

LIGHT



IP65-IP67 Watertight junction boxes

The LIGHT series is a set of watertight surface boxes intended for electrical junctions or for trunking boxes.

They can also be used to build electrical or electronic switchboards. With the right accessories, small terminal junction boxes can be built, and power sockets can be used to create small electric power supply blocks.

This series is completed with the motor-protection and electrical and electronic protection boxes for machine tools or similar applications.

IP
65IP
67

CE



LIGHT

LIGHT Technical Specifications

- **Degree of protection:** IP65-IP67*.
- **Resistance to impact:** IK07.
- **Glow wire resistance:** 650 °C.
- **Ball pressure test:** 70 °C.
- **Ambient temperature range:** -25 °C / +40 °C.
- **Maximum operating voltage:** 1000 V AC/1500 V DC.
- **Double insulation:** Class II.

* Except ref. EP048, EP088 and EX088 (IP54).

LIGHT Certifications



Compliant with the Low Voltage Directive 2014/35/EU.
Standards: IEC 60998-2-5 and IEC 60670-24.

Intended for industrial and outdoor facilities,
where a high degree of protection against dust and
impacts is required

LIGHT

IP65-IP67 junction boxes



Product series

Standard:

- Seven watertight junction boxes.
- Three watertight motor-protection boxes.
- Each of these models is manufactured in three different versions:
 - With conical cable glands.
 - With knock-out sides.
 - With plain sides.
- The three largest models are available with opaque or transparent cover.
- A series of assemblies with standard power sockets is offered.

Special:

- Using the basic versions, special versions can be created to suit the needs of each customer or to comply with the specific regulations of the target markets.
- Special assemblies with power sockets can be supplied in any combination, with no minimum order quantity.

Material

- Halogen-free plastic materials.
- Opaque base and cover: Shock-proof PS RAL 7035.
- Transparent cover: PC tinted window, with UV protection.

Supply

- The boxes are supplied individually, shrink-wrapped and in multiple cardboard packaging, according to minimum packaging units.
- EP048 is not supplied shrink-wrapped, it is supplied with the label over the cover.
- Boxes with conical cable glands are supplied with the cone assembled.
- Accessory bag: Bag with 2 arrow screws plus 2 screws without arrow.

Possibility of special assemblies with no minimum order quantity

Table for DIN rails

Box type	Direction	Hole distance	Rail length	Rail code
		(mm)	(mm)	
65DS111	Vertical	77.5	90	92711
	Horizontal	77.5	90	
65DS161	Vertical	77.5	90	92711
	Horizontal	127	137	92713
65DS/GS171	Vertical	127	137	92713
	Horizontal	127	137	
65DS/GS231	Vertical	139	166	92721
	Horizontal	187	214	92722
65DS/GS322	Vertical	187	214	92722
	Horizontal	312	325	



Base

- The junction and motor-protection boxes are available in three versions:
 - Plain sides.
 - Sides with closed knock-outs, adapted to the metric and easy to remove.
 - Sides with cut-outs for fitting conical cable glands.
- The wall-mounting points are located at the bottom of the base and can be hermetically isolated using caps that guarantee the box's IP protection and dielectric strength. These caps are supplied as an accessory (Ref. 77650).
- There are also slotted ribs at the bottom of the base for securing tap-off terminals and plates.
- The supports for securing the DIN rails are also located there. They can be ordered as an accessory (see page 248).
- There are closed knock-outs on the outside of the box bottom to facilitate the entry of cables from the back.
- There are vertical ribs on the four inside walls to give the part greater rigidity.
- There are also open or closed cut-outs, depending on the versions. These cut-outs have a diameter of 25 or 40 mm and the number and size depends on the box size.

