

## FLAMEPROOF ENCLOSURES



### EJB SERIES

Suitable for installation in Zone: 1, 2, 21, 22



## **Table of Contents:**

### **1. General information**

- 1.1 Manufacturer
- 1.2 About these Instructions
- 1.3 Conformity with Standards and Regulations

### **2. Explanations of Symbols on the device**

### **3. Safety**

- 3.1 General precautions
- 3.2 Type of protection
- 3.3 Intended Use

### **4. Transport, Storage & Handling**

- 4.1 Transport & Storage
- 4.2 Handling

### **5. Mounting & Installation**

- 5.1 Preparation of the product: unpacking
- 5.2 Before mounting & installation
- 5.3 Before commissioning
- 5.4 Apparatus composition
  - 5.4.1 Components & accessories
  - 5.4.2 Terminals
  - 5.4.3 Bars
  - 5.4.4 Maximum dissipated power
- 5.5 Mounting the enclosure

**Table of Contents:**

5.6 Opening the enclosure

5.7 Closing the enclosure

5.8 Electrical connections

**6. Maintenance**

6.1 General Information

**7. Cleaning**

**8. Repairing**

**9. Disposal**

**10. Special conditions of use**

**11. Warranties**

11.1 General Conditions

11.2 Terms and Conditions

11.3 Liability limitations

11.4 Management of non-conformities

**12. Marking**

**13. Annex A – Technical Data**

**14. Annex B – Enclosure dimensions**

**15. Annex C – Maximum number of entries**

## 1. General Information

### 1.1 Manufacturer

YSEBAERT  
Koralenhoeve 13  
B-2160 Wommelgem  
Phone +32(0)3 328 06 60



### 1.2 About these Instructions

- **INSTRUCTION NOTE: D04/17/2302, issued on February 2023**
- Read carefully these Instructions before using the device
- Keep these Instructions throughout the entire service life of the enclosure
- Make these Instructions available to operating and maintenance personnel
- Update these Instructions every time an amendment is delivered from YSEBAERT
- In case of sale of the apparatus, pass these Instructions to subsequent owners

### 1.3 Conformity with Standards and Regulations

- EJB Series is manufactured in accordance with ATEX standards

## 2. Explanation of symbols on the device

Symbol	Meaning
	Product compliant with European Directive 2014/34/EU (ATEX) for installation in hazardous areas
	Product compliant with applicable European Directives

### 3. Safety

#### 3.1 General precautions

- The apparatus must be installed according to **EN 60079-14** standard (Edit in force) and maintenance operations must be performed according to **EN 60079-17** standard (Edit in force).
- User must be aware of electric risks, chemical and physical characteristics of gas, vapours, and dusts present in the plant.
- To further guarantee good product quality/safety, the **Quality System of YSEBAERT is evaluated and approved by a Notified Body**, which carries out Quality System surveillance.
- YSEBAERT ensures and guarantees correct manufacturing of its products.
- Buyer and/or End User are directly responsible of correct product installation and maintenance, according to local and national laws and product installation specifications.
- Use the apparatus only in accordance with the operating conditions described in these operating Instructions;
- Use the apparatus only for the intended purpose specified in these operating Instructions;
- All modifications and changing are strictly forbidden.

**DANGER: EXPLOSION HAZARD DUE TO IMPROPER USE AND/OR ALTERATIONS TO THE APPARATUS CAN CAUSE SEVERE OR FATAL INJURIES**

**WARNING: ALL MODIFICATIONS / CHANGING, MADE BY BUYER / END USER, WITHOUT YSEBAERT WRITTEN ACCEPTANCE WILL INVALIDATE CERTIFICATIONS, WARRANTIES AND ANY OTHER CONTRACTUAL AGREEMENT**

**RESIDUAL RISK: ALTOUGH USED PROPERLY, THE APPARATUS CAN PRESENT RESIDUAL RISKS, WHICH ARE TYPICAL OF ANY APPARATUS CONNECTED TO POWER SUPPLY.**

## 3.2 Type of protection

### Flameproof enclosures EJB Series – Protection: Ex db, Ex db [i.], Ex ia/ib, Ex tb

Compliant with:

- *EN 60079-0*  
Equipment - General requirement
- *EN 60079-1*  
Equipment protection by flameproof enclosures 'd'
- *EN 60079-11*  
Equipment protection by intrinsic safety 'i'
- *EN 60079-31*  
Equipment dust ignition protection by enclosure "t"

Enclosure:

#### Type of protection Ex db:

Electric equipment is installed in enclosure suitable to withstand the pressure raised during the internal explosion and avoids flame transmission to the external potentially explosive atmosphere.

#### Type of protection Ex i:

The energy of the circuit which could be capable of igniting a potentially explosive atmosphere is limited so that neither sparking nor heating of the electrical components can ignite the surrounding potentially explosive atmosphere.

#### Type of protection Ex tb:

It avoids combustible dust (IIIC) penetration into the enclosure and ensures surface temperature limitation for use in explosive dust atmospheres.

### 3.3 Intended Use

EJB Series are suitable for:

- Equipment for explosive Gas and Dust atmospheres, having a "high" Level of Protection, which is not a source of ignition in normal operation or during expected malfunctions.
- Applications such as: control units, junction boxes, industrial power distribution switch racks; receptacles; heat tracing and lighting panels.
- Housing electric and/or electronic equipment and / or terminals.
- Housing arcing or sparking components.
- Indoor / Outdoor application.
- Hazardous areas: Zone 1, 2, 21, 22.
- Safe areas.

**WARNING: USE THE APPARATUS ONLY FOR ITS INTENDED PURPOSE. AN INCORRECT USE MAY AFFECT NEGATIVELY THE EFFICIENCY OF THE APPARATUS**

**WARNING: USE THE APPARATUS ONLY IN THE HAZARDOUS AREAS STATED IN THESE INSTRUCTIONS.**

**DANGER: AN IMPROPER USE OF THE APPARATUS MAY LEAD TO SEVER AND/OR FATAL INJURIES**

## **4. Transport, Storage & Handling**

### **4.1 Transport & Storage**

- Transport and store the device only in its original packaging:
  - Paper/carton boxes; or
  - Wood boxes; or
  - Wood cages
- Store the device in a dry place, protected from sunlight, humidity, rain and vibration-free in the following condition:
  - -20°C ... +40°C

### **4.2 Handling**

For handling, no special measures are required, therefore it is recommended to perform this operation following the common safety standards.

## **5. Mounting & Installation**

### **5.1 Preparation of the product: unpacking**

- Make sure to throw away any packaging component which could result dangerous to people, such as: screws, belts, plastic bags, etc...;
- Make sure that the packaging has not been damaged during transport;
- Put down the right side of the packaging and unpack the apparatus;
- Remove the apparatus from the package in the most appropriate manner according to the weight of the apparatus.



## 5.2 Before mounting & installation

Before mounting and installing the device, User must verify that:

- Apparatus is suitable for the hazardous area classification;
- Apparatus group is suitable for gases, vapours and/or dusts present in the installation site;
- Temperature class and surface temperature of the apparatus is suitable for gases, vapours and/or dusts present in the installation site;
- Apparatus is not damaged.

**DANGER: EXPLOSION HAZARD DUE TO INCORRECT MOUNTING OF THE DEVICE CAN CAUSE SEVERE OR FATAL INJURIES**

## 5.3 Before commissioning

Before placing the device into service, User shall verify:

- correct project data and installation;
- the electrical ratings (voltages, frequency, mechanical and thermal stress within project data);
- the clamping of the electric and mechanical connections;
- the integrity and the continuity of earth, protection or equipotential conductors;
- that no modifications have occurred to the electrical and/or mechanical structure and functionality of the apparatus (e.g. the alteration of the enclosure by the installation of further equipment inside the apparatus);
- any electrical protection was not excluded nor deregulated;
- verify the correct fastening of the enclosure parts;
- verify the absence of any cause of stress (e.g. exposure to collision damages, presence of corrosive agents, possibility of internal short circuits with power dissipation superior than the admitted one).

**WARNING: ALL MODIFICATIONS / CHANGING, MADE BY BUYER / END USER, WHICH IMPACT ON THE ELECTRICAL AND/OR MECHANICAL STRUCTURE AND FUNCTIONALITY OF THE APPARATUS WILL INVALIDATE CERTIFICATIONS, WARRANTIES AND ANY OTHER CONTRACTUAL AGREEMENT**

Verify **THREADED ENTRIES and CABLE GLANDS:**

- Type and size of threaded holes are marked on the enclosure;
- Threaded entries must be equipped with suitable cable glands, accessories and blanking elements certified according to type of protection Ex db IIC and / or Ex tb IIIC, suitable to maintain the enclosure protection degree IP66 and suitable for ambient temperature stated on the “marking” label;
- Each entry shall have no more than one thread adapter. DO NOT USE a blanking element with a thread adapter.
- Use certified stopping plugs to close unused entries.

Verify the **COVER:**

- Cover must be properly closed. Refer to paragraph 5.7 – Closing the enclosure for correct tightening of the cover screws.

**WARNING: IN CASE UNUSED CABLE ENTRIES AND/OR THE COVER ARE NOT PROPERLY CLOSED, EXPLOSION PROTECTION CAN NO LONGER BE GUARANTEED.**

**WARNING: IN CASE UNPROPER CABLE GLANDS, ACCESSORIES AND/OR BLANKING ELEMENTS ARE USED, EXPLOSION PROTECTION CAN NO LONGER BE GUARANTEED.**

## **5.4 Apparatus composition**

The EJB Series are made of a body and a cover available in different sizes, used in accordance to:

- The number of components and/or terminals installed inside the enclosure;
- The inputs of connection cables.

**NOTE: THE ENCLOSURE COMPOSITION DEPENDS TO CUSTOMER’S REQUIREMENT, BUT IN ANY CASE IT IS SUBJECT TO CONFORMITY CERTIFICATION.**

### 5.4.1 Components & accessories

The enclosure can host electric and/or electronic equipment and/or terminals. The cover can be provided by threaded entries for the assembling of following accessories: draining & breathing devices, push buttons, selector switches, potentiometers, signal lamps, rotary handles fuses and/or windows (suitable for visualization of internal apparatus). Refer to below table for the complete list of suitable components:

COMPONENT TYPE:	
Instruments of measure of electric parameters	Time relay
Electronic thermoregulation units	Photocells
Radio communication and telephony units	Capacitors
PLC and multiplexer	Transformers
Devices for the control and the weight measure; pressure; damp; level; temperature and capacity	Anticondensate heatings
Automatic and/or earth leakage circuit breakers	Circumferentor and recorders of physical data
Switches; on load switches; rotary switches	Displays
Fuses / antitrouble filters	Ignitors
Contactors; remote control switches	General purpose drive and UPS
Relay	Fans
Led lamps 3 W max.	Cells and batteries
Electric and electronic of regulation and of starting devices	Terminals
Intrinsically safe devices	



Pushbutton



Pilot lamp



Rotary switch



## 5.4.2 Terminals

Refer to below tables for terminals rated current and max. number of terminals which can be installed inside EJB\*\*\* enclosures.

TERMINALS – RATED CURRENT													
Terminal cross-sectional area (mm <sup>2</sup> )	2,5	4	6	10	16	35	50	70	95	120	185	240	300
Rated current (A)	24	32	41	57	76	125	150	192	239	269	353	415	520

Max. number of terminals calculated in worst condition, so according to following parameters:

- T. class = T3;
- Ambient temp. = +40°C

SECTION \ TYPE	EJB Models											
	EJB-2	EJB-3	EJB-4	EJB-5	EJB-6	EJB-8	EJB-9	EJB-10	EJB-11	EJB-12	EJB-13 EJB-13A EJB-13XL	EJB-14
2,5 mmq	52	84	122	148	224	276	320	308	360	488	712	1026
4 mmq	48	69	102	122	188	195	220	259	300	357	600	856
6 mmq	36	54	78	69	138	150	168	168	232	273	425	594
10 mmq	21	32	40	57	87	102	123	122	148	186	276	406
16 mmq	17	26	32	45	72	80	84	95	114	130	228	325
35 mmq	9	18	24	23	36	45	50	56	69	82	140	196
50 mmq	-	14	20	20	30	36	44	48	57	70	108	168
70 mmq	-	7	15	18	28	33	38	33	44	60	88	140
95 mmq	-	-	-	7	13	18	24	24	26	33	50	87
120 mmq	-	-	-	7	13	16	15	24	26	33	50	87
185 mmq	-	-	-	-	-	-	-	-	-	18	24	48
240 mmq	-	-	-	-	-	-	-	-	-	16	24	48
300 mmq	-	-	-	-	-	-	-	-	-	5	16	20

## 5.4.3 Bars

Refer to below tables for bars which can be installed inside EJB\*\*\* enclosures.

