

SWITCH DISCONNECTORS AND CHANGEOVER SWITCHES



GL SERIES

 **Lovato**
electric
ENERGY AND AUTOMATION

SWITCH DISCONNECTORS



COMPACT SIZE

The three-pole switch disconnectors are made up of a body with compact dimensions: 162mm wide up to 315A, 203mm from 320A to 500A and 231mm for 630A.

UL98 VERSION

Switch disconnectors are listed for USA and Canada, certified according to UL98/CSA C22.2 n° 4.

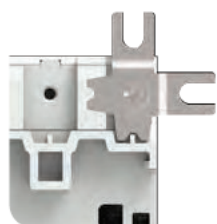


FOUR-POLE VERSION AVAILABLE

Switch disconnectors are supplied with three-pole configuration. To realise the four-pole version, a fourth-pole add-on can be purchased.

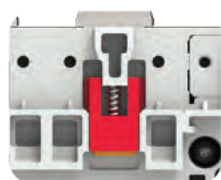
EASY INSTALLATION ON DIN RAIL

The switch disconnectors can be mounted on a DIN rail (for sizes from 160A to 315A) or on a plate by screw fixing.



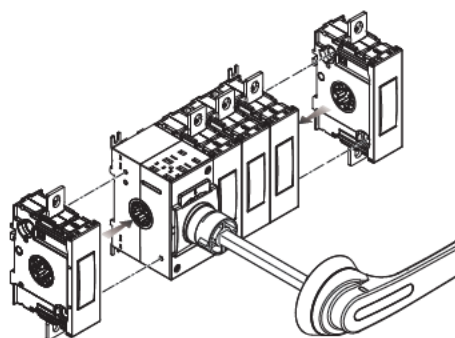
FLEXIBLE INSTALLATION ORIENTATION

Switch disconnectors can be installed in all directions. The clips for screw fixing can be adjusted both in rotation and position (flexible fixing interaxis).



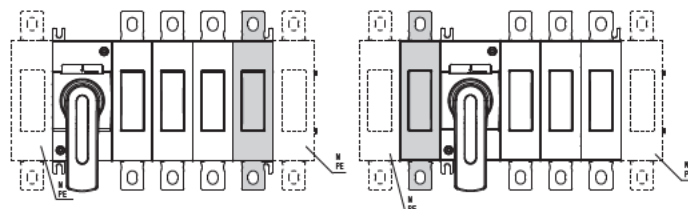
ANTI-SLIDE INSERT FOR DIN RAIL

For sizes from 160A to 315A there are two rubber pad inserts prevent the sliding of switch disconnectors on the DIN rail.



COMPONENT FLEXIBILITY

It is possible to mount the fourth pole, neutral and earth/ground terminals on both sides of the switch disconnectors using 2 screws.



CHANGEOVER SWITCHES



COMPACT SIZE

Changeover switches are made up of a body with compact dimensions:

- 185mm wide for three-pole versions up to 315A, 237mm from 320A to 500A and 263mm for 630A;
- 220mm wide for the four-pole versions up to 315A, 281mm from 320A to 500A and 317mm for 630A.

EASY INSTALLATION

The changeover switches can be mounted on a plate by screws.

UL1008 VERSION

The changeover switches are listed for USA and Canada, certified according to UL1008/CSA C22.2 n° 178.



THREE AND FOUR-POLE VERSION

Changeover switches are already supplied assembled in three-pole and four-pole configuration.

Switch disconnectors and changeover switches

GL series 160A to 630A

WIDE RANGE OF ACCESSORIES

A wide choice of auxiliary contacts, terminal covers, phase barriers, terminal clamps, bridging bars, shafts and handles are available to satisfy every installation need.

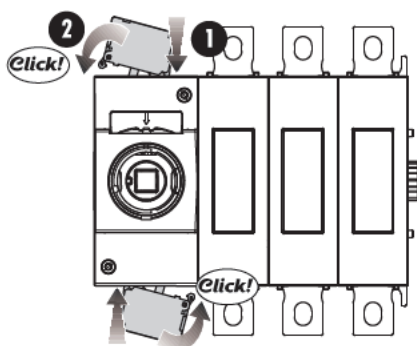
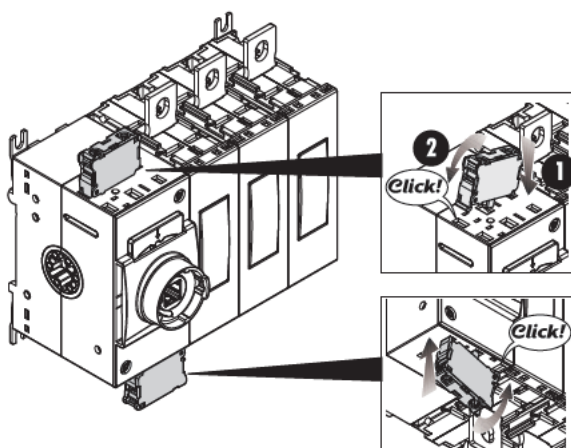


HIGH IEC ELECTRICAL CAPABILITY

The rated currents in AC23 up to 630A-415V and 500A-690V are the highest of the category.

ADD-ON AUXILIARY CONTACTS

The same add-on block is suitable for all the switch disconnectors and changeover switches. Contacts are mounted on main switching actuator (max 8 contacts for switch disconnectors; max 4 contacts for changeover switches).



VISIBLE CONTACTS: MAXIMUM SECURITY!

Thanks to the window on the individual power poles the open or closed switch status is clearly visible at a distance.



UL508A DEFEATABLE HANDLE

In compliance with UL508A standards, which require internal panel inspection by authorized personnel with power applied, pistol handles are available with defeatable feature of the door coupling when the switch disconnector or the changeover switch is closed, i.e. in ON position.

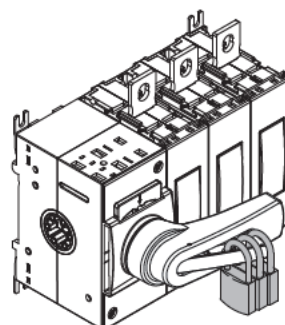
IP66, IP69K AND NEMA 4X HANDLES

A wide range of screw fixing pistol grip handles are available with the maximum degree of protection on the market.



PADLOCKABLE HANDLES

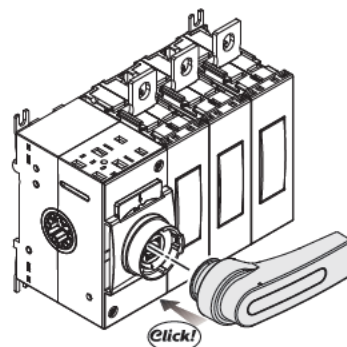
All direct and door coupling handles are equipped with integrated padlock mechanism.



HANDLES

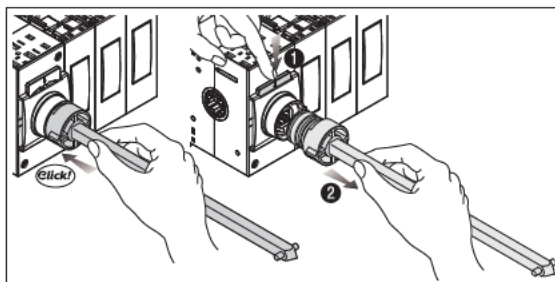
Switch disconnectors and changeover switches are standard supplied without any handles. By purchasing the direct operating handle separately it is possible to create a direct operating version. The handles can be mounted and removed very easily thanks to the snap-on assembly.

By purchasing a shaft extension and a door coupling handle separately it is possible to create the door coupling version.



SNAP ON SHAFT MOUNTING

Shafts can be mounted and removed very easily by snapping on the front of the switch. This feature allows fast installation and easy accessibility to the panel in case of maintenance.



Switch disconnectors and changeover switches

GL series 160A to 630A



Selection guide



IEC/EN



Type	IEC conventional free air thermal current I _{th}	IEC rated operational current I _e		IEC reactive power for control of capacitors 400V	Fourth pole	Neutral terminal	Earth/ground terminal	Direct operating handle		
	AC21A (≤690V)	AC23A (≤400V)	AC23A (≤500V)					Black	Red/Yellow	
Order code	[A]	[A]	[A]	[kvar]	Order code	Order code	Order code	Order code	Order code	
IEC/EN three-pole switch disconnectors.										
GL0160 C1	160	160	160	80	GLX42 0315	GLX3 00	GLX3 01	GLX61 DB	GLX61 D	
GL0200 C1	200	200	200	100						
GL0250 C1	250	250	250	115						
GL0315 C1	315	250	250	145						
GL0320 C1	320	320	320	145	GLX42 0320	GLX3 02	GLX3 03	GLX62 DB	GLX62 D	
GL0400 C1	400	400	400	180	GLX42 0400					
GL0500 C1	500	500	500	200	GLX42 0500					
GL0630 C1	630	630	500	250	GLX42 0630					
IEC/EN three-pole changeover switches.										
GLC0160 C1	160	160	160	-	-	-	-	GLX61 DB	-	
GLC0200 C1	200	200	200							
GLC0250 C1	250	250	250							
GLC0315 C1	315	250	250							
GLC0320 C1	320	320	320					GLX62 DB		
GLC0400 C1	400	400	400							
GLC0500 C1	500	500	500							
GLC0630 C1	630	630	500							
IEC/EN four-pole changeover switches.										
GLC0160 T4C1	160	160	160	-	-	-	-	GLX61 DB	-	
GLC0200 T4C1	200	200	200							
GLC0250 T4C1	250	250	250							
GLC0315 T4C1	315	250	250							
GLC0320 T4C1	320	320	320					GLX62 DB		
GLC0400 T4C1	400	400	400							
GLC0500 T4C1	500	500	500							
GLC0630 T4C1	630	630	500							

cULus



Type	General purpose current	Max 3-phase horsepower rating	Fourth pole	Neutral terminal	Earth/ground terminal	Direct operating handle	
						Black	Red/Yellow
Order code	[A]	[HP/Voltage]	Order code	Order code	Order code	Order code	Order code
UL98 three-pole switch disconnectors.							
GL0200 C1UL	200	75/240 150/480 200/600	GLX42 0200UL	GLX3 00	GLX3 01	GLX61 DB	GLX61 D
GL0400 C1UL	400	125/240 250/480 350/600	GLX42 0400UL	GLX3 02	GLX3 03	GLX62 DB	GLX62 D
UL1008 three-pole changeover switches.							
GL0C200 C1UL	200	75/240 150/480 200/600	-	-	-	GLX61 DB	-
GLC0400 C1UL ●	400	125/240 250/480 350/600				GLX62 DB	
UL1008 four-pole changeover switches.							
GL0C200 T4C1UL	200	75/240 150/480 200/600	-	-	-	GLX61 DB	-
GLC0400 T4C1UL ●	400	125/240 250/480 350/600				GLX62 DB	