Covers

- The covers are smooth and rounded and, together with the inside ribs, afford the whole unit excellent rigidity.
- In the 111 to 322 models, the covers have a continuous recess for an injected rubber gasket that guarantees maximum IP65-IP67 protection. These covers have a clip to make the screws captive.
- The EP048 and EP088 models have a base-cover clipping system that delivers IP54 protection.
- The covers used for motor-protection boxes are higher to be able to house the electrical devices typical of this type of box.

Screws

- These boxes are supplied with four ¼ turn plastic screws made captive by means of a clip located on the cover. The covers of the references EP048 and EP088 are clipped without screws.
- Two of the screws have pins that give the cover a hinge effect and keep the unit together.
- These screws have a hole through them, and once in place they face a hole in the cover, making it possible to seal the box and prevent access to the inside.



Conical cable glands

- The conical cable glands have diameters of 25 mm and 40 mm.
- They are supplied in the EP*** and EV*** versions and are always assembled in the box.
- The cones are manufactured with a flexible material that guarantees a suitable degree of protection in all cases.
- The design of the cones consists of rings placed at different heights. Each one of these rings corresponds to a pipe diameter for electrical installations, so that if they are cut to different heights the pipe can be inserted into the box through the conical cable gland, maintaining a perfect fit and guaranteeing watertightness.

Hinges

- Option to fit hinges between the cover and the base for all models of boxes and motor housings.
- The hinges come with markings showing the position of the screws for their attachment.

Ø of rings depending on cone model

Cones	Size 1	Size 2	Size 3	Size 4	Size 5
M25	-	-	20 mm	16 mm	20 mm ²
M40	32 mm	25 mm	-	16 mm	20 mm ²

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IP65-IP67 junction boxes

Boxes with opaque cover

Ref. No.	Dimensions	Description	Cable entry		Weight	Power dissipation according to temperature increase °C P[W]*					Type
			No. conical glands			KG	20	25	30	35	
HEIGHT X WIDTH X DEPTH			M25	M40							
EP048	Ø84x50	With conical cable glands	4	-	0.07	1.6	2.0	2.4	2.9	3.3	54DS048
EP088	84x84x50	With conical cable glands	7	-	0.08	1.6	2.0	2.4	2.9	3.3	54DS088
EV111	108x108x64	With conical cable glands	7	-	0.16	2.7	3.4	4.0	4.7	5.4	65DS111
EV161	116x162x76	With conical cable glands	6	4	0.25	3.8	4.7	5.7	6.6	7.6	65DS161
EV171	151x175x95	With conical cable glands	6	4	0.38	6.0	7.5	9.0	10.5	12.1	65DS171
EV231	180x241x95	With conical cable glands	4	6	0.53	8.6	10.8	13.0	15.1	17.3	65DS231
EV322	239x328x129	With conical cable glands	-	12	1.17	15.7	19.6	23.6	27.5	31.4	65DS322
EX088	84x84x50	Knock-out entries	7	-	0.06	1.6	2.0	2.4	2.9	3.3	54DS088
EX111	108x108x64	Knock-out entries	7	-	0.14	2.7	3.4	4.0	4.7	5.4	65DS111
EX161	116x162x76	Knock-out entries	6	4	0.21	3.8	4.7	5.7	6.6	7.6	65DS161
EX171	151x175x95	Knock-out entries	6	4	0.32	6.0	7.5	9.0	10.5	12.1	65DS171
EX231	180x241x95	Knock-out entries	4	6	0.46	8.6	10.8	13.0	15.1	17.3	65DS231
EX322	239x328x129	Knock-out entries	-	12	1.06	15.7	19.6	23.6	27.5	31.4	65DS322
EL111	108x108x64	Plain sides	-	-	0.14	2.7	3.4	4.0	4.7	5.4	65DS111
EL161	116x162x76	Plain sides	-	-	0.22	3.8	4.7	5.7	6.6	7.6	65DS161
EL171	151x175x95	Plain sides	-	-	0.38	6.0	7.5	9.0	10.5	12.1	65DS171
EL231	180x241x95	Plain sides	-	-	0.47	8.6	10.8	13.0	15.1	17.3	65DS231
EL322	239x328x129	Plain sides	-	-	1.06	15.7	19.6	23.6	27.5	31.4	65DS322

HALOGEN-FREE PLASTIC MATERIALS

Base and opaque cover: PS RAL 7035 - Cones: RAL 7035.