ELECTRICAL BAR CHARACTERISTICS		
EJB Models	Nominal Section sqmm	Nominal current (A)
From EJB-2 to EJB-14	36	72
From EJB-2 to EJB-14	100	200
From EJB-2 to EJB-14	160	250
From EJB-4 to EJB-14	250	400
From EJB-6 to EJB-14	400	625

#### 5.4.4 Maximum dissipated power

Maximum dissipated power (W / VA) for EJB without windows and without or with IS apparatus when IS apparatus is protected by thermal probes

TYPE OF ENCLOSURE	T6/T85°C for ambient up to				T5/T100°C for ambient up to				T4/T135°C for ambient up to				T3/T200°C for ambient up to			
	40°C	50°C	55°C	60°C	40°C	50°C	55°C	60°C	40°C	50°C	55°C	60°C	40°C	50°C	55°C	60°C
EJB-2	74	56	47	38	101	83	74	65	164	146	137	128	281	263	254	245
EJB-3	96	72	61	49	131	107	96	84	213	189	178	166	365	341	330	318
EJB-3A	102	77	65	52	140	115	102	90	227	202	190	177	390	365	352	340
EJB-4	114	86	72	58	156	128	114	100	253	225	211	197	434	406	392	378
EJB-5	138	110	82	64	193	156	138	119	322	285	267	248	561	524	506	487
EJB-6	173	139	104	81	243	197	173	150	405	359	336	312	706	660	637	614
EJB-8; 9	216	173	130	101	303	245	216	187	505	448	419	390	881	823	794	765
EJB-10; 11	254	203	152	118	355	287	254	220	592	525	491	457	1033	955	931	897
EJB-12	324	237	194	151	453	367	324	280	756	670	627	583	1319	1232	1189	1146
EJB-13	431	308	246	185	615	492	431	369	1046	923	861	800	1845	1722	1661	1599
EJB-13A; 13XL	487	348	278	209	695	556	487	417	1181	1042	973	904	2085	1946	1876	1807
EJB-14	728	520	416	312	1039	832	728	624	1767	1559	1455	1351	3117	2909	2806	2702
T° Cable	80°C				90°C				120°C				175°C			

Maximum dissipated power (W / VA) for EJB with windows, and without or with IS apparatus when IS apparatus is protected by thermal probes.

TYPE OF ENCLOSURE	T6/T85°C for ambient up to				T5/T100°C for ambient up to				T4/T135°C for ambient up to			
	40°C	50°C	55°C	60°C	40°C	50°C	55°C	60°C	40°C	50°C	55°C	60°C
EJB-2; 3; 3A	67	48	39	30	94	76	67	58	158	140	131	121
EJB-4; 5; 6	114	86	72	58	156	128	114	100	253	225	211	197
EJB-8; 9	144	108	88	72	195	144	119	100	315	234	211	197
EJB-10; 11	180	132	108	90	268	200	161	134	360	270	216	197
EJB-12	240	180	144	120	323	242	195	162	405	301	243	203
EJB-13	280	208	168	140	365	272	221	183	450	337	270	225
EJB-13A	320	240	192	160	408	306	246	204	477	355	288	239
T° Cable	80°C				90°C				120°C			

#### 5.4.4 Maximum dissipated power

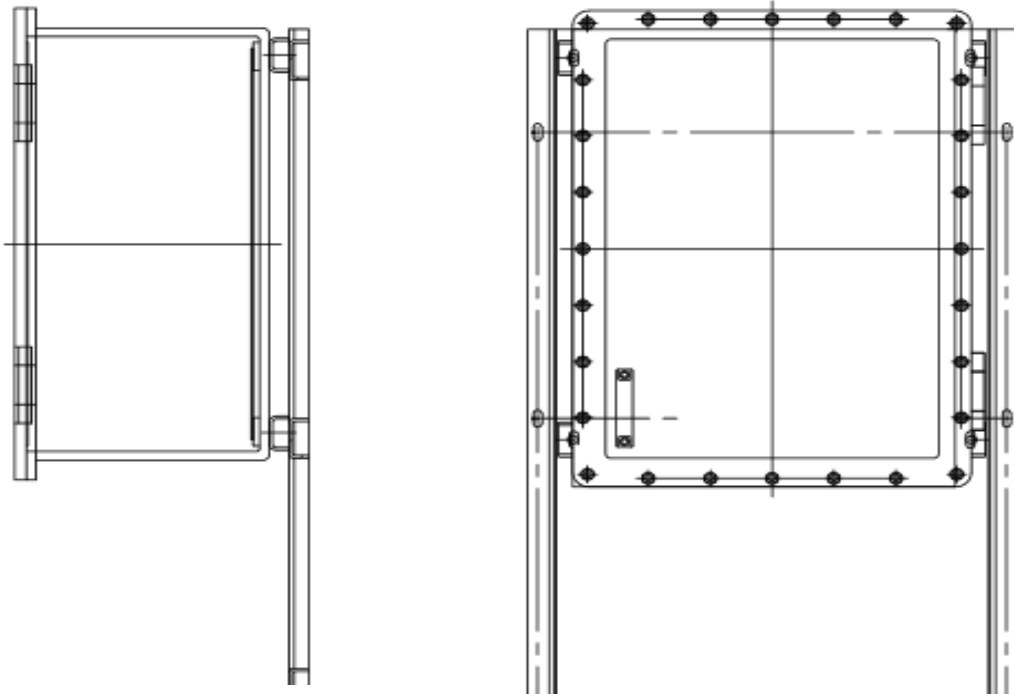
Maximum dissipated power (W / VA) for EJB with or without windows with IS apparatus without thermal probes protection.

TYPE OF ENCLOSURE	T.AMB OF THE INTRINSIC SAFETY ELEMENT	T <sub>6</sub> /T <sub>85</sub> °C FOR AMBIENT UP TO			
		40°C	50°C	55°C	60°C
EJB-2	60°C	18	4	N/A	N/A
	70°C	32	18	11	4
	80°C	46	32	25	18
	85°C	53	39	32	25
EJB-3	60°C	27	13	7	N/A
	70°C	40	27	20	13
	80°C	53	40	33	27
	85°C	60	47	40	33
EJB-3A	60°C	29	14	7	N/A
	70°C	43	29	21	14
	80°C	57	43	36	29
	85°C	64	50	43	36
EJB-4	60°C	32	16	8	N/A
	70°C	48	32	24	16
	80°C	64	48	40	32
	85°C	71	56	48	40
EJB-5	60°C	41	20	10	N/A
	70°C	61	41	31	20
	80°C	81	61	51	41
	85°C	92	71	61	51
EJB-6	60°C	51	26	13	N/A
	70°C	77	51	38	26
	80°C	103	77	64	51
	85°C	115	90	77	64
EJB-8; 9	60°C	64	32	16	N/A
	70°C	96	64	48	32
	80°C	128	96	80	64
	85°C	144	112	96	80
EJB-10; 11	60°C	75	38	19	N/A
	70°C	113	75	56	38
	80°C	150	113	94	75
	85°C	169	131	113	94
EJB-12	60°C	96	48	24	N/A
	70°C	144	96	72	48
	80°C	192	144	120	96
	85°C	215	168	144	120
EJB-13	60°C	123	61	31	N/A
	70°C	184	123	92	61
	80°C	245	184	153	123
	85°C	276	214	184	153
EJB-13A; 13 XL	60°C	138	69	35	N/A
	70°C	208	138	104	69
	80°C	277	208	173	138
	85°C	312	242	208	173
EJB-14* <i>*Without window only</i>	60°C	207	104	52	N/A
	70°C	311	207	155	104
	80°C	414	311	259	207
	85°C	466	362	311	259
T° Cable		80°C			

## 5.5 Mounting the enclosure

- Mount the enclosure in vertical position by using four screws. Refer to dimensional drawings for mounting holes
- Tighten the mounting screws properly.

Fig. 5.



ENCLOSURE TYPE	SCREW SIZE FOR EJB (AL)	SCREW SIZE FOR EJB (SS)
EJB-2	M8	M8
EJB-3	M8	M8
EJB-3A	M8	M8
EJB-4	M8	M10
EJB-5	M8	M10
EJB-6	M8	M12
EJB-8	M8	M12
EJB-9	M10	M12
EJB-9	M10	M12
EJB-10	M10	M12
EJB-11	M10	M12
EJB-12	M12	M12
EJB-13	M12	M12
EJB-13A	M12	M12
EJB-13XL	-	M12
EJB-14	M12	M12

## 5.6 Opening the enclosure

The enclosure cover is bolted. Use allen key of appropriate size to open cover bolts.

## 5.7 Closing the enclosure

Tighten the cover screws according to below table. When closing the enclosure. Do not forget to grease the lid screws with LOCTITE 8104 or similar. For correct cleaning of the screws, refer to paragraph 7 – Cleaning.

**For EJB enclosure realized in aluminum**, grease and tighten the lid screws according to below table:

ENCLOSURE TYPE	TORQUE (Nm)	SCREW SIZE
EJB-2	10	M6
EJB-3	15	M8
EJB-3A	15	M8
EJB-4	30	M10
EJB-5	15	M8
EJB-6	30	M10
EJB-8	30	M10
EJB-9	30	M10
EJB-9	40	M12
EJB-10	30	M12
EJB-11	40	M12
EJB-12	40	M12
EJB-13	45	M12
EJB-13A	45	M12
EJB-14	110	M14

**For EJB enclosure realized in welded Stainless Steel or carbon steel**, grease and tighten the lid screws according to below table:

ENCLOSURE TYPE	TORQUE (Nm)	SCREW SIZE
EJB-2	10	M6
EJB-3	15	M8
EJB-3A	15	M8
EJB-4	30	M10
EJB-5	15	M8
EJB-6	30	M10
EJB-8	30	M10
EJB-9	30	M10
EJB-9	40	M12
EJB-10	30	M12
EJB-11	40	M12
EJB-12	40	M12
EJB-13	45	M12
EJB-13A	45	M12
EJB-13 XL	160	M16
EJB-14	160	M16



## 5.8 Electrical connections

The terminals of the equipment must be used with the insert and the connection of the wires of type and section allowed, for voltage and current values not higher than ones indicated from the constructor.

**DANGER: EXPLOSION HAZARD DUE TO IMPROPER CONNECTION CAN CAUSE SEVERE OR FATAL INJURIES**

**WARNING: ALL DAMAGES TO THE DEVICE DUE TO IMPROPER CONNECTION WILL INVALIDATE CERTIFICATIONS, WARRANTIES AND ANY OTHER CONTRACTUAL AGREEMENT**

### Internal wiring

- Strictly adhere to wire size and length for which heat loss dissipation are taken into account for permissible wattage for a given T Class. In case of non-compliance explosion protection can no longer be guaranteed.
- Strictly adhere to the creepage and clearance required.
- Use only insulated wires of suitable voltage grade.
- Mounting rails or components must be loosened and fastened properly.

### External wiring

- The cables must comply with EN 60079-14 and relevant regulation and must have the required cross section.
- Strictly adhere to cable size and length for which heat loss dissipation are taken into account for permissible wattage for a given T Class and ambient temperature.
- Cable shall be in compliance with the T<sub>cable</sub>.
- In case of non-compliance explosion protection can no longer be guaranteed.

