




## Rotary cam switches GX series

Planet-SWITCH

Planet-DIN

Planet-LOGIC

 **Lovato**  
**electric**  
*100% electricity*

# Rotary cam switches GX series

**Lovato**  
**electric**  
100% electricity

Compact and finger safe (IP20 protection of contacts).

Designed according to the latest technology in the switching device field and made of the best quality materials, these cam switches are characterised by high breaking capacity, long life (both mechanical and electrical), installation ease as well as compact size.

The contacts are dual breaking and made of silver alloy. The terminals have cross-slotted captive screws and are self releasing.

GX rotary cam switches can be used for isolation, motor control in AC3 and AC23 duties and electromagnetic load switching, AC15 duty.

**start**

**disconnect**

**switch**

**reverse**

**Available in  
four different ratings,  
16, 20, 32 and 40A,  
and an assortment  
of versions.**



Front mounting version.  
Type: GX...U.  
Pages 4 to 6.



Door coupling version.  
Types: GX...068 – GX...078.  
Page 8.



Door-coupling version with  
red/yellow padlock handle system.  
Types: GX...088 – GX...098.  
Page 8.





Front-mounting version with handle operation for Ø 22mm central fixing. Type: GX...U11. Page 7.



Key operation version for Ø 22mm central fixing. Type: GX...U12. Page 7.



Front mounting version with red/yellow padlock system. Types: GX...U25 – GX...U65. Page 7.



Modular DIN rail mount version. Type: GX...048. Page 9.



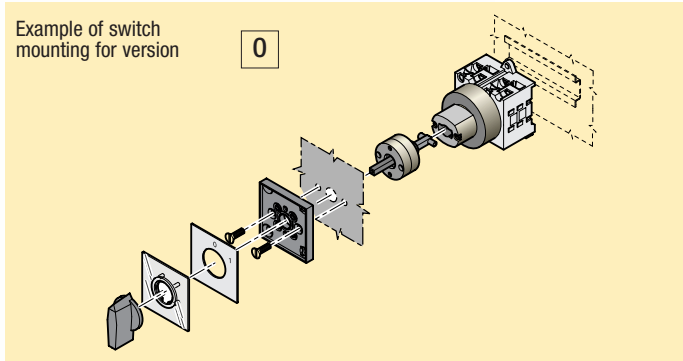
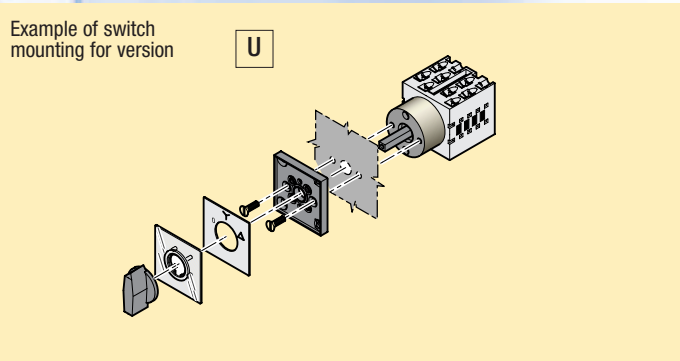
Enclosure version. Type: GX...P. Page 10.



Enclosure version with padlockable rotating handle. Type: GX...P25. Page 10.

**ORDER CODE STRUCTURE:**

G	X	•	•	•	•	U	•	•
						0		
<b>RATING</b>				<b>SCHEME</b>		<b>VERSION</b>	<b>OPTIONALS</b>	
16 A 20 A 32 A 40 A				See page 12		U = front mounting 0 = door coupling	See pages 4 to 8	



### U version front mounting. ON/OFF switches



Order code	Rated current AC1	Front plate size	Q.ty per pkg	Weight
	[A]	[mm]	n°	[kg]

ON/OFF SWITCHES.

One-pole – 1 wafer – scheme 90.

<b>GX16 90 U</b>		16	□ 48	1	0.093
<b>GX20 90 U</b>		20	□ 48	1	0.096
<b>GX32 90 U</b>		32	□ 65	1	0.222
<b>GX40 90 U</b>		40	□ 65	1	0.223

Two-pole – 1 wafer – scheme 91.

<b>GX16 91 U</b>		16	□ 48	1	0.097
<b>GX20 91 U</b>		20	□ 48	1	0.101
<b>GX32 91 U</b>		32	□ 65	1	0.244
<b>GX40 91 U</b>		40	□ 65	1	0.256

Three-pole – 2 wafers – scheme 10.

<b>GX16 10 U</b>		16	□ 48	1	0.113
<b>GX20 10 U</b>		20	□ 48	1	0.120
<b>GX32 10 U</b>		32	□ 65	1	0.296
<b>GX40 10 U</b>		40	□ 65	1	0.312

Four-pole – 2 wafers – scheme 92.

<b>GX16 92 U</b>		16	□ 48	1	0.110
<b>GX20 92 U</b>		20	□ 48	1	0.124
<b>GX32 92 U</b>		32	□ 65	1	0.301
<b>GX40 92 U</b>		40	□ 65	1	0.326

#### General characteristics

- 16 to 40A rated thermal current I<sub>th</sub> ratings
- Extended mechanical and electrical life
- Switching angles: 30°, 45°, 60° and 90°
- Silver-alloy dual-breaking contacts
- IP40 front degree of protection (for IP65, see "Optional" below); IP20 protection of contacts
- Operating temperature: -25° to +55°C
- Legend marking is standard supplied as illustrated in the order code table; any other on request.

#### Certifications and compliance

Certifications obtained: cULus.  
Compliant to standards: IEC/EN 60947-3, IEC/EN 60204-1, IEC/EN 61058-1.

#### Selection guide

See page 14.