Surface boxes.

References EP048-EP088-EX088: IP54.

References EV: IP65.

References EX-EL: IP65-IP67.

* Calculations obtained according to the CEI 890:1997 standard (including Corrigendum 1998). Method of temperature-rise assessment by extrapolation for partially type-tested assemblies (PTTA) of low-voltage switchgear and control gear.



EP048



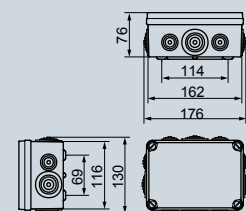
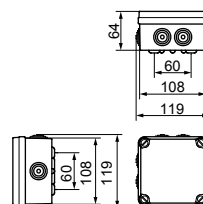
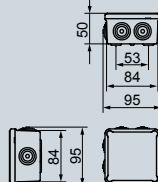
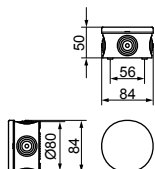
EP/EX088



EV/EX/EL111



EV/EX/EL161



Boxes with transparent cover

Ref. No.	Dimensions	Description	Cable entry No. conical glands		Weight	Power dissipation according to temperature increase °C P[W]*					Type	
			M25	M40		KG	20	25	30	35		40
	HEIGHT X WIDTH X DEPTH											
EVT171	151x175x95	With conical cable glands	6	4	0.38	6.0	7.5	9.0	10.5	12.1	65DS171	
EVT231	180x241x95	With conical cable glands	4	6	0.53	8.6	10.8	13.0	15.1	17.3	65DS231	
EVT322	239x328x129	With conical cable glands	-	12	1.17	15.7	19.6	23.6	27.5	31.4	65DS322	
EXT171	151x175x95	Knock-out entries	6	4	0.32	6.0	7.5	9.0	10.5	12.1	65DS171	
EXT231	180x241x95	Knock-out entries	4	6	0.46	8.6	10.8	13.0	15.1	17.3	65DS231	
EXT322	239x328x129	Knock-out entries	-	12	1.06	15.7	19.6	23.6	27.5	31.4	65DS322	
ELT171	151x175x95	Plain sides	-	-	0.38	6.0	7.5	9.0	10.5	12.1	65DS171	
ELT231	180x241x95	Plain sides	-	-	0.47	8.6	10.8	13.0	15.1	17.3	65DS231	
ELT322	239x328x129	Plain sides	-	-	1.06	15.7	19.6	23.6	27.5	31.4	65DS322	

HALOGEN-FREE PLASTIC MATERIALS

Opaque base: PS RAL 7035 - Transparent cover: PC, tinted, with UV protection - Cones: RAL 7035.

Surface boxes.

References EVT: IP65.

References EXT-ELT: IP65-IP67.

* Calculations obtained according to the CEI 890:1997 standard (including Corrigendum 1998). Method of temperature-rise assessment by extrapolation for partially type-tested assemblies (PTTA) of low-voltage switchgear and control gear.



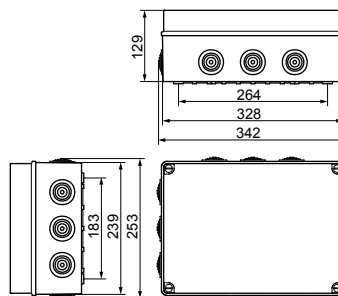
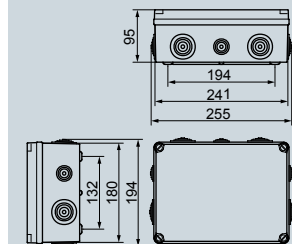
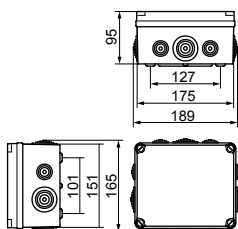
EV/EX/EL171
EVT/EXT/ELT/171