● cULus certification pending.

● 1-piece set. 1 terminal connection for single cable:
- Maximum conductor cross section: 120mm²/250kcmil;
- Minimum conductor cross section: 16mm²/6AWG.

● 3-piece set. 3 terminals connection for single cable:
- Maximum conductor cross section: 120mm²/250kcmil;
- Minimum conductor cross section: 16mm²/6AWG.

● 1-piece set. 1 terminal connection for single cable:
- Maximum conductor cross section: 304mm²/600kcmil;
- Minimum conductor cross section: 33.6mm²/2AWG.

Switch disconnectors and changeover switches

GL series 160A to 630A



Door coupling handle		Shaft extensions for door coupling handles				Shaft alignment ring	Auxiliary contacts	Terminal covers	Phase barriers	Terminal clamps	Bridging bars
Black	Red/Yellow	Panel depth		Shaft section							
Order code	Order code	Order code	min [mm]	max [mm]	□ [mm]	Order code	Order code	Order code	Order code	Order code	Order code
GLX61 B	GLX61	GLX7 150 S10 GLX7 200 S10 GLX7 300 S10 GLX7 400 S10 GLX7 500 S10	124	194 244 344 444 544	10	GLX00	GLX10 01 (1NC) GLX10 10EA (1EB)	GLX8 00 (3 pcs) GLX8 01 (4 pcs)	GLX9 00 (6 pcs) GLX9 01 (8 pcs)	GLX5 00● GLX5 01●	–
GLX62 B	GLX62	GLX7 150 S10 GLX7 200 S10 GLX7 300 S10 GLX7 400 S10 GLX7 500 S10	157	227 277 377 477 577				GLX8 02 (3 pcs) GLX8 03 (4 pcs)	GLX9 02 (6 pcs) GLX9 03 (8 pcs) Built-in	GLX5 02● GLX5 03● GLX5 04● GLX5 05●	
GLX61 CB	–	GLX7 150 S10 GLX7 200 S10 GLX7 300 S10 GLX7 400 S10 GLX7 500 S10	220	290 340 440 540 640	10	GLX00	GLX10 01 (1NC) GLX10 10EA (1EB)	GLX8 00 (3 pcs) GLX8 01 (4 pcs)	GLX9 00 (6 pcs) GLX9 01 (8 pcs)	GLX5 00● GLX5 01●	GLX2 01 (3 pcs) GLX2 02 (4 pcs)
GLX62 CB		GLX7 150 S10 GLX7 200 S10 GLX7 300 S10 GLX7 400 S10 GLX7 500 S10	267	337 387 487 587 687				GLX8 02 (3 pcs) GLX8 03 (4 pcs)	GLX9 02 (6 pcs) GLX9 03 (8 pcs) Built-in	GLX5 02● GLX5 03● GLX5 04● GLX5 05●	GLX2 06 (3 pcs) GLX2 07 (4 pcs)
GLX61 CB	–	GLX7 150 S10 GLX7 200 S10 GLX7 300 S10 GLX7 400 S10 GLX7 500 S10	220	290 340 440 540 640	10	GLX00	GLX10 01 (1NC) GLX10 10EA (1EB)	GLX8 00 (3 pcs) GLX8 01 (4 pcs)	GLX9 00 (6 pcs) GLX9 01 (8 pcs)	GLX5 00● GLX5 01●	GLX2 01 (3 pcs) GLX2 02 (4 pcs)
GLX62 CB		GLX7 150 S10 GLX7 200 S10 GLX7 300 S10 GLX7 400 S10 GLX7 500 S10	267	337 387 487 587 687				GLX8 02 (3 pcs) GLX8 03 (4 pcs)	GLX9 02 (6 pcs) GLX9 03 (8 pcs) Built-in	GLX5 02● GLX5 03● GLX5 04● GLX5 05●	GLX2 06 (3 pcs) GLX2 07 (4 pcs)
Door coupling handle		Shaft extensions for door coupling handles				Shaft alignment ring	Auxiliary contacts	Terminal covers	Phase barriers	Terminal clamps	Bridging bars
Black	Red/Yellow	Panel depth		Shaft section							
Order code	Order code	Order code	min [mm]	max [mm]	□ [mm]	Order code	Order code	Order code	Order code	Order code	Order code
GLX61 B	GLX61	GLX7 150 S10 GLX7 200 S10 GLX7 300 S10 GLX7 400 S10 GLX7 500 S10	124	194 244 344 444 544	10	GLX00	GLX10 01 (1NC) GLX10 10EA (1EB)	GLX8 00 (3 pcs) GLX8 01 (4 pcs)	Built-in	GLX5 00● GLX5 01●	–
GLX62 B	GLX62	GLX7 150 S10 GLX7 200 S10 GLX7 300 S10 GLX7 400 S10 GLX7 500 S10	157	227 277 377 477 577				GLX8 02 (3 pcs) GLX8 03 (4 pcs)	Built-in	GLX5 02● GLX5 03● GLX5 04● GLX5 05●	
GLX61 B	–	GLX7 150 S10 GLX7 200 S10 GLX7 300 S10 GLX7 400 S10 GLX7 500 S10	220	290 340 440 540 640	10	GLX00	GLX10 01 (1NC) GLX10 10EA (1EB)	GLX8 00 (3 pcs) GLX8 01 (4 pcs)	Built-in	GLX5 00● GLX5 01●	GLX2 01 (3 pcs) GLX2 02 (4 pcs)
GLX62 B		GLX7 150 S10 GLX7 200 S10 GLX7 300 S10 GLX7 400 S10 GLX7 500 S10	267	337 387 487 587 687				GLX8 02 (3 pcs) GLX8 03 (4 pcs)	Built-in	GLX5 02● GLX5 03● GLX5 04● GLX5 05●	GLX2 06 (3 pcs) GLX2 07 (4 pcs)
GLX61 B	–	GLX7 150 S10 GLX7 200 S10 GLX7 300 S10 GLX7 400 S10 GLX7 500 S10	220	290 340 440 540 640	10	GLX00	GLX10 01 (1NC) GLX10 10EA (1EB)	GLX8 00 (3 pcs) GLX8 01 (4 pcs)	Built-in	GLX5 00● GLX5 01●	GLX2 01 (3 pcs) GLX2 02 (4 pcs)
GLX62 B		GLX7 150 S10 GLX7 200 S10 GLX7 300 S10 GLX7 400 S10 GLX7 500 S10	267	337 387 487 587 687				GLX8 02 (3 pcs) GLX8 03 (4 pcs)	Built-in	GLX5 02● GLX5 03● GLX5 04● GLX5 05●	GLX2 06 (3 pcs) GLX2 07 (4 pcs)

● 3-piece set. 3 terminals connection for single cable:
– Maximum conductor cross section: 304mm²/600kcmil;
– Minimum conductor cross section: 33.6mm²/2AWG.

● 1-piece set. 1 terminal connection for double cables:
– Maximum conductor cross section: 2x152mm²/2x300kcmil;
– Minimum conductor cross section: 2x21.2mm²/2x4AWG.

● 3-piece set. 3 terminals connection for double cables:
– Maximum conductor cross section: 2x152mm²/2x300kcmil;
– Minimum conductor cross section: 2x21.2mm²/2x4AWG.

Switch disconnectors and changeover switches

GL series 160A to 630A



IEC/EN three-pole switch disconnectors



GL0160 C1...GL0315 C1



GL0320 C1...GL0500 C1

UL98 three-pole switch disconnectors



GL0200 C1UL



GL0400 C1UL

IEC/EN fourth pole add-on



GLX42 0315

GLX42 0500

GLX42 0630

UL98 fourth pole add-on



GLX42 0200UL

GLX42 0400UL

Order code	IEC conventional free air thermal current Ith AC21A (≤690V)	IEC rated operational current Ie	Qty per pkg	Wt
	[A]	[A]	[A]	n° [kg]

Supplied without handle.

Complete the switch disconnector by selecting shaft extension and handle for door coupling version or the handle for direct operating version (see page 9).