### Protective Earth conductor connection

- The device is equipped with one internal and two external protective conductor connection arrangements with knurled SS screw (anti-rotational) and flat washer.
- Use ring type lug of suitable material and size to be affixed between plain washers.
- The PE conductor size shall be as under:

CROSS SECTIONAL AREA OF PHASE CONDUCTOR S mm <sup>2</sup>	MINIMUM CROSS SECTIONAL AREA OF THE CORRESPONDING PE CONDUCTOR IN mm <sup>2</sup>
S ≤ 16	S with min of 4mm <sup>2</sup>
16 < S ≤ 35	16
S > 35	0.5 S

## 6. Maintenance

### 6.1 General information

The maintenance is a set of operations performed in order to maintain the safety and functional features of the apparatus during its operating life. The maintenance operations must be performed according to **EN 60079-17** standard (Edit in force).

The apparatus must be submitted to a detailed maintenance program studied and managed by qualified and authorized technicians and related to the type of apparatus, its operating service and environmental conditions.

- Do not exceed the limit of two years between inspections;
- Check the WARNINGS on the marking tag before opening the enclosure;
- All the maintenance operations must be performed with the electrical apparatus isolated from all energy sources;
- The apparatus must be installed and maintained in order to prevent dangers from casual contacts with under voltage elements and the risks of fire and burst derived from possible abnormal working conditions;
- If the apparatus is subjected to vibrations, verify frequently the fastening of screws, pipe and/or cable entries and each part of the enclosure;
- Replace damaged parts by original YSEBAERT spare parts only;
- The inspections and maintenance on the apparatus must be carried out only from expert staff, whose training has included all the necessary instructions on the installation modalities, on the laws and standards relevant and on the general principles of the classification of the hazardous areas.

## 7. Cleaning

### Cleaning of flanged joints and cover screws:

- Use only non-metallic brushes and non-corrosive cleaning fluids;
- All joints and screws must be thoroughly cleaned and lightly smeared with a suitable grease to protect and prevent corrosion. NON-HARDENING grease (LOCTITE 8104 or equivalent) must be used in order to prevent corrosion and protect them against bad weather;
- Clean and grease the flanged joints and cover screws before cover reassembling;
- Before reassembling the apparatus, verify that flanged joints and screws have not been damaged.

**WARNING: APPLY CAREFULLY THE GREASE TO THE JOINTS TO ENSURE THE RETENTION OF NOT HARDENING CHARACTERISTICS**

**DANGER: EXPLOSION HAZARD DUE TO DAMAGED JOINTS DURING CLEANING TREATMENTS CAN CAUSE SEVERE OR FATAL INJURIES**

### When the apparatus is installed in environments with combustible dust:

- Proceed with a regular cleaning of the apparatus to avoid dust accumulation on the surfaces

### When the Warning: "POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS" is present on the tag:

- Proceed with a regular cleaning using damp cloth or antistatic products only;
- During cleaning process, touch the apparatus with an insulated object.

The following precautions must be taken when the apparatus is installed in environments with combustible dust: **TO AVOID DUST ACCUMULATION ON THE SURFACES, USER MUST PROCEED WITH A REGULAR CLEANING OF THE APPARATUS.**

**WARNING: DO NOT USE AGGRESSIVE DETERGENTS OR ABRASIVE SOLVENTS WHICH CAN AFFECT NEGATIVELY THE FUNCTIONALITY OF THE APPARATUS**

## 8. Repairing

**Fastening screws of cover must be replaced by YSEBAERT spare parts only.**

Flameproof joints whose dimensions are different from the values specified in the tables of EN 60079-1 standard cannot be repaired.

**All repairing impacting the type of protection** (except for replacement with original YSEBAERT spare parts) **are admitted only under written authorization of YSEBAERT.**

Written agreements with YSEBAERT must be taken concerning procedures for mandatory verifications and tests to be performed after repairing.

## 9. Disposal

- Observe national and local regulations regarding disposal.
- Separate materials when sending it to recycling.
- Ensure environmentally friendly disposal of all components.

## 10. Special conditions of use

- The screws used for cover fastening must have a tensile strength higher or equal to 800 N/mm<sup>2</sup>.
- The dimensions of flameproof joints are different from the values specified in the tables of the EN 60079-1 standard. The flameproof joints are not intended to be repaired.

## **11. Warranties**

### **11.1 General Conditions**

Unless agreed otherwise, YSEBAERT's Terms of Guarantee are as follows (the one that occurs first):

- 12 months from installation or commissioning;
- 18 months from the delivery date.

### **11. 2 Terms and Conditions**

YSEBAERT guarantees that:

- Goods shall be in accordance with the Order Confirmation;
- Goods shall be new, merchantable, made of the specified materials, free from defects, and fit and safe for the purpose they are produced for;

YSEBAERT guarantees the repairing or replacement (at YSEBAERT sole discretion) of "non-compliant" Goods only in case Customers can be proved that:

- Goods have been correctly stored in an appropriate way according to Clause 4.1 "Transport and Storage" of the User Manual
- Goods have not suffered any breakage as a result of improper handling and according to Clause 4.2 "Handling" of the User manual
- Any weakness, deficiency, failure, breakdown or deterioration beyond normal wear and tear is the result of defective material, faulty design, poor workmanship or improper packaging.

For the entire guarantee period, Customers will enjoy all warranty rights covering manufacturing defects as per following conditions:

- Wiring and installation have been performed in accordance with operating instructions, application guidelines, standards and/or any other document accompanying the product;
- Goods have been correctly used according to the specified electrical values, in suitable applications and in the appropriate environmental conditions.

The warranty is invalid or void in the following circumstances:

- Installation, repairs and maintenance carried out by non-trained or unauthorized personnel;
- Installation, repairs and maintenance carried out in presence of power supply;
- Improper installation, repairs and maintenance carried out without observing the operating instructions prescribed by YSEBAERT;
- Abnormal and/or improper use or stress of the Goods, including, but not limited to, peak conditions and voltage dips, switching cycles;
- Modifications/changing to the Product made by Buyer without YSEBAERT written acceptance and/or installation of non-original components to the product;
- Use in violations or non-compliance with any standard, code or instruction;
- Defects, losses, damages or malfunctions due to any natural disaster, such as fire and earthquake, vandalism, civil disturbances, electrical overload, incorrect power supply, electric current fluctuations, installations in corrosive environments, induced vibration, harmonic oscillation or resonance phenomena caused by the movement of air currents around the Product, alteration, accident.

*WARNING: in case the goods should include batteries, to maintain performance and expected life, it is necessary to store them in proper ambient conditions and recharge them timely, as per producer recommendations. Please read carefully Battery Producer User Manual available online and YSEBAERT Product User Manual specific Clause*

YSEBAERT's guarantee does not cover:

- The replacement of component subject to wear which can be assimilated as consumables which may have, for objective reasons, a shorter working life than the one foreseen in the guarantee. As not exhaustive examples: batteries, light bulbs, gaskets, ....

### **11.3 Liability limitations**

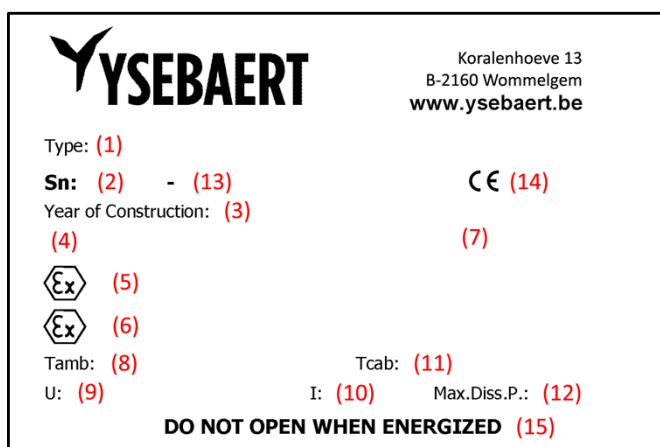
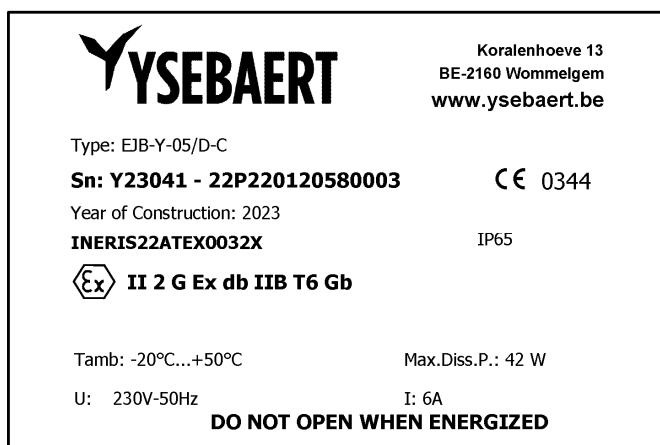
- YSEBAERT shall be liable for the repairing or replacing of non-compliant Goods, in case Customers can prove that any weakness, deficiency, failure, breakdown is due to YSEBAERT's defections as explained above.
- All replacement or repaired Products are warranted solely for the remain of the Warranty Period related to the originally purchased Product.
- YSEBAERT's liability, with respect to a non-compliant or defective Product, shall in any event be limited to the price paid by the Customer for the purchase of the aforementioned defective Product.
- Under no circumstances, YSEBAERT shall be held liable for electrical supply conditions, including supply spikes, over/under-voltage, that are beyond the limits specified for each individual Product and those defined by relevant supply standards.
- Under no circumstances, YSEBAERT shall be held liable for any damages in terms of: loss of revenue, savings or profits, interruption of operating activities, loss of contracts and/or business opportunities arising out of breach of Warranty Terms & Conditions herein described, regardless of whether such damages were foreseeable and whether or not YSEBAERT was advised of such damages.
- These limitations of liability shall not apply to damages related to personal injury or death if caused by gross negligence or willful misconduct of YSEBAERT.

### **11.4 Management of non-conformities**

In case of receiving a Product considered as non-compliant, please contact [exzone@ysebaert.be](mailto:exzone@ysebaert.be) and communicate the following information: Company name, PO number, delivery date, non-compliant Product and the reason(s) why the Product has been considered as non-compliant. YSEBAERT will evaluate the request and the Product will be repaired or replaced, at YSEBAERT sole discretion.