EV/EX/EL231
EVT/EXT/ELT231



EV/EX/EL322
EVT/EXT/ELT322



LIGHT

IP65-IP67 junction boxes

Motor-protection boxes with **opaque cover**

Ref. No.	Dimensions	Description	Cable entry		Weight	Power dissipation according to temperature increase °C P(W)*					Type
			No. conical glands			20	25	30	35	40	
HEIGHT X WIDTH X DEPTH			M25	M40	KG						
GSV171	151x175x155	With conical cable glands	6	4	0.49	8.2	10.2	12.3	14.3	16.4	65GS171
GSV231	180x241x175	With conical cable glands	4	6	0.80	12.4	15.4	18.5	21.6	24.7	65GS231
GSV322	239x328x188	With conical cable glands	-	12	1.61	19.4	24.2	29.1	33.9	38.8	65GS322
GSX171	151x175x155	Knock-out entries	6	4	0.43	8.2	10.2	12.3	14.3	16.4	65GS171
GSX231	180x241x175	Knock-out entries	4	6	0.77	12.4	15.4	18.5	21.6	24.7	65GS231
GSX322	239x328x188	Knock-out entries	-	12	1.48	19.4	24.2	29.1	33.9	38.8	65GS322
GSL171	151x175x155	Plain sides	-	-	0.43	8.2	10.2	12.3	14.3	16.4	65GS171
GSL231	180x241x175	Plain sides	-	-	0.74	12.4	15.4	18.5	21.6	24.7	65GS231
GSL322	239x328x188	Plain sides	-	-	1.48	19.4	24.2	29.1	33.9	38.8	65GS322

HALOGEN-FREE PLASTIC MATERIALS

Base and opaque cover: PS RAL 7035 - Cones: RAL 7035.

Transparent cover: PC, tinted, with UV protection.

Surface boxes - High cover.

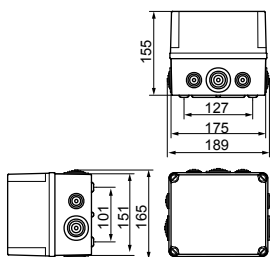
References GSV: IP65.

References GSX-GSL: IP65-IP67.

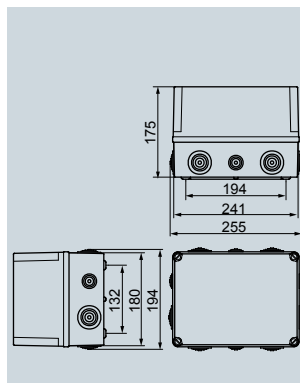
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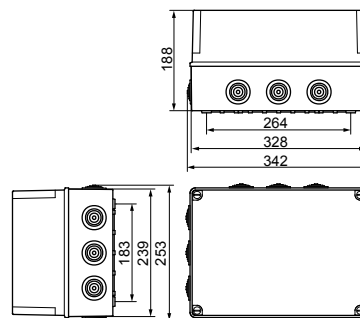
GSV/GSX/GSL171



