

### **WATERTIGHT ENCLOSURES IN POLYESTER**

REINFORCED WITH FIBERGLASS 7 SIZES - IP66 AND VO RATED

















We are pleased to present the renewed range of GRP polyester enclosures designed by Elettrocanali, which stands out for the introduction of a new bigger size (the seventh one) and for the upgrade of protection degree to IP66.

The new features follow a specific market research and reflect an increasing trend of modular solutions, with additional performance for a more efficient electricity distribution.

Our enclosures have been designed to ensure the **maximum safety** and **reliability** in any environment, indoor and **outdoor**. Specifically, this renovated range distinguishes for its **extended flexibility in systems configuration**, thanks to the modularity of each component. This way, the new enclosures grant additional versatility as they can adapt to specific needs of the customer, giving **efficiency and cost savings**.

Additionally, they can be equipped with advanced monitoring and control systems, which make it possible to detect faults and promptly intervene to prevent energy failures.



#### **PLUS**



#### SELF-EXTINGUISHING IN LESS THAN 10 SECONDS

The V0 self-extinguishing classification, as defined by the **UL 94 standard**, indicates that a plastic material extinguishes itself within 10 seconds after the flame is removed. This means that, once exposed to a direct flame, the material will stop burning within 10 seconds after the flame source is taken away.



#### **RELIABILITY**

The **insulation class II** offers more safety for people and components, on the other side the **high impact resistance** (rated IK10 – 20J) offers the robustness required **outdoor and in industrial environment**.



#### **SAFETY**

The enclosures are made of a composite of polyester resin reinforced with fibreglass (25%) as well as other additives in order to make them Halogen-Free, UV and fire resistant. Standard colour is grey RAL7035.

The peculiarity of the new enclosures is a very good anti-corrosion property and pollution resistance, making them suitable for either indoor and outdoor installation as well as industrial plants such as ports, washing stations, construction sites, chemical, paper, food, petrochemical, telecommunications, energy, photovoltaic and railway plants.



#### **ENDURANCE**

Quality means stability and durability.

With an IP66 rating we define our QUBESYSTEM series range as fully protected against dust and resistant against powerful water jets. The polyester material is resistant to chemicals such as oils and solvents.

Our IP66 electrical enclosure is therefore particularly indicated for outdoor installations such as in industrial plants, public infrastructures and facilities, wind farms or photovoltaic plants. GRP enclosures can therefore offer high level of resistance in harsh environments where power failures can generate negative consequences for people's safety.

## **FULL** RANGE

#### PLUS VO





## 2 VERSIONS (BLIND AND WITH WINDOW)

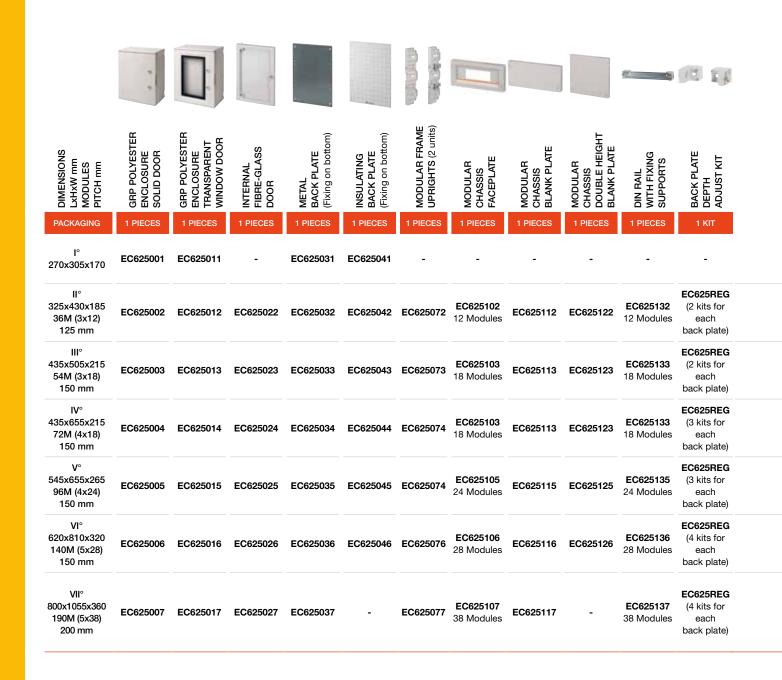


#### **RANGE**

Elettrocanali offers a full range of electrical enclosures along with accessories for a complete board customization.

The assembling stages and installation become therefore simple and fast.