## 12. Marking

Find below an example of marking that will be present on flameproof enclosure EJB Series



(1)	Equipment type designation given by manufacturer
(2)	Serial number Y.....
(3)	Year of construction
(4)	Certificate
(5)	ATEX marking (gas)
(6)	ATEX marking (dust)
(7)	IP degree
(8)	Ambient temperature
(9)	Voltage
(10)	Current
(11)	Temperature at branching point
(12)	Max. dissipated power
(13)	Serial number of the empty housing
(14)	Identification of Notified Body that has issued the Production Quality Assurance Notification
(15)	Warnings



## 13. Annex A – Technical data

### 13.1 Explosion protection

Europe (ATEX)

**II 2 G Ex db IIB T(\*\*) Gb or**  
**II 2 G Ex db IIB+H2 T(\*\*) Gb or**  
**II 2 G Ex db ia/ib IIB T(\*\*) Gb or**  
**II 2 G Ex db ia/ib IIB+H2 T(\*\*) Gb and/or**  
**II 2 D Ex tb IIIC T(\*\*) Db**  
**II 2 D Ex tb ia/ib IIIC T(\*\*) Db**  
**\*\* T6/T85°C, T5/T100°C, T4/T135°C, T3/T200°C**

**II 2(1) G Ex db [ia Ga] IIB T6 Gb or**  
**II 2(1) G Ex db [ia Ga] IIB+H2 T6 Gb and/or**  
**II 2(2) G Ex db [ib] IIB T6 Gb or**  
**II 2(2) G Ex db [ib] IIB+H2 T6 Gb and/or**  
**II 2(1) G Ex db ia/ib [ia Ga] IIB T6 Gb or**  
**II 2(1) G Ex db ia/ib [ia Ga] IIB+H2 T6 Gb and/or**  
**II 2(2) G Ex db ia/ib [ib] IIB T6 Gb or**  
**II 2(2) G Ex db ia/ib [ib] IIB+H2 T6 Gb and/or**

**II 2(1) D Ex tb [ia Da] IIIC T85°C Db**  
**II 2(2) D Ex tb [ib] IIIC T85°C Db**  
**II 2(1) D Ex tb ia/ib [ia Da] IIIC T85°C Db**  
**II 2(2) D Ex tb ia/ib [ib] IIIC T85°C Db**

**I M2 Ex db I Mb**  
**I M2 Ex db ia/ib I Mb**  
**I M2(M1) Ex db [ia Ma] I Mb**  
**I M2(M2) Ex db [ib] I Mb**  
**I M2(M1) Ex db ia/ib [ia Ma] I Mb**  
**I M2(M2) Ex db ia/ib [ib] I Mb**

## 13.2 Electrical data

Max. supply voltage:	<b>20 KVac or 20 KVdc</b>
Max. current:	<b>2.000 A</b>
Rated frequency:	<b>0-1.000 Hz</b>
Max. supply voltage for «IS» element:	<b>500 V</b>

## 13.3 Mechanical data

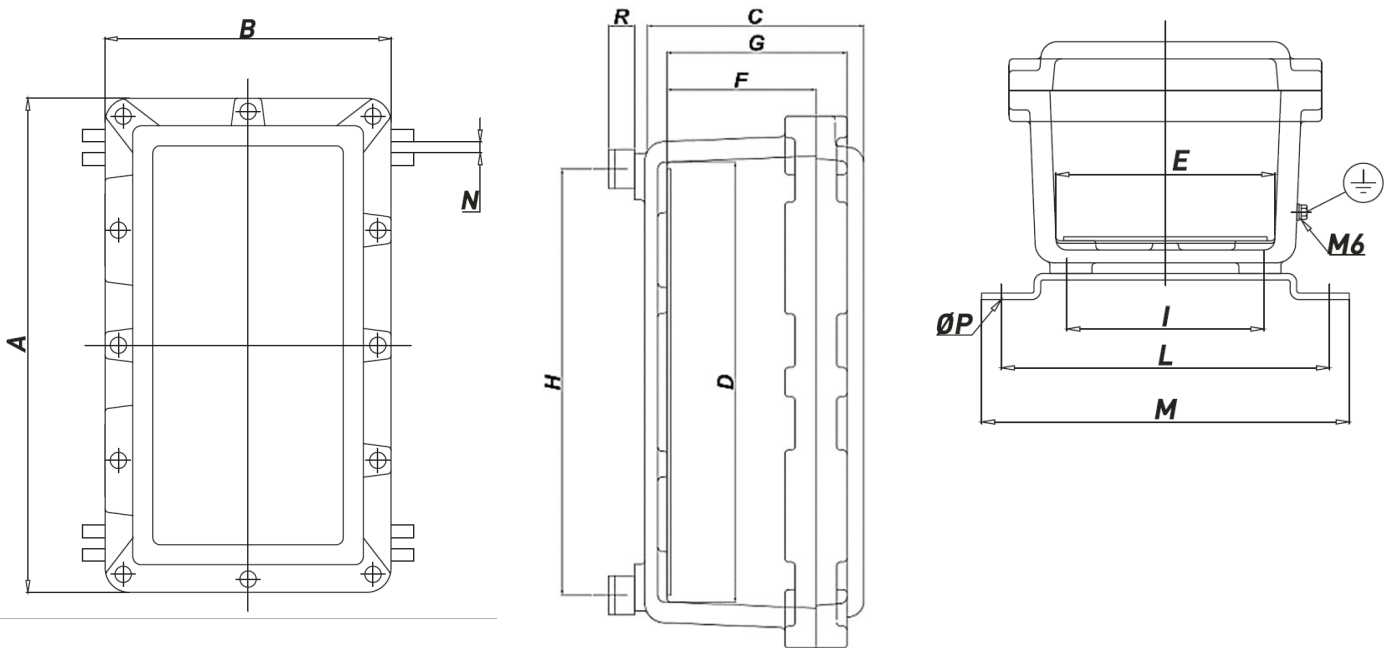
Degree of protection:	<b>IP66</b>
Ambient temp. range:	<b>-60°C to +60°C (without window)</b> <b>-50°C to +60°C (with window)</b>
Body:	<b>Copper-free aluminium or</b> <b>AISI316L stainless steel or</b> <b>Galvanized carbon steel</b>
Hinges:	<b>AISI316L stainless steel</b>
Hand grip* (to open the cover)	<b>Polyamide reinforced with glass fiber or</b> <b>Polypropylene</b>
Hardware and screws:	<b>AISI316L stainless steel</b>
Entries:	<b>Metric pitch 1.5, ANSI B1.20.1 NPT</b>
Mounting brackets:	<b>Stainless steel A4-80</b>
Coating / Painting:	<b>Polyurethane painting cycle</b>
Enclosure colour:	<b>Blue (RAL5014) - Other colours available upon request</b>
Certification label:	<b>Acrylic laminate – Traffolyte available upon request</b>

## 13.4 Optional accessories

ACCESSORIES	FEATURES
<b>WALL MOUNTING BRACKETS C/W SCREWS</b>	EJB-2: Screws STF-2
	EJB-3: Screws STF-3
	EJB-4/5: Screws STF-4/5
	EJB-6: Screws STF-6
	EJB-8: Screws STF-8
	EJB-9: Screws STF-9
	EJB-10: Screws STF-10
	EJB-11: Screws STF-11
	EJB-12: Screws STF-12
	EJB-13: Screws STF-13
	EJB-14: Screws STF-14
<b>DRAIN / BREATHER VALVE</b>	ECR-1 Valve
<b>AISI304 / AISI316L STAINLESS STEEL HINGES (for EJB in copper-free aluminium only)</b>	EJB from 2 to 5: Length 56x38mm
	EJB from 6 to 11: Length 60x45mm
	EJB from 12 to 14: Length 108x45mm
<b>DOOR HANDLE C/W SCREWS</b>	EJB from 8 to 14
<b>KNOB C/W SCREWS</b>	EJB up to 6
<b>OPERATION HEADS</b>	PL.. Series: Push buttons, mechanical operators, signaling lamps
	PSRC.. Series: Rotating switches
<b>WINDOWS</b>	Standard shape: Rectangular Standard dimensions (mm): 45x70; 100x170; 100x270; 110x290 Customization is available upon request

## 14. Annex B – Enclosure dimensions

EJB.. in copper-free aluminium

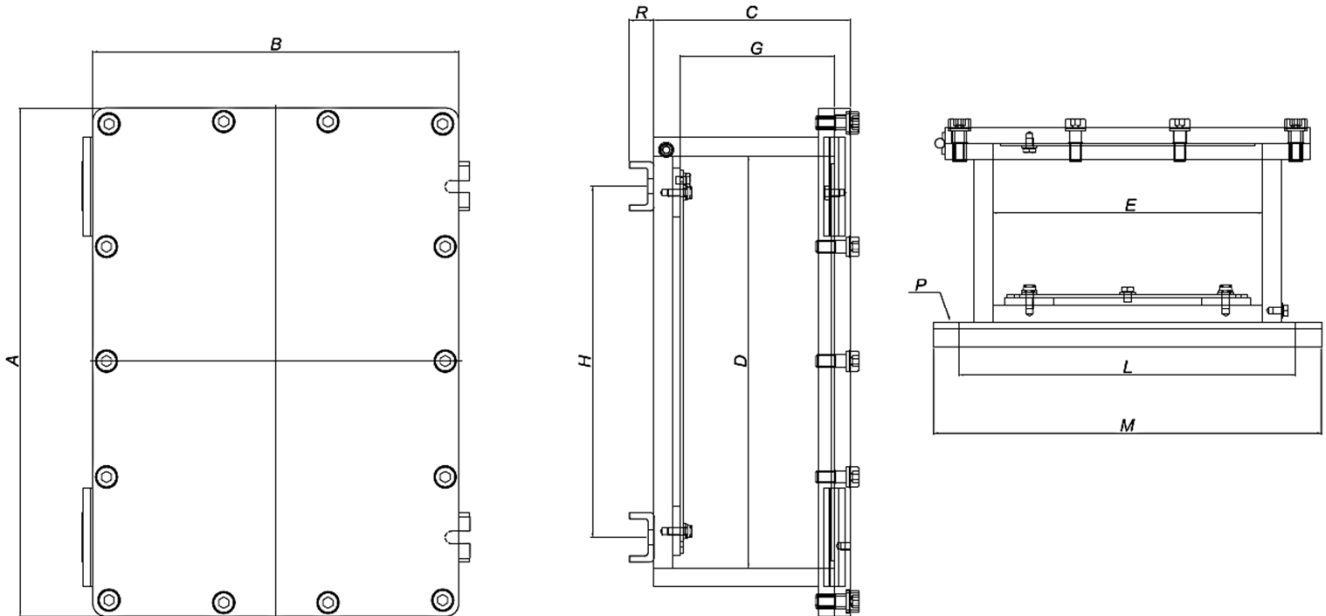


### EJB.. Series enclosures c/w internal mounting plate

TYPE	DIMENSIONS [mm]														WEIGHT [Kg]	COVER ENTRIES	MOUNTING PLATE(S)
	A	B	C	D	E	F	G	H	I	L	M	N	ØP	R			
EJB-2	298	238	163	230	168	116	135	205	140	250	280	9	M6	20	10.07	12	160 X 220
EJB-3	410	236	167	340	167	115	136	330	150	250	280	9	M8	20	13.40	18	155 X 330
EJB-3A	410	236	191	340	167	115	158	330	150	250	280	9	M8	20	13.50	9	155 X 330
EJB-4	415	300	165	335	220	116	132	300	190	300	320	9	M8	20	17.50	20	210 X 325
EJB-5	477	297	221	392	209	157	182	350	185	300	320	9	M8	20	20.50	22	200 X 385
EJB-6	478	404	226	387	310	160	186	355	280	390	420	9	M8	20	33.00	28	300 X 380
EJB-8	630	361	246	530	262	173,5	204	495	225	340	370	9	M8	20	36.05	36	250 X 520
EJB-9	532	465	252	426	363	177	204	410	340	440	470	12	M10	20	40.00	34	350 X 420
EJB-10	754	366	294	630	250	217	234	580	205	330	360	12	M10	20	48.50	34	240 X 620
EJB-11	592	501	257	483	394	174	204	445	360	480	510	12	M10	20	53.30	44	380 X 470
EJB-12	801	450	300	690	335	206,5	243	640	285	425	450	14	M12	20	73.00	54	325 X 625
EJB-13	830	604	298	723	500	160	236	630	405	580	620	14	M12	20	106.00	76	463 X 683
EJB-13A	830	604	404	723	500	265	322	630	405	580	620	14	M12	20	124.00	76	463 X 683
EJB-14	970	770	478	795 745	595 545	343 378	404 439	765	565	710	770	16	M14	25	245.00	0	795x595 745x545
EJB-14*	970	770	461	795 745	595 545	343 378	367 402	765	565	710	770	16	M14	25	310.00	57	795x595 745x545

