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- SWITCH DISCONNECTORS 16A TO 125A (AC21A)**
- Switch disconnectors with direct operating handle and door coupling version
 - Switch disconnectors with front door mount
 - Three-pole switch disconnectors for photovoltaic applications
 - Switch disconnectors in IP65 housing.



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- SWITCH DISCONNECTORS 160A TO 1250A (AC21A)**
- Three and four-pole switch disconnectors
 - Three and four-pole switch disconnectors with NH and BS type fuse holders
 - Four-pole switch disconnectors for photovoltaic applications
 - Three and four-pole changeover switches.

- ◆ 16A to 1250A ratings
- ◆ Versions: direct operating handle, door coupling and in housing
- ◆ Wide range of accessories
- ◆ Three and four-pole types for photovoltaic applications up to 630A.



Switch disconnectors 16A to 125A

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Switch disconnectors 16A to 125A

COMPACT SIZE

The three-pole switch disconnectors, 16A to 40A ratings in AC21A, are made up of a single unit body, merely 36mm wide, while the 63A to 125A ratings in AC21A, of another body size of only 70mm wide.



VERSIONS

Switch disconnectors are standard supplied with direct operating handle and for door mount.

A shaft extension and rotating handle can be ordered separately to transform the direct operating version into a door coupling type.

VERSIONS FOR PHOTOVOLTAIC APPLICATIONS

The GA...D type switch disconnectors are suitable for both small domestic installations as well as those with a large number of solar cells. Use up to 800V in DC21B category.

SIDE MOUNT ADD-ON FOURTH POLE

Simultaneous or early-make contact operation of the fourth pole with respect to the switch disconnector poles.



ADD-ON AUXILIARY CONTACTS

One only add-on block suitable for all the 8 ratings of switch disconnectors.



ACCESSORY COMBINATIONS

Mounting up to 4 auxiliary contacts or 1 fourth pole and 3 auxiliary contacts (2 blocks always on the right and 2 on the left side) of each switch disconnector. The earth and neutral terminals and fuse holder also can be added.

ADD-ON BLOCK MOUNTING

Mounting and removal of the fourth pole and add-on blocks are simple and quick operations with no need of tools.

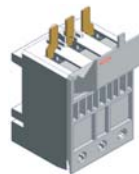


6 AND 8 POLE VERSION

A mechanical coupling system is available for the 16A to 125A switch disconnectors with direct operating handle to provide 6/8 pole disconnectors along with a mechanical interlock mechanism for the line changeover function (I - O - II).

FUSE HOLDERS

A three-pole fuse holder can be added to 16A to 32A switch disconnectors to provide a single compact unit. Access to the fuse can be made only in OFF position.



cULus and KEMA CERTIFICATIONS

All GA series switch disconnectors are certified by KEMA and by UL for Canada and USA. The 16A to 40A types are certified according to UL 508/CSA 22.2 N° 14 while the 63A to 125A types to UL98/CSA 22.2 N° 4 standards.



IP65 PADLOCKABLE HANDLES

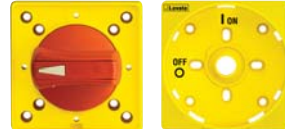
Wide range of selector or pistol grip handles, with screw or ring fixing. All handles are equipped with built-in padlockable mechanism. The selector handle GAX63... is snapped on to the door-mount switch disconnectors in 16A to 40A ratings, with no need of tools.



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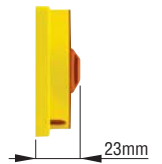
HANDLE ADAPABILITY

The extensive number of fixing holes in the front handle plate can replace switch disconnectors, normally found out in the field, without having to drill other holes.



REDUCED HANDLE THICKNESS

GAX61 and GAX 61 B handles are only 23mm thick.



DEFEATABLE SELECTOR HANDLE

In compliance with UL508 standards, which require internal panel inspection by authorised personnel with power applied, the selector handle is available with defeatable feature of the door coupling when the switch disconnector is closed.



SWITCH STATUS INDICATION

The switch open or closed state is clearly and unequivocally seen at a distance thanks to the simple and modern design of the handle.

DIN RAIL FIXING

The fixing on and removal of the switch disconnector from the 35mm (IEC/EN 60715) DIN rail are done without tools.

PAD INSERT FOR NO DIN RAIL SLIDING

A rubber pad insert prevents the sliding of switch disconnectors even when out of tolerance or mounted vertically.



TERMINAL ADAPTABILITY

Terminals are suitable to accept any type of cable: flexible, rigid, AWG wire. The terminals can withstand high tightening torques.

HIGH CAPABILITY IN AC23

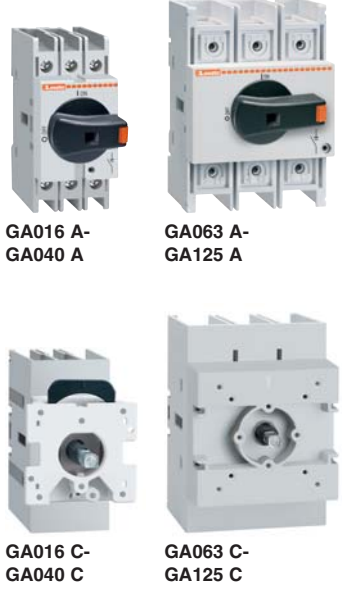
The rated currents I_e in AC23 at 690VAC are the highest of the category.

MODULARITY

The switch disconnectors can be mounted in modular panels.

Three-pole switch disconnectors

2



GA016 A- GA040 A GA063 A- GA125 A

GA016 C- GA040 C GA063 C- GA125 C

Order code	Conventional free air thermal current I _{th} AC21A	Rated operational current I _e		Qty per pkg	Wt [kg]
		AC22A (≤690V)	AC23A (≤415V)		
	[A]	[A]	[A]	n°	[kg]

Direct operating version, complete with black handle.
For door-coupling version, separately order the handle and shaft extension; refer to page 2-6.

GA016 A	16	16	16	1	0.135
GA025 A	25	25	25	1	0.135
GA032 A	32	32	32	1	0.135
GA040 A	40	40	40	1	0.135
GA063 A	63	63	63	1	0.365
GA080 A	80	80	80	1	0.365
GA100 A	100	100	100	1	0.365
GA125 A	125	125	125	1	0.365

Door-mount version, complete with shaft; separately order the handle, refer to page 2-6.

GA016 C	16	16	16	1	0.135
GA025 C	25	25	25	1	0.135
GA032 C	32	32	32	1	0.135
GA040 C	40	40	40	1	0.135
GA063 C	63	63	63	1	0.365
GA080 C	80	80	80	1	0.365
GA100 C	100	100	100	1	0.365
GA125 C	125	125	125	1	0.365

Fourth pole



GAX42...A
GAX41...A

GAX42...C
GAX41...C

Order code	Conventional free air thermal current I _{th} AC21A	Rated operational current I _e		Qty per pkg	Wt [kg]
		AC22A (≤690V)			
	[A]	[A]		n°	[kg]

Simultaneous closing operation as switch poles.
For GA...A versions.

GAX42 040A	40	40		1	0.040
GAX42 063A	63	63		1	0.110
GAX42 080A	80	80		1	0.110
GAX42 100A	100	100		1	0.110
GAX42 125A	125	125		1	0.110

For GA...C versions.

GAX42 040C	40	40		1	0.040
GAX42 063C	63	63		1	0.110
GAX42 080C	80	80		1	0.110
GAX42 100C	100	100		1	0.110
GAX42 125C	125	125		1	0.110

Early-make closing operation with respect to switch poles.
For GA...A versions.