GL0160 C1	160	160	160	1	1.740
GL0200 C1	200	200	200	1	1.740
GL0250 C1	250	250	250	1	1.740
GL0315 C1	315	250	250	1	1.740
GL0320 C1	320	320	320	1	3.460
GL0400 C1	400	400	400	1	3.460
GL0500 C1	500	500	500	1	3.460
GL0630 C1	630	630	500	1	3.780

Order code	General purpose current	Max. 3-phase horsepower rating	Qty per pkg	Wt
	[A]	[HP/V]	n°	[kg]

Supplied without handle.

Complete the switch disconnector by selecting shaft extension and handle for door coupling version or the handle for direct operating version (see page 9).

GL0200 C1UL	200	75/240 150/480 200/600	1	1.900
GL0400 C1UL	400	125/240 250/480 350/600	1	3.780

Order code	IEC conventional free air thermal current Ith AC21A (≤690V)	IEC rated operational current Ie	Qty per pkg	Wt
	[A]	[A]	[A]	n° [kg]

Simultaneous closing operation as switch disconnector poles. For GL0160 C1...GL0315 C1 versions.

GLX42 0315	315	250	250	1	0.400
GLX42 0320	320	320	320	1	0.900
GLX42 0400	400	400	400	1	0.900
GLX42 0500	500	500	500	1	0.900
GLX42 0630	630	630	500	1	0.900

Order code	General purpose current	Max. 3-phase horsepower rating	Qty per pkg	Wt
	[A]	[HP/V]	n°	[kg]

Simultaneous closing operation as switch disconnector poles. For GL0200 C1UL version.

GLX42 0200UL	200	75/240 150/480 200/600	1	0.410
GLX42 0400UL	400	125/240 250/480 350/600	1	0.900

General characteristics

- 160 to 630A AC23 versions
- 200A and 400A general purpose according to UL98
- Compact dimensions and add-on fourth-pole
- Screw or 35mm DIN rail fixing to 315A, only on a plate from 320A to 630A
- Possibility to adjust the position of the clips for screw fixing on plate
- Visible contacts
- Maximum number of power poles: 4.

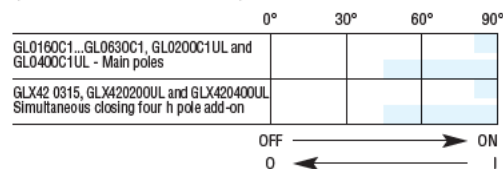
Operational characteristics

- Rated insulation voltage Ui: 1,000V
- Rated impulse withstand Uimp: 12kV
- Mechanical life:
 - 20,000 cycles from 160A to 315A
 - 10,000 cycles from 320A to 630A.

Certifications and compliance

Certifications obtained: cULus according to UL98 / CSA C22.2 n°4 for GL...UL and GLX42...UL types.
Compliant with standards: IEC/EN 60947-3, IEC/EN 60947-1.

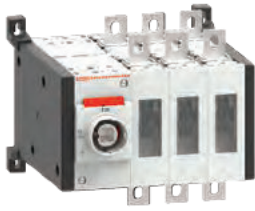
Strokes of GL poles
(main poles and add-on pole)



Switch disconnectors and changeover switches

GL series 160A to 630A

IEC/EN three-pole changeover switches



GLC0160 C1...GLC0315 C1

Order code	IEC conventional free air thermal current Ith AC21A (≤690V)	IEC rated operational current Ie	Qty per pkg	Wt
	[A]	[A]	[A]	n° [kg]

Supplied without handle.

Complete the changeover switch by selecting shaft extension and handle for door coupling version or the handle for direct operating version (see page 9).

GLC0160 C1	160	160	160	1	3.550
GLC0200 C1	200	200	200	1	3.550
GLC0250 C1	250	250	250	1	3.550
GLC0315 C1	315	250	250	1	3.550
GLC0320 C1	320	320	320	1	7.060
GLC0400 C1	400	400	400	1	7.060
GLC0500 C1	500	500	500	1	7.060
GLC0630 C1	630	630	500	1	7.720

IEC/EN four-pole changeover switches



GLC0160 T4C1...GLC0315 T4C1

Order code	IEC conventional free air thermal current Ith AC21A (≤690V)	IEC rated operational current Ie	Qty per pkg	Wt
	[A]	[A]	[A]	n° [kg]

Supplied without handle.

Complete the changeover switch by selecting shaft extension and handle for door coupling version or the handle for direct operating version (see page 9).

GLC0160 T4C1	160	160	160	1	4.330
GLC0200 T4C1	200	200	200	1	4.330
GLC0250 T4C1	250	250	250	1	4.330
GLC0315 T4C1	315	250	250	1	4.330
GLC0320 T4C1	320	320	320	1	8.810
GLC0400 T4C1	400	400	400	1	8.810
GLC0500 T4C1	500	500	500	1	8.810
GLC0630 T4C1	630	630	500	1	9.460

UL1008 three-pole changeover switches



GLC0200 C1UL

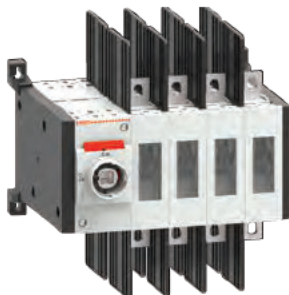
Order code	General purpose current	Max. 3-phase horsepower rating	Qty per pkg	Wt
	[A]	[HP/V]	n°	[kg]

Supplied without handle.

Complete the changeover switch by selecting shaft extension and handle for door coupling version or the handle for direct operating version (see page 9).

GLC0200 C1UL	200	75/240 150/480 200/600	1	3.800
GLC0400 C1UL	400	125/240 250/480 350/600	1	7.560

UL1008 four-pole changeover switches



GLC0200 T4C1UL

Order code	General purpose current	Max. 3-phase horsepower rating	Qty per pkg	Wt
	[A]	[HP/V]	n°	[kg]

Supplied without handle.

Complete the changeover switch by selecting shaft extension and handle for door coupling version or the handle for direct operating version (see page 9).

GLC0200 T4C1UL	200	75/240 150/480 200/600	1	4.590
GLC0400 T4C1UL	400	125/240 250/480 350/600	1	7.680

General characteristics

- 160 to 630A AC33 versions
- 200A and 400A general purpose according to UL1008
- Screw fixing on plate
- Visible contacts.

Operational characteristics

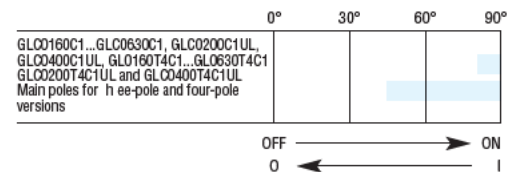
- Rated insulation voltage Ui: 1,000V
- Rated impulse withstand Uimp: 12kV
- Mechanical life:
 - 20,000 cycles from 160A to 315A
 - 10,000 cycles from 320A to 630A.

Certifications and compliance

Certifications obtained: cULus according to UL1008 (pending for GLC0400...UL types).

Compliant with standards: IEC/EN 60947-6-1, IEC/EN 60947-3.

Strokes of GLC poles



Switch disconnectors and changeover switches

GL series 160A to 630A

Accessories



Add-on blocks



GLX10 10EA GLX10 01



GLX3 00 GLX3 01



GLX8...



GLX9...



GLX5 00 - GLX5 01



GLX5 02 - GLX5 03



GLX5 04 - GLX5 05



GLX2...

Order code	Characteristics	Qty per pkg	Wt
		n°	[kg]
Auxiliary contacts.			
GLX10 01	1NC with screw terminals	1	0.100
GLX10 10EA	1EB with screw terminals	1	0.100
Neutral terminal.			
GLX3 00	For GL0160...GL0315	1	0.340
GLX3 02	For GL0320...GL0630	1	0.680
Earth/ground terminal.			
GLX3 01	For GL0160...GL0315	1	0.340
GLX3 03	For GL0320...GL0630	1	0.680
One-pole terminal covers.			
GLX8 00	3-piece set. 3 terminals protections. For GL0160...GL0315 and GLC0160...GLC0315	1	0.060
GLX8 01	4-piece set. 4 terminals protections. For GL0160...GL0315 and GLC0160...GLC0315	1	0.080
GLX8 02	3-piece set. 3 terminals protections. For GL0320...GL0630 and GLC0320...GLC0630	1	0.070
GLX8 03	4-piece set. 4 terminals protections. For GL0320...GL0630 and GLC0320...GLC0630	1	0.095
One-pole phase barrier (needed for voltages > 500V).			
GLX9 00	6-piece set. 3 terminals protections. For GL0160...GL0315 and GLC0160...GLC0315	1	0.070
GLX9 01	8-piece set. 4 terminals protections. For GL0160...GL0315 and GLC0160...GLC0315	1	0.090
GLX9 02	6-piece set. 3 terminals protections. For GL0320...GL0630 and GLC0320...GLC0630	1	0.011
GLX9 03	8-piece set. 4 terminals protections. For GL0320...GL0630 and GLC0320...GLC0630	1	0.011
Terminal clamp sets for rigid and flexible cables.			
GLX5 00	1-piece set. 1 terminal connection for single cable. For GL0160...GL0315 and GLC0160...GLC0315	1	0.050
GLX5 01	3-piece set. 3 terminals connection for single cable. For GL0160...GL0315 and GLC0160...GLC0315	1	0.140
GLX5 02	1-piece set. 1 terminal connection for single cable. For GL0320...GL0630 and GLC0320...GLC0630	1	0.100
GLX5 03	3-piece set. 3 terminals connection for single cable. For GL0320...GL0630 and GLC0320...GLC0630	1	0.280
GLX5 04	1-piece set. 1 terminal connection for double cables. For GL0320...GL0630 and GLC0320...GLC0630	1	0.110
GLX5 05	3-piece set. 3 terminals connection for double cables. For GL0320...GL0630 and GLC0320...GLC0630	1	0.310
One-pole bridging bars for changeover parallel connection GLC0160...GLC0630.			
GLX2 01	3-piece set. Connection 3 poles. For GLC0160...GLC0315	1	0.180
GLX2 02	4-piece set. Connection 4 poles. For GLC0160...GLC0315	1	0.200
GLX2 06	3-piece set. Connection 3 poles. For GLC0320...GLC0630	1	0.190
GLX2 07	4-piece set. Connection 3 poles. For GLC0320...GLC0630	1	0.255

Operational characteristics of auxiliary contacts GLX10...