\*Copper-free aluminium enclosure with stainless steel cover

EJB in AISI316L stainless steel / Galvanized carbon steel

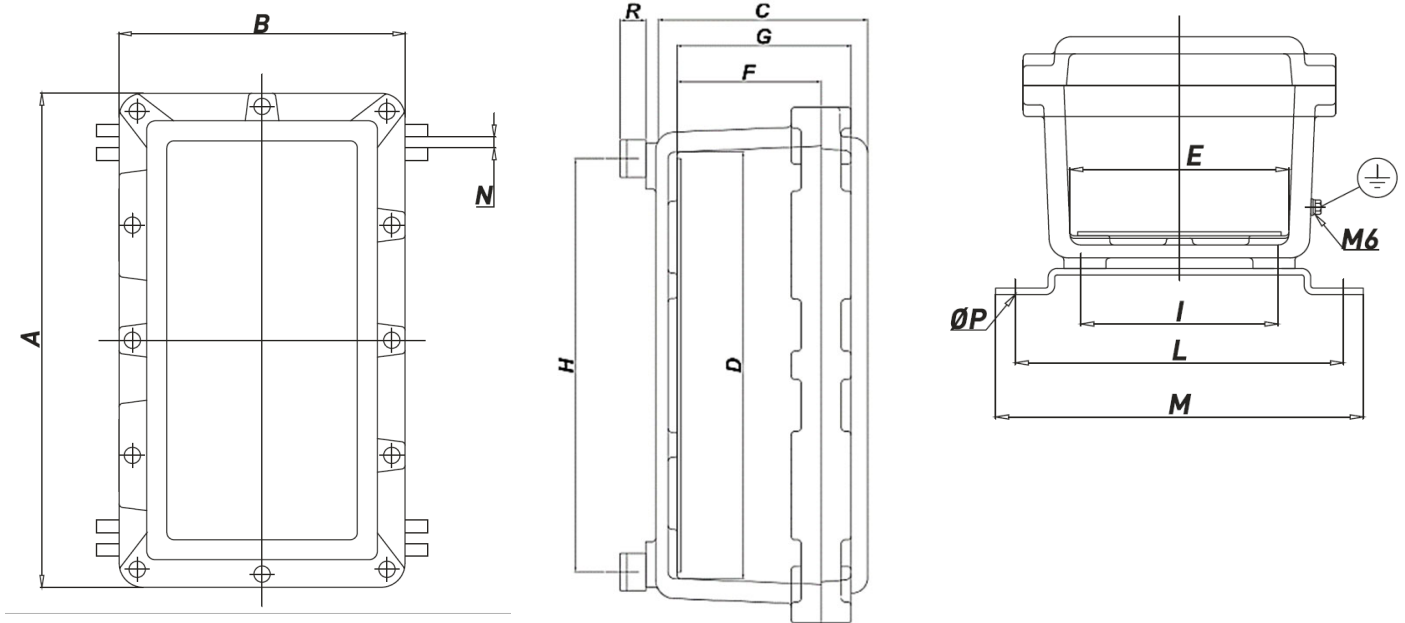


**EJB.. Series enclosures c/w internal mounting plate**

TYPE	DIMENSIONS [mm]											WEIGHT [Kg]	COVER ENTRIES	INT. MOUNTING PLATE
	A	B	C	D	E	G	H	L	M	ØP	R			
EJB-2	296	234	158	230	168	132	205	250	280	10	20	35	12	160 X 220
EJB-3	408	235	161	340	167	130	330	250	280	10	20	45	18	155 X 330
EJB-4	414	298	160	336	220	126	300	305	340	12	20	55	20	210 X 325
EJB-5	472	289	210	392	209	176	350	295	330	12	20	70	22	200 X 385
EJB-6	489	414	224	399	324	190	355	410	450	14	25	93	28	300 X 380
EJB-8	617	348	237	531	162	198	495	360	400	14	25	114	36	250 X 520
EJB-9	516	453	237	426	363	198	400	460	500	14	25	118	34	350 X 420
EJB 10	726	344	267	630	248	228	580	340	380	14	25	125	40	560X178
EJB-11	585	496	236	483	394	215	445	490	530	14	25	139	44	380 X 470
EJB-12	809	459	299	705	355	256	640	440	480	16	30	181	54	325 X 675
EJB-13	825	602	269	723	500	226	667	605	650	18	30	235	76	463 X 683
EJB-13A	825	602	355	723	500	330	667	605	650	18	30	262	76	463 X 683
EJB-13 XL	940	650	404	840	550	356	775	650	690	18	30	300	80	793 x 509
EJB-14	970	770	436	850	650	378	790	760	800	20	30	530	57	795 X 595

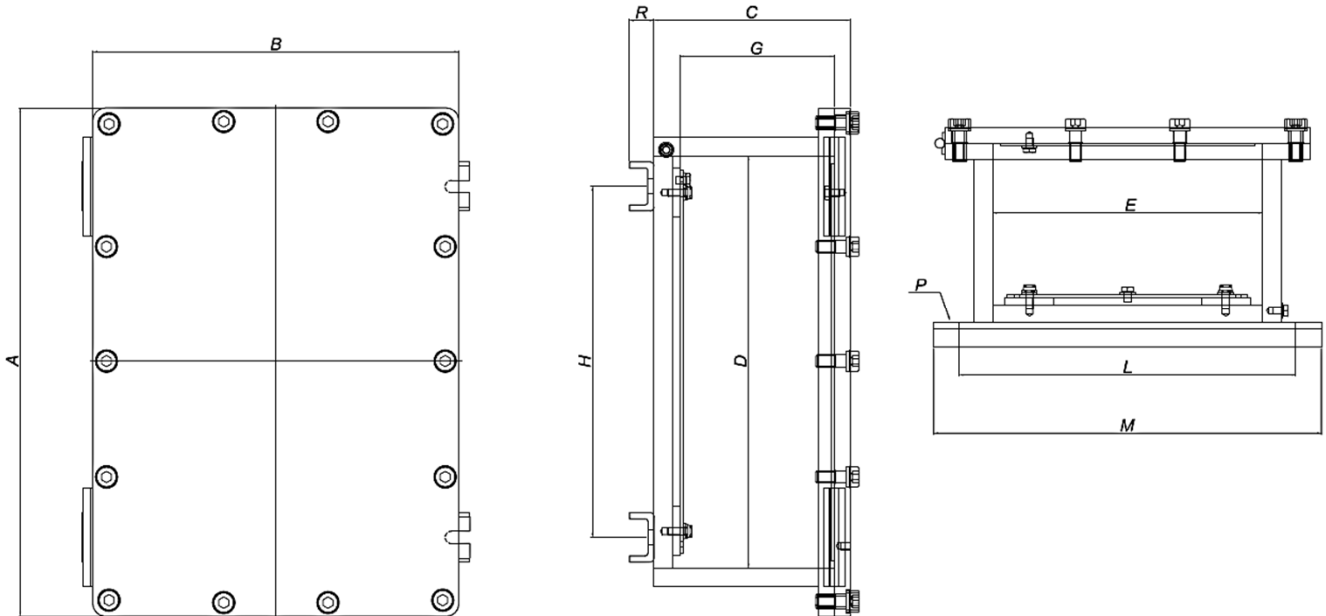
## 15. Annex C – Maximum number of entries

EJB.. in copper-free aluminium



TYPE	EJB-2	EJB-3	EJB-3A	EJB-4	EJB-5	EJB-6	EJB-8	EJB-9	EJB-10	EJB-11	EJB-12	EJB-13	EJB-13A	EJB-14*
M20 - ½"	9/7	14/7	14/7	14/9	27/13	24/18	35/16	27/24	57/21	32/27	61/28	48/32	81/54	111/110
M25 - ¾"	9/5	7/3	7/3	7/4	14/7	14/10	29/13	24/18	46/18	21/27	40/18	27/18	54/36	71/70
M32 - 1"	4/3	6/3	6/3	6/4	12/5	12/9	18/8	12/10	29/10	14/12	32/16	23/16	35/24	43/43
M50 - 1½"	3/2	4/2	4/2	4/3	5/2	5/4	7/3	9/9	14/5	6/5	16/7	9/6	18/10	17/17
M63 - 2"	2/1	3/1	3/1	3/2	4/2	4/3	6/2	4/4	12/4	5/4	12/5	8/5	14/9	11/11
M75 - 2½"	-	-	-	-	3/1	3/2	4/2	3/3	5/2	4/3	6/3	6/4	6/4	7/7
M80 - 3"	-	-	-	-	2/1	2/2	3/1	2/2	4/1	3/2	4/2	5/3	5/3	6/6
M90 - 3½"	-	-	-	-	2/1	2/2	3/1	2/2	4/1	3/2	4/2	5/3	5/3	6/5
M100 - 4"	-	-	-	-	2/1	2/2	2/1	2/2	4/1	3/2	4/2	4/3	5/3	5/4

EJB.. in AISI316L stainless steel / Galvanized carbon steel



TYPE	EJB-2	EJB-3	EJB-3A	EJB-4	EJB-5	EJB-6	EJB-8	EJB-9	EJB-10	EJB-11	EJB-12	EJB-13	EJB-13A	EJB-13XL	EJB-14
M20 - ½"	9/7	14/7	14/7	14/9	27/13	24/18	35/16	27/24	57/21	32/27	61/28	48/32	81/54	96/110	111/110
M25 - ¾"	9/5	7/3	7/3	7/4	14/7	14/10	29/13	24/18	46/18	21/27	40/18	27/18	54/36	62/70	71/70
M32 - 1"	4/3	6/3	6/3	6/4	12/5	12/9	18/8	12/10	29/10	14/12	32/16	23/16	35/24	39/43	43/43
M50 - 1½"	3/2	4/2	4/2	4/3	5/2	5/4	7/3	9/9	14/5	6/5	16/7	9/6	18/10	17/17	17/17
M63 - 2"	2/1	3/1	3/1	3/2	4/2	4/3	6/2	4/4	12/4	5/4	12/5	8/5	14/9	12/11	11/11
M75 - 2½"	-	-	-	-	3/1	3/2	4/2	3/3	5/2	4/3	6/3	6/4	6/4	7/7	7/7
M80 - 3"	-	-	-	-	2/1	2/2	3/1	2/2	4/1	3/2	4/2	5/3	5/3	6/6	6/6
M90 - 3½"	-	-	-	-	2/1	2/2	3/1	2/2	4/1	3/2	4/2	5/3	5/3	5/4	6/5
M100 - 4"	-	-	-	-	2/1	2/2	3/1	2/2	4/1	3/2	4/2	4/3	4/3	4/3	5/4

\*Max. number of entries can increase for EJB-14 if  $T_{amb} = -20^{\circ}C$



EU Declaration of  
conformity

EU Verklaring van  
overeenstemming

UE Déclaration de  
conformité

EU Konformitäts-  
erklärung

INERIS22ATEX0032X

We,

Wij,

Nous,

Wir,

YSEBAERT N.V.  
Koralenhoeve 13  
2160 Wommelgem  
Belgium

Hereby declare in our sole  
responsibility, that the  
product

Verklaren hierbij onder eigen  
verantwoordelijkheid dat het  
product

Déclarons sous notre entière  
responsabilité, que le  
produit

Erklären in alleiniger  
Verantwortung, dass das  
Produkt

“Enclosure type EJB\*”

Complies with the  
requirements of the  
ATEX114 Directive  
2014/34/EU,

Voldoet aan de eisen van  
ATEX114 Richtlijn 2014/34/EU,

Correspond aux exigences  
de la Directive ATEX114  
2014/34/UE,

Die Anforderungen der  
ATEX114-Richtlinie  
2014/34/EU,

And with their  
corresponding harmonized  
standards, and other  
normative documents.

En aan de corresponderende  
geharmoniseerde normen en  
andere normatieve  
documenten.

Et à leurs normes  
harmonisées, et aux autres  
documents normatifs  
suivants.

Und den entsprechenden  
harmonisierten Normen,  
und weiteren normativen  
Dokumenten entspricht.

