# **Electrical installation solutions for buildings**

# Junction boxes

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# Livorno Series emergency consumer units

Technical details designed to facilitate installation



# Livorno Series emergency consumer units

# Technical details designed to facilitate installation



The Livorno Series is a range of emergency consumer units equipped with an emergency breakable glass to quickly and effectively stop systems or services in the case of malfunctions or

dangers that may occur in residential, tertiary or industrial installations.

Made of self-extinguishing thermoplastic material, these devices are mainly installed in those environments that have greater risk of fire.

The flush- and wall-mounting versions can be equipped with a luminous button and glass-breaking hammer.

Livorno Series emergency consumer units



#### Consumer units, technical specifications

Protection class	IP40, IP55 or IP65, according to version.
Version	flush- and wall-mounting.
Colour	RAL 3000 red and RAL 7035 grey.
Installation temperature	-25°C ÷ +60°C.
Resistance to heat	ball thermopressure up to +85°C according to EN 60695-10-2 standard.
Front door	breakable glass 0.75 (IK05 degree).
Material	self-extinguishing thermoplastic material, resistant to abnormal heat and fire up to 650°C (glow wire test), according to IEC 60695-2-11 standard.
Door lock	coded-type key
Included accessories	module covers (per DIN rail versions)
	4 screw cover plugs
	certification plate

#### Consumer units with emergency button, technical specifications

Protection degree	IP55.
Version	flush- and wall-mounting
Colour	RAL 3000 red.
Installation temperature	-25°C ÷ +60°C.
Rated operating voltage Ue	250 V.
Utilisation category	AC 12.
Rated operating voltage le	2 A.
Rated insulation voltage Ui	250 V.
Pollution degree	3.
Fuses	10 A, gG type, 10.3x38 mm.
Front door	breakable glass 0.75 (IK05 degree).
Material	self-extinguishing thermoplastic material, resistant to abnormal heat and fire up to 650°C (glow wire test), according to IEC 60695-2-11 standard.
Luminous button	with 1 NO contact + 1 NC contact (2 A, 250 V).
Included accessories	glass-breaking hammer.
Optional accessories	12 or 24 V bulb lamp (incandescent), or 250 V (fluorescent).
Conformity	EN 60947-5-1 standard.
Mark of approval	IMQ according to EN 60947-5-1

## Livorno Series emergency consumer units



13 183



13 143

Description	IP rating	Dimensions WxHxD [mm]	Order details		Pack.
			Туре	Order code	— рс.
Flush-mounting version				,	
RAL 3000 red colour. Possible installation on flush-mounting box with 83.5 mm centre distance. Equipped with luminous button (bulb lamp* - 12 V and 24 V incandescent or 250 V fluorescent), with 1 NO contact + 1 NC contact (2 A, 250 V), complete with glass-breaking hammer.	IP55	100x100x50	-	M131830000	1/13
RAL 7035 grey colour. With DIN rail x 6 mod.	IP40	200x245x82	-	M131430000	1/7

<sup>\*</sup> lamp not included

### Livorno Series emergency consumer units



13 180



13 171 - 13 175

Description	IP Dimensions (	Order details		Pack. — pc.	
	[mm]	Туре	Order code	pc.	
Wall-mounting version				,	
RAL 3000 red colour. Equipped with luminous button (bulb lamp* - 12 V and 24 V incandescent or 250 V fluorescent), with 1 NO contact + 1 NC contact (2 A, 250 V), complete with glass-breaking hammer.	IP55	100x100x50	-	M131800000	1/14
RAL 3000 red colour. Equipped with flanges for easy branch connections. With DIN rail x 8 mod.	IP65	205x220x140	-	M131710020	1/6
RAL 3000 red colour. Equipped with flanges for easy branch connections. With panel.	IP65	205x220x140	-	M131750020	1/6

<sup>\*</sup> lamp not included

Pack.

