GIOVENZANA
INTERNATIONAL B.V.

LIFT

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INTERNATIONAL B.V.

LIFT TECHNOLOGY

LIFT

Throughout the years, continuous technological research and development has made Giovenzana the undisputed leader in its field. The range of products includes:

- *pit bottom push button stations*
- *recall drive control units*
- *inspection boxes*

QUALITY

Giovenzana, leader in the elevator and lifting equipment field, has gained a prominent position in the automation sector with their launch of industrial control accessories into the market. For many years, all commercial and industrial operations have been integrated within the frame of the **UNI EN ISO 9001:2008** quality system.
CSQ certificate N 9105. GIOV.
Giovenzana has fulfilled its commitment to high quality of its products since 1995. Quality system is the end user's guarantee that all production stages are closely followed under strict control and adhere to the requirements set by the company both in terms of customer expectations and compliance to the relevant international standards as proved by the various certificates Giovenzana holds for its products.
With the **UNI EN ISO 14001:2004**, Giovenzana keeps up with new technologies in order to reduce raw materials consumption, energy and natural resources and to minimize waste and emissions in order to be environment friendly, Giovenzana products are in conformity to directives Rohs, Pfos, Raee and Reach.
The certification CSQ N 9191. GIBV.

COMPLIANCE

All Giovenzana products are manufactured according to the most relevant Cee directives. Giovenzana certifies this compliance with a declaration of conformity.

CERTIFICATIONS

In order to reach its high quality level Giovenzana's products are tested by multiple third parties. In order to obtain the UL mark, Giovenzana submits their products to Underwriter Laboratories Inc., one of the most eminent independent certification companies in the World.

CEE DIRECTIVES

From January 1st, 1997 it is compulsory to CE mark all electromechanical products: this has been outlined by an important regulation: 2006/95/CE Low Voltage Directives.

CE MARK

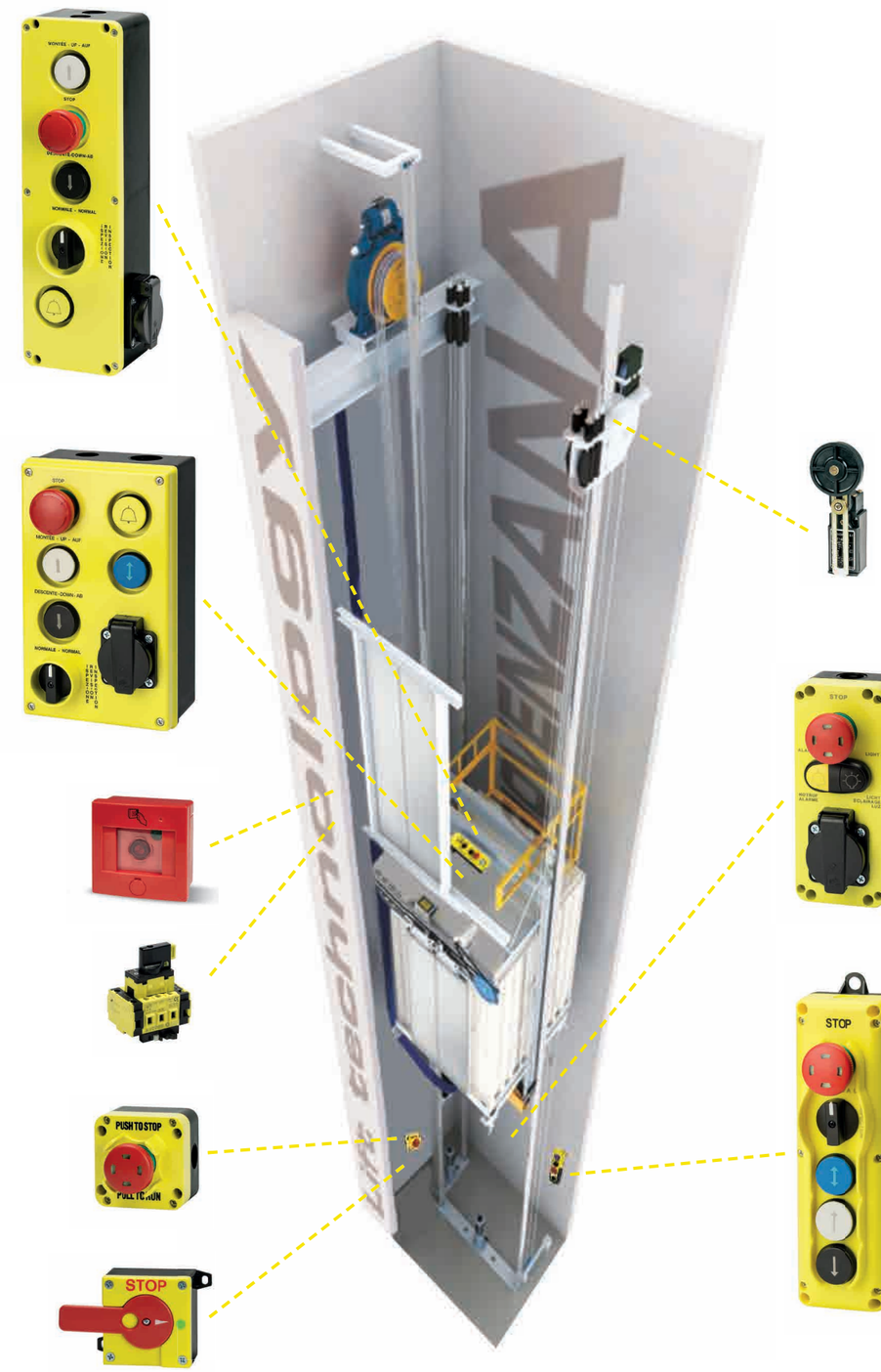
European directives, applied to all national regulations, set the minimum requirements in term of safety of all electrical material sold within the EU.
Compliance to these requirements is certified to the manufacturer by the CE mark placed on the products.

STANDARDS

Giovenzana's products comply with both the European EN and the American UL standards.
These regulations, such as CEI EN 60204-1 (CEI 44-5) with regards to the safety requirements of the electrical circuits on board industrial machinery, define the characteristics, performance and use of the products.

EN EUROPEAN STANDARDS

The EN European standards are originated from IEC International standards and are the result of the collaboration between CENELEC (European Committee for Electrotechnical Standardization) member countries.
These standards cover and eliminate existing national standards that may be contradictory obsolete.



SPECIAL VERSION ON REQUEST

On demand we are in condition to meet customers specials enquires developping customers plans:

- *Push buttons design meeting standard rules and special symbology*
- *Cabled and wired as customers electrical diagrams*
- *With or without feeding connectors*
- *Execution with special support and metal brackets*
- *PCB conductive plans*

INDEX

THE INNOVATION

Giovenzana International B.V., widely recognized as a leader in elevator technology and the name that operators associate with security and quality, has created the **new GM series** of inspection boxes (**complies with International Standard EN 81.20 and EN 81.50**).

The ergonomic design ensures **maximum operator safety**. Giovenzana has applied its new design philosophy which incorporates these rules:

- Mushroom stopping device in accordance with IEC / EN 60947-5-5
- Mandatory Run button
- Operators are protected against accidental impacts at all times
- Cam switch (not selector) binding to the norm for inspection operation with solid drive and without margin of error in the switching
- Contact blocks with spring clamp conform to EN 60068-2-6 and EN 60068-2-27 and vibration resistant with IP20 degree of protection
- AC-15 and DC-13 contact blocks in accordance with EN 60947-5-1:2005 (1M cycles)

Giovenzana designs and implements safety components for the world's major chain lift manufacturers.

EN 81.20

In order to facilitate **inspection and maintenance**, a readily operable station should be permanently installed:

a) On the car roof; 1
b) In the pit; 2
c) In the car (if there are areas of work in the car); 3
d) On a platform (if there are areas of work on the platform).

The inspection control station should consist of:
a) A switch (inspection operation switch) which should satisfy the requirements for electric safety devices. It is supposed to be bi-stable, shall be protected against involuntary operation;
b) Direction push buttons "UP" and "DOWN" protected against accidental operation; clear indications of movement direction;
c) A push button "RUN" protected against accidental operation;
d) A stopping device.

The control station may also incorporate special switches protected against accidental operation for controlling the doors mechanism from the car roof. The inspection control station should have a minimum degree of protection of IPXXD (EN 60529).

Return to normal operation of the lift
The return to normal operation of the lift should only be effected by switching the inspection operation switch(es) back to normal. Additionally return to normal operation of the lift from pit inspection station should only be made under following conditions:

a) Landing doors giving access to the pit are closed and locked;
b) All stopping devices in pit are inactive;
c) Electrical reset device outside the well is operated:
   1. In conjunction of emergency unlocking key of the door giving access to the pit, or
   2. Accessible to authorised personnel only, e. g. inside a locked cabinet located close to the door giving access to the pit.

Precautions should be taken to prevent all involuntary movement of the car in the event of inspection operation.

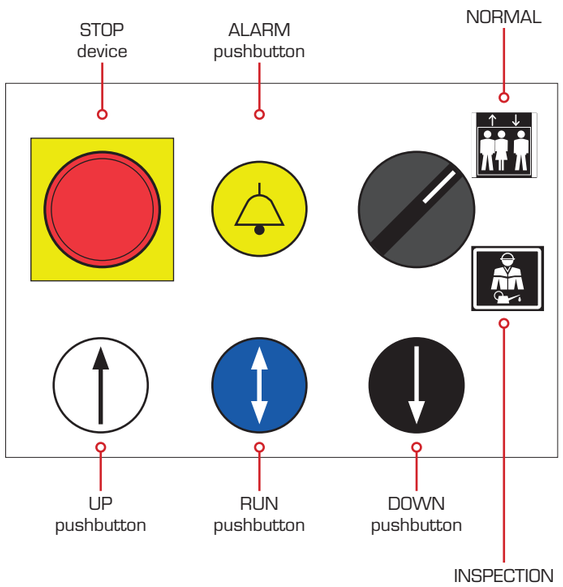
The car movement in inspection operation should depend uniquely on constant pressure on a direction and the "RUN" push-button. It should be possible to operate the "RUN" button and a direction button with one hand simultaneously.

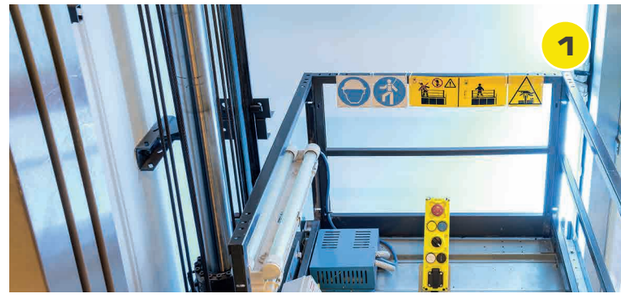
The **inspection operation electric safety device** should be bypassed by one of the following solutions:

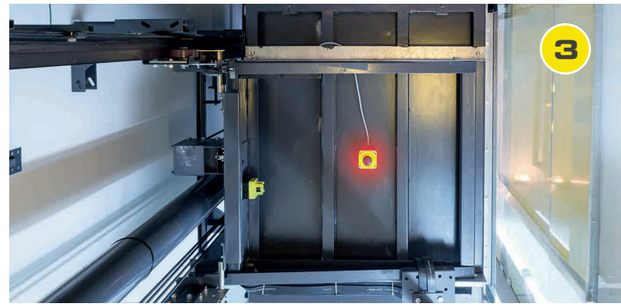
a) A series connection of a direction and the "RUN" push-button. These push buttons shall belong to the following categories as defined in EN 60947-5-1:2005:
• AC-15 for safety contacts in A.C. circuits
• DC-13 for safety contacts in D.C. circuits
The durability should be at least 1.000.000 operating cycles mechanical and electrical related to the applied load.

b) An electric safety device which is monitoring correct operation of direction and "RUN" push buttons.

Colors and Design Symbols







PIT BOTTOM, RECALL DRIVE CONTROL UNITS AND EN81 INSPECTION BOXES

Pit bottom push button stations, recall drive control units and EN81 inspection boxes with max 11 functions.
Connection by spring or wired on the printed circuit Europeean specification EN 81.20 and EN 81.50 "Safety rules for the build and for lift plant" and Nord America CSA - B44.1/ASME-A17.5 "Elevator and Escalator Electrical Equipment", resistance to vibrations and impacts as EN 60068-2-6, EN 60068-2-27, EN 60068-2-2.

The components are made in conformity to **IMQ**, **CCC**, **GOST-R** e **UL** Certifications.

ELECTRICAL CHARACTERISTICS

		CONTACT BLOCKS	CAM SWITCHES
In conformity to standard rules		IEC/EN 60947-5-1, UL508	**IEC/EN 60947-3, UL508**
Approvals		IMQ, CCC, EAC, UL, RINA	
Rated insulation voltage Ui	V	690	**690**
Rated impulse withstand voltage Uimp	kV	4	**4**
Rated thermal current Ith/Ithe	A	16	**20/16**
Frequency	Hz	50/60	**50/60**
Rated operating current Ie:	V	24 60 110 240 400 500 690	
AC - 15 alternate current	A	10 8 6 5 4 4 2	-
DC - 13 direct current	V	24 48 60 110 250	-
	A	2 2 1 0,4 0,4	-
AC - 21A - AC - 22A alternate current	A	-	**16A-690V**
Conditional short circuit withstand current	A	1000	**5000**
Fuse rating gG	A	10A - 500V	**20A - 690V**
Switching mechanism		slow break double gap contacts	
Positive		Contact blocks NC positive open ⊖	Positive open ⊖ *
Screws and clamps		Spring clamp connection	**M3,5**
Connections: Flex cable and solid cable	n. 1 min/max mm²	0,5/2,5	**0,75/4**
	n. 2 min/max mm²	0,5/2,5	**0,75/2,5**
	AWG	20-12	**16-12**
UL508 characteristics: General use		10A 600V AC - 2,5A 125V DC	**16A 600V AC**
Standard motors load single phase - 2 poles		-	**1HP (16FLA) 120V AC**
		-	**1,5HP (10FLA) 240V AC**
3 phases - 3 poles		-	**3HP (14,4FLA) 200V AC**
		-	**5HP (15,2FLA) 240V AC**
		-	**7,5HP (11FLA) 480V AC**
		-	**7,5HP (9FLA) 600V AC**
Heavy Duty (HD) category		A600 - Q600	-