- Conventional free air thermal current I_{th}: 10A
- Rated insulation voltage: 690V
- Conductivity: 5V, 1mA
- UL/CSA and IEC/EN 60947-5-1 designation: A600 Q600
- Tightening torque: 0.8Nm/7.1lb.in
- Maximum 8 contacts for GL0160...GL0630 switch disconnectors
- Maximum 4 contacts for GLC0160...GLC0630 changeover switches
- snap-on assembly without the use of tools.

Operational characteristics of neutral and earth/ground terminals GLX3...

- Add-on only on GL0160...GL0630 switch disconnectors
- Tightening torque for GLX300 and GLX301: 15...22Nm/132.7...194.7lb.in
- Tightening torque for GLX302 and GLX303: 30...37Nm/265...327lb.in.

Operational characteristics for terminal covers and phase barriers GLX8..., GLX9...

- Snap on mounting.

Operational characteristics for terminal clamps GLX500-GLX501

- Maximum conductor cross section: 120mm²/250kcmil
- Minimum conductor cross section: 16mm²/6AWG
- Tightening torque: 35Nm/309.7lb.in.

GLX502-GLX503

- Maximum conductor cross section: 304mm²/600kcmil
- Minimum conductor cross section: 33.6mm²/2AWG
- Tightening torque: 42.4Nm/375lb.in

GLX504-GLX505

- Maximum conductor cross section: 2x152mm²/2x300kcmil
- Minimum conductor cross section: 2x21.2mm²/2x4AWG
- Tightening torque: 22.6Nm/200lb.in

Certifications and compliance

Certifications obtained: cULus
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-3.

Strokes of GL poles (main poles with add-on pole)

	0°	30°	60°	90°
GL0160C1...GL0630C1, GL0200C1UL, GL0400C1UL, GLC0160C1...GLC0630C1, GLC0200C1UL, GLC0400C1UL, GL0160T4C1...GL0630T4C1, GLC0200T4C1UL e GLC0400T4C1UL Main poles				
GLX10 01 Auxiliary contact (1NC)				
GLX10 10EA Auxiliary contacts (1EB NO with early-break with respect to main poles)				

OFF → ON
0 ← 1

Switch disconnectors and changeover switches

GL series 160A to 630A
Accessories

Handles and shafts



GLX61 DB



GLX61 D



GLX62 DB



GLX61



GLX61 B



GLX61 CB



GLX00



GLX7...

Order code	Characteristics	Qty per pkg n°	Wt [kg]
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Direct operating handles.

GLX61 DB	For GL0160...GL0315 and GLC0160...GLC0315. Black	1	0.075
GLX61 D	For GL0160...GL0315. Red/yellow	1	0.095
GLX62 DB	For GL0320...GL0630 and GLC0320...GLC0630. Black	1	0.140
GLX62 D	For GLC0320...GLC0630. Red/yellow	1	0.170

Door coupling handles.

GLX61	For GL0160...GL0315. Screw fixing. 125mm lever length pistol handle - defeatable (req. UL508A). Red/yellow. □ 10mm	1	0.220
GLX61 B	For GL0160...GL0315. Screw fixing. 125mm lever length pistol handle - defeatable (req. UL508A). Black. □ 10mm	1	0.220
GLX61 CB	For GLC0160...GLC0315. Screw fixing. 125mm lever length pistol handle - defeatable (req. UL508A). Black. □ 10mm	1	0.215
GLX62	For GL0320...GL0630. Screw fixing. 175mm lever length pistol handle - defeatable (req. UL508A). Red/yellow. □ 10mm	1	0.240
GLX62 B	For GL0320...GL0630. Screw fixing. 175mm lever length pistol handle - defeatable (req. UL508A). Black. □ 10mm	1	0.240
GLX62 CB	For GLC0320...GLC0630. Screw fixing. 175mm lever length pistol handle - defeatable (req. UL508A). Black. □ 10mm	1	0.240

Accessories for door coupling handles.

GLX00	Shaft alignment ring	1	0.040
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Shaft extensions for door coupling handles GLX61, GLX61 B, GLX61 CB, GLX62, GLX62 B, GLX62 CB.

GLX7 150 S10	150mm long. □ 10mm	1	0.150
GLX7 200 S10	200mm long. □ 10mm	1	0.190
GLX7 300 S10	300mm long. □ 10mm	1	0.270
GLX7 400 S10	400mm long. □ 10mm	1	0.350
GLX7 500 S10	500mm long. □ 10mm	1	0.430

Operational characteristics for direct operating handles

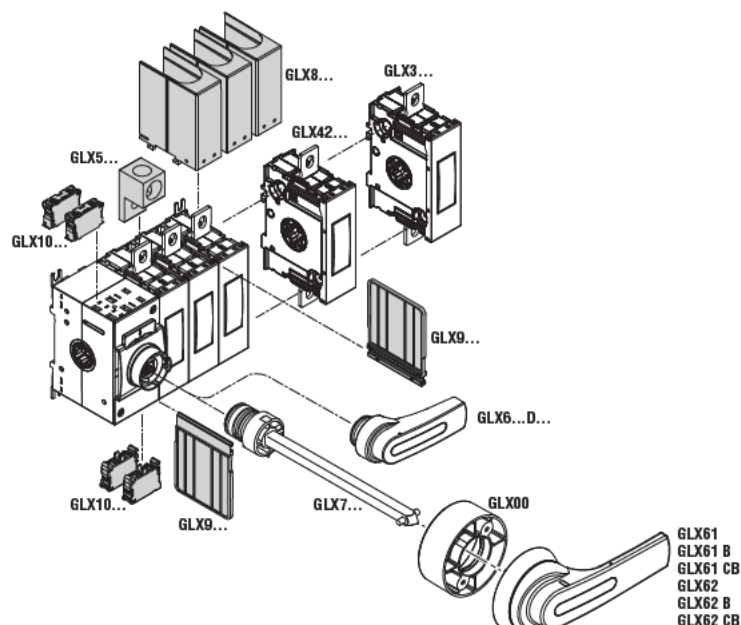
- Snap on mounting on switch disconnectors and changeover switches
- 1 to 3 padlocks in the Ø4...6mm.

Operational characteristics for door coupling handles

- Fixing handles interaxis: 28x40mm
- 1 to 3 padlocks in the Ø4...8mm
- Tightening torque: 1.5Nm/13.3lbin
- Degree of protection:
 - Per IEC/EN: IP66 and IP69K;
 - Per UL: Type 1, 2, 3R, 12, 12K, 4, 4X external use.

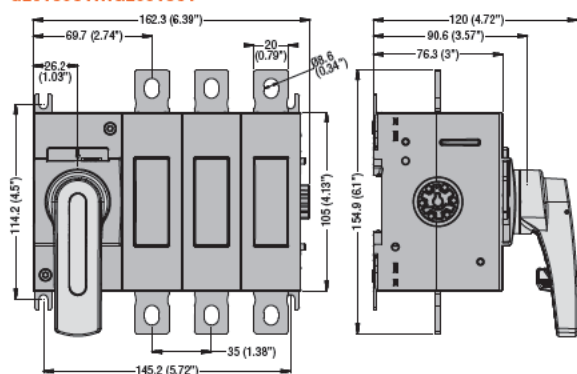
Certifications and compliance

Certifications obtained: cULus.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-3.