# Enclosures

## Livorno Series emergency consumer units

Description



		Order code pc.	
	Type	Order code	pc.
Accessories		'	
Spare lid for consumer units with emergency button	-	M131900000	10/40
Fixing brackets for IP65 insulated consumer units only	-	M128580000	20/240

Order details

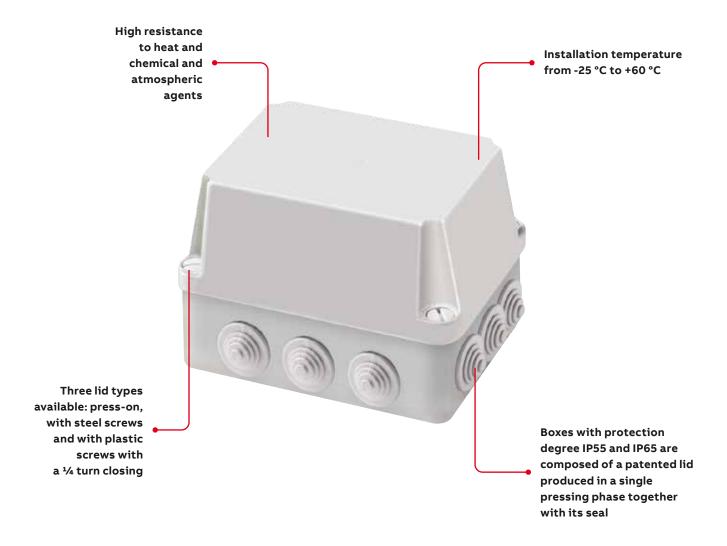
13 190



12 858

# IP44, IP55 and IP65 Junction boxes

# The details make the difference



# IP44, IP55 and IP65 Junction boxes

## The details make the difference



A wide range for all needs. There are IP44 for press-on lid boxes with cable glands, IP55 for screw-on lid boxes with cable glands and IP65 for screw-on lid box with smooth sides.



Some versions of the IP44 and IP55 junction boxes are already equipped with cable glands.



Boxes with protection degree IP55 and IP65 are composed of a patented lid produced in a single pressing phase together with its seal.



Now new: All IP65 junction boxes (with smooth sides) are manufactured in halogen free thermoplastic material.



Wall-mounting is also possible. All junction boxes measuring 160x135, 220x170 and 310x240 mm can be mounted on the wall with brackets (accessory; code 12858).



All IP44, IP55 and IP65 junction boxes are also available in thermoplastic material, self-extinguishing in compliance with UL 94 V2 Standard and resistant to abnormal heat and fire up to 960 °C GWT.

#### IP44, IP55 and IP65 Junction boxes

- IP44, IP55 and IP65 Junction boxes for swimming pool control equipment, washing car centers, garages, building services, automatic garden lighting and watering, traffic signs, photovoltaic installations.
- Protection degree: IP44 for press-on lid boxes with cable glands, IP55 for screw-on lid boxes with cable glands, IP65 for screw-on lid box with smooth sides
- Shock resistant: IK07 for IP44 boxes, IK08 for IP55 and IP65 boxes
- IP44 and IP55 boxes with press-on lids in thermoplastic material, self-extinguishing in compliance with UL 94 HB Standard and resistant to abnormal heat and fire up to 650°C (glow wire flammability index) in compliance with IEC 60695-2-11 Standard
- IP65 boxes with screw-on lids in halogen free thermoplastic material, self-extinguishing in compliance with UL 94 HB Standard and resistant to abnormal heat and fire up to 650°C (glow wire flammability index) in compliance with IEC 60695- 2-11 Standard
- Installation temperature from -25°C to +60°C; Resistant to heat: ball thermopressure up to +85°C for IP44, IP55 and IP65 junction boxes
- Boxes with protection degree IP55 and IP65 are composed of a patented lid produced in a single pressing phase together with its seal
- All junction boxes made in compliance with IEC 60670-1 and IEC 60670-22 Standards
- IP44 and IP55 junction boxes in thermoplastic material obtained the IMQ mark of approval
- All the boxes are RoHS compliance

All IP44, IP55 and IP65 junction boxes are also available in thermoplastic material, self-extinguishing in compliance with UL 94 V2 Standard and resistant to abnormal heat and fire up to 960°C (glow wire flammability index) in compliance with IEC 60695-2-11 Standard.