* Suitable for use as switch disconnector 0-1 90° 2-3-4 poles

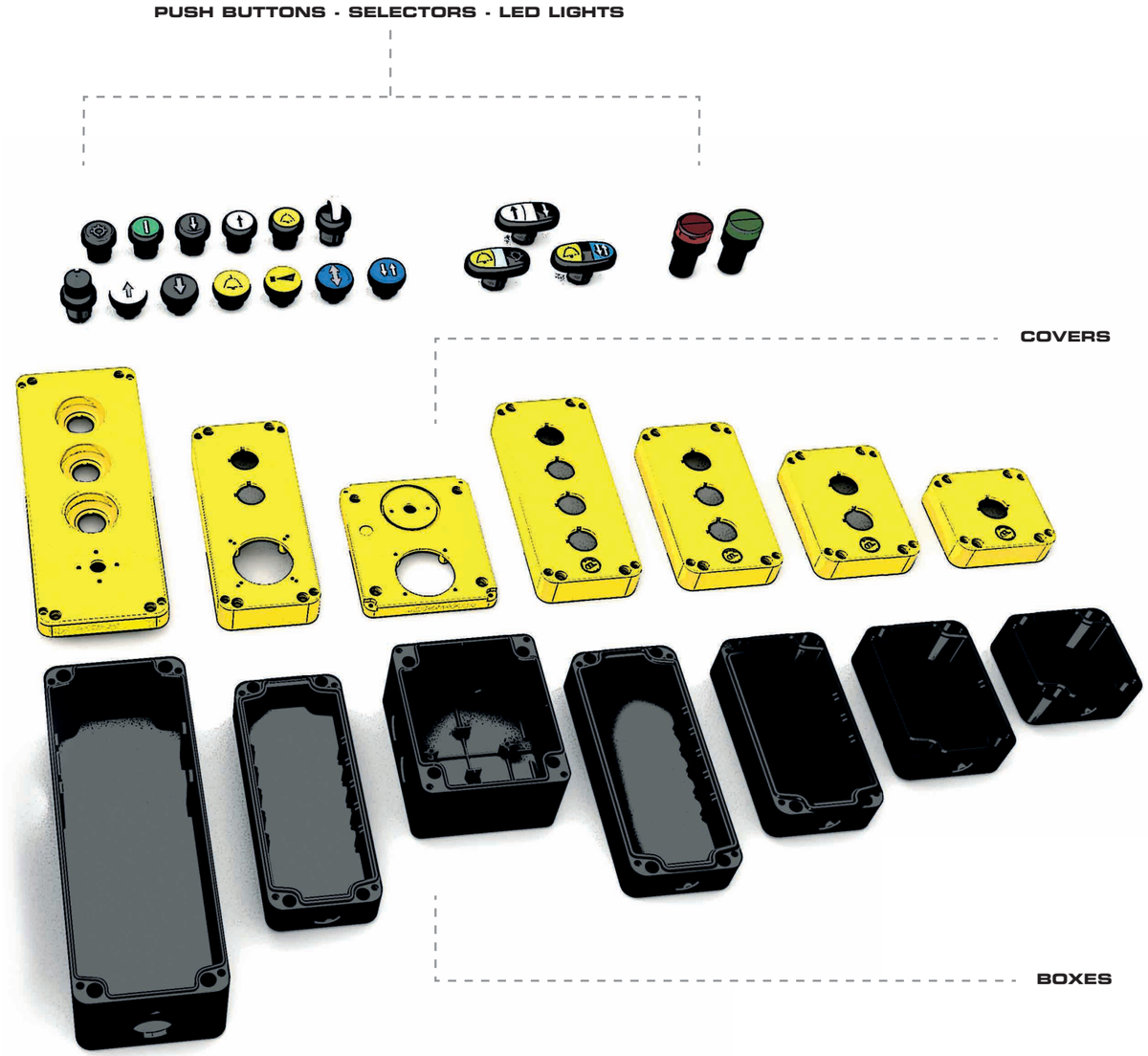
GENERAL CHARACTERISTICS

The products have European EN 81.20 and 81.50, North America CSA - B44.1 / ASME - A17.5 specifications and are meeting all safety requirements. The components are made in fully accordance with standard product norms **IEC 947-3**, **IEC 947-5-1**, **EN 60947-3**, **EN 60947-5-1**, **UL 508**, **IEC 204-1**, **EN 60204-1**, **EN ISO 13850** and in conformity to directives: **RoHS**, **PFOS**, **RAEE**, **REACH**.
With over 70 years experience in this field, Giovenzana International B.V., European market leader in the lift equipment electrical devices, made a wide range of standard products for all installation requirements with actual specification and safety guidelines.

The Lift products series are classified as:

- Pit bottom stations - Recall drive control units - Car top ispection boxes beyond the standard versions are available a wide range of specials products and customizable meeting customers technical needs.
- In conformity to EN 81.20, EN 81.50, CSA-B44.1/ASME-A17.5, EN ISO 13850, SIL1 and SIL2 (pending)
- CSA approved
- Enclosures made of self extinguishing thermoplastic material
- Protection class EN 60529: NEMA 4X, IP65 w/ot socket , with socket IP54, terminal connections IP20
- Vibration resistance as EN 60068-2-26 and EN 60069-2-27
- Shocks resistance as EN 600068-2-29
- Connections: spring clamp contacts for push buttons, mushrooms, screws terminals for cam switches, buzzers and socket outlets
- Ambient temperature: operating -25° + 70°C, storage -30° + 70°C

CAR TOP, PIT BOTTOM INSPECTION STATIONS - GM Series
Modular configuration example



The **GM Series** Recall Control Stations are available in many layouts indentifying the high level of versatility and quality of the products and boasting the following features:

- well dimensioned sizes ensuring easy of handleability;
- operator lasered indications in according with EN81.20 & EN81.50;
- the used materials have made Giovenzana a widely recognized point of reference of the field
- the used contact elements of PCW serie (according to EN 60068-2-6 and EN 60068-2-27) make easier and faster all the electrical connections

PIT BOTTOM, RECALL DRIVE CONTROL UNITS AND CAR TOP INSPECTION BOXES - GM Series

GM01FN3 GM01RN3A GM01RN3A.1A

IP65

DESCRIPTION	SCHEME
Alarm push button station CE 95/16	
Push button Ø 40 momentary (GM01FN3)	
Flush push button Ø 40 momentary (GM01RN3A)	
Flush push button Ø 40 momentary (GM01RN3A.1A)	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM01P4NP - GM01P4SP GM01R4NP - GM01R4N

IP65

DESCRIPTION	SCHEME
E-stop push button station EN ISO 13850	
Mushroom Ø 40 push-pull with 4 sectors shock protected 1NO-1NC (GM01P4NP - GM01P4SP)	
Mushroom Ø 40 push-pull with 4 sectors shock protected 1NC (GM01R4NP - GM01R4N)	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM353

IP65

DESCRIPTION	SCHEME
Pit bottom switch with knob Ø 35	
Cam switch 0-1 90° switching 1NO	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

GM355

IP65

DESCRIPTION	SCHEME
Pit bottom switch with knob Ø 35	
Cam switch 0-1 90° switching 2NO	

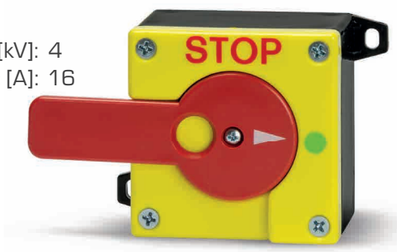
CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

GM354 GM356

IP65

DESCRIPTION	SCHEME
Pit switch	
With handle locked in stop position - 1NO (GM354)	
With handle locked in stop position - 2NO (GM356)	

CAM SWITCHES
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current in enclosure Ithe [A]: 16
Rated thermal current Ith [A]: 20
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Frequency [Hz]: 50/60



GM092

IP65

DESCRIPTION	SCHEME
Door opener control station	
Cam switch 1 - 0 - 2 spring return to the center	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

PIT BOTTOM, RECALL DRIVE CONTROL UNITS AND CAR TOP INSPECTION BOXES - GM Series

GM406/EU

IP54

DESCRIPTION	SCHEME	
Emergency stop EN ISO 13850 mushroom Ø 40 push-pull with vision:		
1 Schuko socket outlet 16A		
1 Cenelec socket outlet		**GM407**
1 USA socket outlet		**GM408**
1 Swiss socket outlet		**GM408/SW**
1 UK standard socket outlet		**GM408/UK**
1 Australia-China socket outlet		**GM408/CH**

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM401

IP54

DESCRIPTION	SCHEME	
Emergency stop EN ISO 13850 mushroom Ø 40 push-pull with vision:		
1 Alarm push button - 1NO		
1 Schuko socket outlet 16A		
1 Cenelec socket outlet		**GM401/FR**
1 USA socket outlet		**GM401/US**
1 Swiss socket outlet		**GM401/SW**
1 UK standard socket outlet		**GM401/UK**
1 Australia-China socket outlet		**GM401/CH**

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM403A

IP54

DESCRIPTION	SCHEME	
Emergency stop EN ISO 13850 mushroom Ø 40 push-pull with vision:		
1 knob selector 0 - 1 to 90°		
1 Schuko socket outlet 16A		
1 Cenelec socket outlet		**GM403/FR**
1 USA socket outlet		**GM403/US**
1 Swiss socket outlet		**GM403/SW**
1 UK standard socket outlet		**GM403/UK**
1 Australia-China socket outlet		**GM403/CH**

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM421

IP54

DESCRIPTION	SCHEME	
Emergency stop EN ISO 13850 mushroom Ø 40 push-pull with vision:		
1 Alarm lighted push button - 1 NO		
1 Cenelec socket outlet		
1 Schuko socket outlet 16A		**GM421/EU**
1 USA socket outlet		**GM421/US**
1 Swiss socket outlet		**GM421/SW**
1 UK standard socket outlet		**GM421/UK**
1 Australia-China socket outlet		**GM421/CH**

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

PIT BOTTOM, RECALL DRIVE CONTROL UNITS AND CAR TOP INSPECTION BOXES - GM Series

GM491 IP54

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 mushroom Ø 40 push-pull with vision:	
1 dual push button Alarm - Light 1NO+1NO	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM492
GM492/US
GM492/SW
GM492/UK
GM492/CH

GM419 IP65

DESCRIPTION	SCHEME
Buzzer AC/DC 12-24V with:	
1 Red led Light	AC/DC 24V
1 Green led light	AC/DC 24V

GM219 IP65

DESCRIPTION	SCHEME
Advising LED lights AC/DC 12-24V with:	
1 Green led Light	AC/DC 24V
1 Red led light	AC/DC 24V

GM092BYPASS IP65

DESCRIPTION	SCHEME
Landing and car door bypass device	
Cam switch 1 - 2	DS

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

GM243 IP54

DESCRIPTION	SCHEME
Cam switch 0-1 90° switching with:	
1 Schuko socket outlet 16A	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

1 Cenelec socket outlet — **GM243/FR**
1 USA socket outlet — **GM243/US**
1 Swiss socket outlet — **GM243/SW**
1 UK standard socket outlet — **GM243/UK**
1 Australia-China socket outlet — **GM243/CH**

PIT BOTTOM, RECALL DRIVE CONTROL UNITS AND CAR TOP INSPECTION BOXES - GM Series

GM483

IP65

DESCRIPTION	SCHEME
Green LED 24V AC/DC with:	AC/DC 24V
1 Up push button - 1NO	
1 Down push button - 1NO	
1 Cam switch 1-2 90° switching - 2NO + 2NC	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM488

IP65

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 30 twist to release with:	
1 Up push button - 2NO	
1 Down push button - 2NO	
1 Cam switch 1-0-2 90° switching - 2NO + 2NC	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM442N

IP65

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 twist to release with:	
1 Up push button - 2NO	
1 Down push button - 2NO	
1 Cam switch 1-0-2 90° switching - 2NO + 2NC	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM444N

IP65

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 twist to release with:	
1 Up push button - 2NO	
1 Down push button - 2NO	
1 Cam switch 1-2 90° switching - 2NO + 2NC	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

PIT BOTTOM, RECALL DRIVE CONTROL UNITS AND CAR TOP INSPECTION BOXES - GM Series

GM441N

IP54

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 twist to release with:	
1 Up push button - 2NO	
1 Down push button - 2NO	
1 Cam switch 1-2 90° switching - 2NO + 2NC	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM441N/FR
GM441N/US
GM441N/SW
GM441N/UK
GM441N/CH

GM445N

IP54

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 twist to release with:	
1 Up push button - 2NO	
1 Down push button - 2NO	
1 Cam switch 1-0-2 90° switching - 2NO + 2NC	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM445N/FR
GM445N/US
GM445N/SW
GM445N/UK
GM445N/CH

GM660

IP54 *Magnets on the bottom by request*

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 twist to release with:	
1 Up push button - 2NO	
1 Down push button - 2NO	
1 Alarm push button 1NO + 1NC	
1 Cam switch 1-2 90° switching - 3NO + 3NC	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM660/FR
GM660/US
GM660/SW
GM660/UK
GM660/CH

GM663

IP54 *Magnets on the bottom by request*

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with:	
1 Up push button - 2NO	
1 Down push button - 2NO	
1 Common push button - 2NO	
1 Cam switch 1-2 90° switching - 3NO + 3NC	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM663/FR
GM663/US
GM663/SW
GM663/UK
GM663/CH

PIT BOTTOM, RECALL DRIVE CONTROL UNITS AND CAR TOP INSPECTION BOXES - GM Series

GM670

IP54 ⧈ *Magnets on the bottom by request*

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 twist to release with:	
1 Up push button - 2NO	
1 Down push button - 2NO	
1 Alarm push button 1NO+1NC	
1 Cam switch 1-0-2 90° switching - 2NO + 2NC	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM670/FR
GM670/US
GM670/SW
GM670/UK
GM670/CH

GM677

IP54 ⧈ *Magnets on the bottom by request*

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with:	
1 Up push button - 2NO	
1 Down push button - 2NO	
1 Common push button - 2NO	
1 Cam switch 1-0-2 90° switching - 3NO + 3NC	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM677/FR
GM677/US
GM677/SW
GM677/UK
GM677/CH

GM750

IP54 ⧈ *Magnets on the bottom by request*

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with:	
1 Up push button - 2NO	
1 Down push button - 2NO	
1 Alarm push button - 1NO	
1 Common push button - 1NO	
1 Cam switch 1-2 90° switching - 2NO + 2NC	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM750/FR
GM750/US
GM750/SW
GM750/UK
GM750/CH

GM757

IP54 ⧈ *Magnets on the bottom by request*

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with:	
1 Up push button - 2NO - 1NC	
1 Down push button - 2NO - 1NC	
1 Knob selector 1-0-2 - 1NO+1NO	
1 Common push button - 2NO	
1 Cam switch 1-2 90° switching - 2NO + 2NC	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM757/FR
GM757/US
GM757/SW
GM757/UK
GM757/CH

PIT BOTTOM, RECALL DRIVE CONTROL UNITS AND CAR TOP INSPECTION BOXES - GM Series

GM758

IP54 *Magnets on the bottom by request*

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with:	
1 Up push button - 2NO - 1NC	
1 Down push button - 2NO - 1NC	
1 Led light	
1 Common push button - 2NO	
1 Cam switch 1-2 90° switching - 2NO + 2NC	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

1 Schuko socket outlet 16A	
1 Cenelec socket outlet	**GM758/FR**
1 USA socket outlet	**GM758/US**
1 Swiss socket outlet	**GM758/SW**
1 UK standard socket outlet	**GM758/UK**
1 Australia-China socket outlet	**GM758/CH**

GM751

IP65 *Magnets on the bottom by request*

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with:	
1 Up push button - 2NO	
1 Down push button - 2NO	
1 Alarm push button - 1NO	
1 Common push button - 1NO	
1 Cam switch 1-2 90° switching - 2NO + 2NC	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM756