GAX41 040A	40	40		1	0.040
GAX41 125A	125	125		1	0.110

For GA...C versions.

GAX41 040C	40	40		1	0.040
GAX41 125C	125	125		1	0.110

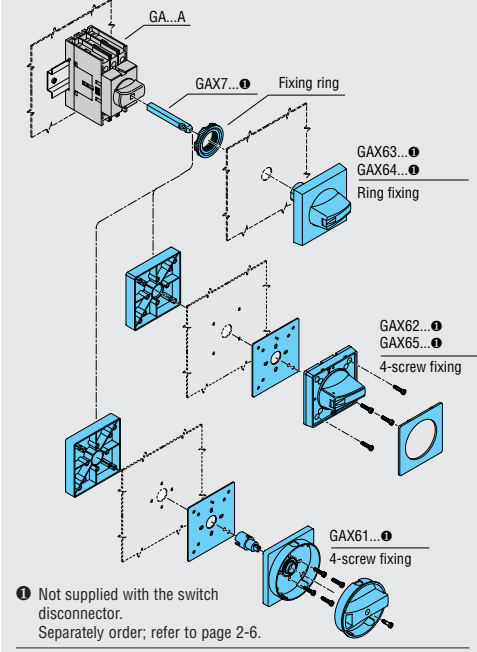
General characteristics

- 16A to 125A ratings
- Available versions: direct operating and door mount. For door coupling version, use switch disconnector with direct operating handle and separately order the handle and shaft extension
- Compact and modular size
- Screw or 35mm DIN (IEC/EN 60715) rail fixing
- Padlockable in 0 position with no extra accessory.

Operational characteristics

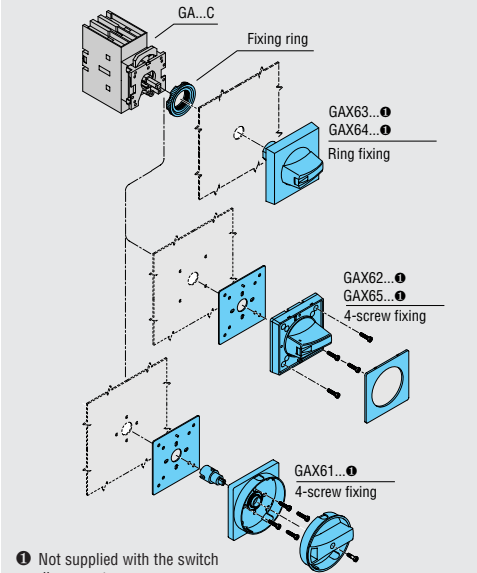
- Rated insulation voltage U_i: 800V
- Rated impulse withstand U_{imp}: 8kV
- Electrical life in AC21A: 100,000 operations
- Mechanical life: 100,000 operations.

Transformation of direct operating version into door coupling type



❶ Not supplied with the switch disconnector. Separately order; refer to page 2-6.

Door-mount version



❶ Not supplied with the switch disconnector. Separately order; refer to page 2-6.

Certifications and compliance

Certifications obtained: cULus (to UL508/CSA 22.2 n° 14 for GA016... GA040...; to UL98/CSA 22.2 n° 4 for GA063... GA125...); KEMA.
Compliant with standards: IEC/EN 60947-3, IEC/EN 60947-1.

Three-pole switch disconnectors for photovoltaic applications



GA040 D



GA080 D
GA125 D

Order code	Conventional free air thermal current Ith AC21A	Rated operational current Ie			Qty per pkg	Wt [kg]
		4 p	6 p	8 p		
		DC21B (800V)				
	[A]	[A]	[A]	[A]	n°	[kg]

Direct operating version, complete with black handle.
For door-coupling version, separately order the handle and shaft extension; refer to page 2-6.

GA040 D	40	15	18	25	1	0.135
GA080 D	80	18	22	30	1	0.355
GA125 D	125	20	30	35	1	0.355

MAXIMUM OPERATIONAL CURRENT IN DC21B

Voltage Ue [V]	Poles in series n°	GA040 D [A]	GA080 D [A]	GA125 D [A]
48	3	40	80	125
220	3	32	40	95

400	4Ⓜ	32	40	64
440	4Ⓜ	32	40	64
500	4Ⓜ	32	40	56
600	4Ⓜ	20	30	40
700	4Ⓜ	15	18	20
750	4Ⓜ	15	18	20
800	4Ⓜ	15	18	20

600	6Ⓜ	25	35	40
700	6Ⓜ	18	22	30
750	6Ⓜ	18	22	30
800	6Ⓜ	18	22	30

700	8Ⓜ	25	30	35
750	8Ⓜ	25	30	35
800	8Ⓜ	25	30	35

- Ⓜ Switch disconnectors GS...D complete with fourth pole GAX42...D.
- Ⓜ Two switch disconnectors GA...D complete with mechanical coupling system GAX60...
- Ⓜ Two switch disconnectors GA...D complete with mechanical coupling system GAX60... and two fourth pole GAX42...D.

Fourth pole for switch disconnectors for photovoltaic applications



GAX42...D

Order code	Conventional free air thermal current Ith AC21A	Rated operational current Ie		Qty per pkg	Wt [kg]
		(220V)	(800V)		
		[A]	[A]	n°	[kg]

Simultaneous closing operation as switch poles.
For GA...D versions.

GAX42 040D	40	32	15	1	0.040
GAX42 080D	80	40	18	1	0.110
GAX42 125D	125	95	20	1	0.110

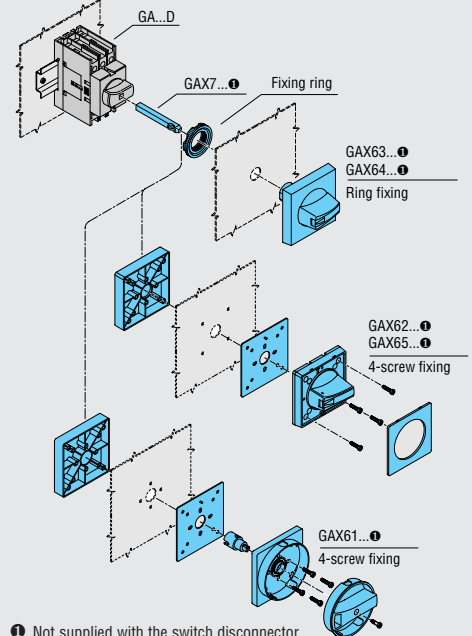
General characteristics

- 40A to 125A ratings
- Available versions: direct operating.
For door coupling version, use switch disconnector with direct actuator and separately order the handle and shaft extension
- Compact and modular size
- Screw or 35mm DIN (IEC/EN 60715) rail fixing
- Padlockable in 0 position with no extra accessory.

Operational characteristics

- Rated insulation voltage Ui: 800V
- Rated impulse withstand Uimp: 8kV
- Electrical life in AC21A: 100,000 operations
- Mechanical life: 100,000 operations.

Transformation of direct operating version into door coupling type



- Ⓜ Not supplied with the switch disconnector. Separately order; refer to page 2-6.

Certifications and compliance

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

Add-on blocks and accessories



2



GAX10 11A GAX10 11C



GAX3...A GAX3...C



GAX61



GAX62



GAX63 B



GAX7...

Order code	Characteristics	Qty per pkg	Wt
		n°	[kg]

Auxiliary contacts.

GAX10 11A	1NO+1NC for GA...A and GA...D	1	0.030
GAX10 11C	1NO+1NC for GA...C	1	0.030

Neutral terminal.