Description	Dimensions HxWxD		Box/Pack No items
	[mm]	Order code	
IP44 boxes - GWT 650°C With cable glands and press-on lid			
IP44-Snap-on cover - GWT 650°C	Ø 60 - H 35	M00800000	240/240
	65x65x32	M008080000	168/168
	80x80x40	M008100000	100/100
IP55 waterproof boxes with plastic 1/4 turn screws - 0 With cable glands and low screw-on lid RAL 7035	GWT 650°C		
IP55-Cable glands-low lid-1/4TS GWT 650°C	100x100x50	1SL0816A00	1/54
	105x70x50	1SL0820A00	1/70
	100x100x80	1SL0821A00	1/40
	153x110x66	1SL0822A00	1/32
IP55-Cable glands-low lid-1/4TS GWT 650°C*	160x135x77	1SL0824A00	1/18

220x170x80

310x240x110

1SL0826A00

1SL0828A00

1/12

1/6





IP44 boxes



IP44 boxes



IP55

#### IP44, IP55 and IP65 Junction boxes



IP65



IP65



IP55



IP65



IP65

Description	iption Dimensions HxWxD		Box/Pack No items
	[mm]	Order code	
IP65 waterproof boxes with plastic 1/4 turn screws - GWT 650 With smooth sides and low screw-on lid RAL 7035	°C halogen free		
IP65-Smooth-low lid-1/4TS GWT 650°C halogen free	100x100x50	1SL0846A00	1/60
	105x70x50	1SL0850A00	1/100
	100x100x80	1SL0851A00	1/40
	153x110x66	1SL0852A00	1/32
IP65-Smooth-low lid-1/4TS GWT 650°C halogen free*	160x137x77	1SL0854A00	1/24
	220x170x80	1SL0856A00	1/12
	310x240x110	1SL0858A00	1/6
With smooth sides and transparent low screw-on lid			
IP65-Smooth-low transparent lid-1/4TS GWT 650°C halogen free	153x110x66	1SL0872A00	1/34
IP65-Smooth-low transparent lid-1/4TS GWT 650°C	160x135x77	1SL0874A00	1/24
halogen free*	220x170x80	1SL0876A00	1/12
	310x240x110	1SL0878A00	1/6
IP55 waterproof boxes with steel screws - GWT 650°C With cable glands and high screw-on lid RAL 7035			
IP55- Cable glands-low lid - GWT 650°C	100x100x50	M008160000	1/54
	105x70x50	M008200000	1/70
	100x100x80	M008210000	1/40
	153x110x66	M008220000	1/32
IP65 waterproof boxes with steel screws - GWT 650°C halogen With smooth sides and high screw-on lid RAL 7035	free		
IP65- Smooth Wlow lid - GWT 650°C halogen free	100x100x50	M008460000	1/60
	105x70x50	M008500000	1/100
	100x100x80	M008510000	1/40
	153x110x66	M008520000	1/34
With Smooth sides and transparent high screw-on lid			
IP65- Smooth Wtransparent. low lid-153X110X66 GWT 650°C halogen free	151x110x66	M008720000	1/34

<sup>\*</sup> Can be wall-mounted using wall brackets code 12858.

#### IP44, IP55 and IP65 Junction boxes





IP65



IP65

Description	Dimensions HxWxD		Box/Pack No items	
	[mm] Order code			
IP55 waterproof boxes with plastic 1/4 turn screws - GWT With Cable glands and high screw-on lid RAL 7035	650°C	'		
IP55-Cable glands-high lid -1/4TS GWT 650°C	160x135x150	1SL0830A00	1/16	
	220x170x150	1SL0832A00	1/8	
	310x240x160	1SL0834A00	1/4	
IP65 waterproof boxes with plastic 1/4 turn screws - GWT With Smooth sides and high screw-on lid RAL 7035	650°C halogen free			
IP65-Smooth-high lid -1/4TS GWT 650°C	160x135x150	1SL0860A00	1/16	
halogen free	220x170x150	1SL0862A00	1/8	
	310x240x160	1SL0864A00	1/4	
With Smooth sides and transparent high screw-on lid				
IP65-Smooth-high transparent lid -1/4TS GWT 650°C	160x135x150	1SL0880A00	1/16	
halogen free*	220x170x150	1SL0882A00	1/8	
	310x240x160	1SL0884A00	1/4	

<sup>\*</sup> Can be wall-mounted using wall brackets code 12858.