IP54 *Magnets on the bottom by request*

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with:	
1 Up push button - 2NO - 1NC	
1 Down push button - 2NO - 1NC	
1 Alarm push button - 1NO	
1 Common push button - 2NO	
1 Cam switch 1-2 90° switching - 2NO + 2NC	
1 Red led light	AC/DC 24V
1 Knob selector 1-0-2 1NO+1NO	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	**GM756/FR**
1 USA socket outlet	**GM756/US**
1 Swiss socket outlet	**GM756/SW**
1 UK standard socket outlet	**GM756/UK**
1 Australia-China socket outlet	**GM756/CH**

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM754

IP65 *Magnets on the bottom by request*

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with:	
1 Up push button - 2NO - 1NC	
1 Down push button - 2NO - 1NC	
1 Alarm push button - 1NO	
1 Common push button - 2NO	
1 Cam switch 1-2 90° switching - 2NO + 2NC	
1 Knob selector 1-0-2 1NO+1NO	
1 Red led light	AC/DC 24V

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

PIT BOTTOM, RECALL DRIVE CONTROL UNITS AND CAR TOP INSPECTION BOXES - GM Series

GM412

IP54

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 twist to release with:	
1 Up push button - 2NO - 1NC	
1 Down push button - 2NO - 1NC	
1 Alarm push button - 1NO	
1 Common push button - 2NO	
1 Cam switch 1-2 90° switching - 3NO + 3NC	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]:16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM412/FR
GM412/US
GM412/SW
GM412/UK
GM412/CH

GM822

IP54

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 30 twist to release with:	
1 Up push button - 2NO - 1NC	
1 Down push button - 2NO - 1NC	
1 Alarm push button - 1NO	
1 Common push button - 2NO	
1 White LED light	AC/DC 12V
1 Cam switch 1-2 90° switching - 3NO + 3NC	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]:16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM822/FR
GM822/US
GM822/SW
GM822/UK
GM822/CH

GM321

IP54

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with:	
1 Up push button - 2NO	
1 Down push button - 2NO	
1 Alarm/Light dual push button 1NO+1NO	
1 Blue push button - 1NO	
1 Cam switch 1-2 90° switching - 2NO + 4NC	
2 Knob selector 1-0-2 1NO+1NO	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]:16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM321/FR
GM321/US
GM321/SW
GM321/UK
GM321/CH

GM520

IP55

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 30 twist to release with:	
1 Up push button - 1NO	
1 Down push button - 1NO	
1 Plug	
1 Common push button - 1NO	
1 Cam switch 1-2 90° switching - 1NO + 1NC	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]:16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Rated operating current: AC 15 – DC 13
Frequency [Hz]: 50/60

GM520/FR
GM520/US
GM520/SW
GM520/UK
GM520/CH

GMS03 IP54

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 twist to release with:	
1 Up push button - 1NO - 1NC	
1 Down push button - 1NO - 1NC	
1 Green push button - 1NO	
1 Blue push button - 1NO	
1 Black push button - 1NO	
1 Cam switch 1-2 90° switching - 1NO + 1NC	
1 Schuko socket outlet 16A	
1 USA socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM004 IP65

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with:	
1 multi-function button Yellow - Green 2NO	
1 multi-function button Up - Down 2NO	
1 Cam switch 1-2 90° switching 1NO + 1NC	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM412Black IP54

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with:	
1 Up push button - 2NO - 1NC	
1 Down push button - 2NO - 1NC	
1 Alarm push button - 1NO	
1 Common push button - 2NO	
1 Cam switch 1-2 90° switching - 3NO + 3NC	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM412Black/FR
GM412Black/US
GM412Black/SW
GM412Black/UK
GM412Black/CH

GM660Black IP54

Magnets on the bottom by request

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 twist to release with:	
1 Up push button - 2NO	
1 Down push button - 2NO	
1 Common push button - 2NO	
1 Cam switch 1-2 90° switching - 3NO + 3NC	
1 Schuko socket outlet 16A	
1 Cenelec socket outlet	
1 USA socket outlet	
1 Swiss socket outlet	
1 UK standard socket outlet	
1 Australia-China socket outlet	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM660Black/FR
GM660Black/US
GM660Black/SW
GM660Black/UK
GM660Black/CH

GM Series for ESCALATOR

GM482

IP65

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with:	
1 Up push button - 1NO - 1NC	
1 Down push button - 1NO - 1NC	
1 Start push button - 1NO	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GM245

IP65

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with:	
1 Up push button - 1NO - 1NC	
1 Down push button - 1NO - 1NC	
1 Cam switch O-1 90° switching	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

GMS50

IP65

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with:	
1 Up push button - 1NO - 1NC	
1 Enable push button - 1NO	
1 Down push button - 1NO - 1NC	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

COMPLEMENTARY PRODUCT for ESCALATOR

Mushroom Ø 90 station

PG1M9W01

IP66

DESCRIPTION	SCHEME
Mushroom momentary	.1 — .2
Colour	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

PG8M9W10

IP66

DESCRIPTION	SCHEME
Mushroom momentary	.3 — .4
Colour	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

PR1M9W01

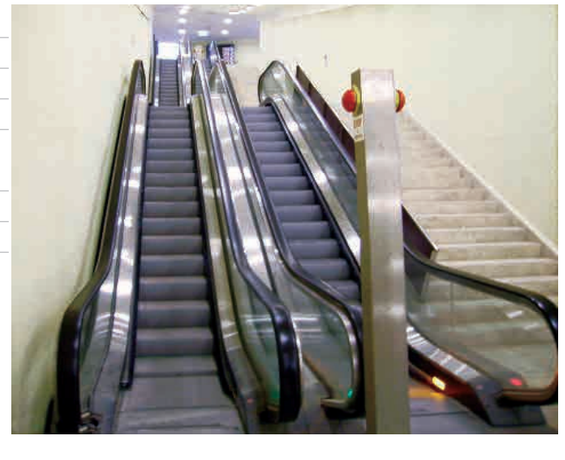
IP66

DESCRIPTION	SCHEME
Mushroom momentary	.1 — .2
Colour	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

ELECTRICAL CHARACTERISTICS

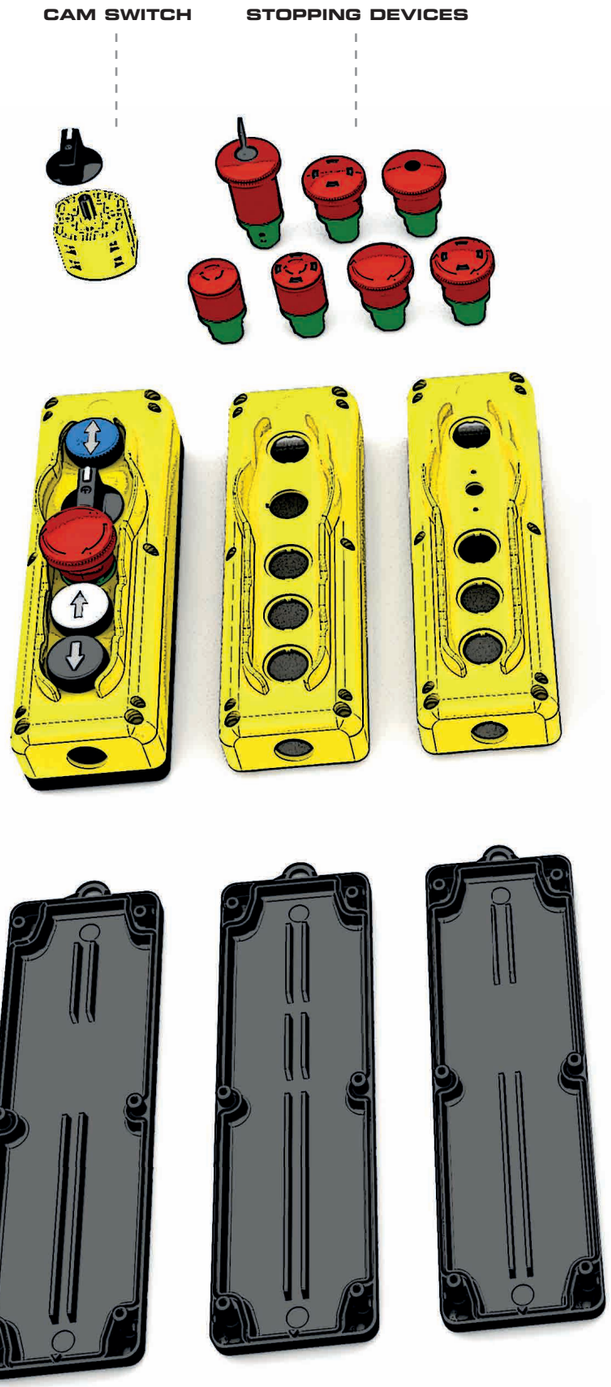
Protection	EN 60529 IP66
Double insulated	⧈
Number contact capacity	max 3 contact blocks
Cable entry with 3 holes	Pg 13,5/M20
Ambient temperature	operating -25° C +70°C storage -30° C +70°C
Climate protection	IEC 68 2-3, 2-30
Terminal referencing	EN 50013
Colours	Red mushroom RAL 3000 Giovenzana yellow cover Black box RAL 9005 Black mushroom RAL 9005 Grey cover RAL 7035 Black box RAL 9005

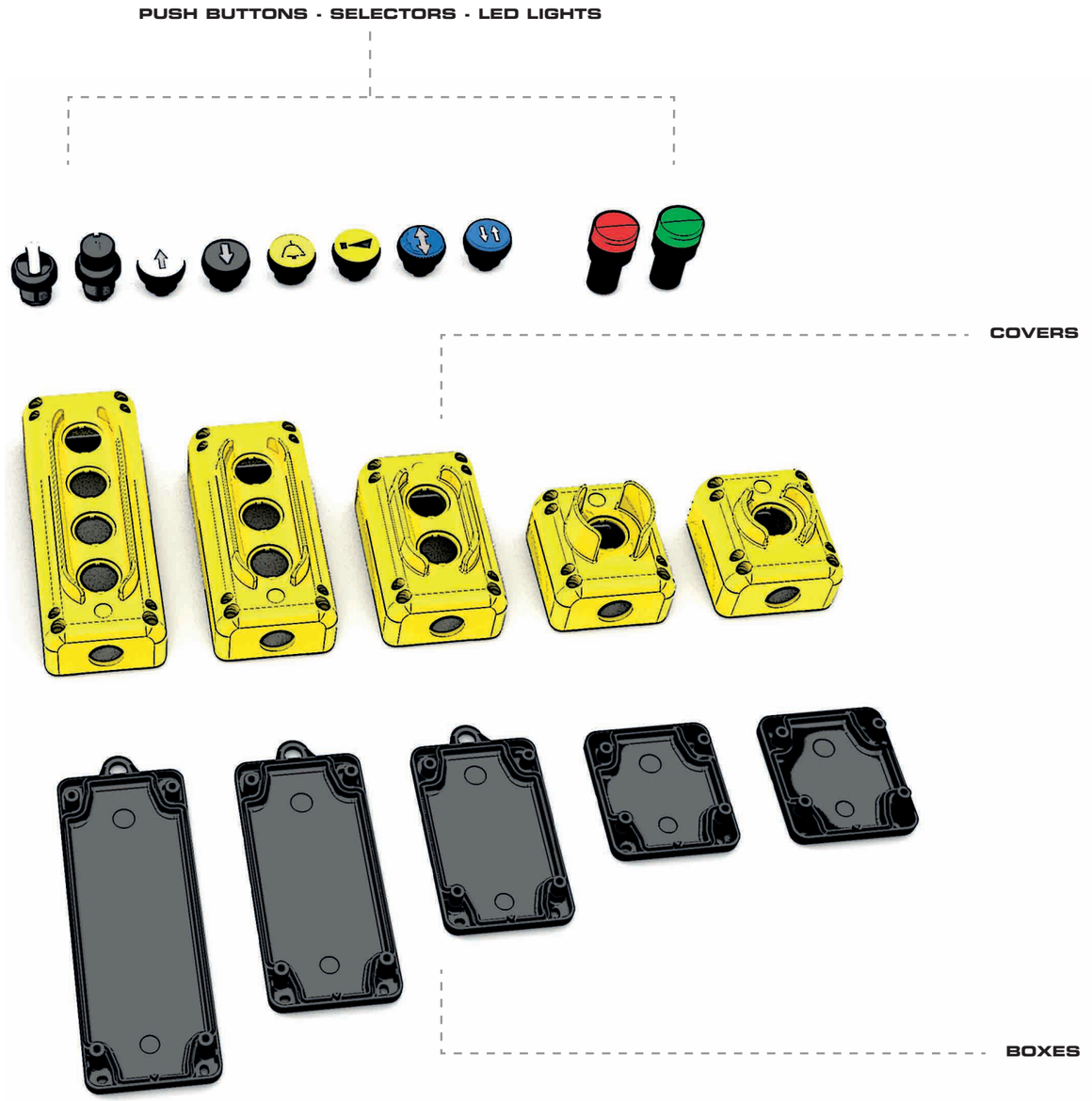


PENDANT STATIONS - TLP Series
Modular configuration example

GENERAL CHARACTERISTICS

- Lifting Platforms and tails lifts application
- In conformity to IEC/EN 60947-5-1, UNI EN 1570-1 (2011)
- Box in thermoplastic, shocks and heat resistance
- Double insulating material with IP 65 protection degree IEC/EN 60529
- Contact blocks with spring connection IP20
- Contact block NC PCW01, Contact block NO PCW10
- Cam switch with screw terminal IP20
- Two directions mechanically interlocked
- Push buttons laser engraved
- Pendant or solid fixing
- Skin stop cable gland M20
- Class V0 material or UV resistant ABS upon request





The **TLP Series** represents another step in lift maintenance sector; this new range is thought to be used in the lift shafts by the second maintenance men.
This means creation of hight security levels.