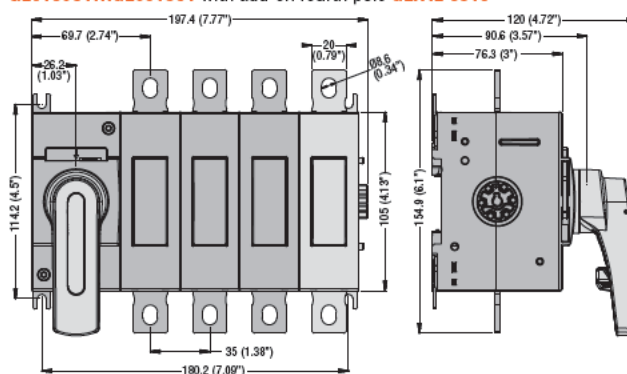
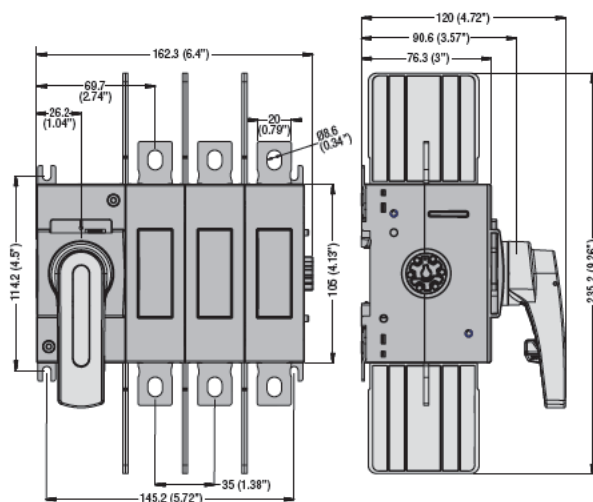


Dimensions [mm (in)]

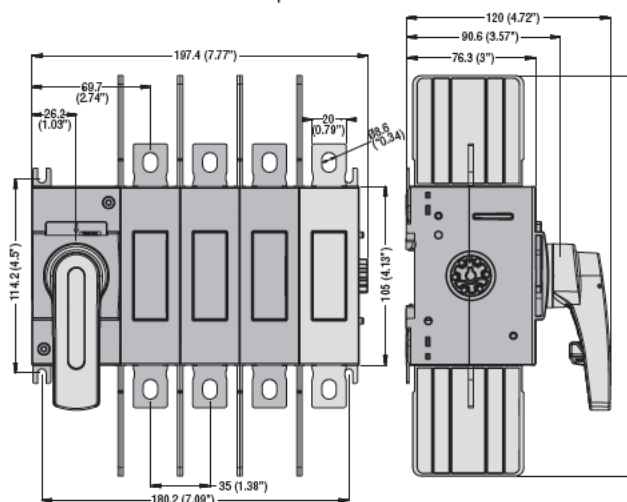
GL0160C1...GL0315C1



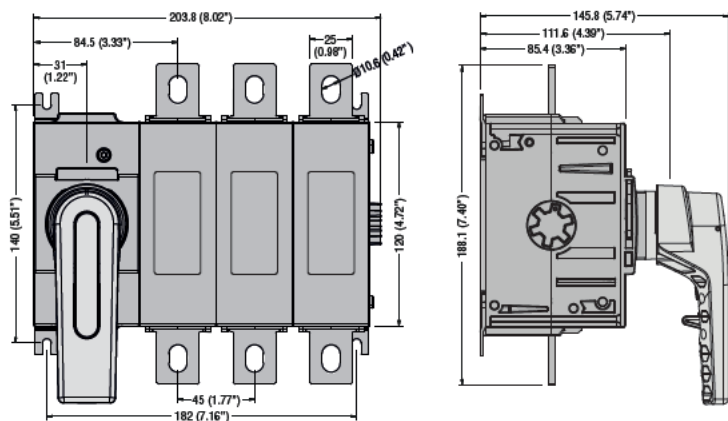
GL0160C1...GL0315C1 with add-on fourth pole **GLX42 0315**

**GL0200 C1UL**

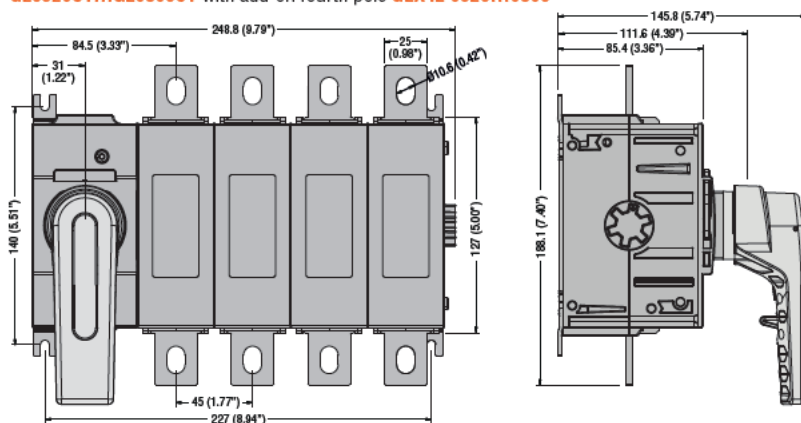
GL0200 C1UL with add-on fourth pole **GLX42 0200UL**



GL0320C1...GL0500C1



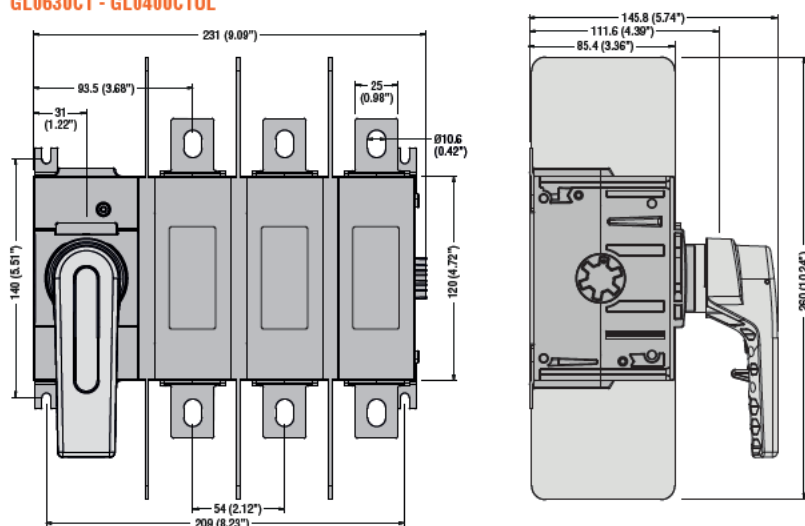
GL0320C1...GL0500C1 with add-on fourth pole **GLX42 0320...0500**



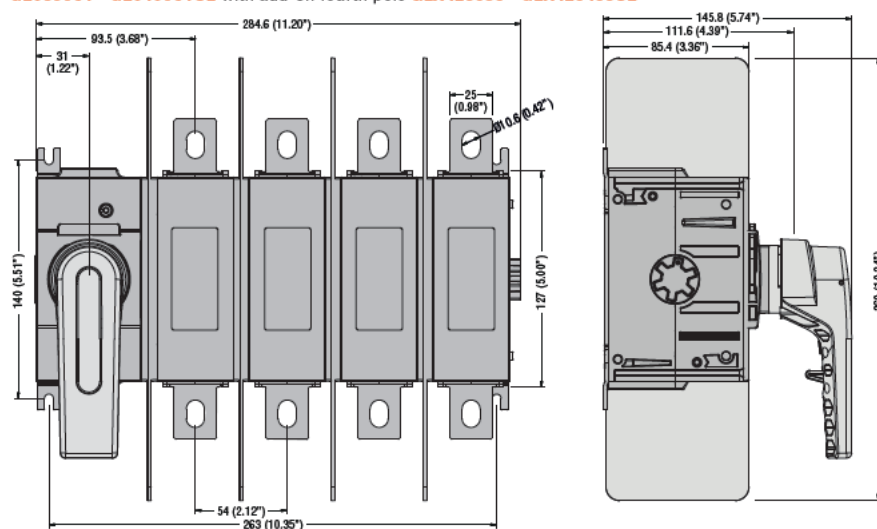
Switch disconnectors and changeover switches

Dimensions [mm (in)]

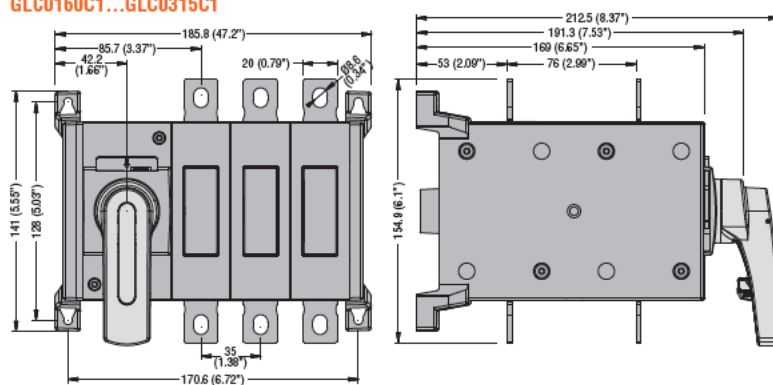
GL0630C1 - GL0400C1UL



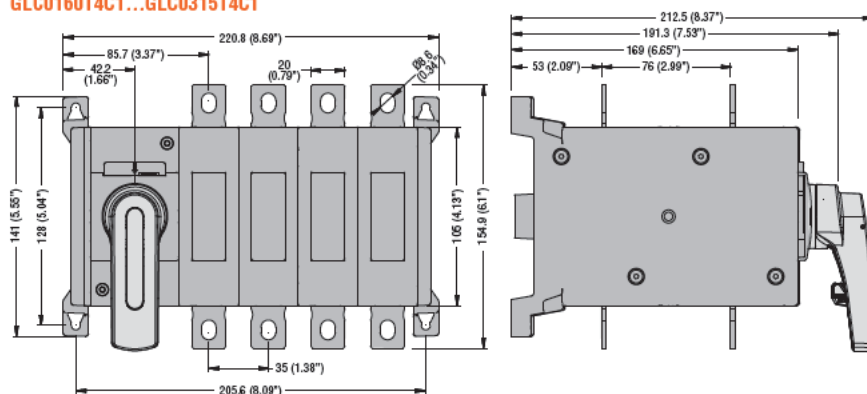
GL0630C1 - GL0400C1UL with add-on fourth pole GLX420630 - GLX420400UL



