




Switch disconnectors 16A to 1250A

 **Lovato**
electric
100% electricity

16A to 125A switch disconnectors

Three-pole and four-pole versions

Normally, the three-pole version is supplied. To make the four-pole version, the add-on fourth pole can be purchased and fitted.

Versions for photovoltaic applications

The GA...D switch disconnectors are suitable both for low-rated residential installations and for large numbers of strings of photovoltaic panels. Use up to 800V in DC21B category.

Compact dimension

The three-pole switch disconnectors, 16A to 40A ratings, are made up of a single unit body, merely 36mm wide, while the 63A to 125A ratings, 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 purchased separately to transform the direct operating version into a door coupling control type.

Modular front size

The switch disconnectors can be mounted in modular consumer panels.

High capability in AC23

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

6 and 8 pole version

A mechanical coupling system is available for the 16A to 125A switch disconnectors with one direct operating handle to provide 6/8 pole disconnectors along with a mechanical interlock for the line changeover function (I - 0 - II).



Side mount add-on fourth pole

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

Easy assembly with no need of tools

Mounting and removal of the fourth pole and add-on blocks are simple and quick operations, not requiring any sort of tool.

Add-on auxiliary contacts

Only one add-on block is suitable for all 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.



Pad insert for no DIN rail sliding

A rubber pad insert prevents the sliding of switch disconnectors even when the 35mm DIN rail is out of tolerance or mounted vertically.

Fuse holder

A three-pole fuse holder can be added to 16A to 32A switch disconnectors to provide a single compact unit.



Padlockable handles

All handles are equipped with built-in padlockable mechanism.

IP65 handles

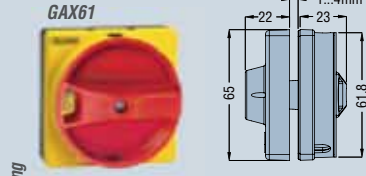
A wide range of selector and pistol grip handles is available, with screw or ring fixing.

Reduced handle thickness

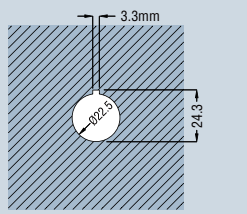
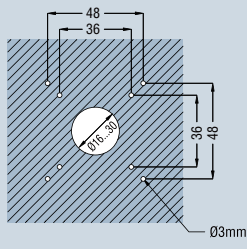
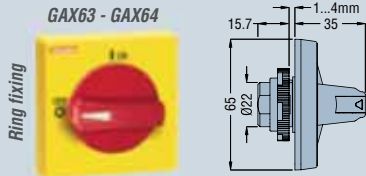
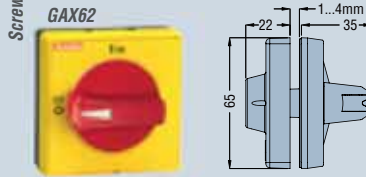
GAX61 and GAX61 B handles are only 23mm thick.



Handle with recessed rotating selector



Handle with protruding rotating selector



Switch status indication

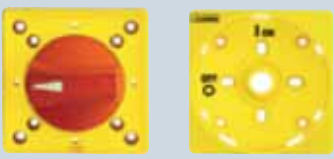
The switch open or closed state is clearly and unequivocally seen at a distance thanks to the simple and modern design of the handle.

UL508A handles

In compliance with UL508 standards, which require internal panel inspection by authorised personnel with power applied, the selector and pistol grip handles are available with defeatable feature of the door coupling when the switch disconnector is at ON position.

Handle adaptability

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.



DIN rail fixing

The fixing on and removal of the switch disconnectors from the 35mm DIN rail are done without tools, by simply applying downward force on the switch disconnector.

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 UL508/CSA 22.2 N°14 while the 63A to 125A types to UL98/CSA 22.2 N°4 standards.



16A to 125A switch disconnectors

Three-pole switch disconnectors

Direct operating control: complete with black handle.
Door coupling control: separately order shaft extension and handle.



GA016 A-GA040 A GA063 A-GA125 A

Order code	Conventional free air thermal current I _{th}	Rated operational current I _e	Qty per pkg	Wt
	AC21A ① (≤690V)	AC22A (≤690V) AC23A (≤415V)		
	[A]	[A]	n°	[kg]
GA016 A	16	16	1	0.135
GA025 A	25	25	1	0.135
GA032 A	32	32	1	0.135
GA040 A	40	40	1	0.135
GA063 A	63	63	1	0.365
GA080 A	80	80	1	0.365
GA100 A	100	100	1	0.365
GA125 A	125	125	1	0.365

Fourth pole.