PENDANT STATIONS - TLP Series

TLP1.EPP

IP65

DESCRIPTION	SCHEME
Emergency stop EN-ISO 13850 Ø 40 to push-pull with 1 contact block NC	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

TLP1.VPP

IP65

DESCRIPTION	SCHEME
Emergency stop EN-ISO 13850 Ø 40 to push-pull with vision contact block NC	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

TLP1.ESR

IP65

DESCRIPTION	SCHEME
Emergency stop EN-ISO 13850 Ø 40 twist to release with 1 contact block NC	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

TLP1B.AL

IP65

DESCRIPTION	SCHEME
Alarm push button mushroom operator Ø 40 with 1 contact NO	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

TLP2

IP65

DESCRIPTION	SCHEME
1 Up push button - 1NO	
1 Down push button - 1NO	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

TLP3.B

IP65

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 30 twist to release with 1 contact block NC	
1 Up push button - 1NO	
1 Down push button - 1NO	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

TLP3.D

IP65

DESCRIPTION	SCHEME
Knob selector with 1 NO contact block	
1 Up push button - 1NO	
1 Down push button - 1NO	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

TLP4.A

IP65

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 30 twist to release with 1 contact block NC	
1 Up push button - 1NO	
1 Down push button - 1NO	
1 Common push button - 1NO	

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

TLP4

IP65

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 30 twist to release with 1 contact block NC	
1 Cam switch 1-2 90° switching - 3NO+3NC	
1 Up push button - 1NO	
1 Down push button - 1NO	

CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

TLP5

IP65

DESCRIPTION	SCHEME
Emergency stop EN ISO 13850 Ø 40 push-pull with 1 contact block NC	
1 Cam switch 1-2 90° switching - 3NO+3NC	
1 Common push button - 1NO	
1 Up push button - 2NO	
1 Down push button - 2NO	

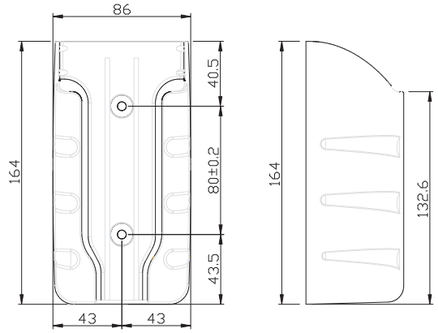
CAM SWITCHES
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 20
Rated thermal current in enclosure Ithe [A]: 16
Frequency [Hz]: 50/60

CONTACT BLOCKS
Rated operating voltage Ue [V]: 690
Rated insulation voltage Ui [V]: 690
Rated impulse withstand voltage Uimp [kV]: 4
Rated thermal current Ith [A]: 16
Rated thermal current Ithe [A]: 16
Frequency [Hz]: 50/60
Rated operating current: AC 15 – DC 13

WALL BRACKET CASE

TLP TYPE	CODE
From 1 to 3 buttons	**16000061**
From 4 to 5 buttons	**16000062**

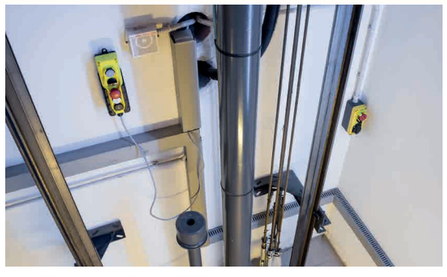
CHARACTERISTICS
Polypropylene material
Logo mold-printed

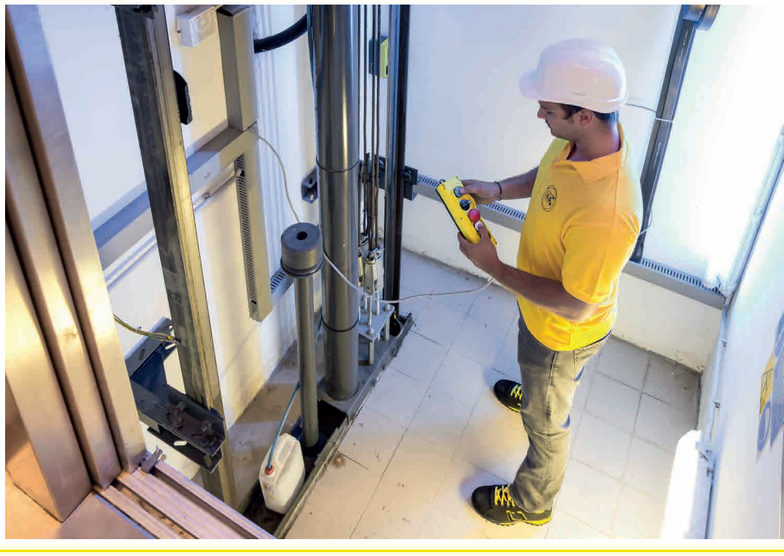


SPIRAL CABLE GLAND

DESCRIPTION	CODE
Cable gland with spiral flex protector	**12901054**

CHARACTERISTICS
Liquid tight strain relief fittings with flex protection made of nylon 6/6
Protection: IP 68 – 10 bar
Temperature: - 40/100 °C
Material: PA





20401371	20401372	20401398	20401399	20401369	12701045
					
European	French	British	Swiss	USA	Australian/Chinese
UE	FR	UK	SW	US	CH

1412.D	1412.FR	1412.BS
		
European DIN	French DIN	British DIN
UE	FR	UK

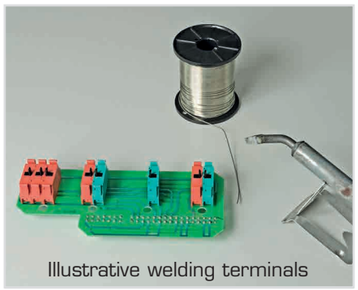
WITH DIN-EN 50022-35 RAIL SUPPORT

DESCRIPTION	CODE	FUNCTIONS	SCHEME
Welding terminals	PSC01	0 1,5 6 mm	NC 1 — 2
	PSC10	0 3,5 6 mm	NO 3 — 4

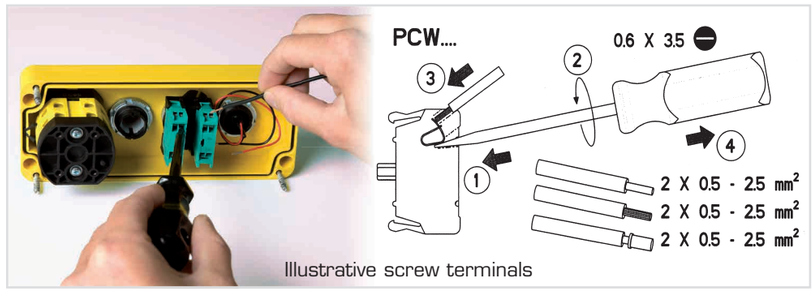
DESCRIPTION	CODE	FUNCTIONS	SCHEME
Spring clamp terminals	PCW01	0 1,5 6 mm	NC 1 — 2
	PCW10	0 3,5 6 mm	NO 3 — 4

DESCRIPTION	CODE	POWER SUPPLY	SCHEME
Lampholder BA9s	PCWAD	BA9s lamp socket 250V - 2,4W max Bulb not included	X1 — X2

DESCRIPTION	CODE	POWER SUPPLY	SCHEME
Lampholder with built-in LED	PCW5L12	AC/DC 12V	X1 — X2
	PCW5L24	AC/DC 24V	
	PCW5L48	AC/DC 48V	
	PCW5L110	AC/DC 110V	
	PCW5L220	AC 220V	



Illustrative welding terminals



Illustrative screw terminals

DESCRIPTION	CODE	FUNCTIONS	SCHEME
Screw terminals	PL004001	0 1,5 6 mm	NC 1 — 2
	PL004002	0 3,5 6 mm	NO 3 — 4

DESCRIPTION	CODE	POWER SUPPLY	SCHEME
Lampholder BA9s	PL004007	BA9s lamp socket 400V - 2,4W max Bulb not included	X1 — X2

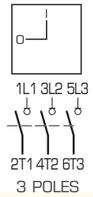
DESCRIPTION	CODE	POWER SUPPLY	SCHEME
Lampholder with built-in LED	PL0045L12	AC/DC 12V	X1 — X2
	PL0045L24	AC/DC 24V	
	PL0045L48	AC/DC 48V	
	PL0045L110	AC/DC 110V	
	PL0045L220	AC 220V	

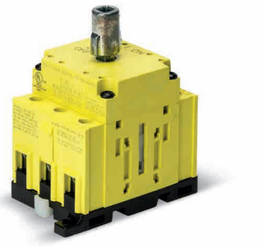
CONTACT BLOCKS ELECTRICAL CHARACTERISTICS

CHARACTERISTICS IEC/EN60947-5-1		PL004001 - PL004002	PCW01 - PCW10
Rated insulation voltage Ui	V	690 V*	690 V*
Rated impulse withstand voltage Uimp	kV	4*	4*
Frequency	Hz	50/60*	50/60*
Rated Thermal Current Ith	A	16*	16*
Rated thermal current Ithe	A	16*	16*
RATED OPERATING CURRENT			
AC15: alternate current	V	24 60 120 240 400 440 500 690	24 60 110 240 400 440 500 690
	A	16* 12 8 6 4 3,5 3 1	10* 8* 6 5* 4 4 4* 2*
DC13: direct current	V	24 48 60 110 220	24 48 60 110 250
	A	2* 1,2 0,85 0,4 0,25*	2 2* 1* 0,4 0,4*
Short circuit characteristics	A	1000*	1000*
Fuse rating gG	500 V	10A*	10A*
Contact insulation resistance	m Ω	<25	<25
Switching machanism		Slow break double gap contacts	
Contact Duty		NC contact with positive opening ⊖	
Minimum tripping force		4N	4N
Electrical life AC15/mil. cycles	mil. cycles	1A/1,5 - 2A/0,5 - 3A/0,25	1A/1,5 - 2A/0,5 - 3A/0,25
UL508 CHARACTERISTICS			
General use		10A-600V ac 2,5A-125V dc	10A-600V ac 2,5-125V dc
Havy duty (HD) category		A600 - Q600	A600 - Q600

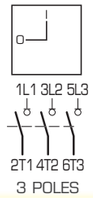
* IMQ values

SQ025 - SQ032 IP20

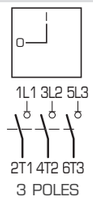
DESCRISPTION	RANGE	SCHEME	FEATURES
SQ032003DL1N Base fixing with direct command	AC-22A 32A-690V		IEC 947-3, EN 60947-3, uL 508 Box fixing and DIN rail 50022-35 Black knob with locking in position O - OFF Protection Class Terminals **IP20**



SQ063 - SQ080 IP20

DESCRIPTION	RANGE	SCHEME	FEATURES
SQ063003DL2N Base fixing with direct command	AC-22A 80A-690V		IEC 947-3, EN 60947-3, uL 508 Box fixing and DIN rail 50022-35 Black knob with locking in position O - OFF Protection Class Terminals **IP20**

SQN125 IP20

DESCRIPTION	RANGE	SCHEME	FEATURES
SQN125003B Base fixing with direct command	AC-22A 125A-690V		IEC 947-3, EN 60947-3, uL 508 Box fixing and DIN rail 50022-35 Black knob with locking in position O - OFF Protection Class Terminals **IP20**

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS IEC/EN60947-3				SQ032	SQ063	SQN125
Rated insulation voltage Ui			V	690	690	800
Rated impulse withstand voltage Uimp			kV	8	8	8
Rated thermal current Ith-Ithe			A	40	80	125
Frequency			Hz	50/60	50/60	50/60
RATED OPERATING CURRENT Ie:						
AC-21A Switching resistive loads with light overloads		690V	A	40	80	125
AC-22A Switching mixed resistive and inductive loads at light overloads		690V	A	32	80	125
AC-23A Periodic switching of motors or other overloads	3 phases - 3 poles	230V	A	32	75	-
		400/500V	A	32	67	125/100
		690V	A	20	32	47
Nominal interruption power AC-23A (cosfi 0,45)		400V	A	256	536	1.000 (cosfi 0,35)
Short circuit characteristics			kA	10	10	10
Fuse rating gG		690V	A	40	63	125
Terminal capacity		Flexible conductors	mm²	1,5-10	6-25	10-70
		Solid conductors	mm²	1,5-16	10-35	10-70
			AWG	12-8	10-2	6-2/0
General Use UL 508		600Vac	A	40	80	125

- Standard version 3 poles, possible extra mounting of three types of contacts: power contacts, neutral, ground and auxiliaries contacts NC and NO.
- cUL approvals on SQ032 and SQ063 Series.

FT139Z11 IP65

DESCRIPTION	STROKE AND OPERATION DIAGRAM
Variable length roller lever Ø 18 **Minimum tripping force 0,10 N**	

FT140Z11 IP65

DESCRIPTION	STROKE AND OPERATION DIAGRAM
Variable length roller lever Ø 45 **Minimum tripping force 0,10 N**	

FT141Z11 IP65

DESCRIPTION	STROKE AND OPERATION DIAGRAM
Variable length roller lever Ø 45 **Minimum tripping force 0,10 N**	

CHARACTERISTICS

Comply with: UL508 (Designation A600-Q600) IEC 947-5-1, EN 60947-5-1, CSA 22.2 N°14

Certification: cUL

Rated insulation voltage Ui: 690V

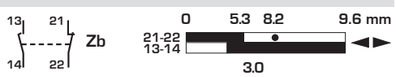
Rated thermal current Ith: 10A

Rated operating current Ie:
AC-15 (24V-10A/120V-6A/230V-3,1A/380V-1,9A)
DC-13 (24V-2,8A/120V-0,55A/230V-0,27A)

Snap action contacts IP65

AFT2T16Y11 IP65

Nylon Ø 20mm. roller plunger

DESCRIPTION	STROKE AND OPERATION DIAGRAM
Overlapping slow action contacts 1NO+1NC **Positive opening operation according to IEC 947-5-1**	

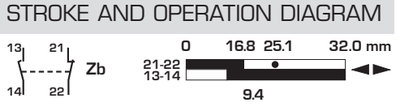
AFT2T16X11 IP65

Nylon Ø 20mm. roller plunger

DESCRIPTION	STROKE AND OPERATION DIAGRAM
Non Overlapping slow action contacts 1NO+1NC **Positive opening operation according to IEC 947-5-1**	

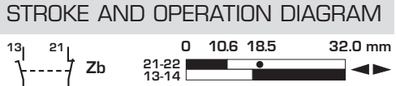
AFT2T38Y11 IP65

Metal plunger with adjustable nylon roller lever Ø 22mm.

DESCRIPTION	STROKE AND OPERATION DIAGRAM
Overlapping slow action contacts 1NO+1NC **Positive opening operation according to IEC 947-5-1**	

AFT2T38X11 IP65

Metal plunger with adjustable nylon roller lever Ø 22mm.