GAX31 A	For GA016 A-GA040 A and GA040D	1	0.040
GAX32 A	For GA063 A-GA125 A and GA080 D - GA125 D	1	0.110
GAX31 C	For GA016 C-GA040 C	1	0.040
GAX32 C	For GA063 C-GA125 C	1	0.110

Earth terminal.

GAX33 A	For GA016 A-GA040 A and GA040D	1	0.040
GAX34 A	For GA063 A-GA125 A and GA080 D - GA125 D	1	0.110
GAX33 C	For GA016 C-GA040 C	1	0.040
GAX34 C	For GA063 C-GA125 C	1	0.110

DOOR COUPLING HANDLES, PADLOCKABLE, IP65. Red/yellow, rotating.

GAX61	For GA...A, GA...C and GA...D Screw fixing ①	1	0.058
GAX62	For GA...A, GA...C and GA...D Screw fixing. Selector handle ①	1	0.055
GAX63	For GA...A, GA...C and GA...D Ring fixing. Selector handle, with release ①②	1	0.053
GAX64	For GA...A, GA...C and GA...D Ring fixing. Selector handle, defeatable per UL508A ①	1	0.060
GAX65	For GA...A, GA...C and GA...D Screw fixing. Pistol grip handle ①	1	0.070
GAX66	For GA...A, GA...C and GA...D Screw fixing. Pistol grip handle, defeatable UL508A ①	1	0.075

Black, rotating.

GAX61 B	For GA...A, GA...C and GA...D Screw fixing ①	1	0.058
GAX62 B	For GA...A, GA...C and GA...D Screw fixing. Selector handle ①	1	0.055
GAX63 B	For GA...A, GA...C and GA...D Ring fixing. Selector handle, with release ①②	1	0.053
GAX64 B	For GA...A, GA...C and GA...D Ring fixing. Selector handle, defeatable per UL508A ①	1	0.060
GAX65 B	For GA...A, GA...C and GA...D Screw fixing. Pistol grip handle ①	1	0.070
GAX66 B	For GA...A, GA...C and GA...D Screw fixing. Pistol grip handle, defeatable per UL508A ①	1	0.075
GAX67 B	For GAX50... (I-O-II)	1	0.040

Shaft extension for door coupling handles. For GA...A and GA...D switch disconnectors.

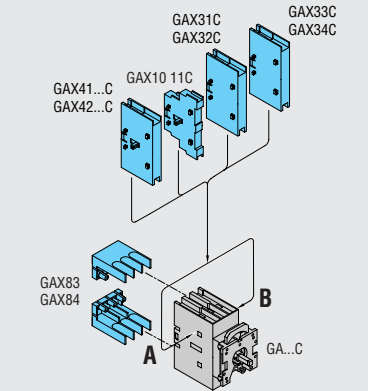
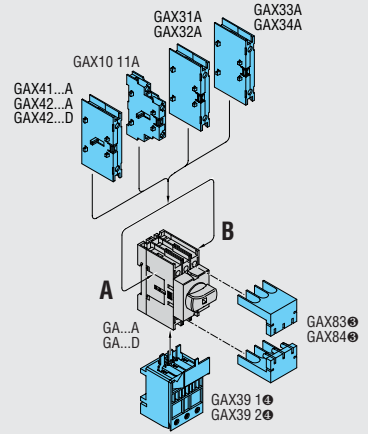
GAX7055	55mm long	1	0.011
GAX7070	70mm long	1	0.013
GAX7090	90mm long	1	0.017
GAX7150	150mm long	1	0.028
GAX7200	200mm long	1	0.037
GAX7300	300mm long	1	0.055

① For GA...A and GA...D switch disconnectors, separately order GAX7... shaft extensions.
② Snap-on fixing of GA016-GA040C switch disconnectors with the handle.

General characteristics of auxiliary contacts

Conventional free air thermal current I_{th}: 16A

Maximum combinations for side-mount auxiliary contacts



			Position			
			A		B	
			Solution 1	Solution 2	Solution 1	Solution 2
GAX41...A GAX42...A GAX42...D	GAX41...C GAX42...C	Fourth pole	1	—	1	—
GAX10 11A	GAX10 11C	Auxiliary contact	1	2	1	2
GAX31A GAX32A	GAX31B GAX32B	Neutral terminal	1	1	1	1
GAX33A GAX34A	GAX33B GAX34B	Earth terminal	1	1	1	1

- Fourth pole is always mounted directly on the switch side
- Auxiliary contacts are always mounted directly on the fourth pole side, if any, or on the switch side
- Neutral and earth terminals are always mounted directly on the fourth pole side, if any, or on the switch side. It is indifferent whether the first is the neutral terminal or earth terminal.

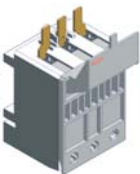
① The lower terminal covers cannot be fitted when the GAX39 1 fuse holder is mounted.
② The fuse holder cannot be fitted when the GAX8 terminal covers are mounted.

Certifications and compliance

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



**GAX50 0...
GAX60 0...**



GAX39 1

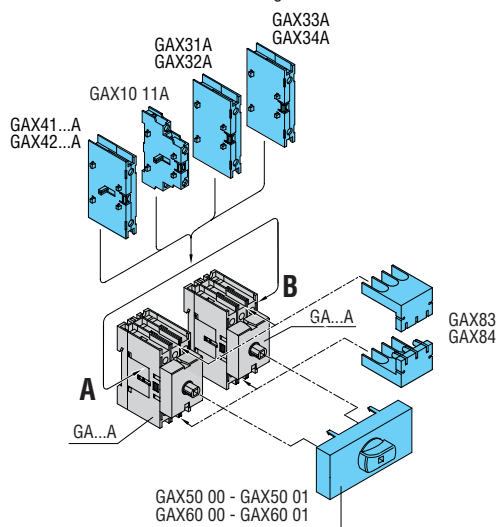
- 1 Contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).
- 2 Use with handles type GAX65, GAX65 B, GAX66, GAX66 B, depending on type of switch.

Order code	Characteristics	Qty per pkg	Wt
		n°	[kg]
Mechanical interlock for line changeover (I-O-II).			
GAX50 00	For GA016 A-GA040 A	1	1
GAX50 01	For GA063 A-GA125 A	1	1
Mechanical coupling system for 6-8 pole switch disconnectors.			
GAX60 00	For GA016 A-GA040 A, GA040 D	1	1
GAX60 01	For GA063 A-GA125 A, GA080 D, GA125 D	1	1
Set of 2 three-pole terminal covers.			
GAX83	For GA016 A-GA040 A, GA016 C-GA040 C, GA040 D	1	0.009
GAX84	For GA063 A-GA125 A, GA063 C-GA125 C, GA080 D, GA125 D	1	0.015
Set of 2 one-pole terminal covers for fourth pole.			
GAX81	For GAX42 040A, GAX42 040C, GAX42 040D, GAX41 040A, GAX41 040C	1	0.003
GAX82	For GAX42 063A-GAX42 125A, GAX42 063C-GAX42 125C, GAX42 080D, GAX42 125D, GAX41 125A, GAX41 125C	1	0.005
Fuse holder for switch disconnectors.			
GAX39 1	For GA016 A-GA032 A Suitable for 10.3x38 fuse size	1	1

Operational characteristics of fuse holder

- Rated insulation voltage U_i : 800V
- Rated impulse withstand voltage U_{imp} : 8kV
- The fuse holder connects directly to the switch disconnectors
- Access to fuses only when the switch disconnectors are in OFF position.