EN 60079-0 : 2018  
EN 60079-1 : 2014  
EN 60079-11 : 2012  
EN 60079-31 : 2014

Notified body of the  
certification


Aangemelde instantie

Organe notifié et compétent

Benannte Stelle

INERIS, notified body number 0080  
Parc Technologique ALATA, BP n°2  
60550 Verneuil-en-Halatte  
France

Wommelgem, 20-02-2023

  
Lotte Ysebaert  
Managing Director / Gedelegeerd bestuurder  
Président-directeur général / Geschäftsführer





**2 Appareil ou système de protection destiné à être utilisé en atmosphères explosibles**  
*Equipment and protective systems intended for use in potentially explosive atmospheres*

**Directive 2014/34/UE**  
**Directive 2014/34/EU**

**1 ATTESTATION D'EXAMEN UE DE TYPE**  
**EU-TYPE EXAMINATION CERTIFICATE**

**3** Numéro de l'attestation d'examen UE de type / *Number of the EU-Type Examination Certificate*

**INERIS 22ATEX0032X**

INDICE / *ISSUE* : 00

**4** Appareil ou système de protection / *Equipment or protective system:*

**Boîtiers électroniques et/ou boîtes de jonction type EJB\***  
*Controls Units and/or Junction Boxes type EJB\**

**5** Fabricant / *Manufacturer:*

**YSEBAERT N.V.**

**6** Adresse / *Address:*

**Koralenhoeve 13  
2160 Wommelgem  
BELGIUM**

**7** Cet appareil ou système de protection et toute autre variante acceptable de celui-ci sont décrits dans l'annexe de la présente attestation et dans les documents descriptifs cités dans cette annexe.

*This equipment or protective system and any acceptable variation thereto is specified in the Annex of this certificate and the descriptive documents therein referred to.*

**8** L'Ineris, organisme notifié et identifié sous le numéro 0080, conformément aux articles 17 and 21 de la directive 2014/34/UE du parlement européen et du conseil, datée du 26 février 2014, et accrédité par le Cofrac sous le n° 5-0045 dans le cadre de l'activité de certification de produits et services (portée disponible sur [www.cofrac.fr](http://www.cofrac.fr)) certifie que cet appareil ou système de protection répond aux exigences essentielles de sécurité et de santé en ce qui concerne la conception et la construction des appareils et des systèmes de protection destinés à être utilisés en atmosphères explosibles, décrites en annexe ii de la directive.

*Ineris, notified body and identified under number 0080, in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, and accredited by COFRAC under number 5-0045 for certification of products and services (scope of accreditation available on the website [www.cofrac.fr](http://www.cofrac.fr)), certifies that this equipment or protective system fulfils the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.*

Les procédures de certification sont disponibles sur [www.ineris.fr](http://www.ineris.fr).

*The rules of certification are available on Ineris website on: [www.ineris.fr](http://www.ineris.fr).*

Les examens et les essais sont consignés dans le rapport :

*The examinations and the tests are recorded in report:*

**N° 038042**

9 Le respect des exigences essentielles de sécurité et de santé est assuré par :

*The respect of the Essential Health and Safety Requirements has been assured by:*

- la conformité à / *Conformity with:*

EN IEC 60079-0	:	2018
EN 60079-1	:	2014
EN 60079-11	:	2012
EN 60079-31	:	2014

- les solutions spécifiques adoptées par le fabricant pour satisfaire aux exigences essentielles de sécurité et de santé décrites dans les documents descriptifs /

*Specific solutions adopted by the manufacturer to meet the Essential Health and Safety Requirements described in the descriptive documents*

10 Si le signe X est placé à la suite du numéro de l'attestation d'examen UE de type, il indique que cet appareil ou système de protection est soumis à des conditions spéciales d'utilisation, mentionnées dans l'annexe de la présente attestation.







*If the sign X is placed after the number of the EU type examination certificate, it indicates that this equipment and protective system is subject to the Specific Conditions of Use, mentioned in the annex of this certificate.*

11 Cette attestation d'examen UE de type se rapporte uniquement à la conception, aux examens et essais de l'appareil ou système de protection spécifié conformément à la directive 2014/34/UE. D'autres exigences de cette directive s'appliquent à la fabrication et à la fourniture de cet appareil ou système de protection, celles-ci ne sont pas couvertes par cette attestation.

*This EU-Type Examination Certificate relates only to the design, examinations and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These requirements are not covered by this certificate.*

12 Le marquage de l'appareil ou du système de protection doit contenir :

*The marking of the equipment or the protective system shall include the following:*

 II 2 GD ou/or  II 2 (1) GD ou/or  II 2 (2) GD ou/or  
 I M2 ou/or  I M2(M1) ou/or  I M2(M2)

Verneuil-en-Halatte, 2022-12-01

Le directeur général de l'Ineris  
 Par délégation  
*The Chief Executive Officer of Ineris*  
 By delegation

13

**ANNEXE****15 DESCRIPTION DE L'APPAREIL OU DU SYSTÈME DE PROTECTION :**

Les boîtiers électroniques et/ou boîtes de jonction série EJB\* sont couverts par le Certificat de Composant Ex INERIS 21ATEX9004U avec les modes de protection Ex db I, IIB ou IIB+H2 et/ou Ex tb IIIC. Ils sont destinés à contenir des équipements et/ou terminaux électriques et/ou électroniques, définis dans la note technique. Les unités EJB peuvent également contenir des appareils associés de sécurité intrinsèque ayant un type de protection [Ex ia ou ib] et certifiés selon les normes EN 60079-0 / EN 60079-11. Lors de l'utilisation des bornes de sécurité intrinsèque, le mode de protection « ia » ou « ib » peut être spécifié sur la plaque de marquage.

Ces enveloppes peuvent être équipés des accessoires suivants :

- Dispositifs de drainage et de respiration ECR...
- Boutons poussoirs PL...
- Bouton-poussoir PLC-R...
- Actuateurs rotatifs PSRC... ou SRC...
- Voyants lumineux PLD...

Ces boîtiers peuvent également être équipés de ventilateurs jusqu'à 50 m<sup>3</sup>/h et d'une batterie de capacité 1,5 Ah ou moins (voir note technique).

La cellule photoconductrice de type FTC fabriquée par SICE Srl. et certifié INERIS 02ATEX9006U avec type de protection Ex d IIB Gb peut être installé sur des boîtiers EJB de classe de température T5 ou T6 et dans une plage de température ambiante de -40 ° C à + 55 ° C. Lorsque FTC est installé, l'unité EJB est uniquement adaptée au groupe de gaz IIB (H2 et IIIC exclus).

Le couvercle peut être articulé sur le corps du boîtier. Les couvercles des EJB 2 à EJB 13 et 13A peuvent être équipés de fenêtres en verre trempé adaptées à la visualisation des matériels internes (par exemple, écrans, instruments de mesure, etc.). La classe de température des coffrets avec hublot est T4/T135 ° C maximum.

Les enveloppes possèdent les degrés de protection IP66 selon la norme EN 60529 mais le marquage final devra être en accord avec les degrés de protection minimales des accessoires montés sur les coffrets

**PARAMETRES RELATIFS A LA SECURITE :**

Les enveloppes sont prévues pour être utilisées dans une plage de températures ambiantes :

- De -50 ° C à + 60 ° C avec fenêtres
- De -60 ° C à + 60 ° C sans fenêtre

Pour boîtier sans élément de sécurité intrinsèque :

- Tension maximale : 20 kVac ou 20 kVdc
- Courant maximum : 2 000 A
- Fréquence nominale : 0 à 1000 Hz

Les puissances dissipées maximales sont définies dans le Tableau 1 pour les enveloppes sans fenêtre et le Tableau 2 pour les enveloppes avec fenêtre(s). Pour le Groupe I, les puissances maximales dissipées sont en accord avec les Tableaux 1 et 2 mais sans excéder les valeurs pour une classe de température T4.

13

**ANNEX****15 DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM:**

*The enclosures of control units and/or junction boxes EJB\* series are covered by the Ex Component Certificate INERIS 21ATEX9004U with Ex db I, IIB or IIB+H2 and/or Ex tb IIIC type of protection. They are intended to contain electric and/or electronic equipment and/or terminals, defined in the technical note. The EJB units can also contain intrinsically safe associated apparatus having type of protection [Ex ia or ib] and certified according to the EN 60079-0 / EN 60079-11 standards. When using intrinsic safety terminals, the type of protection "ia" or "ib" could be specified on the marking plate.*

*These enclosures can be fitted with the following accessories:*

- *Drain and breather devices ECR...*
- *Push buttons PL...*
- *Push button PLC-R...*
- *Rotary actuators PSRC... or SRC...*
- *Pilot lights PLD...*

*These enclosures can also be fitted with fans up to 50 m<sup>3</sup>/h and battery having capacity 1.5Ah or less (see technical note).*

*The photoconductive cell type FTC manufactured by SICE Srl. and certified INERIS 02ATEX9006U with type of protection Ex d IIB Gb can be installed on EJB enclosures having temperature class T5 or T6 and in range of ambient temperature -40°C to +55°C. When FTC is installed, the unit EJB is only suitable for gas group IIB (H2 and IIIC excluded).*

*The lid can be hinged to the enclosure body. The lids of EJB 2 to EJB 13 and 13A can be provided with windows made of tempered glass suitable for visualization of internal apparatus (e.g. displays, measuring instruments etc.). The temperature class of the enclosures with windows is maximum T4/T135°C.*

*These enclosures get the degrees of protection IP66 according to the EN 60529 standard but the final marking should be in accordance with the minimum degrees of protection of accessories mounted on the enclosures.*

**PARAMETERS RELATING TO THE SAFETY:**

*Enclosures are intended to be used in range of ambient temperatures:*

- *From -50°C to +60°C with windows*
- *From -60°C to +60°C without windows*

*For enclosure without intrinsic safety element:*

- *Maximum voltage: 20 kVac or 20 kVdc*
- *Maximum current: 2 000 A*
- *Rated frequency: 0 to 1000 Hz*

*Maximum dissipated powers are defined in the Table 1 for enclosures without window and Table 2 for enclosures with window(s). For Group I, the maximum dissipated powers are in accordance with the Tables 1 and 2 but not exceeding the values for temperature class T4.*

Pour boîtier avec élément de sécurité intrinsèque :

La température ambiante minimale doit être conforme aux composants SI installés à l'intérieur des boîtiers (barrières, terminaux ...)

- Tension maximale pour les éléments « SI » : 500 V

Les puissances dissipées maximales sont définies dans les Tableaux 1 et 2 pour les enveloppes avec sondes thermiques pour le Groupe II et Groupe III. Les puissances maximales dissipées sont définies le Tableau 3 pour les enveloppes sans sondes thermiques pour le Groupe II et Groupe III.

Pour le Groupe I, les puissances maximales dissipées sont en accord avec les Tableaux 1, 2 et 3 mais sans excéder les valeurs pour une classe de température T4.

Le seuil maximal de sonde thermique doit être :

Température ambiante / Ambient Temperature	Température ambiante pour élément SI / Ambient Temperature of the IS element	Seuil de coupure pour les sondes thermique / Threshold of release of the thermal probe
40°C et/and 50°C	≤ 60°C	55°C ± 5°C
	≤ 70°C	65°C ± 5°C
	≤ 80°C	75°C ± 5°C
	≤ 85°C	80°C ± 5°C
55°C et/and 60°C	≤ 70°C	65°C ± 5°C
	≤ 80°C	75°C ± 5°C
	≤ 85°C	80°C ± 5°C

For enclosure with intrinsic safety element:

The minimum ambient temperature must be in accordance with the IS components installed inside the enclosures (barriers, terminals...)

- Maximum voltage for "IS" elements: 500 V

Maximum dissipated powers are defined in the Tables 1 and 2 for enclosures with thermal probes for Group II and Group III. Maximum dissipated powers are defined in the Tables 3 for enclosures without thermal probes for Group II and Group III.

For Group I, the maximum dissipated powers are in accordance with the Tables 1, 2 and 3 but not exceeding the values for temperature class T4.

The maximum threshold of thermal probe shall be:

Pour les enveloppes avec voyants lumineux PLD :

Ces versions sont destinées à être utilisées dans une plage de températures ambiantes de -50 ° C à + 60 ° C.

Les voyants PLD peuvent être installées sur des enveloppes ayant une classe de température maximale T4/T135 ° C.