# IP 44, IP 55 and IP 65 junction boxes in thermoplastic material



Description	Dimensions HxWxD		Box/Pack No items	
	[mm]	Order code		
IP 44 boxes - GWT 960 °C				
With cable glands and press-on lid	Ø 60 - H 35	1SL0900A00	240/240	
	Ø 80 - H 40	1SL0901A00	144/144	
	65x65x32	1SL0902A00	168/168	
	80x80x40	1SL0903A00	100/100	
IP 55 waterproof boxes with plastic 1/4 turn screws - G	WT 960 °C			
With cable glands and low screw-on lid RAL 7035	100x100x50	1SL0916A00	1/54	
	100x100x80	1SL0921A00	1/40	
	153x110x66	1SL0922A00	1/32	
	160x135x77	1SL0924A00*	1/18	
	220x170x80	1SL0926A00*	1/12	
	310x240x110	1SL0928A00*	1/6	
IP 65 waterproof boxes with plastic 1/4 turn screws - G	WT 960 °C			
With smooth sides and low screw-on lid RAL 7035	100x100x50	1SL0946A00	1/60	
	100x100x80	1SL0951A00	1/40	
	153x110x66	1SL0952A00	1/32	
	160x137x77	1SL0954A00*	1/24	
	220x170x80	1SL0956A00*	1/12	
	310x240x110	1SL0958A00*	1/6	

 $<sup>^{\</sup>star}$  Can be wall-mounted using wall brackets code 12 858.

IP 44, IP 55 and IP 65 junction boxes in thermoplastic material



Description	Dimensions HxWxD		Box/Pack No items	
	[mm]	Order code		
IP 65 waterproof boxes with plastic 1/4 turn screws - GW	Т 960 °C			
With smooth sides and high screw-on lid RAL 7035	160x135x150	1SL0960A00	1/16	
	220x170x150	1SL0962A00	1/8	
	310x240x160	1SL0964A00	1/4	

IP65

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#### **Enclosures**

#### Accessories for IP44, IP55 and IP65 Junction boxes



Metal base plates







Cable Clamps



Conduit clamps

Description	-	Box/Pack No items
	Order code	
Metal base plates		
Metal base plate for boxes with dimensions 160x135x77	M009000000	1/10
Metal base plate for boxes with dimensions 220x170x80	M009020000	1/5
Metal base plate for boxes with dimensions 310x240x110	M009040000	1/5
All metal base plates listed above are equipped with fixing screws type	3.5x9.5.	
Cable Clamps - Protection Degree: IP55		
Cable clamp for conduit Ø 20 mm	M009080000	100/1500
Cable clamp for conduit Ø 25 mm	M009100000	100/1000
Cable clamp for conduit Ø 32 mm	M009120000	50/400
Conduit clamps - Box Connector - Protection Degree: IP67		
Conduit clamp Ø 16 mm	M004300000	500/500
Conduit clamp Ø 20 mm	M004310000	300/300
Conduit clamp Ø 25 mm	M004320000	150/150
Conduit clamp Ø 32 mm	M004330000	100/100
Conduit clamp Ø 40 mm	M004340000	50/50
Conduit clamp Ø 50 mm	M004350000	50/50

Technical details designed to facilitate installation



# Technical details designed to facilitate installation



Rigid on one side and bi-material flange on the other to facilitate input of conduits and cables. The flanges are removeable and interchangeable.



The Polycarbonate GWT 960 ensure unique mechanical performances (Shock resistance IK10) and ensure high resistance against UV rays.



Perfectly symmetrical consumer units with the possibility of attaching the door hinge onto the front (by means of the special articulated screws supplied) on the right or left with 140° opening.



Different type of devices can be installed in an integrated and rational manner thanks to the many accessories such as base plates or a DIN rail.