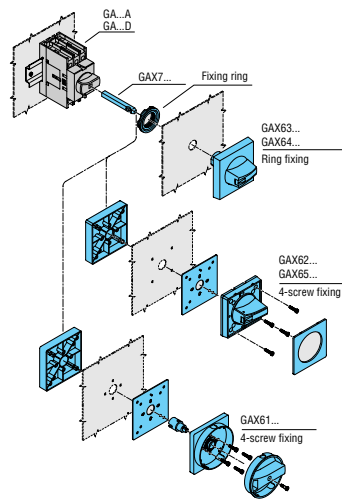
Maximum combinations
Mechanical coupling system and mechanical interlock for line changeover



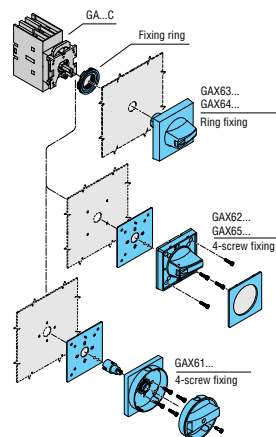
- Fourth pole is always mounted directly on the switch side.
- Auxiliary contacts are always mounted directly on the fourth pole side, if any, or on the switch side.
- Neutral and earth terminals are always mounted directly on the fourth pole side, if any, or on the switch side. It is indifferent whether the first is the neutral or earth terminal.

		Position			
		A		B	
		Solution 1	Solution 2	Solution 1	Solution 2
GAX41...A GAX42...A	Fourth pole	1	—	1	—
GAX10 11A	Auxiliary contact	1	2	1	2
GAX31A GAX32A	Neutral terminal	1	1	1	1
GAX33A GAX34A	Earth terminal	1	1	1	1

Handles
For door coupling

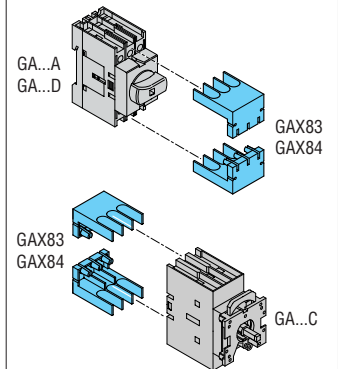


For door mount

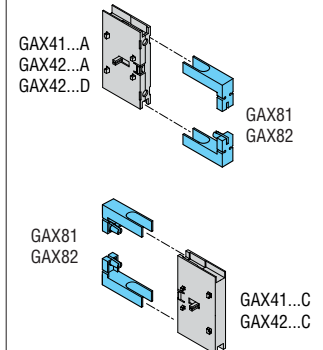


Terminal covers

For switch disconnectors



For fourth pole



Three-pole switch disconnectors in housing

2



GAZ016...-GAZ040...



GAZ063...-GAZ125...

Order code	Conventional free air thermal current Ith AC21A	Qty per pkg	Wt
	[A]	n°	[kg]

With rotating red/yellow handle.

GAZ016	16	1	0.450
GAZ025	25	1	0.450
GAZ032	32	1	0.450
GAZ040	40	1	0.450
GAZ063	63	1	2.220
GAZ080	80	1	2.220
GAZ100	100	1	2.220
GAZ125	125	1	2.220

With rotating black handle.

GAZ016 B	16	1	0.450
GAZ025 B	25	1	0.450
GAZ032 B	32	1	0.450
GAZ040 B	40	1	0.450
GAZ063 B	63	1	2.220
GAZ080 B	80	1	2.220
GAZ100 B	100	1	2.220
GAZ125 B	125	1	2.220

Components Enclosure	Switch disconnector	Handle
GAZ1	GA016 A	GAX61
GAZ1	GA025 A	GAX61
GAZ1	GA032 A	GAX61
GAZ1	GA040 A	GAX61
GAZ3	GA063 A	GAX61
GAZ3	GA080 A	GAX61
GAZ3	GA100 A	GAX61
GAZ3	GA125 A	GAX61

GAZ1 B	GA016 A	GAX61 B
GAZ1 B	GA025 A	GAX61 B
GAZ1 B	GA032 A	GAX61 B
GAZ1 B	GA040 A	GAX61 B
GAZ3 B	GA063 A	GAX61 B
GAZ3 B	GA080 A	GAX61 B
GAZ3 B	GA100 A	GAX61 B
GAZ3 B	GA125 A	GAX61 B

General characteristics

- Polycarbonate housing material
- For four-pole version, add fourth pole GAX4...A
- One auxiliary contact block can be fitted on the right and left sides of the disconnector
- Padlockable handle
- Sealable cover
- IP65 degree of protection
- Entries
 - GAZ016...-GAZ040...: PG16/M25 and PG13.5/M20 knockouts
 - GAZ063...-GAZ125...: smooth surface to be drilled by the user
 - GAZ1...: PG16/M25 and PG13.5/M20 knockouts
 - GAZ3...: smooth surface to be drilled by the user

The empty enclosures are supplied with the following accessories:

Enclosure	GAZ1 B	GAZ3 B	GAZ 1	GAZ 3
Black handle GAX61 B	1	1	—	—
Red/yellow handle GAX61	—	—	1	1
Shaft extension	1	1	1	1
Neutral terminal	1	—	1	—
Earth terminal	1	—	1	—

Reference standards

Compliant with standards: IEC/EN 60947-3, IEC7EN 60947-1.

Special GAZ... versions

In addition to the standard-supplied types, cULus certified versions are available. Add suffix **UL** at the end of the order code; e.g. GAZ063 B **UL**.

Empty enclosures



GAZ1...



GAZ3...

Order code	Characteristics	Qty per pkg	Wt
		n°	[kg]

For switch disconnectors.

With rotating red/yellow handle.

Complete with shaft extension.

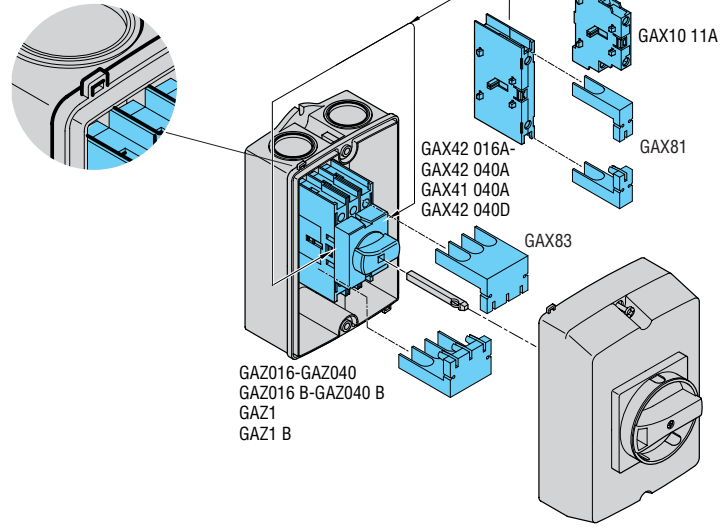
GAZ1	For GA016 A-GA040 A and GA040 D	1	0.320
GAZ3	For GA063 A-GA125 A, GA080 D and GA125 D	1	1.900

With rotating black handle. Complete with shaft extension.

