

ENCLOSURES

**ALUMINUM
STANDARD
ENCLOSURE** →



**GRP STANDARD
ENCLOSURE** →



**ALUMINUM EX
ENCLOSURE** →



**GRP EX
ENCLOSURE** →



**FIRE RATED
ENCLOSURE**
↓

**STAINLESS
STEEL
ENCLOSURE** ←



ALUMINIUM STANDARD ENCLOSURE

Technical Data Sheet :

Material	: AISi12, as per DIN EN 1706
Components	: Fastening threads M4 / M6 in the enclosure bottom
Ingress protection	: IP66 as per IEC 60529 (IP67 , IP68 on request)
Gasket	: Neoprene gasket (-40°C to +100°C)
Lid Screws	: Stainless Steel 1.4301 (A2), captive
Surface	: Painted / Non-Painted
Standard Color	: RAL 7001, 7031, 7032, 7035, 7038 Black RAL 9004 (Other on request)

Optionally available:

External Mounting Bracket	: Stainless Steel 1.4301 (A2)
Mounting Plates	: Sheet Steel, galvanized
Gasket	: Silicon gasket (-60°C to +140°C)
Surface	: Corrosion protection, special colors
Certified	: UL, CE



Approvals



SPECIFICATION SHEET WITH ACCESSORIES

Raychem *RPG*



Raychem Part No.	Y-->Yes			Standard Accessories					
	External Dimensions (mm)			Moun- ting Plate	M6 External Brackets	External Hinges	Internal Hinge	DIN rail for terminals	
	Length	Width	Height					TS15	TS35
RJ01	50	45	30	-	-	-	-	-	-
RJ02	98	64	34	-	-	-	-	-	-
RJ03	150	64	34	-	-	-	-	-	-
RJ04	58	64	34	-	-	-	-	-	-
RJ05	75	80	57	Y	-	-	-	-	-
RJ06	125	80	57	Y	-	-	-	Y	-
RJ07	175	80	57	Y	-	-	-	Y	-
RJ08	250	80	57	Y	-	-	-	Y	-
RJ09	100	100	81	Y	Y	Y	-	Y	-
RJ10	160	100	81	Y	Y	Y	-	Y	-
RJ11	122	120	81	Y	Y	Y	-	-	Y
RJ21	220	120	81	Y	Y	Y	-	-	Y
RJ22	122	120	91	Y	Y	Y	-	-	Y
RJ12	220	120	90	Y	Y	Y	-	-	Y
RJ36	140	140	90	Y	Y	Y	Y	-	Y
RJ37	200	140	90	Y	Y	Y	Y	-	Y
RJ15	160	160	91	Y	Y	Y	Y	-	Y
RJ13	260	160	90	Y	Y	Y	Y	-	Y
RJ14	360	160	90	Y	Y	Y	Y	-	Y
RJ28	180	180	100	Y	Y	Y	Y	-	Y
RJ29	280	180	100	Y	Y	Y	Y	-	Y
RJ19	200	230	110	Y	Y	Y	Y	-	Y
RJ17	280	230	110	Y	Y	Y	Y	-	Y
RJ18	330	230	111	Y	Y	Y	Y	-	Y
RJ30	200	230	180	Y	Y	Y	Y	-	Y
RJ20	330	230	180	Y	Y	Y	Y	-	Y
RJ31	400	310	110	Y	Y	Y	Y	-	Y
RJ32	400	310	180	Y	Y	Y	-	-	Y
RJ33	600	310	110	Y	Y	Y	-	-	Y
RJ34	600	310	180	Y	Y	Y	-	-	Y
RJ35	400	230	110	Y	Y	Y	-	-	Y

Note: Viton and EMC gaskets are available on request

Assembly of Accessories:

Mounting Plates, Mounting Brackets, Internal Hinges, External Hinges.



CUSTOMIZED SERVICES

Mechanical Processing

- Drilling
- Milling
- Tapping
- Profile Milling
- Laser Cutting
- All VMC Operations



Value Added Services

- Screen Printing
- Engraving
- Pad Printing
- Lacquering
- Painting
- Special Powder Coating
- Assembly with Cable Glands

We provide above services on the boxes as per specific requirements.

Quality Assurance

- Raychem RPG has built necessary resources in terms of people and equipment and a above all, an organization, which guarantees efficient use of these resources.
- Various Machines for Measurements and Testing are available to ensure conformance to Quality Specifications.



Environment, Health & Safety



Protecting Today to create a better tomorrow together

Raychem RPG is focused on reducing environmental footprints and improving performance.

All the manufacturing sites of Raychem RPG are ISO 14001 and OHSAS 18001 Certified.