To make frames larger than 800x1055 mm, two or more frames having the same base or height dimensions can be assembled together using EC625GI joining kits and EC521xx series watertight joining fittings.

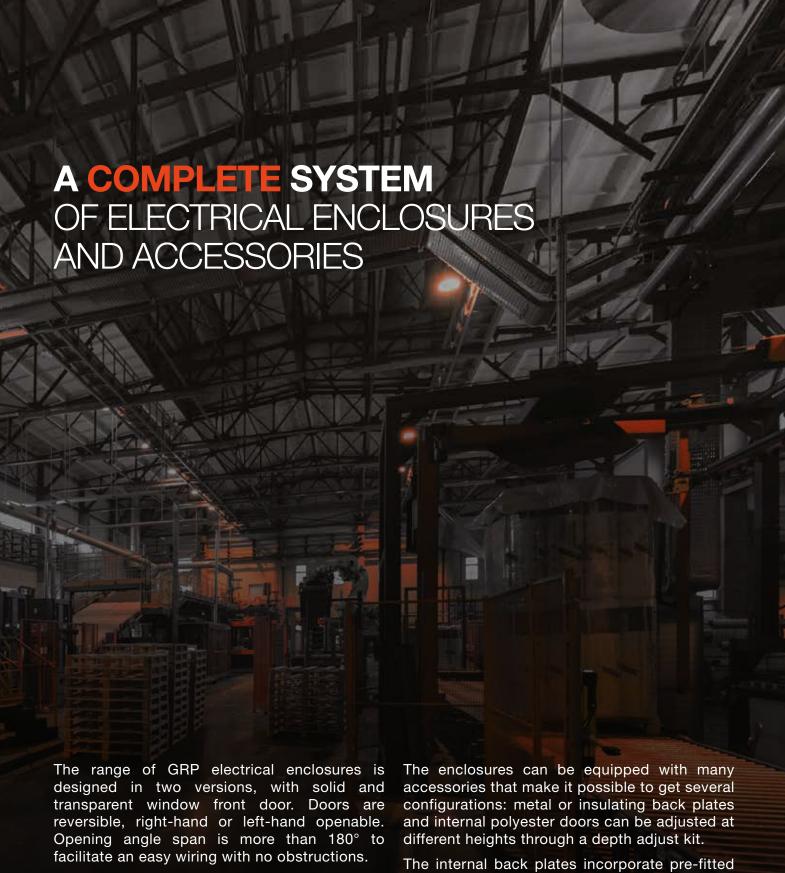




40 40 40			Page 1						9		
WALL MOUNTING BRACKETS GALVANIZED STEEL KIT (4 units)	WALL MOUNTING BRACKETS STAINLESS STEEL KIT (4 units)	MODULAR CHASSIS EMPTY SLOT COVER (4,5 modules)	CUT LOCK MECHANISM	ENCAPSULATED BRASS NUTS (10 units)	CONNECTING JOINT KIT	SPARE BLANK DOOR	SPARE TRANSPARENT WINDOW DOOR	REPLACEMENT KEY	REPLACEMENT STANDARD LOCK	POLE MOUNT KIT (Ø MAX 25 CM)	DIN RAL SUPPORT FRAME FOR 2 MODULES "MY LIFE" MODULAR DEVICES
1 KIT	1 KIT	25 PIECES	1 KIT	1 KIT	1 KIT	1 PEZZO	1 PIECES	10 PIECES	10 KIT DA 2	1 KIT DA 2	40 PIECES
EC625SZ	EC625SI	-	EC625SC	-	EC625GI	EC625001R	EC625011R	EC625ST	EC625SR	EC625SP1	-
EC625SZ	EC625SI	EC600TC	EC625SC	EC625IO	EC625GI	EC625002R	EC625012R	EC625ST	EC625SR	EC625SP1	ECL4608
EC625SZ	EC625SI	EC600TC	EC625SC	EC625IO	EC625GI	EC625003R	EC625013R	EC625ST	EC625SR	EC625SP3	ECL4608
EC625SZ	EC625SI	EC600TC	EC625SC	EC625IO	EC625GI	EC625004R	EC625014R	EC625ST	EC625SR	EC625SP3	ECL4608
EC625SZ	EC625SI	EC600TC	EC625SC	EC625IO	EC625GI	EC625005R	EC625015R	EC625ST	EC625SR	EC625SP5	ECL4608
EC625SZ	EC625SI	EC600TC	EC625SC	EC625IO	EC625GI	EC625006R	EC625016R	EC625ST	EC625SR	EC625SP5	ECL4608
EC625SZ	EC625SI	EC600TC	EC625SC	EC625IO	EC625GI	EC625007R	EC625017R	EC625ST	EC625SR	-	ECL4608







Doors can be removed from the body and easily mounted on again. All enclosures are equipped with standard plastic quarter turn lock, but a safety lock mechanism can be supplied separately if needed.