Simultaneous closing as switch poles.				
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
Early-make closing with respect to switch poles.				
GAX41 040A	40	40	1	0.040
GAX41 125A	125	125	1	0.110

Three-pole switch disconnectors

Door mounting: complete with extension; separately order the handle.



GA016 C-GA040 C GA063 C-GA125 C

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

Fourth pole.



Simultaneous closing as switch poles.				
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 with respect to switch poles.				
GAX41 040C	40	40	1	0.040
GAX41 125C	125	125	1	0.110

Four pole switch disconnectors

Direct operating control: complete with black handle.
Door coupling control: complete with extension and handle.



GA040 D GA080 D-GA125 D

Order code	Conventional free air thermal current I _{th} AC21A (≤690V)	Rated operational current I _e DC21B (220V) 3 poles in series			Qty per pkg	Wt	
		DC21B (800V) Number of poles in series					
	[A]	[A]	[A]	[A]	[A]	n°	[kg]
GA040 D	40	32	15	18	25	1	0.135
GA080 D	80	40	18	22	30	1	0.355
GA125 D	125	95	20	30	35	1	0.355

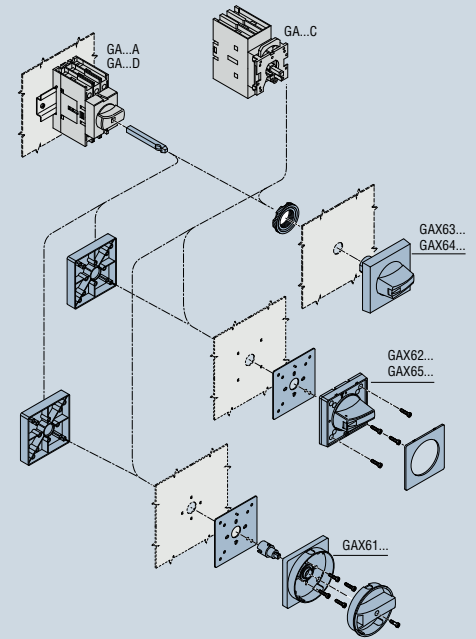
Fourth pole.



Simultaneous closing as switch poles.							
GAX42 040D	40	32 ②	15	–	25	1	0.040
GAX42 080D	80	40 ②	18	–	30	1	0.110
GAX42 125D	125	64 ②	20	–	35	1	0.110

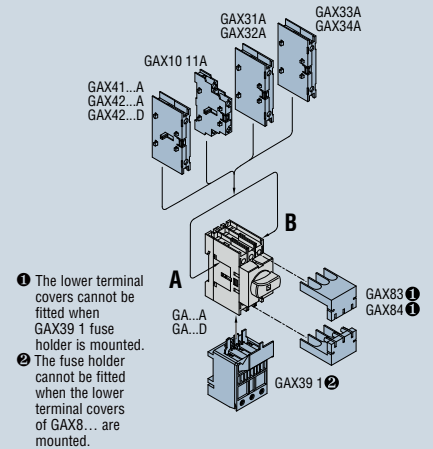
① UL/CSA General Purpose amp ratings are the same as AC21A values.
 ② Valid at ≤440V with 4 poles in series.

Handle mounting



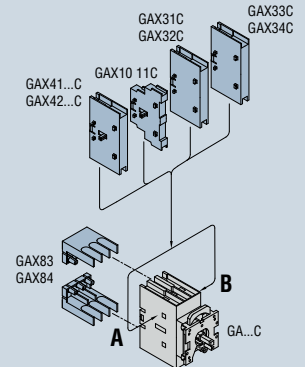
Maximum combinations

Direct operating and door coupling control



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

Door mounting



Three and four-pole switch disconnectors for photovoltaic applications

50A to 1250A switch



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

Auxiliary contacts (Ith 16A).

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 GA040 D 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 pole.

GAX33 A For GA016 A-GA040 A and GA040 D 1 0.040

GAX34 A For GA063 A-GA125 A, GA080 D and 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.