Technical Data :



Material	: AISi12
Surface	: Plain or Powder Coated
Lid Screw	: Stainless Steel, Captive Screw
Tighting Torque	: 5 Nm
Service Temperature	: -60°C to + 140°C (Silicone)
Mechanical Strength	: Accordance With EN/IEC 60079-0, Impact energy > 7 Nm
Protection Class	: IEC/EN 60529, IP 66
Compliance Standard	: IEC/EN 60079-0, IEC/EN 60079-7, IEC/EN 60079-11 and IEC/EN 60079-31.
Standard Color	: RAL 7001, 7031, 7032, 7032, 7035, 7038, Black RAL 9004, White RAL 9010 (Other on request)
Internal / External Earthing	: 4 sqmm to 120 sqmm Internal and External
Accessories available with enclosures	: Mounting plate / Allen lid screw / Sealable lid screw / External mounting brackets / External hinges

Raychem Model No.		Dimension (mm)		
Component	Equipment	L	W	H
RJ 586434	EXRJ 586434	58	64	34
RJ 986434	EXRJ 986434	98	64	34
RJ 156434	EXRJ 156434	150	64	34
RJ 758057	EXRJ 758057	75	80	57
RJ 128057	EXRJ 128057	125	80	57
RJ 178057	EXRJ 178057	175	80	57
RJ 258054	EXRJ 258054	250	80	54
RJ 101080	EXRJ 101080	100	100	80
RJ 121280	EXRJ 121280	122	120	80
RJ 121290	EXRJ 121290	122	120	90
RJ 161080	EXRJ 161080	160	100	80
RJ 221280	EXRJ 221280	220	120	80
RJ 221290	EXRJ 221290	220	120	90
RJ 141490	EXRJ 141490	140	140	90
RJ 161690	EXRJ 161690	160	160	90

Raychem Model No.		Dimension (mm)		
Component	Equipment	L	W	H
RJ 201490	EXRJ 201490	200	140	90
RJ 261690	EXRJ 261690	260	160	90
RJ 361690	EXRJ 361690	360	160	90
RJ 181810	EXRJ 181810	180	180	100
RJ 281810	EXRJ 281810	280	180	100
RJ 202311	EXRJ 202311	200	230	110
RJ 202318	EXRJ 202318	200	230	180
RJ 282311	EXRJ 282311	280	230	110
RJ 332311	EXRJ 332311	330	230	110
RJ 332318	EXRJ 332318	330	230	180
RJ 402311	EXRJ 402311	400	230	110
RJ 403111	EXRJ 403111	404	313	110
RJ 403118	EXRJ 403118	404	313	180
RJ 603111	EXRJ 603111	600	310	110
RJ 603118	EXRJ 603118	600	310	180

Equipment Marking

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

Component Marking

II 2G Ex eb IIC Gb
II 2D Ex tb IIIC Db IP66
SIRA 18 ATEX 3261U
IECEx SIR 18.0070U

GLASS REINFORCED POLYESTER (GRP)

Raychem RPG

STANDARD ENCLOSURE



Color	RAL 7000 (Grey)	RAL 9011 (Black)
Ingress protection	IP 66 to IEC/EN 60529*	IP66 to IEC/EN 60529*
Impact resistance	7 Joules as per IEC/EN 60079-0	7 Joules as per IEC/EN 60079-0
Temperature range	(Neoprene) seal : - 40°C to 80°C (Silicone) seal : - 60°C to 110°C	(Neoprene) seal : - 40°C to 80°C (Silicone) seal : - 60°C to 110°C
Surface resistance	> 10 ¹² Ohms	<10 ⁹ Ohms
Flammability	V0 / self-extinguishing, UL 94	V0 / self-extinguishing, UL 94
Dielectric strength	18 kV / mm	-
Toxicity	free from halogen	free from halogen