- Operating temperature is -25 °C to 70 °C;
- The range is available in 7 sizes, from the Size I (270x305x170 mm) to the Size VII (800x1055x360 mm)

The internal back plates incorporate pre-fitted and reversible metal hinges along with an ergonomic handle and standard plastic lock. The DIN rail modular devices can be wired on the workbench and subsequently mounted inside the enclosure itself.

Enclosures can host modular chassis for the installation of 26 to 190 DIN modules

Pre-fitted encapsulated nuts are incorporated on the back side to accommodate mounting to eliminate drilling and retain IP rating.

#### **ACCESSORIES**







Pre-fitted encapsulated nuts are incorporated on the back side to accommodate mounting to eliminate drilling and retain IP rating





Wall mounting brackets can be fixed vertically or horizontally. The encapsulated nuts can be used to fasten other elements such as bars or threaded frames

Opening angle span of the doors is more than 180° to facilitate an easy wiring with no obstructions





Doors incorporate concealed stainless steel spring hinges and opening can be right or left-handed

Metal or insulating subpanels are wide and can be easily fixed on the bottom with standard supplied screws



Metal or insulating subpanels can be adjusted at different heights through the optional depth adjust kit

Internal doors have a wide surface. They incorporate concealed stainless-steel hinges and are supplied with standard locks and ergonomic handle





The internal doors incorporate pre-fitted and reversible stainless steel hinges and can be adjusted at two different heights



DIN rails (on demand) Holes distance: 36 modules: 125 mm 54/72/96/140 modules: 150 mm

190 modules: 200 mm





DIN rails can be mounted on the frame uprights at specific positions (for devices with standard height of 48, 75 or 102 mm

The DIN rail modular devices can be mounted on the modular frame, wired on the workbench and subsequently mounted inside the enclosure itself.





Cable trunkings can be mounted on the DIN rail supports with minimum height of 40 mm, even with back plate on the bottom

The assembled and wired frame can be hold by the internal brackets.
The final wiring or maintenance is carried out hands-free





The frame fixing is fast and easy thanks to the quick plastic insulating screws: maximum speed for an easy installation and maintenance

All modular faceplates can be quickly mounted with quarter turn plastic screws for a fast and easy installation and maintenance stages



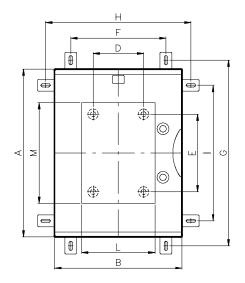


The frame installed in the highest position ensures the retaining of IP20 rating even with open door

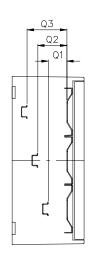
#### **DIMENSION TABLES**

#### GLASS-FIBRE REIFORCED POLYESTER ENCLOSURES SERIE 625

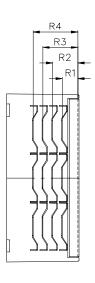
#### EXTERNAL DIMENSIONS AND FIXING POINTS



#### ELEVATIONS OF DIN RAILS ABOVE FACEPLATES



#### ELEVATIONS OF FACEPLATES ABOVE FRONT DOOR



	SIZE	MODULES	Α	В	С	D	D1	E	F	G	Н	1	L	M	W1	W2
	l°	-	307	271	171	93	-	135	188	353	317	224	103	166	-	36
Ī	ll°	36 (3X12)	432	328	186	130	-	260	245	478	374	349	160	290	36	62
_	III°	54 (3X18)	507	436	216	238	-	335	353	553	482	424	268	365	74	112
	ΙV°	72 (4X18)	657	436	216	238	-	485	353	703	482	574	268	515	82	124
	V°	96 (4X24)	657	546	266	348	-	485	463	703	592	574	378	515	94	134
Ī	VI°	140 (5X28)	807	620	322	410	-	620	537	853	666	724	452	656	138	218
_	VII°	190 (5X38)	1057	800	362	590	470	870	717	1103	846	974	632	856	230	315

W1: Dissipation power in Watt with DIN rails and windowed faceplates at 48 mm elevation.