GAX61 Ⓡ For GA...A, GA...C and GA...D. Screw fixing. 1 0.058

GAX61 B Ⓢ With recessed rotating selector Ⓢ 1 0.058

GAX62 Ⓡ For GA...A, GA...C and GA...D. 1 0.055

GAX62 B Ⓢ Screw fixing. With protruding rotating selector Ⓢ 1 0.055

GAX63 Ⓡ For GA...A, GA016 C-GA040 C and 1 0.053

GAX63 B Ⓢ GA...D. Ring fixing. With protruding rotating selector Ⓢ 1 0.053

GAX64 Ⓡ For GA...A and GA...D. Screw fixing. 1 0.060

GAX64 B Ⓢ With protruding rotating selector, defeatable per UL508A Ⓢ 1 0.060

GAX65 Ⓡ For GA...A, GA...C and GA...D. Screw fixing. 1 0.070

GAX65 B Ⓢ Pistol grip Ⓢ 1 0.070

GAX66 Ⓡ For GA...A, GA...C and GA...D. Screw fixing. 1 0.075

GAX66 B Ⓢ Pistol grip, defeatable per UL508A Ⓢ 1 0.075

GAX67 B Ⓢ For GAX50 mechanical interlock mechanism (I-O-II). 1 0.040



Extension shaft for door-coupling handles.

For GA...A and GA...D switch disconnectors.

GAX7 055 55mm long 1 0.011

GAX7 070 70mm long 1 0.013

GAX7 090 90mm long 1 0.017

GAX7 150 150mm long 1 0.028

GAX7 200 200mm long 1 0.037

GAX7 300 300mm long 1 0.055



Mechanical interlock for line changeover (I-O-II).

GAX50 00 For GA016 A-GA040 A 1 Ⓢ

GAX50 01 For GA063 A-GA125 A 1 Ⓢ

Mechanical coupling system for 6-8 pole switch disconnectors.

GAX60 00 For GA016 A-GA040 A and GA040 D 1 Ⓢ

GAX60 01 Ⓢ For GA063 A-GA125 A, GA080 D and GA125 D 1 Ⓢ



Set of 2 three-pole terminal covers.

GAX83 For GA016 A-GA040 A and GA016 C-GA040 C and GA040 D 1 0.009

GAX84 For GA063 A-GA125 A, GA063 C-GA125 C, GA080 D and 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 and GAX41 040C 1 0.003

GAX82 For GAX42 063A-GAX42 125A, GAX42 063C-GAX42 125C, GAX42 080D, GAX42 125D, GAX41 125A and GAX41 125C 1 0.005



Fuse holder for switch disconnectors.

GAX39 1 For GA016 A-GA032 A. Use 10.3x38 fuse 1 Ⓢ



Ⓢ For GA...A and GA...D types, also separately order GAX7... shaft extensions.

Ⓢ Snap-on fixing of GA016-GA040C switch disconnectors with the handle.

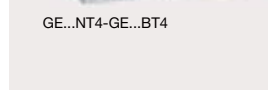
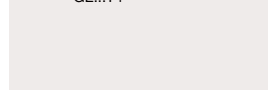
Ⓢ Contact our Customer Service

(Tel. +39 035 4282422 - email: service@LovatoElectric.com).

Ⓢ Use with GAX65, GAX65 B, GAX66 and GAX66 B handles.

Ⓢ Red/yellow handle.


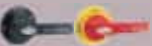

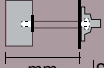






















Ⓢ Black handle.



Order code	Order code	Conventional free air thermal current Ith AC21A (≤500V) [A]	Rated operational current Ie	
			AC23A (≤400V) [A]	AC23A (≤500V) [A]
Switch disconnectors.				
Three pole	Four pole			
GE0160	GE0160 T4	160	160	125
GE0200	GE0200 T4	200	160	125
GE0250	GE0250 T4	250	160	125
GE0251	GE0251 T4	250	250	200
GE0315	GE0315 T4	315	315	250
GE0400	GE0400 T4	400	400	315
GE0500	GE0500 T4	500	500	400
GE0630	GE0630 T4	630	630	500
GE0800	GE0800 T4	800	800	500
GE1000	GE1000 T4	1000	800	800
GE1250	-	1250	800	800
-	GE1250 T4			
Switch disconnectors with NFC fuse holder.				
GE0050 F	GE0050 FT4	50	50	50
GE0125 F	GE0125 FT4	125	125	125
Switch disconnectors with NH fuse holder.				
GE0160 N	GE0160 NT4	160	160	125
GE0161 N	GE0161 NT4	160	160	160
GE0250 N	GE0250 NT4	250	250	250
GE0400 N	GE0400 NT4	400	400	400
GE0630 N	GE0630 NT4	630	630	630
GE0800 N	GE0800 NT4	800	630	630
Switch disconnectors with BS fuse holder.				
GE0160 B	GE0160 BT4	160	160	160
GE0200 B	GE0200 BT4	200	200	200
GE0250 B	GE0250 BT4	250	250	250
GE0315 B	GE0315 BT4	315	315	315
GE0400 B	GE0400 BT4	400	400	400
GE0630 B	GE0630 BT4	630	630	630
GE0800 B	GE0800 BT4	800	630	630
Switch disconnectors for photovoltaic applications.				
-	GE0160 DT4	160	125 Ⓢ	50 Ⓢ
-	GE0250 DT4	250	250 Ⓢ	225 Ⓢ
-	GE0630 DT4	630	630 Ⓢ	280 Ⓢ
Changeover switches.				
GE0160 E	GE0160 ET4	160	160	125
GE0200 E	GE0200 ET4	200	160	125
GE0201 E	GE0201 ET4	200	200	160
GE0250 E	GE0250 ET4	250	200	160
GE0315 E	GE0315 ET4	315	250	200
GE0400 E	GE0400 ET4	400	250	200
GE0500 E	GE0500 ET4	500	400	315
GE0630 E	GE0630 ET4	630	400	315
GE0800 E	GE0800 ET4	800	630	400
GE1000 E	GE1000 ET4	1000	1000	800
GE1250 E	GE1250 ET4	1250	1250	1000