The frame that can be fitted onto the consumer unit makes semi-flush mounting possible, guaranteeing an attractive finish.



The consumer unit can be fitted with Neutral (N) or Earth (E) terminals, by combining the copper terminal bars to the corresponding plastic terminal holders.

#### **Technical characteristics**

- protection degree IP 65
- insulation class II 🔲
- · available in RAL 7035 grey
- in polycarbonate material, self-extinguishing and resistant to abnormal heat and fire up to 960 °C (glow wire test) in compliance with IEC 60695-2-11 Standard
- installation temperature from -25 °C to +60 °C
- resistant to heat: ball thermopressure up to +125 °C in compliance with EN 60695-10-2 Standard
- rated insulation voltage: 1000 V AC; 1500 V DC
- shock resistance 20 Joules (IK level 10)
- perfectly symmetrical junction boxes with possibility of attaching the lid hinges, (using the special articulated screws supplied) on the right or left with 140° opening

- boxes code 12 808, 12 812, 12 814, 12 816 and 12 818 fitted with one rigid and one bi-material flange for facilitated input of conduits and cables
- junction boxes produced in compliance with CEI 23-49 (1996) + V1 + V2, CB certificate IEC 60670-24 Standards
- · boxes are supplied complete with:
- 4 screw-cover caps to guarantee 🗆
- accessories for attaching the hinges on the front
- 1 certification plate
- · instruction sheet
- use 3.5x9.5 self-tapping screws to fix the components on the back



# Order codes













Description	Dimensions WxHxD		Packaging
	[mm]	Order code	
Europa65 junction boxes	140x220x140	M00128040000	1/14
Europa65 junction boxes	205x220x140	M00128080000	1/9
Europa65 junction boxes	275x220x140	M00128120000	1/6
Europa65 junction boxes	275x370x140	M00128140000	1/4
Europa65 junction boxes	275x570x140	M00128160000	1/2
Europa65 junction boxes	380x570x140	M00128180000	1/2

### Europa65 junction boxes, accessories

Wall fixing brackets

#### Order codes







Aluminiumplated metal Insulated base base plates plates

Description	For boxes		Packaging
	[type]	Order code	
Base plates		'	
In aluminium-plated metal	12 804	M00128420000	10/120
	12 808	M00128440000	10/10
	12 812	M00128450000	10/10
	12 814	M00128460000	5/5
	12 816	M00128470000	5/5
	12 818	M00128480000	5/5
In insulated material	12 812	M00128350000	10/10
DIN metal rails			
Complete with fixing screws	12 804	M00128520000	50/600

12 808

12 816 12 818

12 812 - 12 814

M00128540000

M00128550000

M00128560000

30/360

50/200

50/200



DIN metal rails





Wall fixing brackets

Spare flanges

In insulated material	-	M0012858	20/240
Spare flanges			
Rigid flange - 8 modules per row	-	1SL0550A00	30/120
Rigid flange - 12 modules per row	-	1SL0551A00	20/80
Rigid flange - 18 modules per row	-	1SL0552A00	20/80

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#### Europa65 junction boxes, accessories

#### Order codes

#### Terminal holder

The construction of the terminal block is completed by combining the terminal holders with the necessary terminal bars, taking care to separate the latter from one another.



Description	For boxes	Order code	Packaging
	[type]		
Terminal holder	12 804	M00125380000	12/360
Terminal holder	12 808	M00125390000	12/360
Terminal holder	12 812 - 12 814 12 816	M00125400000	12/144
Terminal holder	12 818	M00125430000	12/108

#### Terminal bars

The terminal bars can be installed on any type of terminal holder; they can be hooked by means of 2 snap-on clips through two additional holes at the ends of the bar itself.



Description	Order code	Packaging
No. of holes x Ø holes [mm] + No. of holes x Ø holes [mm]		
5x4,5	M00125310000	20/240
10x4,5 + 3x5,6	M00125320000	20/240
16x4,5 + 3x5,6	M00125330000	20/240
15x4,5 + 6x5,6	M00125340000	20/240
19x4,5 + 6x5,6	M00125350000	20/240

Ν	ot	es