DESCRIPTION	STROKE AND OPERATION DIAGRAM
Non Overlapping slow action contacts 1NO+1NC **Positive opening operation according to IEC 947-5-1**	

CAM SWITCH P016 Series

DESCRIPTION	CODE	SWITCHING	SCHEME
Normal inspection cam switch double positive open **IP20**	P0160100S	2NO + 2NC	
	P0160101S	3NO + 3NC	
	P0160112S	2NO + 2NC	
	P0160138S	3NO + 3NC	

CHARACTERISTICS

Certifications:	cUL, IMQ, CCC, EAC, RINA	Protection Class Terminals:	IP20
Comply with rules:	IEC 947-3, EN 609473 UL508	Flexible conductors mm²:	n.1 x 0,75/4 n.2 x 0,75/2,5
Rated insulation voltage Ui:	690V	Solid conductors mm²:	n.1 x 0,75/4 n.2 x 0,75/2,5
Rated thermal current Ith/Ithe:	20A / 16A		
Rated operating current Ie:		AWG:	
AC-21A - AC-22A	16A - 690V	Flexible	16 - 12
DC-21A (1 pole)	12A - 50V	Solid	16 - 12
DC-22A (1 pole)	10A - 30V	General use UL:	16A - 600Vac

GME01

DESCRIPTION	FEATURES
Breaking glass emergency panel **IP55** ▣	Dimensions: **110x110x57** Colour: **Red** Contact blocks: **1NC + 1NO with screw terminals** Double option: **automatic start upon breaking glass (one action); manual start after breaking glass (two actions)** **Green pilot light for localizing** (Led 230V AC on request) **Red Light push button** (BA9s lamp 230V AC on request) Contacts in conformity to: **IEC 947-5-1, EN 60947-5-1, UL 508** Vibration resistance: **EN 60068-2-27** Shock resistance: **EN 60068-2-29** Certifications: cUL, IMQ, CCC, EAN, RINA

GME13

DESCRIPTION
Pilot light for GM01

GME14

DESCRIPTION
Push button for GM01

11705068

DESCRIPTION
Protection ring Ø 35 for logo

PUSH BUTTONS Black Line

CODE	DESCRIPTION
PPRN3ABL **IP65**	Yellow flush push button ALARM

CODE	DESCRIPTION
PPRN8LBL **IP65**	Black flush push button LIGHT

CODE	DESCRIPTION
PPRN4BL/COM **IP65**	Blue flush push button COMMON

CODE	DESCRIPTION
PPRN5BL/F **IP65**	White flush push button UP

CODE	DESCRIPTION
PPRN8BL/F **IP65**	Black flush push button DOWN

CODE	DESCRIPTION
PPDNR.3BL **IP65**	Multi-function UP-STOP-DOWN

CODE	DESCRIPTION
PPDNR.7BL **IP65**	Dual push button UP-DOWN

CODE	DESCRIPTION
PPDNR.9ABL **IP65**	Dual push button LEFT-RIGHT

11706006

DESCRIPTION
Mushroom guard

11705051

DESCRIPTION
Knob guard Ø 42 for cam switches

11705075

DESCRIPTION
Knob guard Ø 50 for cam switches

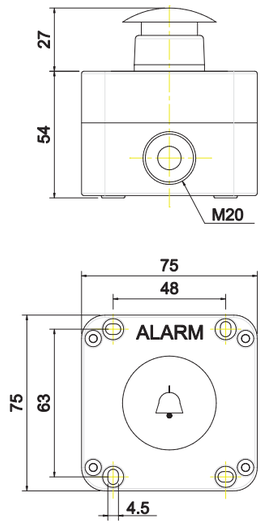
PPESV812

DESCRIPTION
Buzzer AC/DC 12-24V 90db/30cm continuous tone **IP65**

DIMENSIONS - TECHNICAL DRAWINGS GM Series

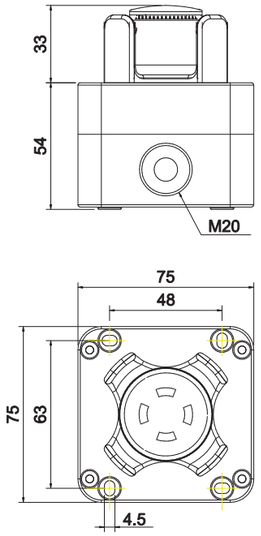
GM01FN3 / GM01RN3A / GM01RN3A.1A

Weight 180 gr



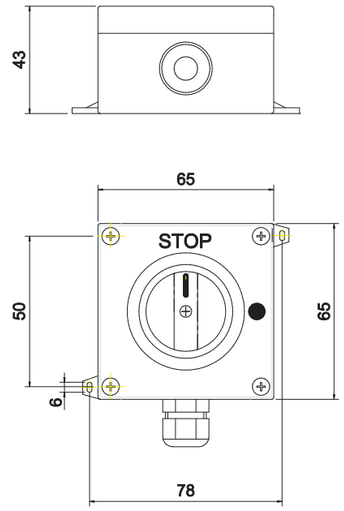
GM01P4NP / GM01P4SP / GM01RN4NP / GM01R4N