*IP67, IP68 also available on request



Model No.	Dimensions (mm)			Din Rail		Mounting plate	Allen lid screw	Sealable lid screw	External Mounting Bracket	External Hinge
	L	B	H	TS 15	TS 35					
GRJ01	80	75	55	Y	-	Y	Y	Y	Y	N
GRJ02	110	75	55	Y	-	Y	Y	Y	Y	N
GRJ03	122	120	90	-	Y	Y	Y	Y	Y	Y
GRJ04	80	75	75	Y	-	Y	Y	Y	Y	N
GRJ05	160	75	55	Y	-	Y	Y	Y	Y	N
GRJ06	160	75	75	Y	-	Y	Y	Y	Y	N
GRJ07	160	160	90	-	Y	Y	Y	Y	Y	Y
GRJ08	110	75	75	Y	-	Y	Y	Y	Y	N
GRJ09	190	75	55	Y	-	Y	Y	Y	Y	Y
GRJ10	190	75	75	Y	-	Y	Y	Y	Y	N
GRJ11	220	120	90	-	Y	Y	Y	Y	Y	Y
GRJ12	255	250	120	-	Y	Y	Y	Y	Y	Y
GRJ13	260	160	90	-	Y	Y	Y	Y	Y	Y
GRJ14	360	160	90	-	Y	Y	Y	Y	Y	Y
GRJ15	400	250	120	-	Y	Y	Y	Y	Y	Y
GRJ16	400	405	120	-	Y	Y	Y	Y	Y	Y
GRJ17	255	250	160	-	Y	Y	Y	Y	Y	Y
GRJ18	400	250	160	-	Y	Y	Y	Y	Y	Y
GRJ19	400	405	201	-	Y	Y	Y	Y	Y	Y
GRJ20	600	250	121	-	Y	Y	Y	Y	Y	Y
GRJ21	600	250	161	-	Y	Y	Y	Y	Y	Y

EX-ENCLOSURE



Material	: Glass reinforced polyester, Graphite added
Color	: Similar to RAL 9011 / Black
Protection Class	: IP66, IEC/EN 60529
Surface resistance	: < 10 ⁹ Ohm
Mechanical Strength	: Impact energy > 7 Joules, IEC/EN 60079-0
Flammability	: Self Extinguishing, UL 94 V0
Service Temperature	: -60°C to +110°C (Silicone)
Compliance Standard	: IEC /EN 60079-0, IEC/EN 60079, IEC/EN 60079-11 and IEC/EN 60079-31



Model No.		Dimensions (mm)		
(Component)	(Equipment)	L	B	H
GRJ 807555	EXGRJ 807555	80	75	55
GRJ 117555	EXGRJ 117555	110	75	55
GRJ 167555	EXGRJ 167555	160	75	55
GRJ 197555	EXGRJ 197555	190	75	55
GRJ 167575	EXGRJ 167575	160	75	75
GRJ 807575	EXGRJ 807575	80	75	75
GRJ 117575	EXGRJ 117575	110	75	75
GRJ 197575	EXGRJ 197575	190	75	75
GRJ 121290	EXGRJ 121290	122	120	90
GRJ 161690	EXGRJ 161690	160	160	90
GRJ 221290	EXGRJ 221290	220	120	90

Model No.		Dimensions (mm)		
(Component)	(Equipment)	L	B	H
GRJ 262690	EXGRJ 262690	260	160	90
GRJ 361690	EXGRJ 361690	360	160	90
GRJ 252512	EXGRJ 252512	255	250	120
GRJ 252516	EXGRJ 252516	255	250	160
GRJ 402512	EXGRJ 402512	400	250	120
GRJ 402516	EXGRJ 402516	400	250	160
GRJ 404012	EXGRJ 404012	400	405	120
GRJ 404020	EXGRJ 404020	400	405	201
GRJ 602512	EXGRJ 602512	600	250	120
GRJ 602516	EXGRJ 602516	600	250	160

Equipment Marking:

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

Component Marking:

II 2G Ex eb IIC Gb
II 2D Ex tb IIIC Db IP66
SIRA 18 ATEX 3261U
IECEx SIR 18.0070U





Technical Data :

Material	: Stainless steel 1.25 mm or 1.5 mm; 1.4301 /304, 1.4404 / 316 other materials on request
Ingress Protection	: IP 65/ IP 66 as per IEC/EN 60529
Seal	: Silicone VMQ or EPDM
Surface	: Grinded, grain 240, other surface on request
Temperature Range	: Silicone : -40°C to +80°C EPDM : -30°C to +90°C



Part Number	Sizes		
SSJ1	100	100	61
SSJ2	150	100	61
SSJ3	150	150	81
SSJ4	200	100	61
SSJ5	200	200	81
SSJ6	200	200	121
SSJ7	300	150	81
SSJ8	300	200	81
SSJ9	300	200	121
SSJ10	300	300	121
SSJ11	300	300	161
SSJ12	380	380	161
SSJ13	400	150	81
SSJ14	400	200	121
SSJ15	400	300	161
SSJ16	500	300	161
SSJ17	500	400	161
SSJ18	600	200	121

- The SSJ range, designed with cleanliness and ingress protection in mind, provides high resistance to corrosion and ensures performance of equipment.
- Intended for harsh environments, the SSJ range is the ideal solution for food and chemical industries, pharmaceutical plants, outdoor applications and marine environments.