GLC0160C1...GLC0315C1



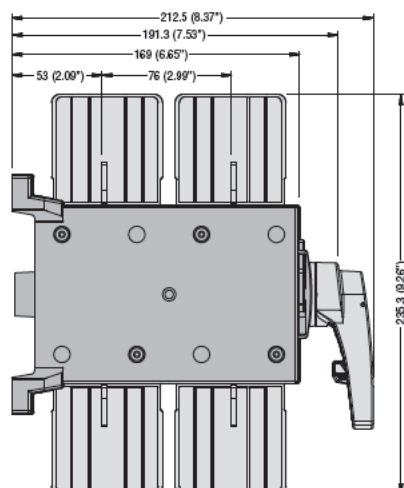
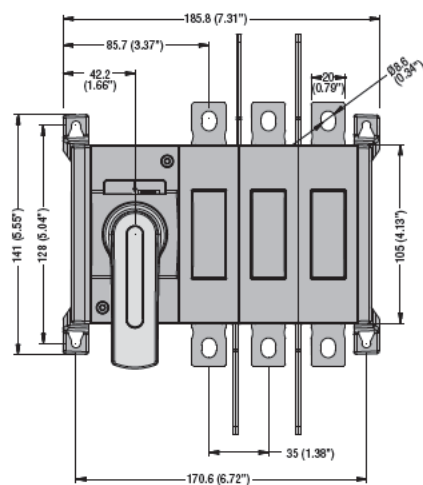
GLC0160T4C1...GLC0315T4C1



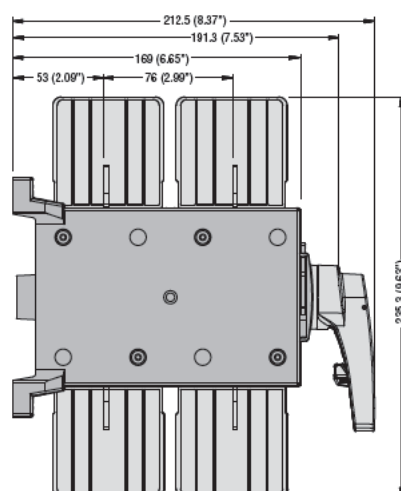
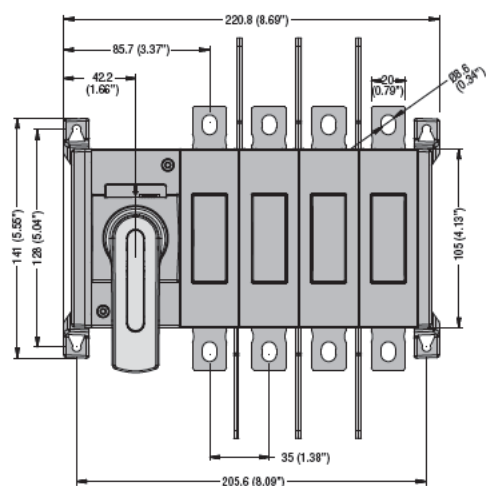
Switch disconnectors and changeover switches

Dimensions [mm (in)]

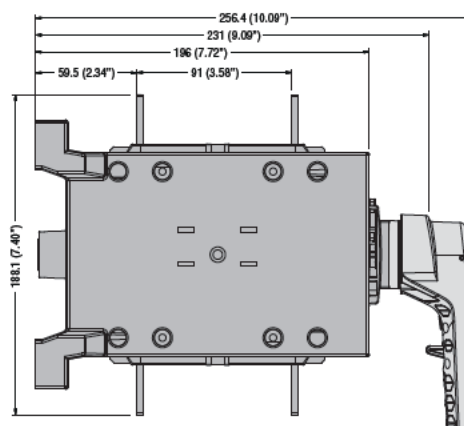
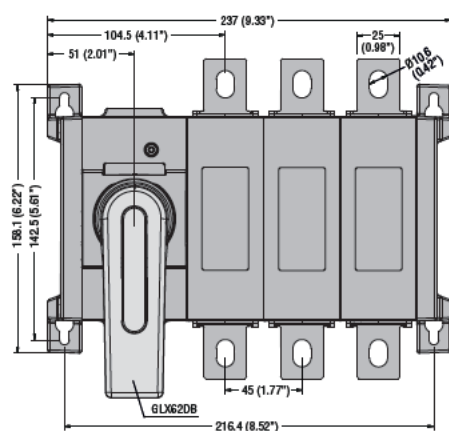
GLC0200 C1UL



GLC0200 T4C1UL



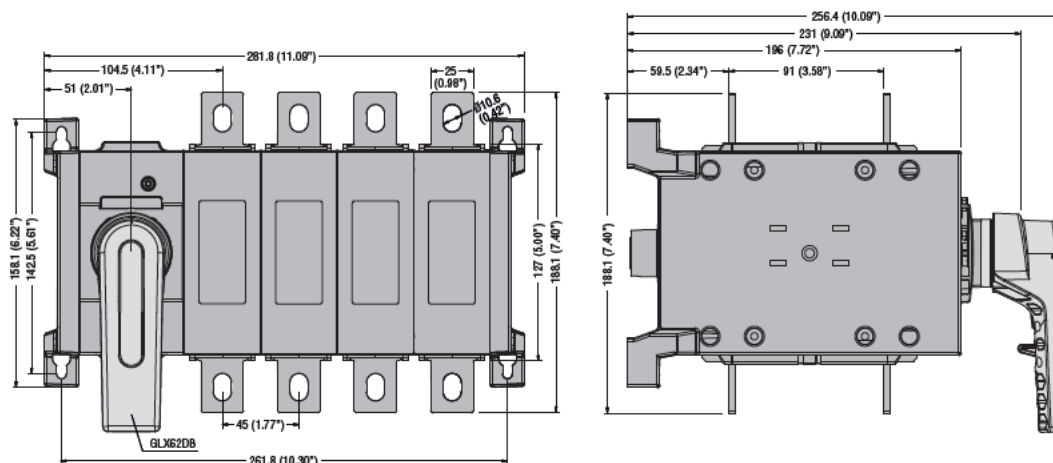
GLC0320C1...GLC0500C1



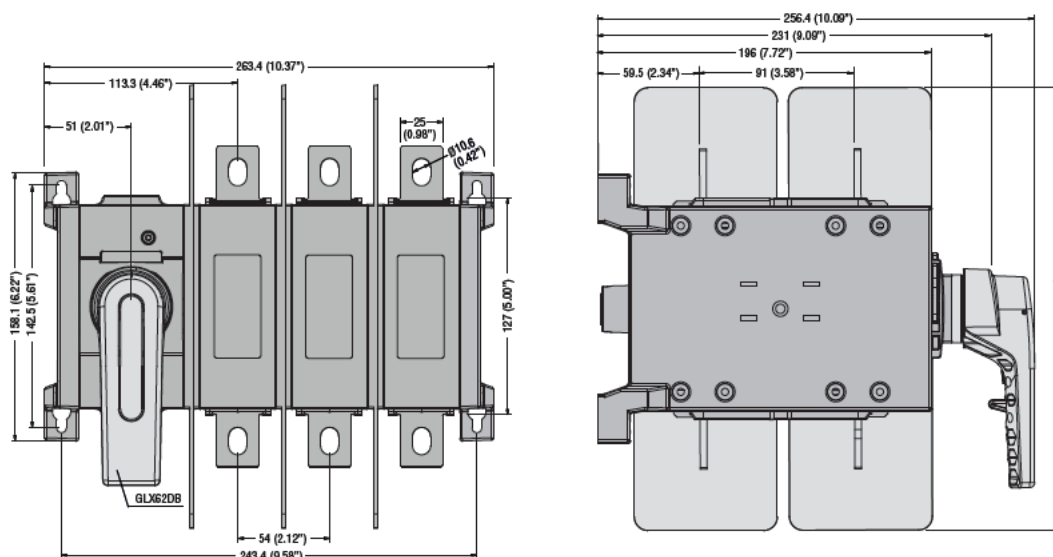
Switch disconnectors and changeover switches

Dimensions [mm (in)]