GAZ1 B	For GA016 A-GA040 A and GA040 D	1	0.320
GAZ3 B	For GA063 A-GA125 A, GA080 D and GA125 D	1	1.900

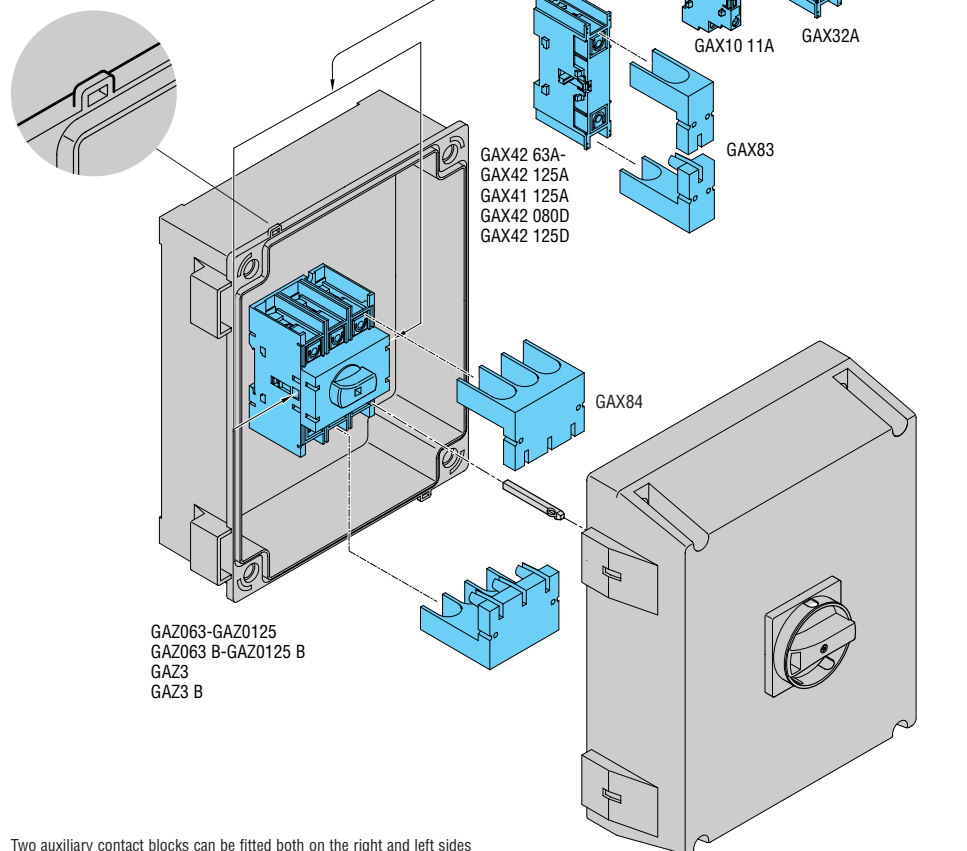
Maximum combinations
Enclosures

Sealing eyelet



One auxiliary contact block can be fitted on the right and left sides of the disconnector. The earth and neutral terminals are already available on the enclosure base.

Sealing eyelet



Two auxiliary contact blocks can be fitted both on the right and left sides of the disconnector. No earth and neutral terminals are available on the enclosure base.

Three-pole switch disconnectors



GE...

Order code	Conventional free air thermal current Ith AC21A (≤500V)		Rated operational current Ie		Qty per pkg	Wt [kg]
	[A]	[A]	AC23A (≤400V)	AC23A (≤500V)		
	[A]	[A]	[A]	n°	[kg]	
Separately order the handle and shaft extension ❶.						
GE0160	160	160	125	1	0.850	
GE0200	200	160	125	1	0.900	
GE0250	250	160	125	1	0.900	
GE0251	250	250	200	1	1.700	
GE0315	315	315	250	1	1.700	
GE0400	400	400	315	1	1.900	
GE0500	500	500	400	1	4.200	
GE0630	630	630	500	1	4.200	
GE0800	800	800	500	1	4.200	
GE1000	1000	800	800	1	7.000	
GE1250	1250	800	800	1	7.600	

Three-pole switch disconnectors with fuse holder



GE...N - GE...B

With NH fuse holder. Separately order the handle and shaft extension ❶❷❸.						
GE0160 N	160	160	125	1	1.700	
GE0161 N	160	160	160	1	3.100	
GE0250 N	250	250	250	1	6.600	
GE0400 N	400	400	400	1	6.600	
GE0630 N	630	630	630	1	13.000	
GE0800 N	800	630	630	1	13.000	
With BS fuse holder. Separately order the handle and shaft extension ❶❷❸.						
GE0160 B	160	160	160	1	❹	
GE0200 B	200	200	200	1	❹	
GE0250 B	250	250	250	1	❹	
GE0315 B	315	315	315	1	❹	
GE0400 B	400	400	400	1	❹	
GE0630 B	630	630	630	1	❹	
GE0800 B	800	630	630	1	❹	

- ❶ Refer to the side table for the selection of the handle.
 ❷ See table on page 2-15 for the types of fuses.
 ❸ The switch disconnector is standard-supplied with fuse protection shield.
 ❹ Contact our Customer Service for details (Tel. +39 035 4282422; e-mail: service@LovatoElectric.com).

Selection of handle

Refer to indicated types in alignment with the order code table on the left for the correct selection of the handle. See page 2-15 for the door-coupling shaft extensions.

Direct operating	Door coupling	
Black	Black	Red/yellow
GEX6 5D	GEX6 5B	GEX6 5
GEX6 6D	GEX65 6B	GEX6 6
GEX6 7D	GEX6 7B	GEX6 7
GEX6 8D	GEX6 8B	GEX6 8

Direct operating	Door coupling	
Black	Black	Red/yellow
GEX6 1D	GEX6 1B	GEX6 1
GEX6 2D	GEX6 2B	GEX6 2
GEX6 3D	GEX6 3B	GEX6 3
GEX6 4D	GEX6 4B	GEX6 4
Direct operating	Door coupling	
Black	Black	Red/yellow
GEX6 2D	GEX6 2B	GEX6 2
GEX6 3D	GEX6 3B	GEX6 3
GEX6 4D	GEX6 4B	GEX6 4

General characteristics

- 160A to 1250A ratings
- Available versions: direct operating and door coupling
- Screw fixing
- Padlockable at 0 position with no extra accessory.

Operational characteristics

- Rated insulation voltage Ui:
 - 1000V for GE160-GE1250, GE0250 N-GE0800 N and GE0250B-GE0800B
 - 800V for GE0160 N, GE0161 N, GE0160 B and GE161 B
- Rated impulse withstand voltage Uimp:
 - 8kV for GE160-GE0400, GE0160 N, GE0161 N, GE0160 B and GE161 B
 - 12kV for GE0500-GE1250, GE0250 N-GE0800 N and GE0250 B-GE0800 B
- Electrical life at 400V in AC23: 1,000 operations
- Mechanical life:
 - 30,000 operations for GE0160-GE0250
 - 20,000 operations for GE0251-GE0400
 - 10,000 operations for GE0500-GE1250, GE0160 N-GE0400 N, GE0160 B-GE0400 B.

Fuses

See page 2-15.

Reference standards

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

Four-pole switch disconnectors



GE...T4

Order code	Conventional free air thermal current Ith AC21A (≤500V)		Rated operational current Ie		Qty per pkg	Wt [kg]
	[A]	[A]	AC23A (≤400V)	AC23A (≤500V)		

Separately order the handle and shaft extension ❶.

GE0160 T4	160	160	125	1	1.000
GE0200 T4	200	160	125	1	1.000
GE0250 T4	250	160	125	1	1.000
GE0251 T4	250	250	200	1	1.900
GE0315 T4	315	315	250	1	1.900
GE0400 T4	400	400	315	1	2.100
GE0500 T4	500	500	400	1	4.500
GE0630 T4	630	630	500	1	4.500
GE0800 T4	800	800	500	1	4.500
GE1000 T4	1000	800	800	1	7.600
GE1250 T4	1250	800	800	1	20.800

With NH fuse holder. Separately order the handle and shaft extension ❶❷❸.

GE0160 NT4	160	160	125	1	2.200
GE0161 NT4	160	160	160	1	8.000
GE0250 NT4	250	250	250	1	8.000
GE0400 NT4	400	400	400	1	8.000
GE0630 NT4	630	630	630	1	15.000
GE0800 NT4	800	630	630	1	15.000

With BS fuse holder. Separately order the handle and shaft extension ❶❷❸.