- Puissance nominale de la lampe à incandescence : ≤ 5 W
- Puissance dissipée maximale de la lampe LED : ≤ 3 W

Liste des Composants Ex pouvant être installés sur les enveloppes : Voir Tableau 4 à la fin du certificat.

For enclosure with pilot lights PLD:

These versions are intended to be used in range of ambient temperatures from -50°C to +60°C.

Pilot lights PLD can be installed on enclosures having temperature class maximum T4/T135°C.

- Nominal incandescent lamp power: ≤ 5 W
- Maximum LED lamp dissipated power: ≤ 3 W


List of the Ex components intended to be installed on the enclosures: See Table 4 at the end of the certificate.


**MARQUAGE :**


Le marquage doit être lisible et indélébile ; il doit comporter les indications suivantes :

**A- Coffrets du Groupe II et/ou Groupe III :**

YSEBAERT N.V.  
B-2160 Wommelgem  
EJB\* <sup>(1)</sup>  
INERIS 22ATEX0032X  
(Numéro de série)  
(Année de construction)

 II 2 G D  
Ex db <sup>(7)</sup> IIB ou IIB+H2 T<sup>(2)</sup> Gb  
Ex tb <sup>(7)</sup> IIIC T<sup>(2)</sup> Db

 II 2 (1) G D  
Ex db [ia Ga] <sup>(7)</sup> IIB ou IIB+H2 T<sup>(2)</sup> Gb  
Ex tb [ia Da] <sup>(7)</sup> IIIC T<sup>(2)</sup> Db

 II 2 (2) G D  
Ex db [ib] <sup>(7)</sup> IIB ou IIB+H2 T<sup>(2)</sup> Gb  
Ex tb [ib] <sup>(7)</sup> IIIC T<sup>(2)</sup> Db  
IP<sup>(6)</sup>


T. Amb : <sup>(3)</sup>  
T. Câble : <sup>(4)</sup>


**MARKING:**


Marking has to be readable and indelible; it has to include the following indications:

**A- Enclosures for Group II and/or Group III:**

YSEBAERT N.V.  
B-2160 Wommelgem  
EJB\* <sup>(1)</sup>  
INERIS 22ATEX0032X  
(Serial Number)  
(Year of Construction)

 II 2 G D  
Ex db <sup>(7)</sup> IIB or IIB+H2 T<sup>(2)</sup> Gb  
Ex tb <sup>(7)</sup> IIIC T<sup>(2)</sup> Db

 II 2 (1) G D  
Ex db [ia Ga] <sup>(7)</sup> IIB or IIB+H2 T<sup>(2)</sup> Gb  
Ex tb [ia Da] <sup>(7)</sup> IIIC T<sup>(2)</sup> Db

 II 2 (2) G D  
Ex db [ib] <sup>(7)</sup> IIB or IIB+H2 T<sup>(2)</sup> Gb  
Ex tb [ib] <sup>(7)</sup> IIIC T<sup>(2)</sup> Db  
IP<sup>(6)</sup>

T. Amb : <sup>(3)</sup>  
Tcable: <sup>(4)</sup>

AVERTISSEMENTS :  
 NE PAS OUVRIR SI UNE ATMOSPHERE  
 EXPLOSIVE EST PRESENTE  
 RISQUE DE CHARGE ÉLECTROSTATIQUE  
 POTENTIEL – VOIR INSTRUCTIONS <sup>(5)</sup>  
 ENTREES DE CABLE : VOIR INSTRUCTIONS

WARNINGS:  
 DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE IS  
 PRESENT  
 POTENTIAL ELECTROSTATIC CHARGING HAZARD  
 – SEE INSTRUCTIONS <sup>(5)</sup>  
 CABLE ENTRIES: SEE INSTRUCTIONS




(1)	EJB *	Enveloppe série / Enclosures series
		Enveloppe taille / Enclosure size (2; 2S ; 3 ; 3A ; 4 ; 5 ; 6 ; 8 ; 9 ; 10 ; 11 ; 12 ; 13 ; 13A ; 13XL ; 14)

- (2) Les classes de température sont définies dans les tableaux ci-dessus en fonction des puissances dissipées et de la température ambiante maximale
- (3) Voir paramètres relatifs à la sécurité
- (4) Le Tcâble est défini dans les tableaux ci-dessus en fonction des puissances dissipées maximales et de la température ambiante maximale
- (5) Avertissement à ajouter lorsque :
- L'épaisseur de peinture non conductrice appliquée sur l'enceinte est > 2 mm (groupe IIB) ou > 0,2 mm (groupe IIB + H2), ou
  - Les matériaux individuels non conducteurs (étiquettes) appliqués sur les boîtiers peints ont une surface exposée > 10 000 mm<sup>2</sup> (Groupe IIB) ou > 2 000 mm<sup>2</sup> (Groupe IIB + H2), ou
  - Les matériaux individuels non conducteurs (étiquettes) appliqués sur des boîtiers non peints (surface conductrice mise à la terre) ont une surface exposée > 40 000 mm<sup>2</sup> (Groupe IIB) ou > 8 000 mm<sup>2</sup> (Groupe IIB + H2).
- (6) Selon le degré de protection minimum des accessoires montés sur le coffret.
- (7) Le mode de protection « ia » ou « ib » peut être ajouté en fonction de la configuration finale.

- (2) The temperature classes are defined in above Tables according to the maximum dissipated powers and the maximum ambient temperature
- (3) See parameters relating to safety
- (4) Tcable is defined in above Tables according to the maximum dissipated powers and the maximum ambient temperature
- (5) Warning to be added when:
- Thickness of not conductive paint applied on the enclosure is > 2 mm (Group IIB) or > 0.2 mm (Group IIB+H2), or
  - Not conductive individual materials (labels) applied on painted enclosures have exposed chargeable area > 10 000 mm<sup>2</sup> (Group IIB) or > 2 000 mm<sup>2</sup> (Group IIB+H2), or
  - Not conductive individual materials (labels) applied on unpainted (conductive earthed surface) enclosures have exposed chargeable area > 40 000 mm<sup>2</sup> (Group IIB) or > 8 000 mm<sup>2</sup> (Group IIB+H2).
- (6) In accordance with the minimum degrees of protection of accessories mounted on the enclosures.
- (7) Type of protection "ia" or "ib" could be added depending on the final configuration.

**B- Coffrets du Groupe I**




YSEBAERT N.V.  
 B-2160 Wommelgem  
 EJB\* <sup>(1)</sup>  
 INERIS 22ATEX0032X  
 (Numéro de série)  
 (Année de construction)

 I M2  
 Ex db <sup>(6)</sup> I Mb  
 I M2(M1)  
 Ex db [ia Ma] <sup>(6)</sup> I Mb  
 I M2(M2)  
 Ex db [ib] <sup>(6)</sup> I Mb  
 IP<sup>(5)</sup>

T. Amb: <sup>(2)</sup>  
 Tcable: <sup>(3)</sup>  
 AVERTISSEMENTS :  
 NE PAS OUVRIR SI UNE ATMOSPHERE EXPLOSIVE  
 EST PRESENTE  
 RISQUE DE CHARGE ÉLECTROSTATIQUE POTENTIEL  
 – VOIR INSTRUCTIONS <sup>(4)</sup>  
 ENTREES DE CABLE : VOIR INSTRUCTIONS

**B- Enclosures for Group I:**

YSEBAERT N.V.  
 B-2160 Wommelgem  
 EJB\* <sup>(1)</sup>  
 INERIS 22ATEX0032X  
 (Serial Number)  
 (Year of Construction)

 I M2  
 Ex db <sup>(6)</sup> I Mb  
 I M2(M1)  
 Ex db [ia Ma] <sup>(6)</sup> I Mb  
 I M2(M2)  
 Ex db [ib] <sup>(6)</sup> I Mb  
 IP<sup>(5)</sup>

T. Amb: <sup>(2)</sup>  
 Tcable: <sup>(3)</sup>  
 WARNINGS:  
 DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE IS  
 PRESENT  
 POTENTIAL ELECTROSTATIC CHARGING HAZARD  
 – SEE INSTRUCTIONS <sup>(4)</sup>  
 CABLE ENTRIES: SEE INSTRUCTIONS

(1)	EJB *	Enveloppe série / <i>Enclosures series</i>
		Enveloppe taille / <i>Enclosure size</i> (2; 2S ; 3 ; 3A ; 4 ; 5 ; 6 ; 8 ; 9 ; 10 ; 11 ; 12 ; 13 ; 13A ; 13XL ; 14)

- (2) Voir paramètres relatifs à la sécurité
- (3) Le Tcâble est défini dans les tableaux ci-dessus en fonction des puissances dissipées maximales et de la température ambiante maximale
- (4) Avertissement à ajouter lorsque :
- L'épaisseur de peinture non conductrice appliquée sur l'enceinte est > 2 mm, ou
  - Les matériaux individuels non conducteurs (étiquettes) appliqués sur les boîtiers peints ont une surface exposée > 10 000 mm<sup>2</sup>, ou
  - Les matériaux individuels non conducteurs (étiquettes) appliqués sur des boîtiers non peints (surface conductrice mise à la terre) ont une surface exposée > 40 000 mm<sup>2</sup>.
- (5) Selon le degré de protection minimum des accessoires montés sur le coffret.
- (6) Le mode de protection « ia » ou « ib » peut être ajouté en fonction de la configuration finale

L'ensemble du marquage peut être réalisé dans la langue du pays d'utilisation.

L'appareil ou le système de protection doit aussi porter le marquage normalement prévu par les normes de construction qui le concernent.

**EXAMENS ET ESSAIS INDIVIDUELS :**

Conformément au § 16.1 de la norme EN 60079-1, chaque matériel ou partie de l'appareil (opérateurs...) ci-dessus défini doit avoir subi avec succès, avant livraison, une épreuve de surpression statique d'une durée comprise entre 10 et 60 secondes sous une pression en accord avec les valeurs spécifiées dans le certificat INERIS 21ATEX9004U.

**16 DOCUMENTS DESCRIPTIFS :**

Les documents descriptifs cités ci-après, constituent la documentation technique de l'appareil, objet de la présente attestation.

Titre / Title	Réf. / Ref.	Rév. / Rev.	Date / Date
EJB* ENCLOSURE MARKING DETAILS	EJB TAG	0	2021-03-22
INSTRUCTION NOTE	TN2103 Annex A	0	2021-02-02

**17 CONDITIONS SPÉCIALES D'UTILISATION :**

- Lors de l'installation, pour le groupe I, l'utilisateur devra tenir compte du fait que le matériel n'a subi qu'un choc mécanique faible.
- Lors d'une utilisation dans une atmosphère explosive du Groupe I, l'exposition des coffrets avec hublots aux agents chimiques tels que des huiles, des graisses et liquides hydrauliques doit être exclue.

- (2) *See parameters relating to safety*
- (3) *Tcable is defined in above Tables according to the maximum dissipated powers and the maximum ambient temperature*
- (4) *Warning to be added when :*
- *Thickness of not conductive paint applied on the enclosure is > 2 mm, or*
  - *Not conductive individual materials (labels) applied on painted enclosures have exposed chargeable area > 10 000 mm<sup>2</sup>, or*
  - *Not conductive individual materials (labels) applied on unpainted (conductive earthed surface) enclosures have exposed chargeable area > 40 000 mm<sup>2</sup>.*
- (5) *In accordance with the minimum degrees of protection of accessories mounted on the enclosures.*
- (6) *Type of protection "ia" or "ib" could be added depending on the final configuration.*

*Marking may be carried out in the language of the country of use.*

*The protective system or equipment has also to carry the marking normally stipulated by its construction standards.*

**ROUTINE EXAMINATIONS AND TESTS:**

*In accordance with clause 16.1 of the EN 60079-1 standard each apparatus or part of apparatus (operators..) defined above has to have successfully passed, before delivery, an overpressure test of a period comprised between 10 and 60 seconds under a pressure in accordance with the values specified in the certificate INERIS 21ATEX9004U.*

**16 DESCRIPTIVE DOCUMENTS:**

*The descriptive documents quoted hereafter constitute the technical documentation of the equipment, subject of this certificate.*

**17 SPECIFIC CONDITIONS OF USE:**

- *During the installation, for Group I, the user will take into consideration that the equipment underwent only a shock corresponding to an energy of a low risk.*
- *During use in explosive atmosphere of Group I, the exposure of the enclosures with windows to specific chemical agents as oils, greases and hydraulic liquids must be excluded.*

**Conditions spéciales d'utilisation complémentaires pour le mode de protection « Ex db » :**

- Les dimensions des joints antidéflagrants sont différentes des valeurs spécifiées dans les tableaux de la norme EN 60079-1. Les joints antidéflagrants ne sont pas destinés à être réparés.
- Les vis utilisées pour la fixation du couvercle doivent avoir une résistance à la traction supérieure ou égale à 800 N/mm<sup>2</sup>.

