453820	458	388	200
SRJ 484815	EXSRJ 484815	480	480	150
SRJ 484820	EXSRJ 484820	480	480	200
SRJ 524215	EXSRJ 524215	527	427	156

#### **Standard Materials:**

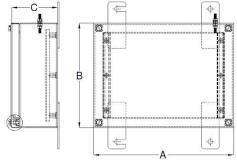
Enclosure: Mild steel (Minimum Thickness: 1.5 mm) Stainless Steel 316 or 304 (Minimum Thickness: 1.2 mm)

Hardware: Mild steel or 316/304 Stainless Steel

## **Technical Data for Terminal Enclosure (X):**

# **EQUIPMENT**

II 1GD / II 2GD
Ex eb IIC T6...T4 Gb
Ex eb ia IIC T6...T4 Gb
Ex tb IIIC T85°C, T100°C, T135°C Db
Ex ia IIC T6...T4 Ga
Ex ia IIIC T85°C, T100°C, T135°C Da
SIRA 19 ATEX 3015X
IECEX SIR 19.0020X



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Model No.	Model No.	Dimensions (		(mm)
(Component)	(Equipment)	Length	Width	Height
SRJ 535315	EXSRJ 535315	530	530	150
SRJ 525221	EXSRJ 525221	527	527	210
SRJ 553615	EXSRJ 553615	550	360	150
SRJ 553620	EXSRJ 553620	550	360	200
SRJ 765015	EXSRJ 765015	762	508	150
SRJ 765020	EXSRJ 765020	762	508	200
SRJ 825715	EXSRJ 825715	827	577	156
SRJ 825721	EXSRJ 825721	827	577	210
SRJ 825730	EXSRJ 825730	827	577	300
SRJ 916120	EXSRJ 916120	920	610	200
SRJ 976728	EXSRJ 976728	977	677	208
SRJ 976715	EXSRJ 976715	977	677	156
SRJ 976730	EXSRJ 976730	977	677	300
SRJ 117715	EXSRJ 117715	1177	777	156
SRJ 117721	EXSRJ 117721	1177	777	210
SRJ 117730	EXSRJ 117730	1190	770	300
SRJ 20020060	EXSRJ 20020060	2000	2000	600

### APPLICATIONS :

Our Enclosures are ideal to be used in wet and corrosive environments and especially in offshore structures because of its good corrosion resistance and mechanical characteristics.

Can be used in power generation industries to combat corrosion, particularly at higher temperature.

Steel Junction boxes can be used in Zone 0, 1 or Zone 2 areas, where flammable gases or vapours are present either continuously or intermittently such as

Petroleum and chemical industries

- Oil and Gas
- Refineries
- Other process facilities

Also can be used in Zone 20, 21 or Zone 22 where flammable dust are present either continuously or often accidentally such as

- Food processing facilities
- Dairy
- Brewing
- Wood processing
- Pharmaceutical Industries

Other commercial facilities











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