GE0160 BT4	160	160	160	1	❶
GE0200 BT4	200	200	200	1	❶
GE0250 BT4	250	250	250	1	❶
GE0315 BT4	315	315	315	1	❶
GE0400 BT4	400	400	400	1	❶
GE0630 BT4	630	630	630	1	❶
GE0800 BT4	800	630	630	1	❶

Four-pole switch disconnectors with fuse holder



GE...NT4-GE...BT4

Four-pole switch disconnectors for photovoltaic applications



GE...DT4

Order code	Convent. free air thermal current Ith AC21A (≤500V)		Rated operational current Ie		Qty per pkg	Wt [kg]
	[A]	[A]	DC21B (220V)	(800V)		

Versions for photovoltaic applications. Separately order the handle and shaft extension ❶.

GE0160 DT4	160	125	50	1	❶
GE0250 DT4	250	250	225	1	❶
GE0630 DT4	630	630	280	1	❶

MAXIMUM OPERATIONAL CURRENT IN DC21B

Voltage Ue [V]	Poles in series n°	GE0160 DT4	GE0250 DT4	GE0630 DT4
		[A]	[A]	[A]
48	4	160	250	630
110	4	160	250	630
220	4	125	250	630
400	4	50	250	500
500	4	85	250	500
600	4	65	250	360
750	4	55	235	300
800	4	50	225	280
850	4	45	200	270
900	4	40	175	200

- ❶ Refer to the side table for the selection of the handle.
- ❷ See table on page 2-15 for the types of fuses.
- ❸ The switch disconnector is standard-supplied with fuse protection shield.
- ❹ Contact our Customer Service for details (Tel. +39 035 4282422; email: service@LovatoElectric.com).

Selection of handle

Refer to indicated types in alignment with the order code table on the left for the correct selection of the handle. See page 2-15 for the door-coupling shaft extensions.

Direct operating	Door coupling	
Black	Black	Red/yellow

GEX6 5D	GEX6 5B	GEX6 5
GEX6 6D	GEX6 6B	GEX6 6
GEX6 7D	GEX6 7B	GEX6 7
GEX6 8D	GEX6 8B	GEX6 8
GEX6 9D	GEX6 9B	GEX6 9

Direct actuator	Door coupling	
Black	Black	Red/yellow
GEX6 1D	GEX6 1B	GEX6 1
GEX6 2D	GEX6 2B	GEX6 2
GEX6 3D	GEX6 3B	GEX6 3
GEX6 4D	GEX6 4B	GEX6 4

Direct actuator	Door coupling	
Black	Black	Red/yellow
GEX6 2D	GEX6 2B	GEX6 2
GEX6 3D	GEX6 3B	GEX6 3
GEX6 4D	GEX6 4B	GEX6 4

Selection of handle

Refer to indicated types in alignment with the order code table on the left for the correct selection of the handle. See page 2-15 for the door-coupling shaft extensions.

Direct operating	Door coupling	
Black	Black	Red/yellow
GEX6 5D	GEX6 5B	—
GEX6 6D	GEX6 6B	—
GEX6 7D	GEX6 7B	—

General characteristics

- 160A to 1250A ratings
- Available versions: direct operating and door coupling
- Screw fixing
- Padlockable at 0 position with no extra accessory.

Operational characteristics

- Rated insulation voltage Ui:
 - 1000V for GE160 T4-GE1250 T4, GE0250 NT4/BT4-GE0800 NT4/BT4, GE160 DT4-GE0630 DT4
 - 800V for GE0160 NT4/BT4, GE0161 NT4/BT4
- Rated impulse withstand voltage Uimp:
 - 8kV for GE160 T4-GE0400 T4, GE160 NT4/BT4, GE0161 NT4/BT4, GE0161 DT4, GE250 DT4
 - 12kV for GE0500 T4-GE1250 T4, GE0250 NT4/BT4-GE0800 NT4/BT4, GE0630 DT4
- Electrical life at 400V in AC23: 1,000 operations
- Mechanical life:
 - 30,000 ops for GE0160 T4-GE0250 T4, GE0160 DT4
 - 20,000 ops for GE0251 T4-GE0400 T4, GE0250 DT4
 - 10,000 ops for GE0500 T4-GE1250 T4, GE0160 NT4/BT4-GE0400 NT4/BT4, GE0630 DT4
 - 5,000 ops for GE0630 NT4/BT4, GE0800 NT4/BT4.

Reference standards

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

Three-pole changeover switches

2



GE...E



Order code	Conventional free air thermal current I _{th} AC21A (≤500V)	Rated operational current I _e		Qty per pkg	Wt
		AC23B (≤400V)	AC23B (≤500V)		
	[A]	[A]	[A]	n°	[kg]
Separately order the handle and shaft extension❶.					
GE0160 E	160	160	125	1	1.800
GE0200 E	200	160	125	1	1.900
GE0201 E	200	200	160	1	4.800
GE0250 E	250	200	160	1	4.800
GE0315 E	315	250	200	1	5.000
GE0400 E	400	250	200	1	5.000
GE0500 E	500	400	315	1	11.500
GE0630 E	630	400	315	1	11.500
GE0800 E	800	630	400	1	11.900
GE1000 E	1000	1000	800	1	21.800
GE1250 E	1250	1250	1000	1	23.600

❶ Refer to the side table for the selection of the handle.

Four-pole changeover switches



GE...ET4



Order code	Conventional free air thermal current I _{th} AC21A (≤500V)	Rated operational current I _e		Qty per pkg	Wt
		AC23B (≤400V)	AC23B (≤500V)		
	[A]	[A]	[A]	n°	[kg]
Separately order the handle and shaft extension❶.					
GE0160 ET4	160	160	125	1	2.100
GE0200 ET4	200	160	125	1	2.200
GE0201 ET4	200	200	160	1	5.300
GE0250 ET4	250	200	160	1	5.300
GE0315 ET4	315	250	200	1	5.500
GE0400 ET4	400	250	200	1	5.500
GE0500 ET4	500	400	315	1	12.600
GE0630 ET4	630	400	315	1	12.600
GE0800 ET4	800	630	400	1	13.200
GE1000 ET4	1000	1000	800	1	24.300
GE1250 ET4	1250	1250	1000	1	26.700

❶ Refer to the side table for the selection of the handle.

Selection of handle

Refer to indicated types in alignment with the order code table on the left for the correct selection of the handle. See page 2-15 for the door-coupling shaft extensions.

Direct actuator	Door coupling
Black	Black

GEX6 1E	GEX6 1C
GEX6 2E	GEX6 2C
GEX6 3E	GEX6 3C
GEX6 4E	GEX6 4C

Selection of handle

Refer to indicated types in alignment with the order code table on the left for the correct selection of the handle. See page 2-15 for the door-coupling shaft extensions.

Direct actuator	Door coupling
Black	Black

GEX6 1E	GEX6 1C
GEX6 2E	GEX6 2C
GEX6 3E	GEX6 3C
GEX6 4E	GEX6 4C

General characteristics

- 160A to 1250A ratings
- Available versions: direct operating and door coupling
- Screw fixing
- Padlockable at 0 position with no extra accessory.

Operational characteristics

- Rated insulation voltage U_i:
 - 800V for GE160 E-GE400 E, GE0160 E4-GE0400 E4
 - 1000V for GE0500 E-GE1250 E and GE0500 ET4-GE1250 ET4
- Rated impulse withstand voltage U_{imp}:
 - 8kV for GE160 E-GE0400 E and GE0160 ET4-GE0400 ET4
 - 12kV for GE0500 E-GE1250 E and GE0500 ET4-GE1250 ET4
- Electrical life at 400V in AC23B: 1,000 operations
- Mechanical life: 10,000 operations.