Weight 240 gr



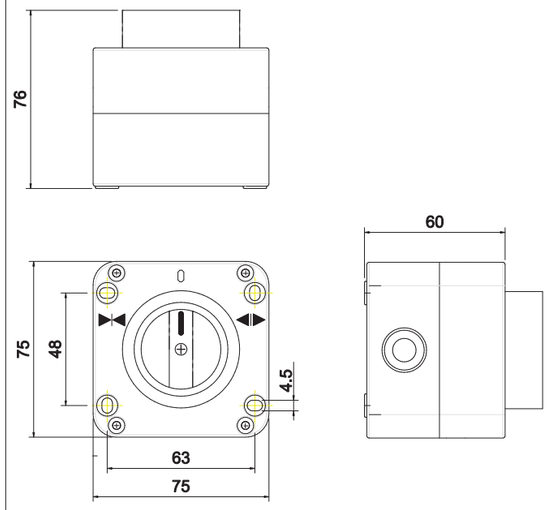
GM355

Weight 110 gr



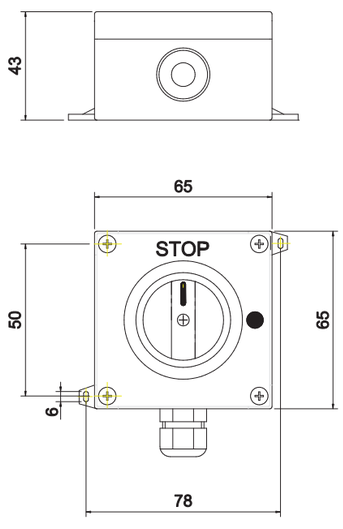
GM092

Weight 230 gr



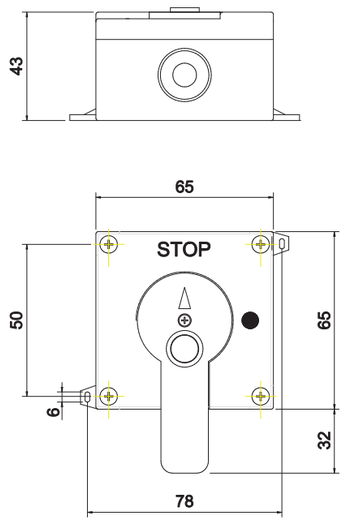
GM353

Weight 120 gr



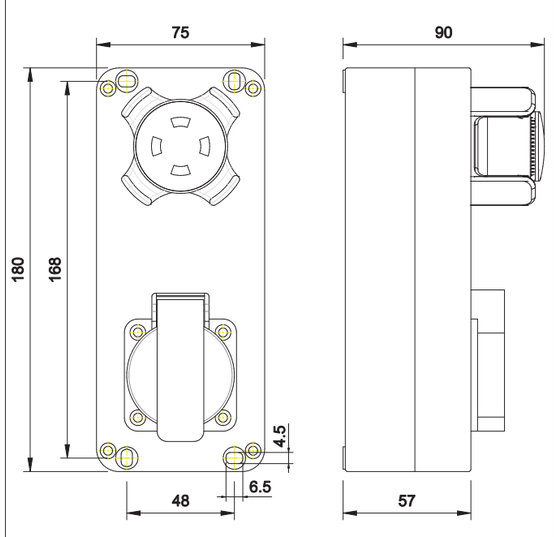
GM354 - GM356

Weight 130 gr



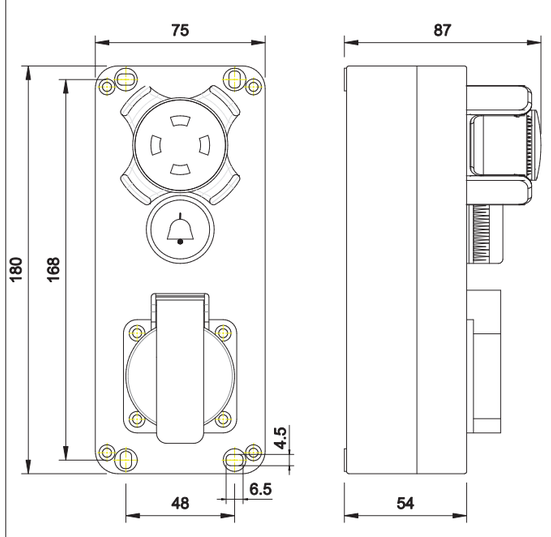
GM406/EU

Weight 380 gr



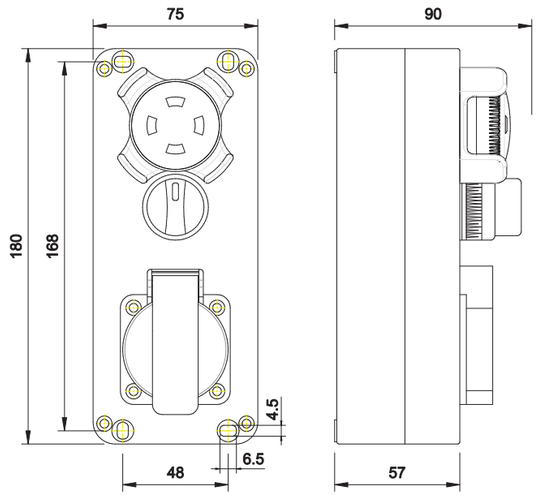
GM401

Weight 400 gr

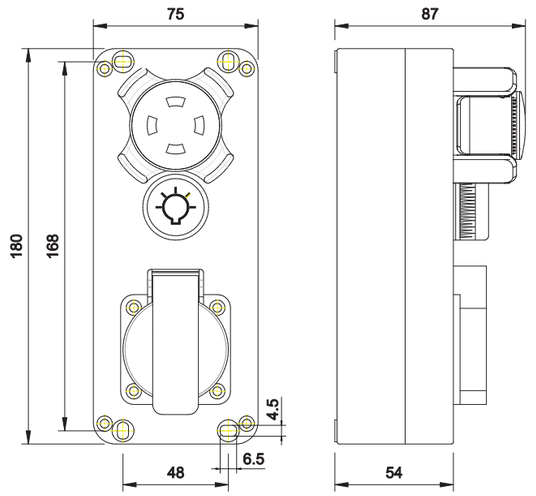


DIMENSIONS - TECHNICAL DRAWINGS GM Series

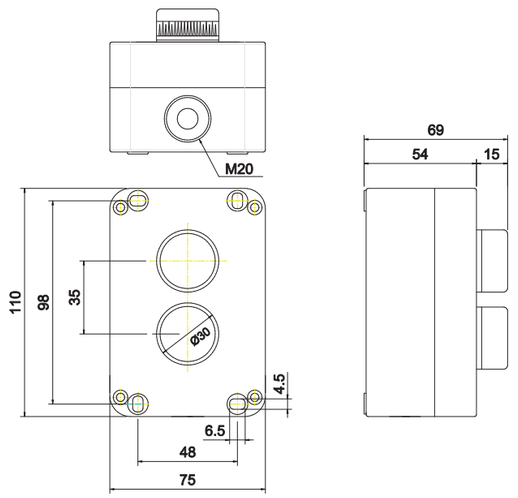
GM403A — Weight 420 gr



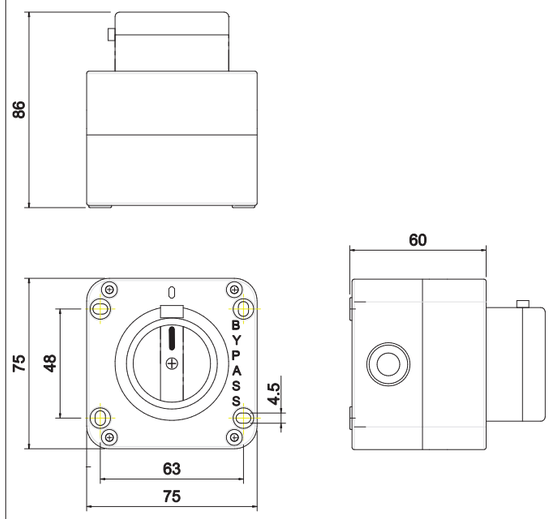
GM421 — Weight 420 gr



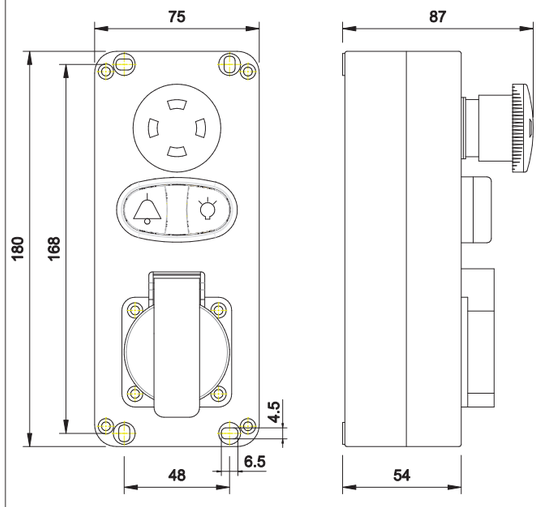
GM219 — Weight 220 gr



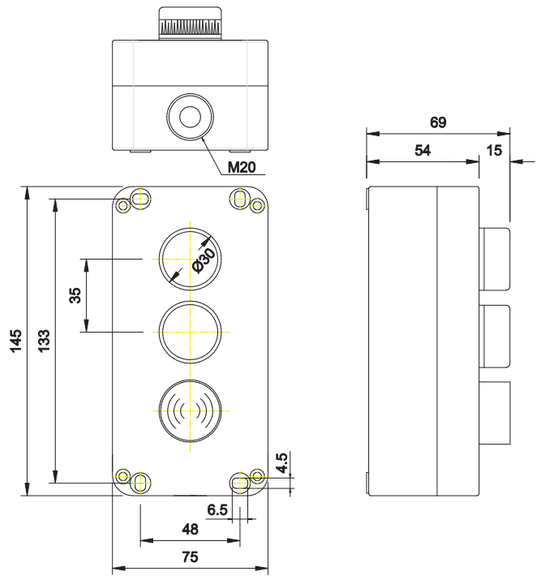
GM092BYPASS — Weight 230 gr



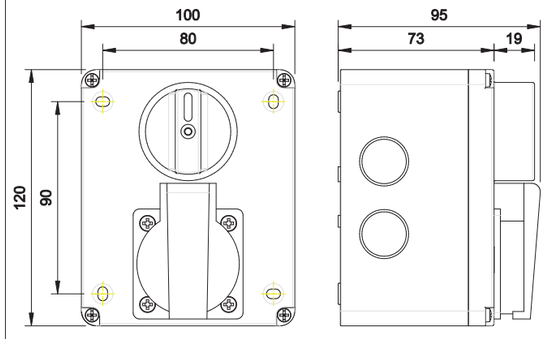
GM491 — Weight 420 gr



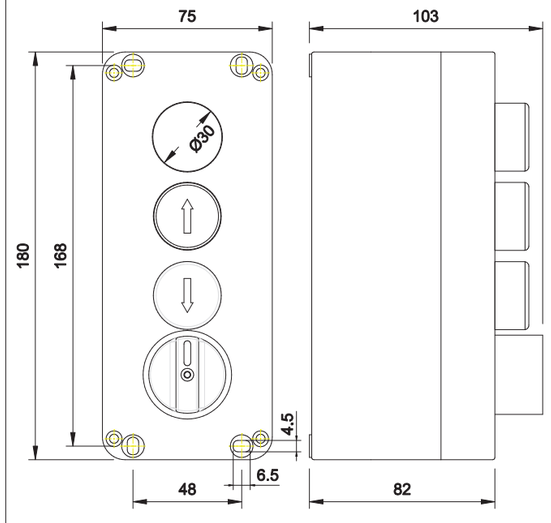
GM419 — Weight 420 gr



GM243 — Weight 350 gr

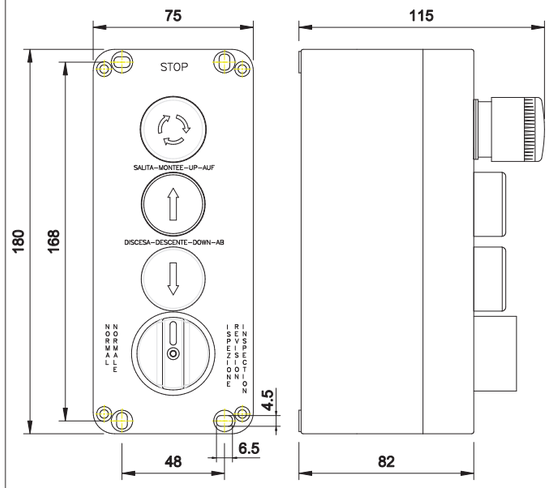


GM483 — Weight 510 gr

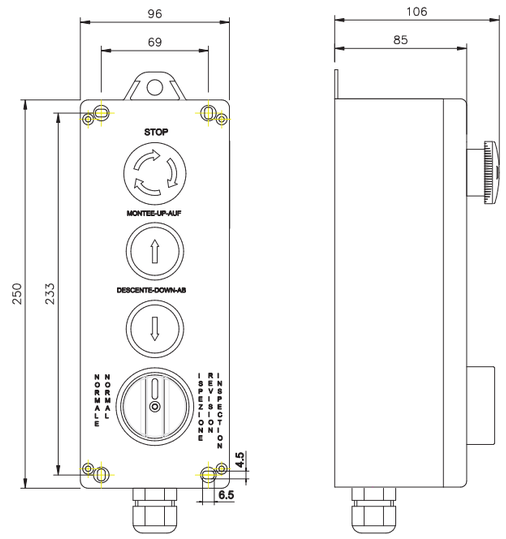


DIMENSIONS - TECHNICAL DRAWINGS GM Series

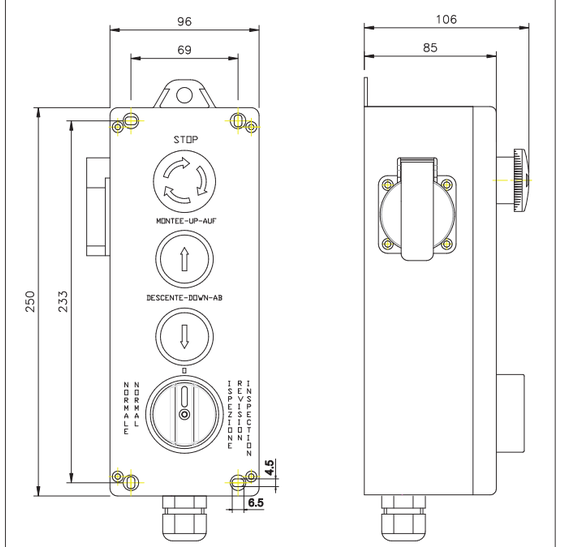
GM488 — Weight 560 gr



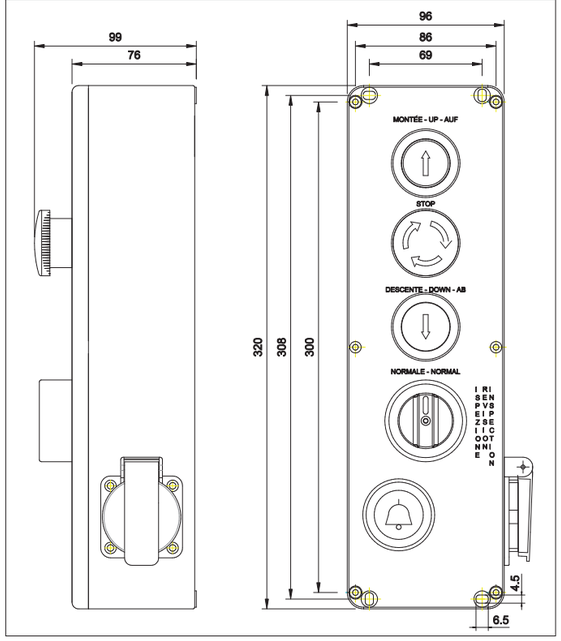
GM442N — Weight 730 gr



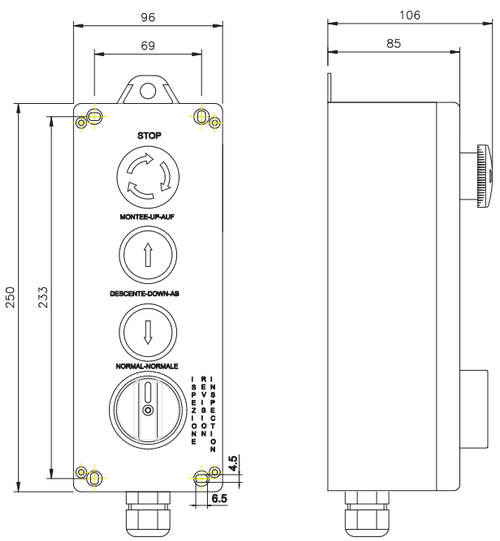
GM445N — Weight 750 gr



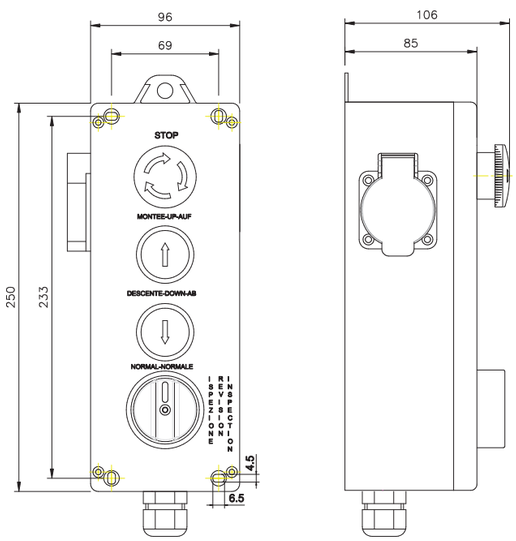
GM660 — Weight 920 gr



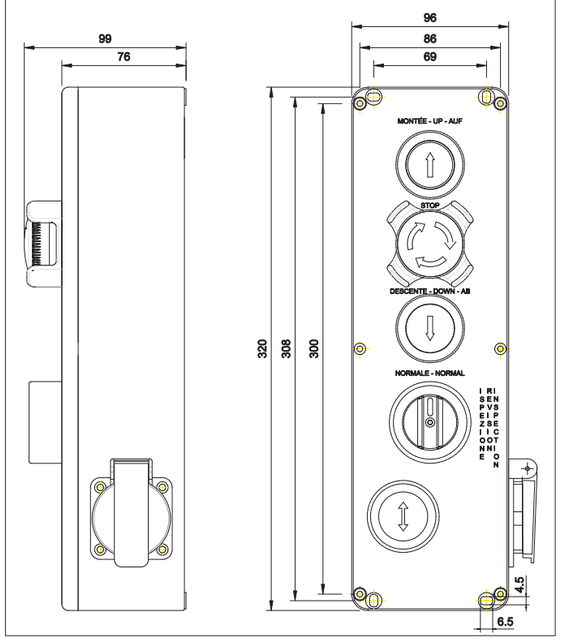
GM444N — Weight 730 gr



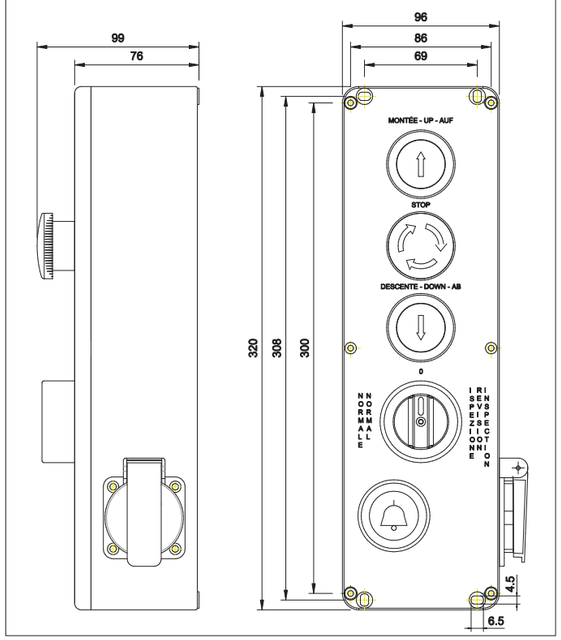
GM441N — Weight 750 gr



GM663 — Weight 920 gr

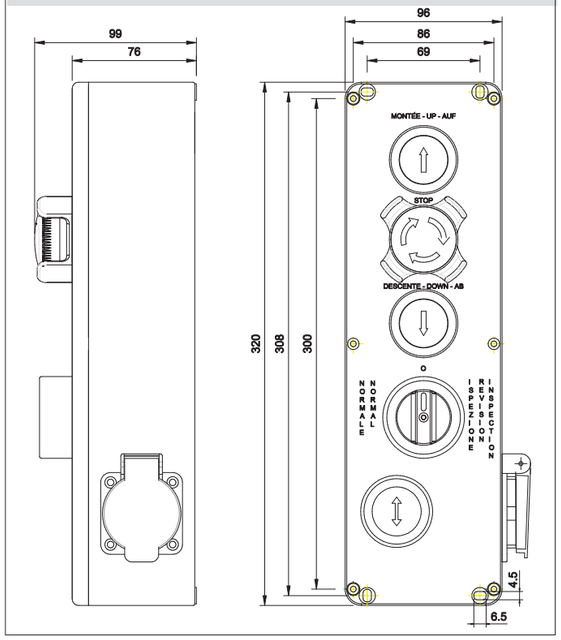