Included in delivery:

- Enclosure base with bracket clips and threaded hole for attachment of DIN rails,
- 4 mounting bosses with attachment holes and sealing plugs
- alternatively available without fastening holes, lid with stud bolts inside
- permanently attached lid screws.

Note: Customized sizes are available on request.

Part Code	Dimensions		
	L	B	H
MSJ1	150	150	81
MSJ2	200	150	90
MSJ3	200	200	120
MSJ4	300	200	120
MSJ5	300	300	161
MSJ6	400	200	120
MSJ7	400	300	160
MSJ8	400	400	160

Note: Customized sizes are available on request.



Key Features

- Value addition through machining of conduit holes
- Gasket options - Neoprene & EPDM (High temperature resistant)
- Ingress Protection: IP65 / IP66 (Available on request)
- TIG welded (Oxide free) for sound joints
- Powder coated finish (RAL color shade as per choice)
- Thickness 1.5 - 3 mm
- Stainless Steel screws

Accessories Provided

- Polyamide Glands
- Polyamide Stop Plus
- Polyamide Terminals

Applications

- Industrial Indoor & Outdoor

WHAT IS ATEX?

ATEX is an abbreviation for "**AT**mospheres **EX**plosible". 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/EU 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 Atmosphere
Group I (Mining Industries)	M1	Gas and Dust	Equipment will be energised	
	M2		Equipment will be de-energised	
Group II (Surface Industries)	1	Gas	0	Always
		Dust	20	
	2	Gas	1	Occasionally
		Dust	21	
	3	Gas	2	Rarely
		Dust	22	

ATEX AND IECEx MARKINGS :

CE 0539 Ex II 2 GD

CE 0539 - Compliance with European Directive and Notifying body number

Ex - ATEX Symbol or Marking for Explosive atmosphere

II - Equipment Group

2 - Equipment category

G/D - Environment (Gas or Dust)

Ex e IIC T6/T5 Gb

Ex e - Increased Safety

IIC - Gas Group

T6/T5 - Temperature class (T1-T6)

Gb - Equipment Protection Level

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.

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 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

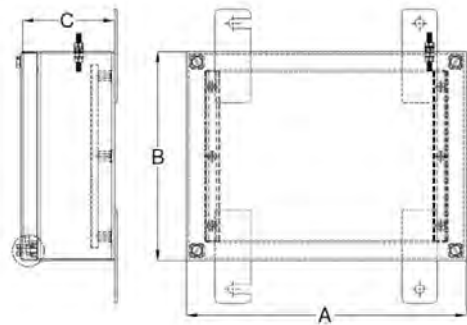
Technical Data for Terminal Enclosure (X):

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

PRODUCT DESCRIPTION

Model No. (Component)	Model No. (Equipment)	Dimensions (mm)		
		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



Model No. (Component)	Model No. (Equipment)	Dimensions (mm)		
		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

FIRE RATED STEEL ENCLOSURE

Raychem RPG

Technical Data :

Material	: sheet steel, powder-coated
Properties	: Intrinsic fire resistance in accordance with DIN 4102 part 12 (German standard) in combination with Fire Survival cables & Ceramic terminal block
	Intrinsic fire resistance from external flame, water & external impact with BS 6387:2013 in combination with Fire Survival cables & Ceramic terminal block
	Protection against accidental contact is ensured by the enclosure
	External brackets for mounting
	Cable junction box for tunnel application for conductor cross-sections up to 4 mm ²
Colour	: Orange, RAL 2003 (Other color on request)
Resistance to impact	: IK 10 (20 Joule)
Degree of protection	: IP 66



PRODUCT SPECIFICATION

Rated Insulation Voltage	800 V
Current Carrying Capacity	57 A
Tightening Torque	1.2 Nm

REFERENCE STANDARD

Product design	IEC 62208:2011
Product testing	DIN 4102-12 BS 6387:2013 (Cat. C, W, Z) IEC 60529 (IP)

PRODUCT CODE	DIMENSIONS (MM)			CERAMIC TERMINAL	
PART NO.	X	Y	Z	2 POLE	3 POLE
FRJB 01	100	100	80	1	1
FRJB 02	150	150	100	2	2
FRJB 03	200	150	100	4	3
FRJB 04	200	200	105	4	3
FRJB 05	250	150	100	5	3
FRJB 06	350	250	105	6	4

Enclosure Type	DIN 4102 - 12 950°C (1742°F) in a closed Chamber, E90 Certification (Flame Only)	BS6387 'C' 950°C (1742°F) for 3 Hours (Flame Only)	BS6387 'Z' 950°C (1742°F) for 15 Minutes (External Impact)	BS6387 'W' 650°C (1202°F) for 30 Minutes (Water Spray)
FRJB Series	PASS	PASS	PASS	PASS