GSV/GSX/GSL231



GSV/GSX/GSL322



Motor-protection boxes with transparent cover

Ref. No.	Dimensions	Description	Cable entry		Weight	Power dissipation according to temperature increase °C P(W)*					Type
			No. conical glands			20	25	30	35	40	
HEIGHT X WIDTH X DEPTH			M25	M40	KG						
GSVT171	151x175x155	With conical cable glands	6	4	0.53	8.2	10.2	12.3	14.3	16.4	65GS171
GSVT231	180x241x175	With conical cable glands	4	6	0.87	12.4	15.4	18.5	21.6	24.7	65GS231
GSVT322	239x328x188	With conical cable glands	-	12	1.61	19.4	24.2	29.1	33.9	38.8	65GS322
GSXT171	151x175x155	Knock-out entries	6	4	0.46	8.2	10.2	12.3	14.3	16.4	65GS171
GSXT231	180x241x175	Knock-out entries	4	6	0.80	12.4	15.4	18.5	21.6	24.7	65GS231
GSXT322	239x328x188	Knock-out entries	-	12	1.48	19.4	24.2	29.1	33.9	38.8	65GS322
GSLT171	151x175x155	Plain sides	-	-	0.46	8.2	10.2	12.3	14.3	16.4	65GS171
GSLT231	180x241x175	Plain sides	-	-	0.80	12.4	15.4	18.5	21.6	24.7	65GS231
GSLT322	239x328x188	Plain sides	-	-	1.55	19.4	24.2	29.1	33.9	38.8	65GS322

HALOGEN-FREE PLASTIC MATERIALS

Base and opaque cover: PS RAL 7035 - Cones: RAL 7035.

Transparent cover: PC, tinted, with UV protection.

Surface boxes - High cover.

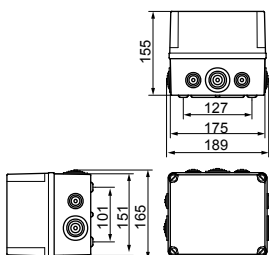
References GSVT: IP65.

References GSXT-GSLT: IP65-IP67.

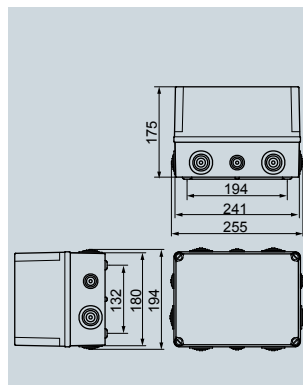
* Calculations obtained according to the CEI 890:1997 standard (including Corrigendum 1998). Method of temperature-rise assessment by extrapolation for partially type-tested assemblies (PTTA) of low-voltage switchgear and control gear.



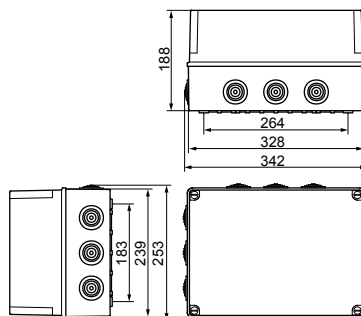
GSVT/GSXT/GSLT171



GSVT/GSXT/GSLT231



GSVT/GSXT/GSLT322



LIGHT

IP65-IP67 junction boxes

Special assemblies



Empty boxes.



Boxes with assembled and wired power sockets.

How to proceed



1. SELECT THE BOX.



2. CHOOSE THE POWER SOCKETS.



3. SUBMIT ALL THE INFORMATION TO OUR TECHNICAL DEPARTMENT.

You can request a quotation and technical assessment at export@ide.es

Special assemblies can be supplied in any combination, with no minimum order quantity

Proposal of sockets for Light boxes

SCHUKO-TYPE FLUSH-FIT SOCKETS



REF.	Poles	I	IP
00102	2P+E	16 A	44
00452	2P+E	16 A	54
00105	2P+E	16 A	67

IP44 FLUSH-FIT SOCKETS



REF.	Poles	I	Voltage
02301	2P+E	16 A	200/250 V
03302	3P+E	16 A	380/415 V
03303	3P+N+E	16 A	200/415 V
02304	2P+E	32 A	200/250 V
03305	3P+E	32 A	380/415 V
03306	3P+N+E	32 A	200/415 V

IP67 FLUSH-FIT SOCKETS



REF.	Poles	I	Voltage
02801	2P+E	16 A	200/250 V
03802	3P+E	16 A	380/415 V
03803	3P+N+E	16 A	200/415 V
02804	2P+E	32 A	200/250 V
03805	3P+E	32 A	380/415 V
03806	3P+N+E	32 A	200/415 V