Ⓢ Rated operational current Ie values in DC21B (220V).

ch disconnectors

Direct operating handles	Door-coupling handles	Shaft extensions for door-coupling handles (the last 3 digits of order code indicate length in mm)			Auxiliary contacts 1NO+1NC	Motorised control unit	Type of fuse
							
GEX...D GEX...E	GEX...B GEX...C	GEX61- GEX69		GEX10...	GEX6...		
	Black	Red/Yellow	Width	mm	Sept. □		
Order code	Order code	Order code			Order code	Order code	Order code
GEX65D	GEX65B	GEX65	 50 mm	195 260 405	7mm	GEX7 137 GEX7 206 GEX7 347	
GEX66D	GEX66B	GEX66	 105 mm	250 400 560	10mm	GEX7 191 GEX7 340 GEX7 500	GEX1011 - -
GEX67D	GEX67B	GEX67	 245 mm	250 400 590	14mm	GEX7 160 GEX7 310 GEX7 501	
GEX68D	GEX68B	GEX68	 285 mm	265 415 605			
GEX69D	GEX69B	GEX69	 360 mm	400 795	14mm	GEX7 204 GEX7 600	
GEX61D	GEX61B	GEX61	 50 mm	187 255 395	7mm	GEX7 137 GEX7 206 GEX7 347	GEX1011N - 14X51 22X58
GEX61D	GEX61B	GEX61	 50 mm	187 255 395	7mm	GEX7 137 GEX7 206 GEX7 347	GEX1011N 00
GEX62D	GEX66B	GEX66	 105 mm	295 445 605	10mm	GEX7 191 GEX7 340 GEX7 500	GEX1011 0
GEX63D	GEX67B	GEX67	 245 mm	280 430 620	14mm	GEX7 160 GEX7 310 GEX7 501	GEX1011 - 1 2 3
GEX64D	GEX64B	GEX64	 360 mm	285 435 625			
GEX62D	GEX66B	GEX66	 105 mm	295 445 605	10mm	GEX7 191 GEX7 340 GEX7 500	GEX1011 - A4 B1-B2
GEX63D	GEX67B	GEX67	 245 mm	280 430 620	14mm	GEX7 160 GEX7 310 GEX7 501	GEX1011 - B1-B2-B3 B1-B2-B3-B4 C1-C2 C1-C2-C3
GEX64D	GEX64B	GEX64	 360 mm	285 435 625			
GEX65D	GEX65B	-	 50 mm	195 260 405	7mm	GEX7 137 GEX7 206 GEX7 347	GEX1011 - -
GEX66D	GEX66B	-	 105 mm	250 400 560	10mm	GEX7 191 GEX7 340 GEX7 500	
GEX67D	GEX67B	-	 245 mm	250 400 590	14mm	GEX7 160 GEX7 310 GEX7 501	
GEX61E	GEX61C	-	 50 mm	255 330 475	7mm	GEX7 137 GEX7 206 GEX7 347	GEX1011M -
GEX62E	GEX62C	-	 105 mm	280 430 590	10mm	GEX7 191 GEX7 340 GEX7 500	GEX69 1
GEX63E	GEX63C	-	 245 mm	260 410 600	14mm	GEX7 160 GEX7 310 GEX7 501	GEX69 2
GEX64E	GEX64C	-	 360 mm	280 430 625			GEX69 3

⊕ Rated operational current I_e values in DC21B (800V).

16A to 125A switch disconnectors in housing

Three-pole switch disconnectors in housing



GAZ016 – GAX040



GAZ063 – GAZ125

Order code	Conventional free air thermal current Ith AC21A (≤ 690V)	Qty per pkg	Wt
	[A]	n°	[kg]

With rotating red/yellow handle.