W2: Dissipation power in Watt with subpanel at 48 mm elevation.

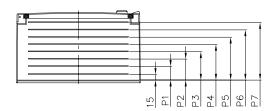


#### HEIGHT OF FRONT DOOR, INTERNAL DOOR AND BACK PLATE AT DIFFERENT ELEVATIONS

# 

DOOR - BACK PLATE DISTANCES

#### HEIGHT OF BACK PLATE AT DIFFERENT ELEVATIONS WHEN FIXED ON DEPTH ADJUST KITS (OPTIONAL)



BACK PLATE DISTANCES - BACK PLATE SUPPORTS

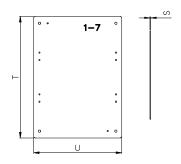
#### \* Calculate 9 mm less (only for windowed faceplates)

SIZE	MODULES	Ν	N1	N2	P1	P2	P3	P4	P5	P6	P7	Q1	Q2	Q3	R1	R2	R3	R4	R5
l°	-	142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II°	36 (3X12)	155	112	82	43	68	-	-	-	-	-	48	75	-	30	55	-	-	-
III°	54 (3X18)	185	142	112	43	68	93	-	-	-	-	48	75	102	30	55	80		-
IV°	72 (4X18)	185	142	112	43	68	93	-	-	-	-	48	75	102	30	55	80	-	-
V°	96 (4X24)	235	192	162	43	68	93	118	143	-	-	48	75	102	30	55	80	105	-
VI°	140 (5X28)	291	248	218	43	68	93	118	143	168	193	48	75	102	30	55	80	105	130
VII°	190 (5X38)	332	282	252	80	105	130	155	180	205	230	48	75	102	30	55	90	115	140

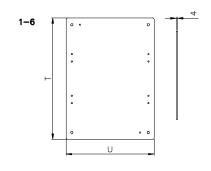
#### INTERNAL DOOR WITH STANDARD LOCK

# 5) Z

#### METAL BACK PLATE

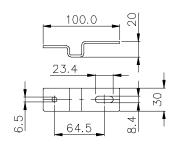


#### **INSULATING BACK PLATE**



#### **INSULATING BACK PLATE**

SIZE	S	Т	U	V	Z	X	Υ
l°	1,5	239	207	-	-	-	-
ll°	1,5	364	264	373	267	318	210
III°	1,5	439	372	447	377	392	320
IV°	1,5	589	372	597	377	542	320
V°	1,5	589	482	597	487	542	430
VI°	2,0	739	556	747	561	692	504
VII°	2,0	989	736	997	741	942	684



# FEATURES AND SPECIFICATIONS

- MATERIAL: **GLASSFIBRE REINFORCED POLYESTER** (GRP), HALOGENFREE, SELF EXTINGUISHING
- RESISTANT TO UV RAYS ACCORDING TO EN 614391/10.2.4
- STANDARD COLOUR: GREY RAL 7035
- IMPACT RESISTANCE: **IK10 (UP TO 20J)**, ACCORDING TO EN 62262
- RESISTANCE TO ABNORMAL HEAT (GWT ACCORDING TO IEC 60695211): 960 °C FOR THE VERSION WITH SOLID FRONT DOOR 650 °C FOR THE VERSION WITH TRANSPARENT WINDOW FRONT DOOR
- TEMPERATURE OPERATING CONDITIONS: -25 °C TO 70 °C
- PROTECTION DEGREE: IP66
- RATED OPERATING VOLTAGE: 1000 Vac 1500 Vdc (SUITABLE FOR PV INSTALLATIONS)
- INSULATION CLASS: II (WHEN FOLLOWING THE USER INSTRUCTIONS)
- SUITABLE FOR THE INSTALLATION OF MODULAR DEVICES WITH HEIGHT **48 AND 75 mm** (DEVICES WITH HEIGHT **102 mm** CAN BE MOUNTED ON BOARDS OF SIZE III 435X505X215 mm AND ABOVE)
- REVERSIBLE LEFT OR RIGHT-HAND OPENING DOOR INCORPORATES CONCEALED REMOVABLE STAINLESS-STEEL HINGES (OPENING ANGLE SPAN ABOVE 180°)
- STANDARD: **EN62208**, **EN606701**, **EN6067024**, **EN61439**
- IN COMPLIANCE WITH THE SAFETY OBJECTIVES OF THE LOW-VOLTAGE DIRECTIVE 2014/35/EU (ANNEX I)
- IN COMPLIANCE WITH ROHS II DIRECTIVE 2011/65/EU AND 2015/863/EU