GM670 — Weight 1.000 gr

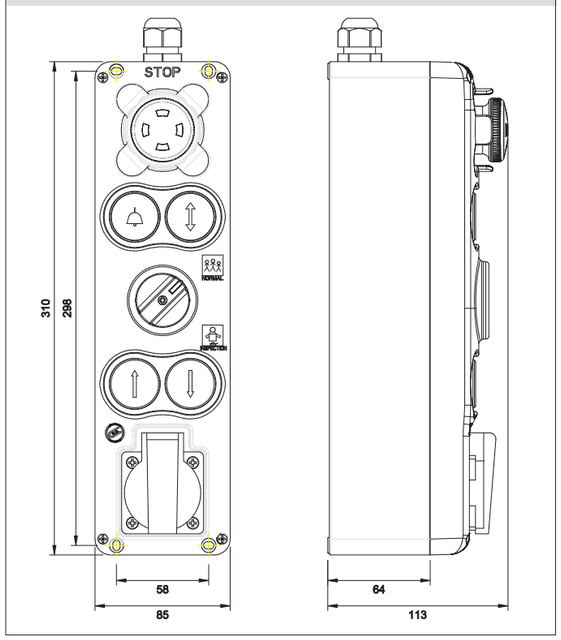


DIMENSIONS - TECHNICAL DRAWINGS GM Series

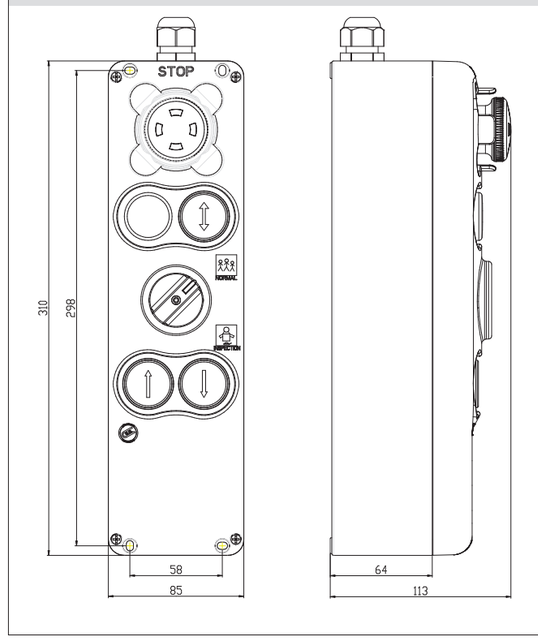
GM677 — Weight 800 gr



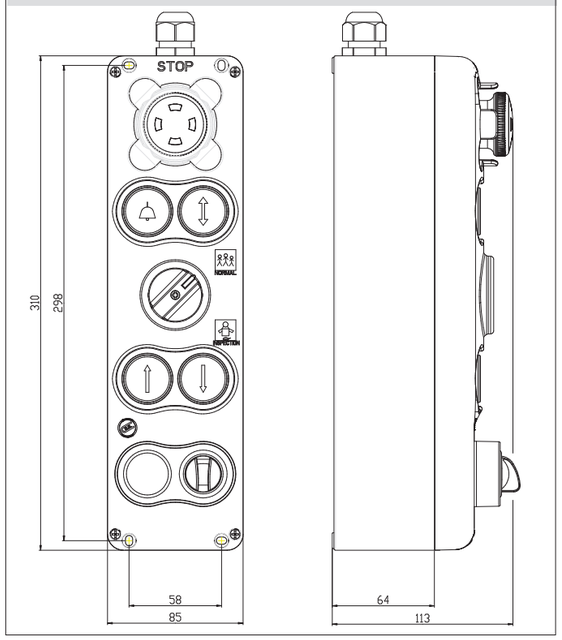
GM750 — Weight 1.110 gr



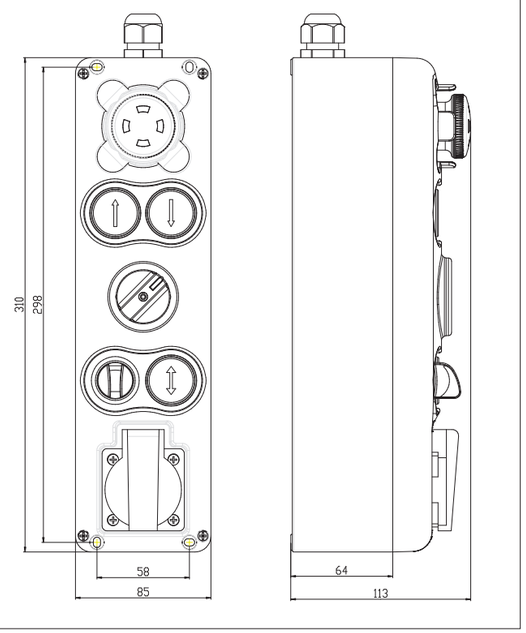
GM751 — Weight 1.000 gr



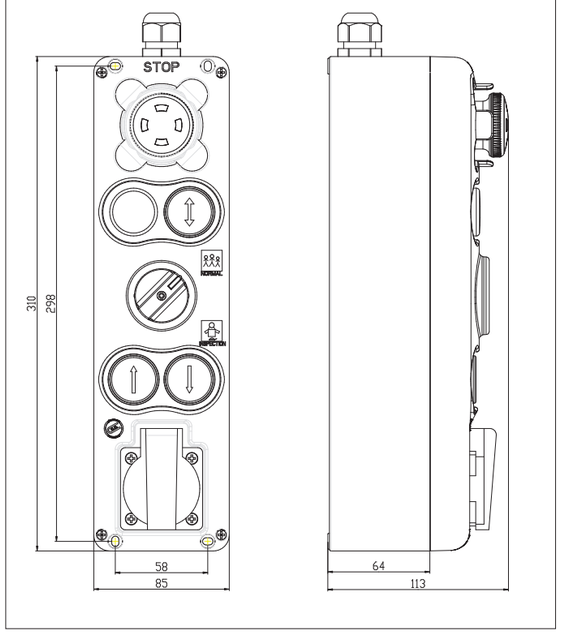
GM754 — Weight 1.100 gr



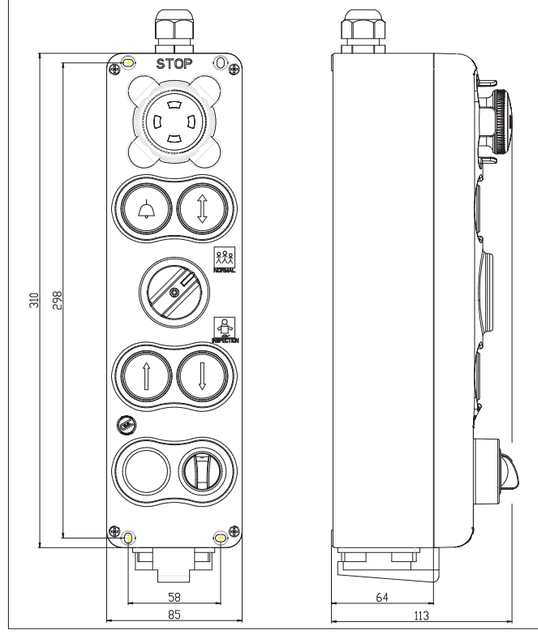
GM757 — Weight 1.110 gr



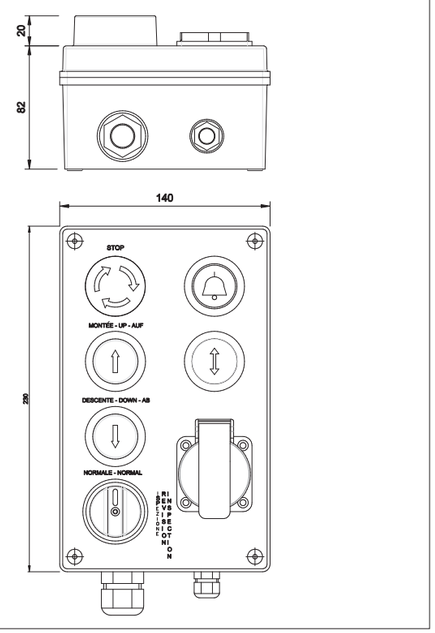
GM758 — Weight 1.110 gr



GM756 — Weight 1.100 gr

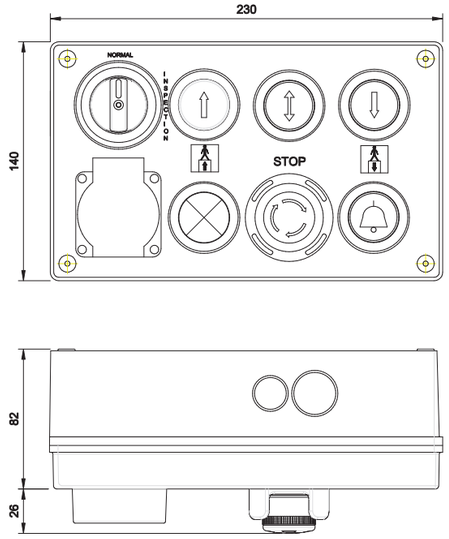


GM412 — Weight 925 gr

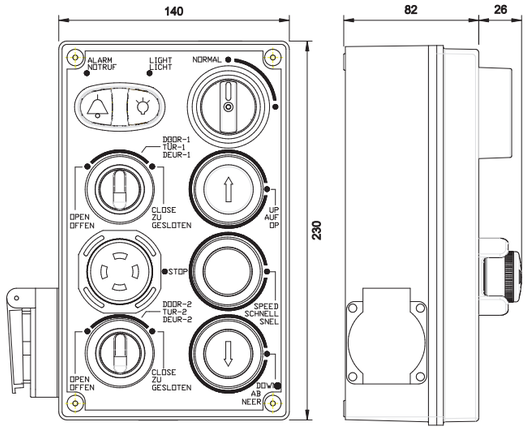


DIMENSIONS - TECHNICAL DRAWINGS GM Series

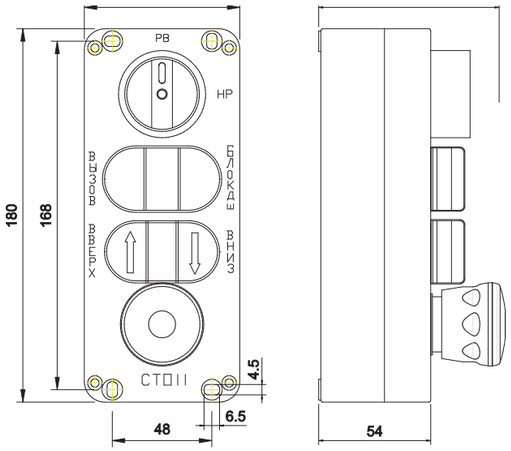
GM822 — Weight 950 gr



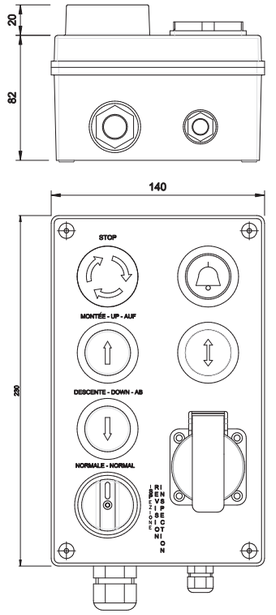
GM321 — Weight 1.040 gr



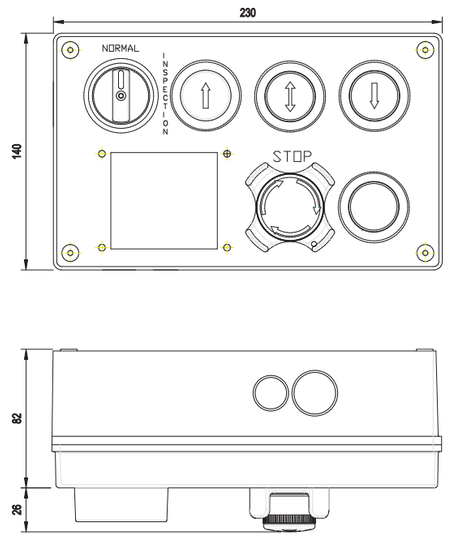
GM004 — Weight 740 gr



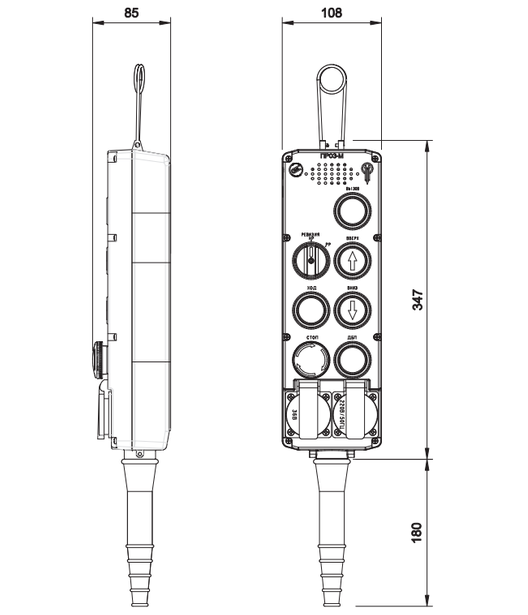
GM412Black — Weight 950 gr



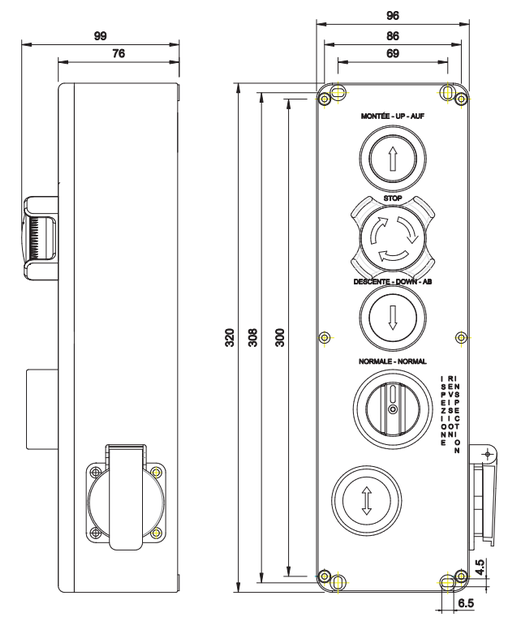
GM520 — Weight 900 gr



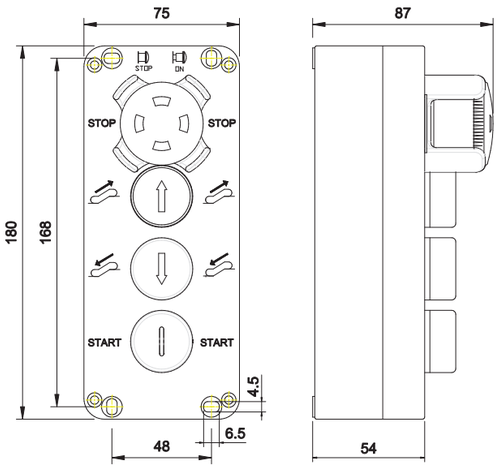
GMS03 — Weight 1.200 gr



GM660Black — Weight 920 gr

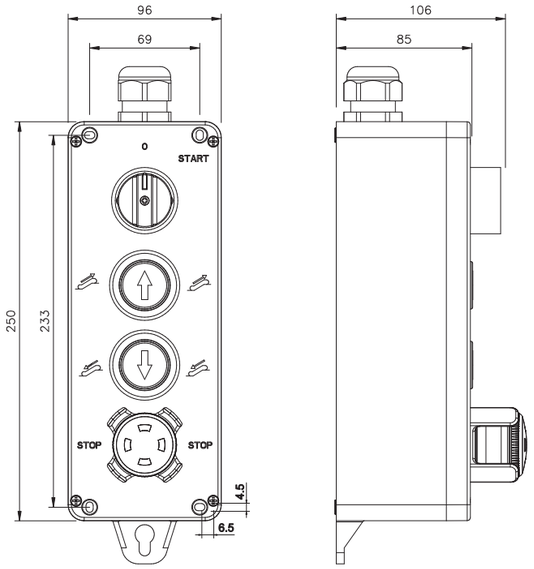


GM482 — Weight 740 gr



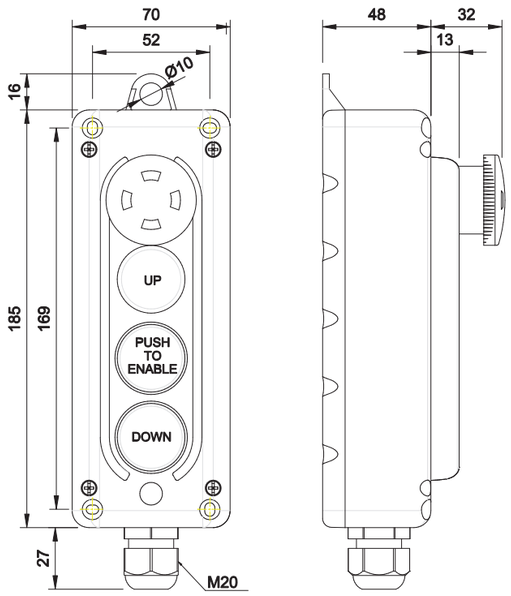
GM245

Weight 740 gr



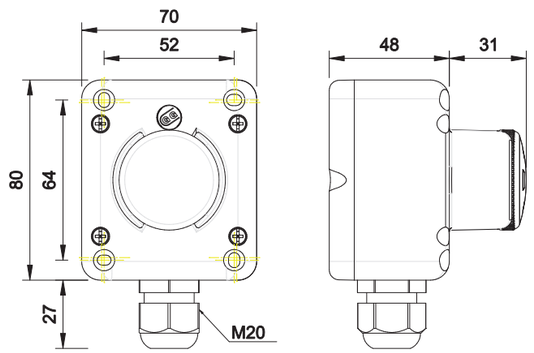
GMS50

Weight 370 gr



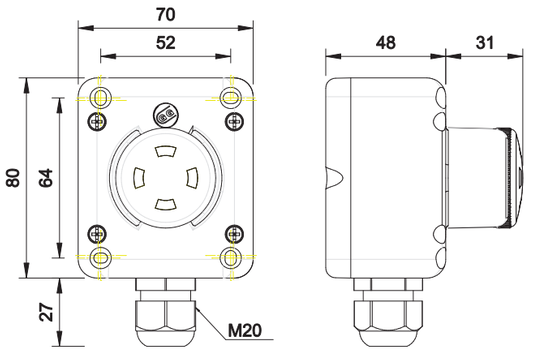
TLP1.EPP

Weight 150 gr

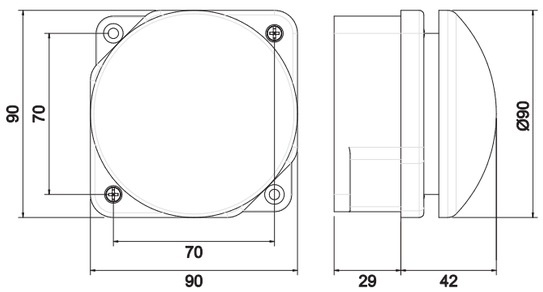


TLP1.VPP

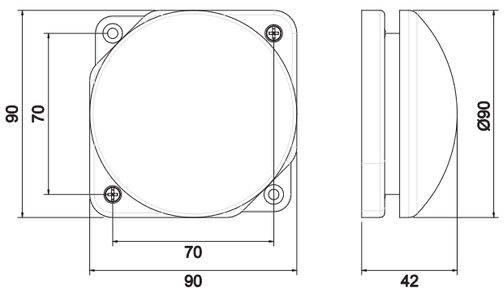
Weight 150 gr



PG1M9W01 - PG8M9W10

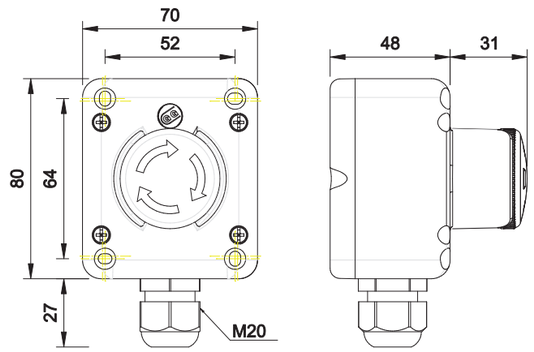