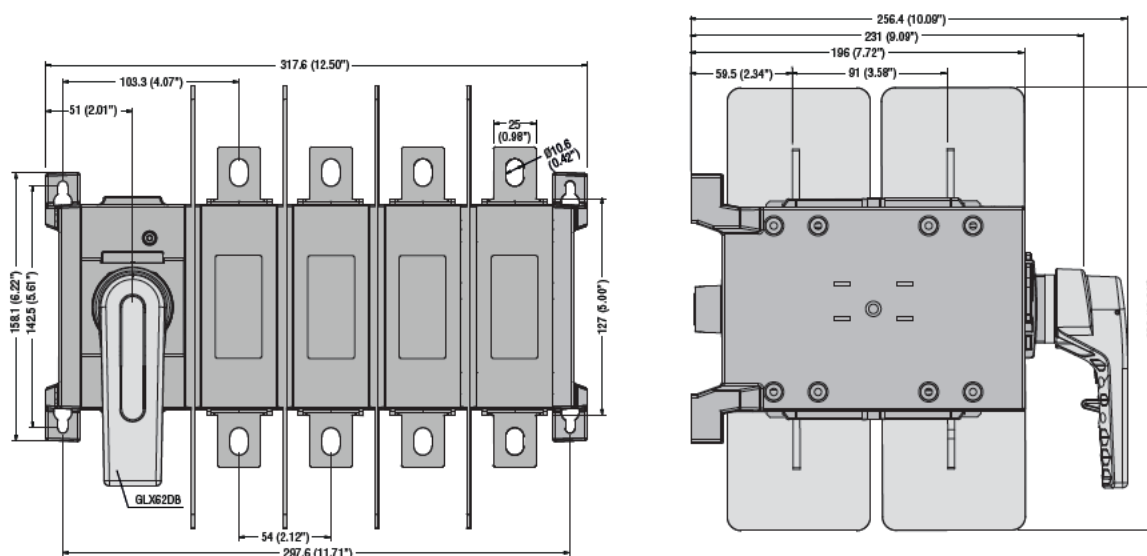
GLC0320T4C1...GLC0500T4C1



GLC0630C1 - GLC0400C1UL



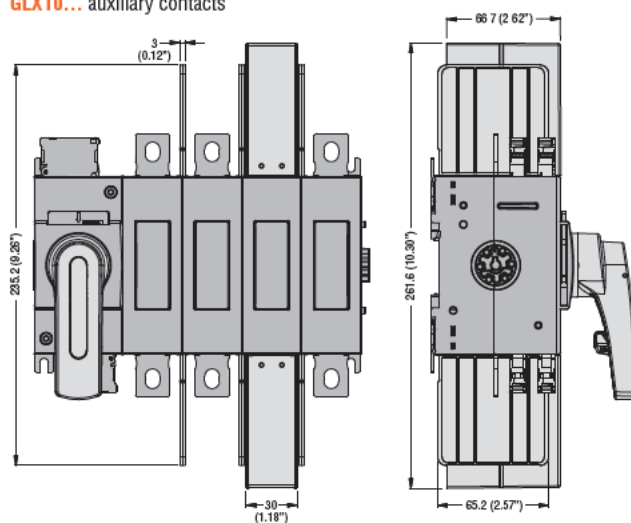
GLC0630T4C1 - GLC0400T4C1UL



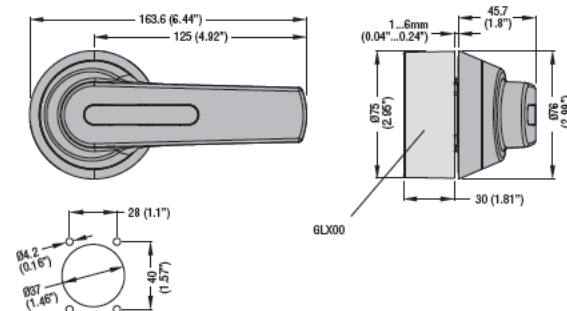
Switch disconnectors and changeover switches

Dimensions [mm (in)]

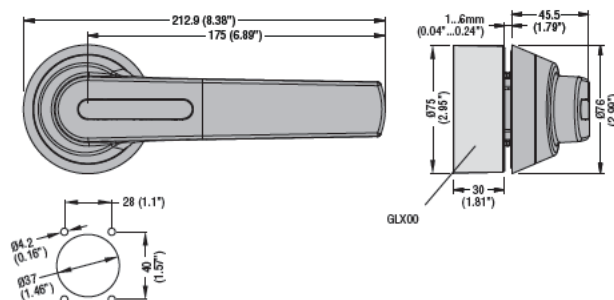
GLX800 - GLX801 terminal covers
GLX900 - GLX901 one-pole phase barrier
GLX10... auxiliary contacts



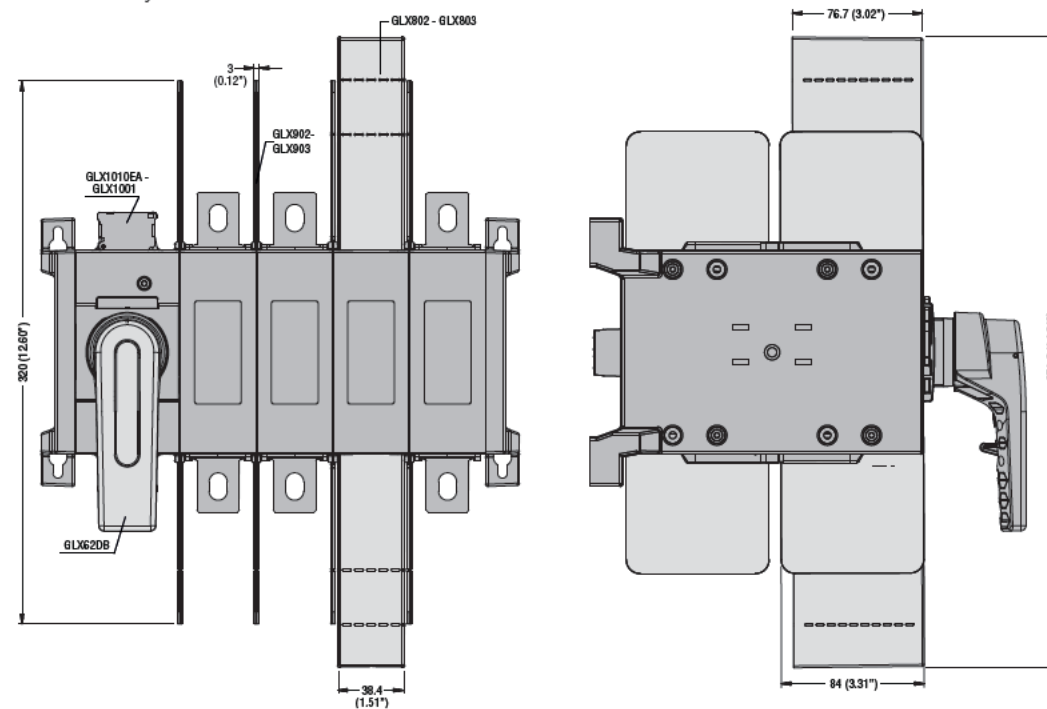
GLX61 - GLX61B - GLX61CB handles



GLX62 - GLX62B - GLX62CB handles



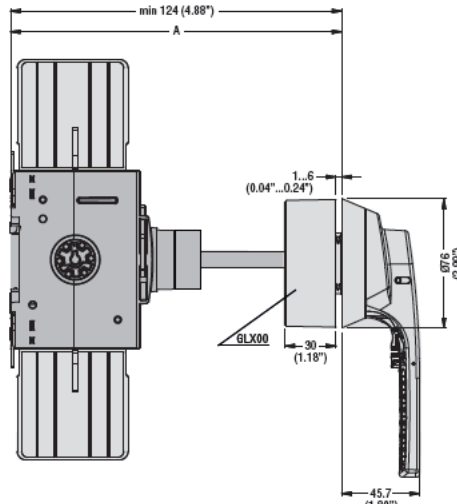
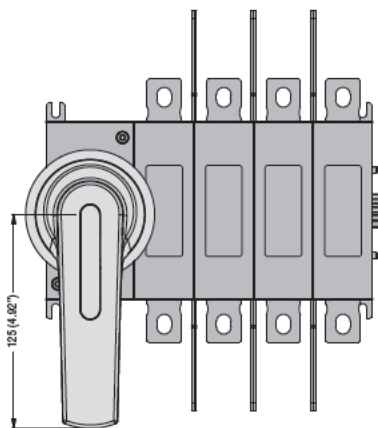
GLX802 - GLX803 terminal covers
GLX902 - GLX903 one-pole phase barrier
GLX10... auxiliary contacts



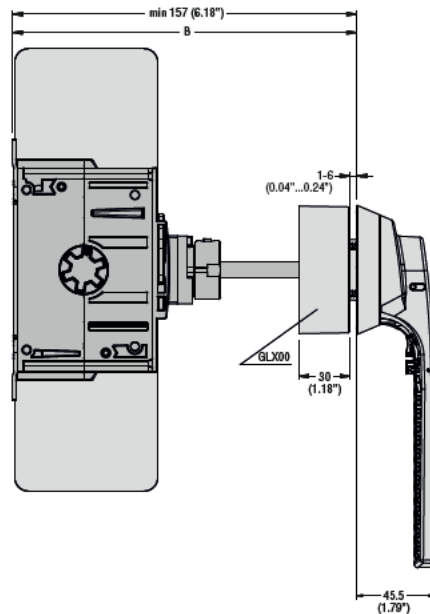
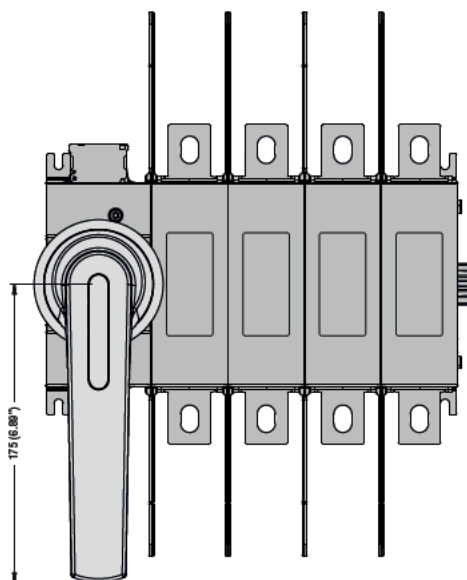
Switch disconnectors and changeover switches

Dimensions [mm (in)]

GLX7... shaft extensions for door coupling handles
GLX00 shaft alignment ring



GLX7...S10	A mm (in)	
	min	max
GLX7150S10	124...104	(4 88... 7.64")
GLX7200S10	124...244	(4 88... 9.61")
GLX7300S10	124...344	(4 88... 13.54")
GLX7400S10	124...444	(4 88... 17.48")
GLX7500S10	124...544	(4 88... 21.42")

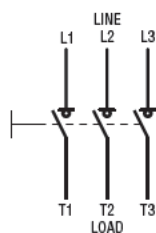


GLX7...S10	B mm (in)	
	min	max
GLX7150S10	157...227	(6 18... 8.94")
GLX7200S10	157...277	(6 18... 10.90")
GLX7300S10	157...377	(6 18... 14.84")
GLX7400S10	157...477	(6 18... 18.78")
GLX7500S10	157...577	(6 18... 22.72")

GL SERIES 160A TO 630A SWITCH DISCONNECTORS

Three-pole

GL0160...GL0630...