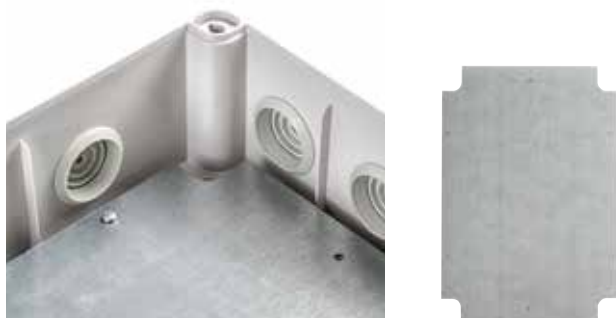
See our standard assemblies on page 272, and our full range of plugs and sockets on page 294

LIGHT Accessories

	Ref.		Ref.
Metal plate for boxes Ref. 171	92123	25 diameter conical glands	77952
Metal plate for boxes Ref. 231	92125	25 HF* diameter conical glands	77953
Low metal plate for boxes Ref. 322	92127	40 diameter conical glands	77962
High metal plate for boxes Ref. 322	92129	40 HF* diameter conical glands	77963
Polyester plate for boxes Ref. 111	92119	3.9 x 9.5 screw for metal and polyester plate	92609
Polyester plate for boxes Ref. 161	92121	Hermetic caps	77650
Polyester plate for boxes Ref. 171	92122	Screws with arrow	77712
Polyester plate for boxes Ref. 231	92124	Screws without arrow	77702
Low polyester plate for boxes Ref. 322	92126	Screws base cover for Ref. GS322 and EV-EL-EX	77720
High polyester plate for boxes Ref. 322	92128		

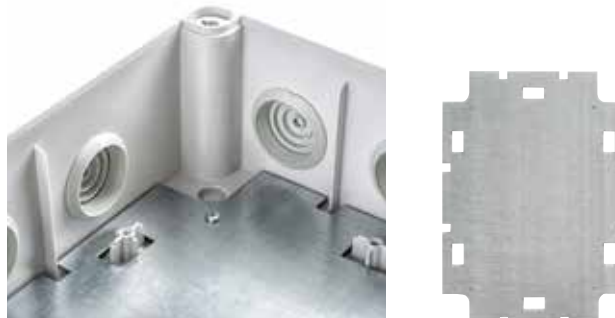
* HF: Halogen-free conical glands.

Fitting high plates



- Metal and polyester high plates for boxes and motor housings (type 322).
- The high plates allow for a space of 14 mm between the plate and the base.
- To be installed it is necessary to request the 3.9x9.5 screws, Ref. 92609.

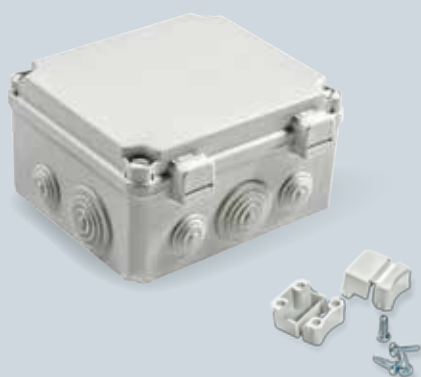
Fitting low plates



- Metal and polyester low plates for boxes and motor housings (type 322).
- Low plates help take full advantage of the depth of the box.
- To be installed it is necessary to request the 3.9x9.5 screws, Ref. 92609.

NEW

Hinges



Ref.	Description
22050	Hinge for Light boxes (2-pieces bag)

- ✓ Hinge for boxes and motor housings compatible with all models.
- ✓ Comes with grooves marked on the hinge for placing screws.
- ✓ The screw with the long arrow must be cut when the hinge is fitted.
- ✓ Degree of protection: IP65.