Reference standards

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

Add-on blocks and accessories



GEX10...



GEX8...



GEX69...

Order code	Characteristics	Qty per pkg	Wt
		n°	[kg]

Auxiliary contacts^⓪.

GEX10 11⓪	1NO+1NC	1	0.032
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Auxiliary contacts for switch disconnector types GE0160 N and GE0160 NT4.

GEX10 11N	1NO+1NC	1	0.024
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Auxiliary contacts for switch disconnector types GE0160 E, GE0200 E, GE0160 ET4 and GE0200 ET4.

GEX10 11M	1NO+1NC	1	⓪
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Order code	Characteristics			Qty per pkg	Wt
	Line 1	Line 2	Load	n°	[kg]

Terminal covers; see the side table and page 2-14 for the selection with respect to the disconnector.

GEX81 01	Yes	—	Yes	1	⓪
GEX81 11	Yes	—	Yes	1	⓪
GEX81 12	Yes	—	Yes	1	⓪
GEX81 21	Yes	—	Yes	1	⓪
GEX81 31	Yes	—	Yes	1	⓪
GEX81 41	Yes	—	Yes	1	⓪
GEX82 01	Yes	—	Yes	1	⓪
GEX82 03	Yes	—	Yes	1	⓪
GEX82 11	Yes	—	—	1	⓪
GEX82 12	Yes	—	Yes	1	⓪
GEX82 13	Yes	Yes	Yes	1	⓪
GEX82 21	Yes	—	—	1	⓪
GEX82 22	Yes	—	Yes	1	⓪
GEX82 23	Yes	Yes	Yes	1	⓪
GEX82 31	Yes	—	—	1	⓪
GEX82 32	Yes	—	Yes	1	⓪
GEX82 33	Yes	Yes	Yes	1	⓪
GEX83 11	—	—	Yes	1	⓪
GEX83 12	—	—	Yes	1	⓪
GEX83 21	—	—	Yes	1	⓪
GEX83 22	—	—	Yes	1	⓪
GEX83 31	—	—	Yes	1	⓪
GEX83 32	—	—	Yes	1	⓪

Order code	Characteristics	Qty per pkg	Wt
		n°	[kg]

Motorised control unit for changeover switches.
Rated auxiliary supply voltage 230VAC.

GEX69 1	For GE0201 E-GE0400 E and GE0201 ET4-GE0400 ET4	1	3.840
GEX69 2	For GE0500 E-GE0800 E and GE0500 ET4-GE0800 ET4	1	5.340
GEX69 3	For GE1000 E-GE1250 E and GE1000 ET4-GE1250 ET4	1	5.753

⓪ Contact our Customer Service for details (Tel. +39 035 4282422; email: service@LovatoElectric.com).

⓪ Not suitable for switch disconnector types GE0160 N, GE0160 NT4, GE0160 E, GE0200 E, GE0200 GE0160 ET4 and GE0200 ET4.

General characteristics for auxiliary contacts

Conventional free air thermal current I_{th}: 16A.

Selection of terminal covers

Disconnector	Terminal covers for:	
	Line	Load

Terminal covers for three-pole switch disconnectors

GE0160	GEX81 01	GEX81 01
GE0200		
GE0250		
GE0251	GEX81 11	GEX81 11
GE0315		
GE0400	GEX81 12	GEX81 12
GE0500	GEX81 21	GEX81 21
GE0630		
GE0800		
GE1000	GEX81 31	GEX81 31
GE1250		

Terminal covers for three-pole switch disconnectors with NH fuse holder

GE0160 N	GEX82 01	GEX82 01
GE0161 N	GEX82 11	GEX82 12
GE0250 N	GEX82 21	GEX82 22
GE0400 N		
GE0630 N	GEX82 31	GEX82 32
GE0800 N		

Terminal covers for three-pole switch disconnectors with BS fuse holder

GE0160 B	GEX82 11	GEX82 12
GE0200 B		
GE0250 B		
GE0315 B	GEX82 21	GEX82 22
GE0400 B		
GE0630 B	GEX82 31	GEX82 32
GE0800 B		

Terminal covers for four-pole switch disconnectors

GE0160 T4	GEX81 01	GEX81 01
GE0200 T4		
GE0250 T4		
GE0251 T4	GEX81 11	GEX81 11
GE0315 T4		
GE0400 T4	GEX81 12	GEX81 12
GE0500 T4	GEX81 21	GEX81 21
GE0630 T4		
GE0800 T4		
GE1000 T4	GEX81 31	GEX81 31
GE1250 T4	GEX81 41	GEX81 41

Continued on page 2-14

General characteristics for motorised control unit

- Rated auxiliary supply voltage: 230VAC
- 3 static outputs, 24VDC 200mA
- 3 inputs, volt-free contacts for changeover control (pulse or stable)
- RS485 Modbus serial port for control and monitoring
- Padlockable
- Auxiliary protection fuse
- LED position indicator
- LED fault indicator.

Reference standards

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

Add-on blocks and accessories

new

2



GEX...D-GEX...E



GEX...B-GEX...C



GEX61÷GEX69



GEX7...

For the correct choice of handle and shaft extension for the switch disconnector, refer to table on page 2-15

Order code	Characteristics	Qty per pkg	Wt
		n°	[kg]
Rotating handles.			
GEX6 1D	Direct operating. Black	1	0.340
GEX6 1E	Direct operating. Black	1	0.052
GEX6 2D	Direct operating. Black	1	0.268
GEX6 2E	Direct operating. Black	1	0.266
GEX6 3D	Direct operating. Black	1	0.536
GEX6 3E	Direct operating. Black	1	0.424
GEX6 4D	Direct operating. Black	1	0.612
GEX6 4E	Direct operating. Black	1	0.612
GEX6 5D	Direct operating. Black	1	0.054
GEX6 6D	Direct operating. Black	1	0.216
GEX6 7D	Direct operating. Black	1	0.322
GEX6 8D	Direct operating. Black	1	0.328
GEX6 9D	Direct operating. Black	1	0.400
GEX6 1	Door coupling. Red/yellow. IP65	1	0.326
GEX6 2	Door coupling. Red/yellow. IP65	1	0.256
GEX6 3	Door coupling. Red/yellow. IP65	1	0.308
GEX6 4	Door coupling. Red/yellow. IP65	1	0.486
GEX6 5	Door coupling. Red/yellow. IP65	1	0.068
GEX6 6	Door coupling. Red/yellow. IP65	1	0.248
GEX6 7	Door coupling. Red/yellow. IP65	1	0.302
GEX6 8	Door coupling. Red/yellow. IP65	1	0.312
GEX6 9	Door coupling. Red/yellow. IP65	1	0.560
GEX6 1B	Door coupling. Black. IP65	1	0.334
GEX6 1C	Door coupling. Black. IP65	1	0.074
GEX6 2B	Door coupling. Black. IP65	1	0.260
GEX6 2C	Door coupling. Black. IP65	1	0.252
GEX6 3B	Door coupling. Black. IP65	1	0.306
GEX6 3C	Door coupling. Black. IP65	1	0.302
GEX6 4B	Door coupling. Black. IP65	1	0.492
GEX6 4C	Door coupling. Black. IP65	1	0.488
GEX6 5B	Door coupling. Black. IP65	1	0.074
GEX6 6B	Door coupling. Black. IP65	1	0.246
GEX6 7B	Door coupling. Black. IP65	1	0.298
GEX6 8B	Door coupling. Black. IP65	1	0.310
GEX6 9B	Door coupling. Black. IP65	1	0.550
Shaft extension for door coupling handles.			
GEX7 125	125mm long □ 14mm	1	0.196
GEX7 137	137mm long □ 7mm	1	0.056
GEX7 149	149mm long □ 14mm	1	0.236
GEX7 151	151mm long □ 14mm	1	0.232
GEX7 160	160mm long □ 14mm	1	0.248
GEX7 161	161mm long □ 10mm	1	0.132
GEX7 187	187mm long □ 7mm	1	0.078
GEX7 191	191mm long □ 10mm	1	0.154
GEX7 204	204mm long □ 14mm	1	0.310
GEX7 206	206mm long □ 7mm	1	0.084
GEX7 275	275mm long □ 14mm	1	0.424
GEX7 290	290mm long □ 14mm	1	0.454
GEX7 299	299mm long □ 14mm	1	0.464
GEX7 305	305mm long □ 10mm	1	0.246
GEX7 310	310mm long □ 14mm	1	0.480
GEX7 340	340mm long □ 10mm	1	0.274
GEX7 347	347mm long □ 7mm	1	0.142
GEX7 500	500mm long □ 10mm	1	0.408
GEX7 501	501mm long □ 14mm	1	0.784
GEX7 600	600mm long □ 14mm	1	0.930