Fourth pole

GLX42...



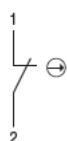
ADD-ON BLOCKS AND ACCESSORIES

Auxiliary contacts

GLX10 10EA



GLX10 01



Neutral terminal

GLX300 - GLX302



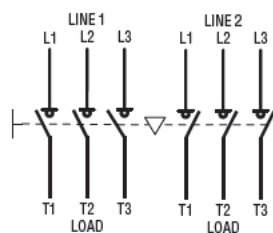
Earth/Ground terminal

GLX301 - GLX303

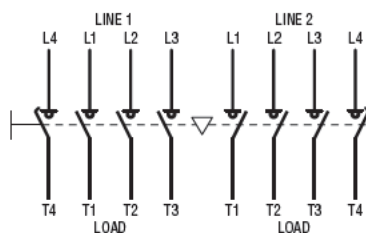


GL SERIES 160A TO 630A CHANGEOVER SWITCHES

Three-pole **GLC0160...GLC0630...**



Four-pole **GLC0160 T4...GLC0630T4...**



Switch disconnectors and changeover switches

Technical characteristics
Switch disconnectors

TECHNICAL DATA ACCORDING TO IEC/EN 60947

TYPE	3-pole	GL0160...	GL0200...	GL0250...	GL0315...	GL0320.....	GL0400...	GL0500...	GL0630...
	4-pole	GLX420315				GLX420320	GLX420400	GLX420500	GLX420630

CONTACT CHARACTERISTICS

IEC conventional free air thermal current I _{th} (≤40°C)	A	160	200	250	315	320	400	500	630	
IEC rated insulation voltage U _i	V	1000				1000				
IEC rated impulse withstand U _{imp}	kV	12				12				
IEC rated operational current I _e										
AC21A	400V	A	160	200	250	315	320	400	500	630
	500V	A	160	200	250	315	320	400	500	630
	690V	A	160	200	250	315	320	400	500	630
AC22A	400V	A	160	200	250	315	320	400	500	630
	500V	A	160	200	250	315	320	400	500	500
	690V	A	160	200	250	315	320	400	500	500
AC23A	400V	A	160	200	250	250	320	400	500	630
	500V	A	160	200	250	250	320	400	500	500
	690V	A	160	200	250	250	320	400	500	500
Power dissipation	W/pole	3.2	4	6.5	6.5	20.8	26.0	32.5	41.0	
IEC rated operational power										
AC23A	400V	kW	90	110	140	140	160	200	250	355
	690V	kW	144	200	250	250	315	400	500	500
IEC reactive power for control of capacitors 400V	kvar	80	100	115	145	145	180	200	250	

SHORT CIRCUIT PROTECTION

Rated short-time current (1s) I _{cs}	kA rms	8				15			
Conditional short-circuit current	kA rms	100				80			
With fuse class gG	A	160	200	250	315	355	400	500	630
Making capacity AC23A 400V	A	1600	2000	2500	2500	3200	4000	5000	6300
Breaking capacity AC23A 400V	A	1280	1600	2000	2000	2560	3200	4000	5040
Mechanical life	cycles	20.000				10.000			
Terminal for busbars	mm	M8 x 20				M10 x 25			
Tightening torque	Nm	15...22				30...37			
	lbin	132...194				265...327			
Conductor section min...max	mm ²	70...185				1 x 185...2 x 185			
	AWG/ Kcmil	00...400				1 x 400...2 x 350			

AMBIENT CONDITIONS

Ambient conditions			
Temperature	Operating	°C	-25...+55
	Storage	°C	-40...+70
Maximum altitude		m	3000
Mounting position	Normal		Vertical
	Admissible		Any
Fixing			By screw or on 35mm DIN rail (IEC/EN 60715)

TECHNICAL DATA ACCORDING TO UL/CSA RATINGS

TYPE	3-pole	—	GL0200C1UL	—	—	—	GL0400C1UL	—	—
	4-pole	—	GLX420200UL	—	—	—	GLX420400UL	—	—
Compliance		—	UL98 CSA C22.2 N°4	—	—	—	UL98 CSA C22.2 N°4	—	—
General purpose current ratings	A	—	200	—	—	—	400	—	—
Maximum operating voltage	V	—	600	—	—	—	600	—	—
Horsepower ratings /motor FLA current three-phase									
	240V	HP/A	—	75/192	—	—	125/312	—	—
	480V	HP/A	—	150/180	—	—	250/302	—	—
	600V	HP/A	—	200/192	—	—	350/336	—	—
Short circuit rating	KA rms	—	200	—	—	—	100	—	—
With fuse	class/A	—	J/200	—	—	—	J/400	—	—
Terminal kit lugs		—	GLX500-GLX501	—	—	—	GLX502-GLX503	—	—
Minimum enclosure dimensions at rated current	mm (in)	—	400 x 250 x 150 (15.8 x 9.9 x 5.9)	—	—	—	950 x 350 x 200 (37.4 x 13.8 x 7.9)	—	—

Switch disconnectors and changeover switches

Technical characteristics
Changeover switches



TECHNICAL DATA ACCORDING TO IEC/EN 60947

TYPE	3-pole	GLC0160...	GLC0200...	GLC0250...	GCL0315...	GLC0320...	GLC0400...	GLC0500...	GLC0630...
	4-pole	GLC0160 T4...	GLC0200 T4...	GLC0250 T4...	GCL0315 T4...	GLC0320 T4...	GLC0400 T4...	GLC0500 T4...	GLC0630 T4...

CONTACT CHARACTERISTICS

IEC conventional free air thermal current I _{th} (≤40°C)	A	160	200	250	315	320	400	500	630
IEC rated insulation voltage U _i	V	1000				1000			
IEC rated impulse withstand U _{imp}	kV	12				12			
IEC rated operational current I _e									
AC31B 400V	A	160	200	250	315	320	400	500	630
500V	A	160	200	250	315	320	400	500	630
690V	A	160	200	250	315	320	400	500	630
AC32B 400V	A	160	200	250	315	320	400	500	630
500V	A	160	200	250	315	320	400	500	500
690V	A	160	200	250	315	320	400	500	500
AC33B 400V	A	160	200	250	250	320	400	500	630
500V	A	160	200	250	250	320	400	500	500
690V	A	160	200	250	250	320	400	500	500
Power dissipation	W/pole	3.2	4	6.5	6.5	20.8	26.0	32.5	41.0
IEC rated operational power									
AC23A 400V	kW	90	110	140	140	160	200	250	355
690V	kW	144	200	250	250	315	400	500	500

SHORT CIRCUIT PROTECTION

Rated short-time current (1s) I _{cw}	kA rms	8				15			
Conditional short-circuit current	kA rms	100				80			
With fuse class gG	A	160	200	250	315	355	400	500	630
Making capacity AC23A 400V	A	1600	2000	2500	2500	3200	4000	5000	6300
Breaking capacity AC23A 400V	A	1280	1600	2000	2000	2560	3200	4000	5040
Mechanical life	cycles	20.000				10.000			
Terminal for busbars	mm	M8 x 20				M10 x 25			
Tightening torque	Nm	15...22				30...37			
	lbin	132...194				265...327			
Conductor section min...max	mm ²	70...185				1 x 185...2 x 185			
	AWG/ Kcmil	00...400				1 x 400...2 x 350			

AMBIENT CONDITIONS

Temperature	Operating	°C	-25...+55						
	Storage	°C	-40...+70						
Maximum altitude		m	3000						
Mounting position	Normal		Vertical						
	Admissible		Any						
Fixing			By screw						

TECHNICAL DATA ACCORDING TO UL/CSA RATINGS

TYPE		—	GLC0200...UL	—	—	—	GLC0400...UL	—	—
Compliance		—	UL1008 CSA C22.2 N°4	—	—	—	UL1008● CSA C22.2 N°4	—	—
General purpose current ratings	A	—	200	—	—	—	400	—	—
Maximum operating voltage	V	—	600	—	—	—	600	—	—
Horsepower ratings /motor FLA current three-phase									
240V	HP/A	—	75/192	—	—	—	125/312	—	—
480V	HP/A	—	150/180	—	—	—	250/302	—	—
600V	HP/A	—	200/192	—	—	—	350/336	—	—
Short circuit ratings	KA rms	—	200	—	—	—	100	—	—
With fuse	class/A	—	J/200	—	—	—	J/400	—	—
Terminal kit lugs		—	GLX500-GLX501	—	—	—	GLX502-GLX503	—	—
Minimum enclosure dimensions at rated current	mm (in)	—	400 x 250 x 150 (15.8 x 9.9 x 5.9)	—	—	—	950 x 350 x 260 (37.4 x 13.8 x 10.3)	—	—

● cULus certification pending.

■ SWITCH DISCONNECTORS AND CHANGEOVER SWITCHES GL SERIES



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The products described in this publication are subject to be revised or improved at any moment. Catalogue descriptions and details, such as technical and operational data, drawings, diagrams and instructions, etc., do not have any contractual value. In addition, products should be installed and used by qualified personnel and in compliance with the regulations in force for electrical systems in order to avoid damages and safety hazards.