GAZ016 ①	16	1	0.450
GAZ025 ①	25	1	0.450
GAZ032 ①	32	1	0.450
GAZ040 ①	40	1	0.450
GAZ063 ①	63	1	2.220
GAZ080 ①	80	1	2.220
GAZ0100 ①	100	1	2.220
GAZ0125 ①	125	1	2.220

With rotating black handle.

GAZ016 B ①	16	1	0.450
GAZ025 B ①	25	1	0.450
GAZ032 B ①	32	1	0.450
GAZ040 B ①	40	1	0.450
GAZ063 B ①	63	1	2.220
GAZ080 B ①	80	1	2.220
GAZ0100 B ①	100	1	2.220
GAZ0125 B ①	125	1	2.220

Empty enclosures



GAZ1...



GAZ3...

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

With rotating red/yellow handle. Complete with shaft extension.

GAZ1 ①	For switch disconnectors GA016 A-GA040 A and GA040 D	1	0.320
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GAZ3 ①	For switch disconnectors GA063 A-GA125 A, GA080 D and GA125 D	1	1.900
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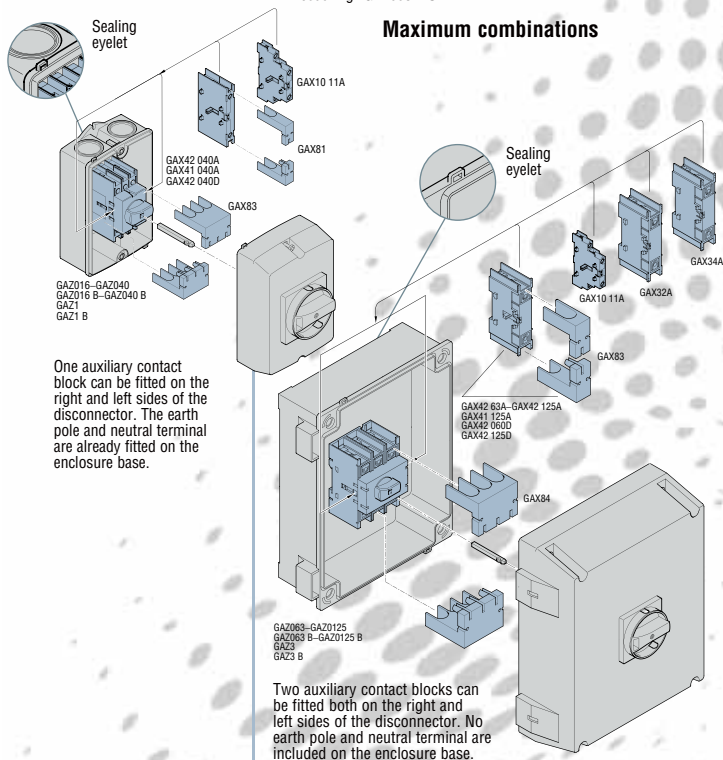
With rotating black handle. Complete with extension shaft.

GAZ1 B ①	For switch disconnectors GA016 A-GA040 A and GA040 D	1	0.320
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GAZ3 B ①	For switch disconnectors For GA063A-GA125 A, GA080 D and GA125 D	1	1.900
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① cULus certified versions are available; add suffix UL at the end of the order code. E.g. GAX063 B UL.

Maximum combinations



50A to 1250A switch disconnectors

Terminal cover selection table

Disconnector	Terminal covers for:	
	Line	Load
Terminal covers for three-pole switch disconnectors with NFC fuse holder		
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		
GE01000	GEX81 31	GEX81 31
GE01250		
Terminal covers for three-pole switch disconnectors with NFC fuse holder		
GE0125 F	GEX82 01	GEX82 01
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		
GE01000 T4	GEX81 31	GEX81 31
GE01250 T4	GEX81 41	GEX81 41

Disconnector	Terminal covers for:	
	Line	Load
Terminals covers for four-pole switch disconnectors with NFC fuse holder		
GE0125 FT4	GEX82 03	GEX82 03
Terminals 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		
Terminals 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		
Terminals covers for switch disconnectors for photovoltaic applications		
GE0160 DT4	GEX81 01	GEX81 01
GE0250 DT4		
GE0630 DT4	GEX81 21	GEX81 21

Disconnector	Terminal covers for:		
	Line 1	Line 2	Load
Terminal covers for three-pole switch disconnectors			
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			
GE01000 E	GEX82 32	GEX82 31	GEX83 31
GE01250 E			
Terminal covers for four-pole switch disconnectors			
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			
GE01000 ET4	GEX82 33	GEX82 33	GEX83 32
GE01250 ET4			

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