Les instructions d'utilisation sont complétées par celles spécifiées dans la notice d'instructions du fabricant et des composants Ex constitutifs de l'équipement final.

**Additional conditions of uses when protected by "Ex db":**

- *The dimensions of flameproof joints are different from the values specified in the tables of the EN 60079-1 standard. The flameproof joints are not intended to be repaired.*
- *The screws used for the lid fastening must have a tensile strength higher or equal to 800 N/mm<sup>2</sup>.*

*The instructions for safe use are completed by those stipulated in the instructions manuals of the manufacturer and of each Ex component fitted on the final product.*

**18 EXIGENCES ESSENTIELLES DE SECURITE ET DE SANTE :**

Le respect des exigences essentielles de sécurité et de santé est assuré par :

- La conformité aux normes listées au paragraphe (9).
- L'ensemble des dispositions adoptées par le constructeur et décrites dans les documents descriptifs.

**18 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS:**

*The respect of the Essential Health and Safety Requirements is ensured by:*

- *Conformity to the standards quoted in clause (9).*
- *All provisions adopted by the manufacturer and defined in the descriptive documents.*

**19 REMARQUES :**

Néant.

**19 REMARKS:**

None.

## TABLEAUX / TABLES

**TABLEAU 1 : Puissance maximale dissipée pour les EJB sans hublot et/ou avec élément SI protégé par sonde de température /  
TABLE 1: Maximum dissipated power (W / VA) for EJB without window and/or with IS barrier protected by thermal probes**

Coffret type / Enclosure type	T6/T85°C				T5/T100°C				T4/T135°C				T3/T200°C			
	40°C	50°C	55°C	60°C	40°C	50°C	55°C	60°C	40°C	50°C	55°C	60°C	40°C	50°C	55°C	60°C
EJB 2	74	56	47	38	101	83	74	65	164	146	137	128	281	263	254	245
EJB 3	96	72	61	49	131	107	96	84	213	189	178	166	365	341	330	318
EJB 3A	102	77	65	52	140	115	102	90	227	202	190	177	390	365	352	340
EJB 4	114	86	72	58	156	128	114	100	253	225	211	197	434	406	392	378
EJB 5	138	110	82	64	193	156	138	119	322	285	267	248	561	524	506	487
EJB 6	173	139	104	81	243	197	173	150	405	359	336	312	706	660	637	614
EJB 8 ; 9	216	173	130	101	303	245	216	187	505	448	419	390	881	823	794	765
EJB 10 ; 11	254	203	152	118	355	287	254	220	592	525	491	457	1033	965	931	897
EJB 12	324	237	194	151	453	367	324	280	756	670	627	583	1319	1232	1189	1146
EJB 13	431	308	246	185	615	492	431	369	1046	923	861	800	1845	1722	1661	1599
EJB 13A / EJB13XL	487	348	278	209	695	556	487	417	1181	1042	973	904	2085	1946	1876	1807
EJB 14	728	520	416	312	1039	832	728	624	1767	1559	1455	1351	3117	2909	2806	2702
Tcable	80°C				90°C				120°C				175°C			

**TABLEAU 2 : Puissance maximale dissipée pour les EJB avec hublot et/ou avec élément SI protégé par sonde de température /  
TABLE 2: Maximum dissipated power (W / VA) for EJB with windows and/or with IS barrier protected by thermal probes:**

Coffret type / Enclosure type	T6/T85°C				T5/T100°C				T4/T135°C			
	40°C	50°C	55°C	60°C	40°C	50°C	55°C	60°C	40°C	50°C	55°C	60°C
EJB 2 ; 2S ; 3 ; 3A	67	48	39	30	94	76	67	58	158	140	131	121
EJB 4 ; 5 ; 6	114	86	72	58	156	128	114	100	253	225	211	197
EJB 8 ; 9	144	108	88	72	195	144	119	100	315	234	211	197
EJB 10 ; 11	180	132	108	90	268	200	161	134	360	270	216	197
EJB 12	240	180	144	120	323	242	195	162	405	301	243	203
EJB 13	280	208	168	140	365	272	221	183	450	337	270	225
EJB 13A	320	240	192	160	408	306	246	204	477	355	288	239
Tcable	80°C				90°C				120°C			



**TABLEAU 3 : Puissance maximale dissipée pour les EJB avec élément SI sans sonde de température /**  
**TABLE 3 : Maximum dissipated power (W / VA) for EJB with IS barrier without thermal probes protection**

Coffret type / Enclosure type	Température ambiante des éléments de SI / Ambient temperature of the IS element	T6/T85°C				Coffret type / Enclosure type	Température ambiante des éléments de SI / Ambient temperature of the IS element	T6/T85°C			
		+40°C	+50°C	+55°C	+60°C			+40°C	+50°C	+55°C	+60°C
EJB 2 ; 2S	60°C	18	4	N/A	N/A	EJB 8 ; 9	60°C	64	32	16	N/A
	70°C	32	18	11	4		70°C	96	64	48	32
	80°C	46	32	25	18		80°C	128	96	80	64
	85°C	53	39	32	25		85°C	144	112	96	80
EJB 3	60°C	27	13	7	N/A	EJB 10 ; 11	60°C	75	38	19	N/A
	70°C	40	27	20	13		70°C	113	75	56	38
	80°C	53	40	33	27		80°C	150	113	94	75
	85°C	60	47	40	33		85°C	169	131	113	94
EJB 3A	60°C	29	14	7	N/A	EJB 12	60°C	96	48	24	N/A
	70°C	43	29	21	14		70°C	144	96	72	48
	80°C	57	43	36	29		80°C	192	144	120	96
	85°C	64	50	43	36		85°C	215	168	144	120
EJB 4	60°C	32	16	8	N/A	EJB 13	60°C	123	61	31	N/A
	70°C	48	32	24	16		70°C	184	123	92	61
	80°C	64	48	40	32		80°C	245	184	153	123
	85°C	71	56	48	40		85°C	276	214	184	153
EJB 5	60°C	41	20	10	N/A	EJB 13A /EJB13XL	60°C	138	69	35	N/A
	70°C	61	41	31	20		70°C	208	138	104	69
	80°C	81	61	51	41		80°C	277	208	173	138
	85°C	92	71	61	51		85°C	312	242	208	173
EJB 6	60°C	51	26	13	N/A	EJB 14	60°C	207	104	52	N/A
	70°C	77	51	38	26		70°C	311	207	155	104
	80°C	103	77	64	51		80°C	414	311	259	207
	85°C	115	90	77	64		85°C	466	362	311	259
Tcable		80°C				Tcable		80°C			

<b>TABLEAU 4 : Liste des composants / TABLE 4: List of the component</b>			
<b>Type de composant / Type of component</b>	<b>Constructeur / Manufacturer</b>	<b>Numéro de certificat / Certificate number</b>	<b>Nomes EN / EN Standards (**)</b>
Coffrets / Enclosures	TECHNOR ITALSMEA	INERIS 21ATEX9004U	EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-31:2014
Cellule photocroductive / Photoconductive cell (*)	SICE	INERIS02ATEX9006U	EN 60079-0:2012/A11:2013 (**) EN 60079-1:2007 (**)
Bouchons, réducteurs, adaptateurs / Stopping plugs, reducers, adaptors	TECHNOR	INERIS04ATEX9006U	EN 60079-0:2009 (**) EN 60079-1:2007 (**) EN 60079-31:2009 (**)
Raccords et traverses scellées / Sealed nipples and bushings	COELBO	ICEPI10ATEX03C006U	EN 60079-0:2006 (**) EN 60079-1:2007 (**) EN 60079-31:2009 (**)
Raccord 3 pieces / Three pieces unions	GADDI	IMQ15ATEX009U	EN 60079-0:2012/A11:2013 (**) EN 60079-1:2014 EN 60079-31:2014
Raccords / Nipples couplings	GADDI	ICEPI14ATEX03C009U	EN 60079-0:2009(**) EN 60079-1:2007(**) EN 60079-31:2009(**)
Dispositif de respiration et drainage type FT/VS 61090... / Breathing or draining devices type FT/VS 61090...	MAM	INERIS 12ATEX9013U	EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-31:2014
Unités de commande et de signalisation type DP/DFP and RS/RX / Command and signaling units type DP/DFP and RS/RX	COELBO	INERIS 14ATEX9009U	EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-31:2014
Operateurs type PM10X, EFP*, EFL*PC* et EFPL3 / Operators type PM10X, EFP*, EFL*PC* and EFPL3	NUOVA ASP	INERIS 13ATEX9016U	EN 60079-0:2012/A11:2013 (**) EN 60079-1:2014 EN 60079-31:2014
Conduit flexible type TFII* / Flexible conduit type TFII*	NUOVA ASP	INERIS 06ATEX9004U	EN 60079-0:2012/A11:2013 (**) EN 60079-1:2014 EN 60079-31:2014
Dispositif de respiration et drainage type ECD**** / Breathing and draining valve type ECD****	NUOVA ASP	EXA 14ATEX0058U	EN 60079-0:2012/A11:2013 (**) EN 60079-1:2014 EN 60079-31:2014
Operateurs type PM10X, EFP*, EFL*PC* et EFPL3 / Operators type PM10X, EFP*, EFL*PC* and EFPL3	FEAM	INERIS 13ATEX9017U	EN 60079-0:2012/A11:2013 (**) EN 60079-1:2014 EN 60079-31:2014
Conduit flexible type TFII* / Flexible conduit type TFII*	FEAM	INERIS 12ATEX9012U	EN 60079-0:2012/A11:2013 (**) EN 60079-1:2014 EN 60079-31:2014
Dispositif de respiration et drainage type ECD**** / Breathing and draining valve type ECD****	FEAM	EXA 14ATEX0059U	EN 60079-0:2012/A11:2013 (**) EN 60079-1:2014 EN 60079-31:2014
Traversées scellées pour conducteur type NPS, TP, NCS, CP et LPS / Conductor sealing bushings type NPS, TP, NCS, CP and LPS	CORTEM	CESI 01ATEX080U	EN 60079-0:2012/A11:2013 (**) EN 60079-1:2014 EN 60079-31:2014
Raccord 3 pieces R*, B*, RB* / Three pieces unions R*, B*, RB*	CORTEM	CESI99ATEX034U	EN 60079-0:2012/A11:2013 (**) EN 60079-1:2014 EN 60079-31:2014

(\*) La cellule photoconductrice type FTC avec type de protection Ex d IIB Gb peut être installée sur des boîtiers EJB de classe de température T5 ou T6 et dans une plage de température ambiante de -40 ° C à + 55 ° C. Lorsque FTC est installé, l'unité EJB est uniquement adaptée au groupe de gaz IIB (H2 et IIIC exclus). / *The photoconductive cell type FTC with type of protection Ex d IIB Gb can be installed on EJB enclosures having temperature class T5 or T6 and in range of ambient temperature -40°C to +55°C. When FTC is installed, the unit EJB is only suitable for gas group IIB (H2 and IIIC excluded).*

(\*\*) Non concerné par les modifications techniques majeures de la dernière édition de la norme / *Not concerned by the major technical changes of the last edition of the standard*