PR1M9W01



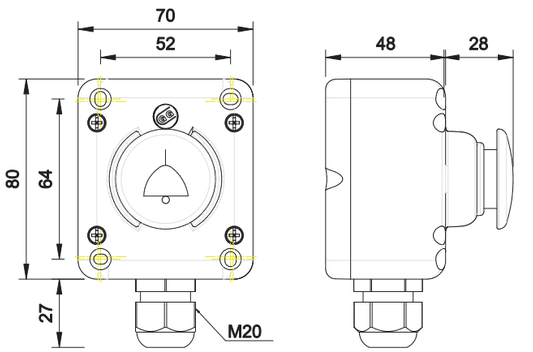
TLP1.ESR

Weight 150 gr



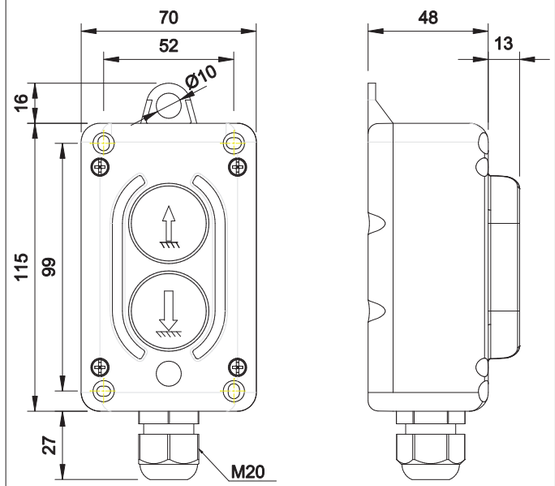
TLP1B.AL

Weight 140 gr

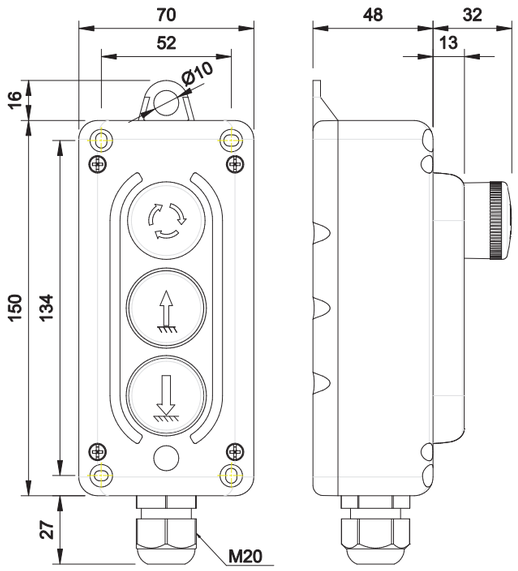


DIMENSIONS - TECHNICAL DRAWINGS TLP Series
Contact blocks

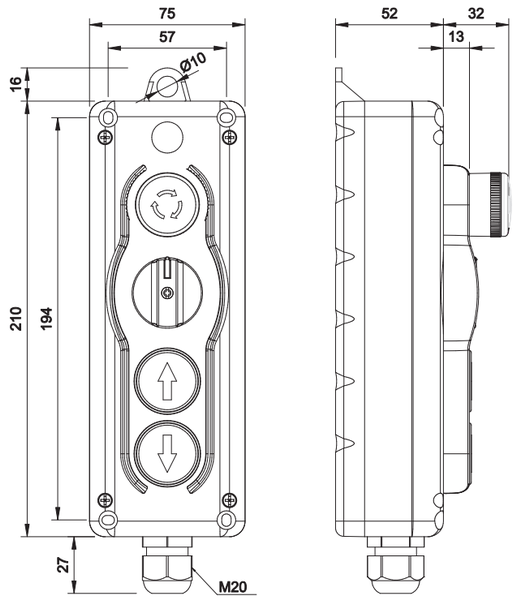
TLP2 — Weight 190 gr



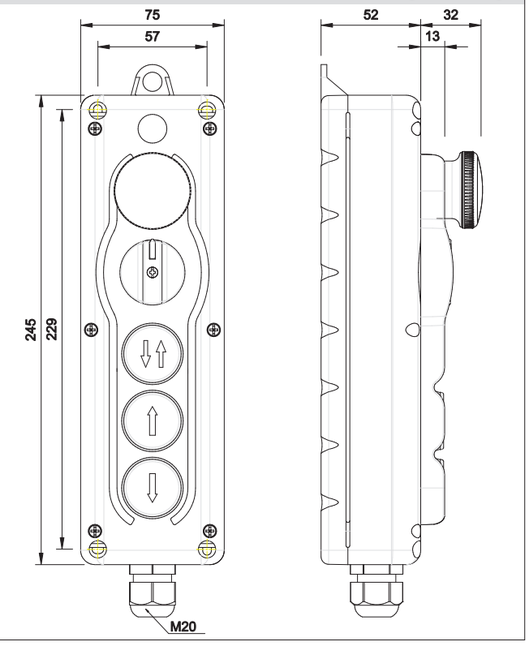
TLP3.B — Weight 320 gr



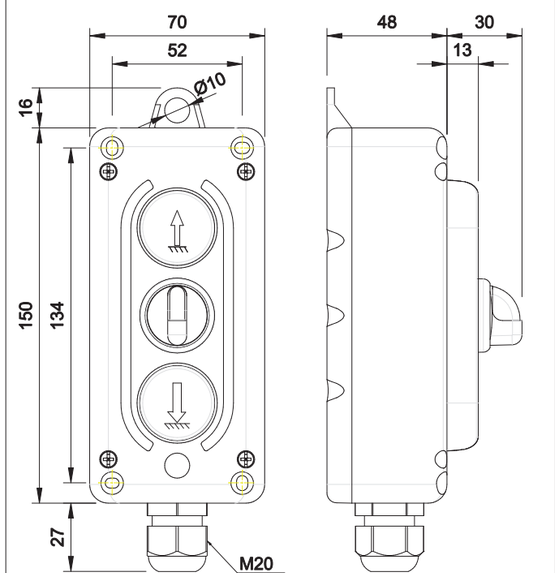
TLP4 — Weight 350 gr



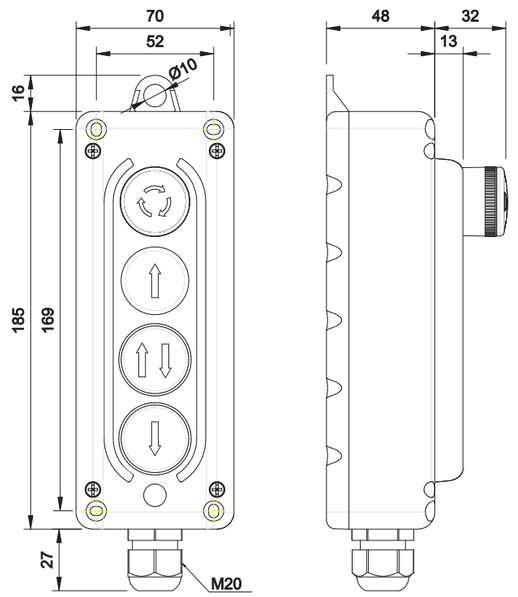
TLP5 — Weight 500 gr



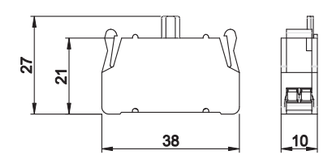
TLP3.D — Weight 250 gr



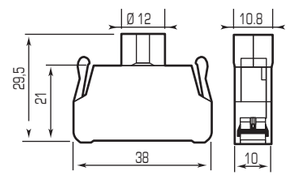
TLP4.A — Weight 320 gr



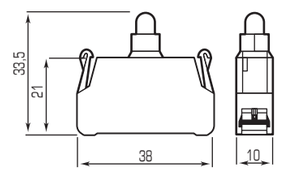
PCW01 PCW10



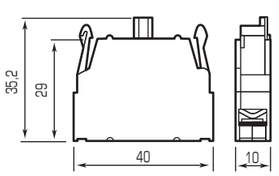
PCWAD



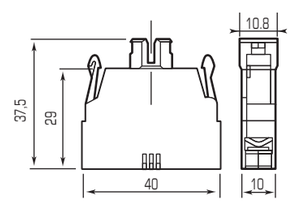
PCW5L12 - PCW5L24 PCW5L48 - PCW5L110 PCW5L220



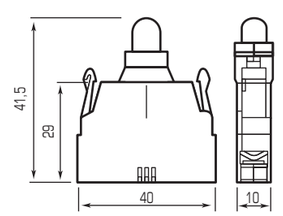
PL004001 PL004002



PL004007

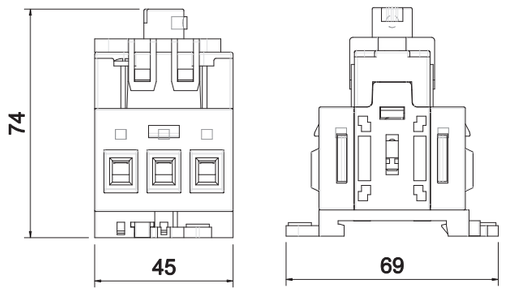


PL0045L12-PL0045L24 PL0045L48-PL0045L110 PL0045L220

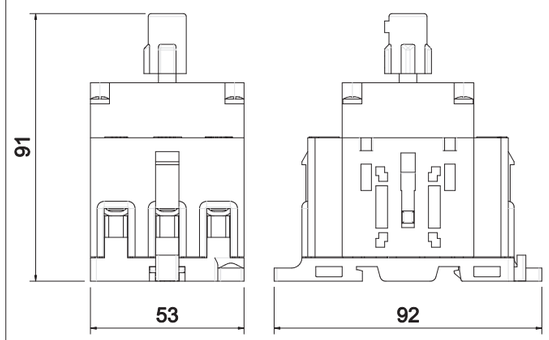


DIMENSIONS - TECHNICAL DRAWINGS Complementary products

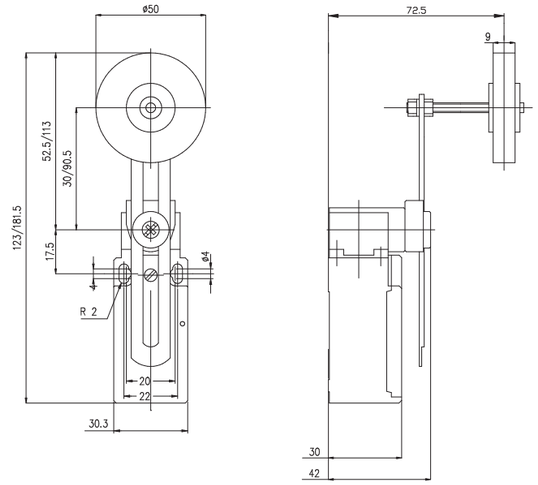
SQ032



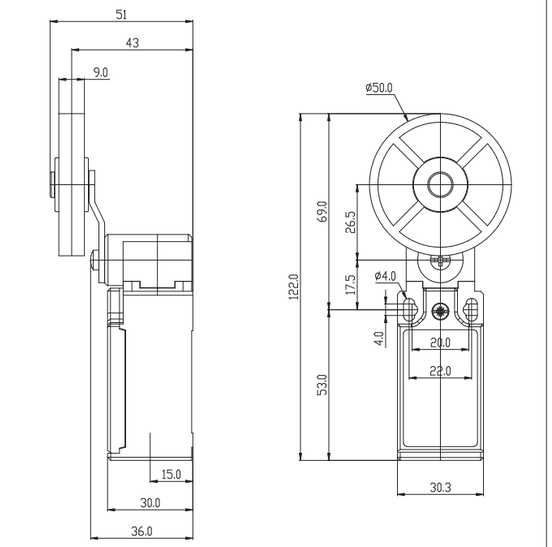
SQ080



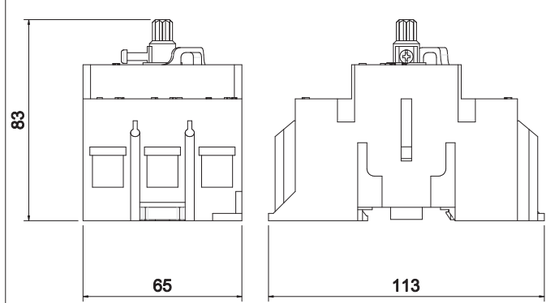
FT140Z11



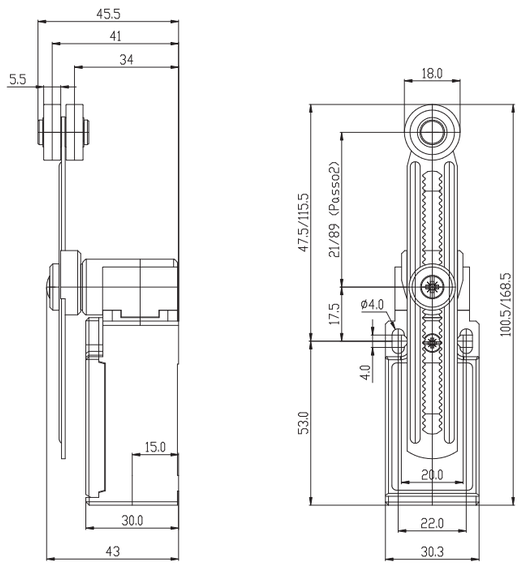
FT141Z11



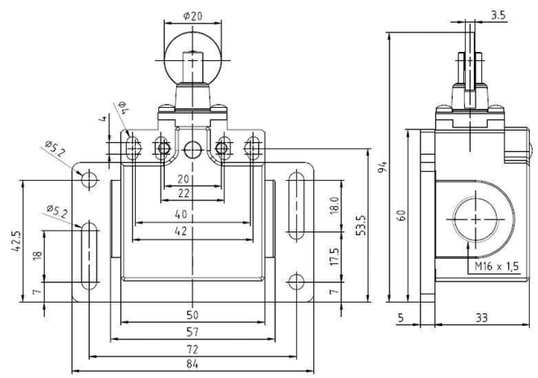
SQ160



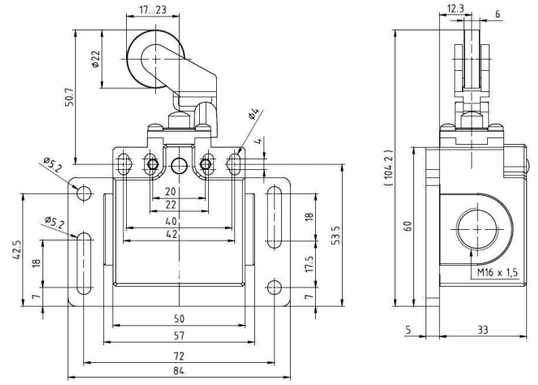
FT139Z11



AFT2T16Y11 - AFT2T16X11



AFT2T38Y11 - AFT2T38X11



NOTES

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