Selection of terminal covers

Continued from page 2-13.

Disconnector	Terminal covers for:	
	Line	Load
Terminal covers for four-pole switch disconnectors with NH fuse holder		
GE0160 NT4	GEX82 03	GEX82 03
GE0161 NT4	GEX82 13	GEX82 13
GE0250 NT4	GEX82 23	GEX82 23
GE0400 NT4		
GE0630 NT4	GEX82 33	GEX82 33
GE0800 NT4		
Terminal covers for four-pole switch disconnectors with BS fuse holder		
GE0160 BT4	GEX82 13	GEX82 13
GE0200 BT4		
GE0250 BT4		
GE0315 BT4	GEX82 23	GEX82 23
GE0400 BT4		
GE0630 BT4	GEX82 33	GEX82 33
GE0800 BT4		
Terminal covers for switch disconnectors for photovoltaic applications		
GE0160 DT4	GEX81 01	GEX81 01
GE0250 DT4		
GE0630 DT4	GEX81 21	GEX81 21

Switches	Terminal covers for:		
	Line 1	Line 2	Load
Terminal covers for three-pole changeover switches			
GE0160 E	GEX82 12	GEX82 11	GEX83 11
GE0200 E			
GE0201 E			
GE0250 E			
GE0315 E			
GE0400 E			
GE0500 E	GEX82 22	GEX82 21	GEX83 21
GE0630 E			
GE0800 E			
GE1000 E	GEX82 32	GEX82 31	GEX83 31
GE1250 E			
Terminals covers for four-pole changeover switches			
GE0160 ET4	GEX82 13	GEX82 13	GEX83 12
GE0200 ET4			
GE0201 ET4			
GE0250 ET4			
GE0315 ET4			
GE0400 ET4			
GE0500 ET4	GEX82 23	GEX82 23	GEX83 22
GE0630 ET4			
GE0800 ET4			
GE1000 ET4	GEX82 33	GEX82 33	GEX83 32
GE1250 ET4			

Selection of handle

See table on page 2-15 for the correct choice of handle with respect to the switch disconnector.

Reference standards

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

See table on page 2-15 for the correct choice for the switch disconnector.



Dimensions
page D-6

Wiring diagrams
page W-2



Summary table of combinations

Type		Handles			Shaft extension (The last 3 digits refer to the shaft length in mm)	Auxiliary contacts	Motorised control unit	Type of fuse		
		Direct operating	Door coupling							
Three-pole	Four-pole	Black	Black	Red/yellow		1NO+1NC				
Switch disconnectors.										
GE0160	GE0160 T4	GEX6 5D	GEX6 5B	GEX6 5	GEX7 137	GEX7 187	GEX7 347	GEX10 11	-	-
GE0200	GE0200 T4									
GE0250	GE0250 T4									
GE0251	GE0251 T4	GEX6 6D	GEX6 6B	GEX6 6	GEX7 191	GEX7 340	GEX7 500			
GE0315	GE0315 T4									
GE0400	GE0400 T4									
GE0500	GE0500 T4	GEX6 7D	GEX6 7B	GEX6 7	GEX7 160	GEX7 310	GEX7 501			
GE0630	GE0630 T4									
GE0800	GE0800 T4									
GE1000	GE1000 T4	GEX6 8D	GEX6 8B	GEX6 8	GEX7 149	GEX7 299				
GE1250	-									
-	GE1250 T4	GEX6 9D	GEX6 9B	GEX6 9	GEX7 204	GEX7 600				
Switch disconnectors with NH fuse holder.										
GE0160 N	GE0160 NT4	GEX6 1D	GEX6 1B	GEX6 1	GEX7 206	GEX7 347	-	GEX10 11N	-	00
GE0161 N	GE0161 NT4	GEX6 2D	GEX6 2B	GEX6 2	GEX7 161	GEX7 305	-	GEX10 11		0
GE0250 N	GE0250 NT4	GEX6 3D	GEX6 3B	GEX6 3	GEX7 151	GEX7 290	-			1
GE0400 N	GE0400 NT4									2
GE0630 N	GE0630 NT4	GEX6 4D	GEX6 4B	GEX6 4	GEX7 125	GEX7 275	-			3
GE0800 N	GE0800 NT4									
Switch disconnectors with BS fuse holder.										
GE0160 B	GE0160 BT4	GEX6 2D	GEX6 2B	GEX6 2	GEX7 161	GEX7 305	-	GEX10 11	-	A4
GE0200 B	GE0200 BT4									B1-B2
GE0250 B	GE0250 BT4									
GE0315 B	GE0315 BT4	GEX6 3D	GEX6 3B	GEX6 3	GEX7 151	GEX7 290	-			B1-B2-B3
GE0400 B	GE0400 BT4									B1-B2-B3-B4
GE0630 B	GE0630 BT4	GEX6 4D	GEX6 4B	GEX6 4	GEX7 125	GEX7 275	-			C1-C2
GE0800 B	GE0800 BT4									C1-C2-C3
Switch disconnectors for photovoltaic applications.										
-	GE0160 DT4	GEX6 5D	GEX6 5B	-	GEX7 187	GEX7 347	-	GEX10 11	-	-
-	GE0250 DT4	GEX6 6D	GEX6 6B	-	GEX7 340	GEX7 500	-			
-	GE0630 DT4	GEX6 7D	GEX6 7B	-	GEX7 310	GEX7 501	-			
Changeover switches.										
GE0160 E	GE0160 ET4	GEX6 1E	GEX6 1C	-	GEX7 187	GEX7 347	-	GEX10 11M	-	-
GE0200 E	GE0200 ET4									
GE0201 E	GE0201 ET4	GEX6 2E	GEX6 2C		GEX7 161	GEX7 305	-	GEX10 11	GEX69 1	
GE0250 E	GE0250 ET4									
GE0315 E	GE0315 ET4									
GE0400 E	GE0400 ET4									
GE0500 E	GE0500 ET4	GEX6 3E	GEX6 3C	-	GEX7 151	GEX7 290	-		GEX69 2	
GE0630 E	GE0630 ET4									
GE0800 E	GE0800 ET4									
GE1000 E	GE1000 ET4	GEX6 4E	GEX6 4C	-	GEX7 275	-	-		GEX69 3	
GE1250 E	GE1250 ET4									