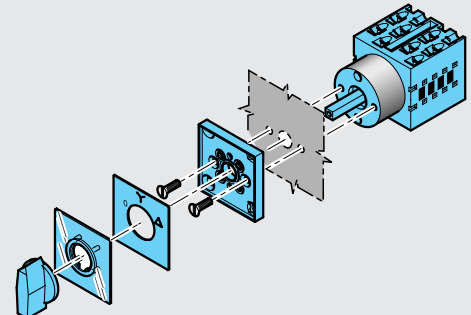
#### Optional

IP65 protection front plate:  
Add "51" at the end of the order code  
E.g. GX16 92 U 51.

Enlarged front plate for GX16-GX20 (65x65mm instead of standard 48x48):  
Add "H" after the switch rating in the order code  
E.g. GX16H 10 U.

Enlarged front plate for GX32-GX40 (90x90mm instead of standard 65x65):  
Add "H" after the switch rating in the order code  
E.g. GX32H 10 U.

#### Example of U version switch mounting



**U version front mounting. Changeover switches with 0 position. Changeover switches without 0 position**



Order code	Rated current AC1	Front plate size	Q.ty per pkg	Weight
	[A]	[mm]	n°	[kg]
<b>CHANGEOVER SWITCHES WITH 0.</b>				
One-pole – 1 wafer – scheme 51.				
<b>GX16 51 U</b>	16	□ 48	1	0.097
<b>GX20 51 U</b>	20	□ 48	1	0.101
<b>GX32 51 U</b>	32	□ 65	1	0.236
<b>GX40 51 U</b>	40	□ 65	1	0.239
Two-pole – 2 wafers – scheme 52.				
<b>GX16 52 U</b>	16	□ 48	1	0.120
<b>GX20 52 U</b>	20	□ 48	1	0.124
<b>GX32 52 U</b>	32	□ 65	1	0.309
<b>GX40 52 U</b>	40	□ 65	1	0.326
Three-pole – 3 wafers – scheme 53.				
<b>GX16 53 U</b>	16	□ 48	1	0.138
<b>GX20 53 U</b>	20	□ 48	1	0.146
<b>GX32 53 U</b>	32	□ 65	1	0.371
<b>GX40 53 U</b>	40	□ 65	1	0.402
Four-pole – 4 wafers – scheme 75.				
<b>GX16 75 U</b>	16	□ 48	1	0.157
<b>GX20 75 U</b>	20	□ 48	1	0.171
<b>GX32 75 U</b>	32	□ 65	1	0.440
<b>GX40 75 U</b>	40	□ 65	1	0.472
<b>CHANGEOVER SWITCHES WITHOUT 0.</b>				
One-pole – 1 wafer – scheme 54.				
<b>GX16 54 U</b>	16	□ 48	1	0.098
<b>GX20 54 U</b>	20	□ 48	1	0.102
<b>GX32 54 U</b>	32	□ 65	1	0.121
Two-pole – 2 wafers – scheme 55.				
<b>GX16 55 U</b>	16	□ 48	1	0.117
<b>GX20 55 U</b>	20	□ 48	1	0.126
<b>GX32 55 U</b>	32	□ 65	1	0.155
Three-pole – 3 wafers – scheme 56.				
<b>GX16 56 U</b>	16	□ 48	1	0.137
<b>GX20 56 U</b>	20	□ 48	1	0.146
<b>GX32 56 U</b>	32	□ 65	1	0.186
Four-pole – 4 wafers – scheme 69.				
<b>GX16 69 U</b>	16	□ 48	1	0.158
<b>GX20 69 U</b>	20	□ 48	1	0.171
<b>GX32 69 U</b>	32	□ 65	1	0.224

**General characteristics**

- 16 to 40A rated thermal current Ith ratings
- Extended mechanical and electrical life
- Switching angles: 30°, 45°, 60° and 90°
- Silver-alloy dual-breaking contacts
- IP40 front degree of protection (for IP65, see "Optional" below); IP20 protection of contacts
- Operating temperature: -25° to +55°C
- Legend marking is standard supplied as illustrated in the order code table; any other on request.

**Certifications and compliance**

Certifications obtained: cULus.  
Compliant to standards: IEC/EN 60947-3, IEC/EN 60204-1, IEC/EN 61058-1.

**Selection guide**

See page 14.

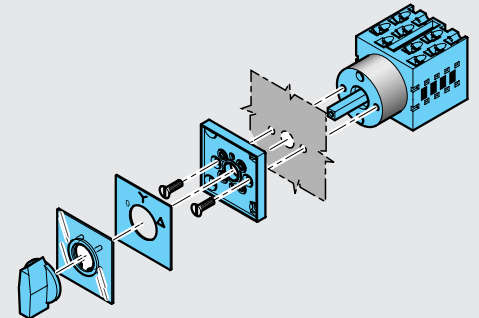
**Optional**

IP65 protection front plate:  
Add "51" at the end of the order code  
E.g. GX16 75 U 51.

Enlarged front plate for GX16-GX20 (65x65mm instead of standard 48x48):  
Add "H" after the switch rating in the order code  
E.g. GX16H 52 U.

Enlarged front plate for GX32-GX40 (90x90mm instead of standard 65x65):  
Add "H" after the switch rating in the order code  
E.g. GX32H 52 U.

**Example of U version switch mounting**



### U version front mounting. Motor switches



Order code	Ith AC1	Max power AC23A	Front plate size	Q.ty per pkg	Wt.
	[A]	[kW]	[mm]	n°	[kg]

**MOTOR SWITCHES.**

Reversing switches. Three-pole – 3 wafers – scheme 11.

<b>GX16 11 U</b>		16	6.5	□ 48	1	0.133
<b>GX20 11 U</b>		20	7.5	□ 48	1	0.141
<b>GX32 11 U</b>		32	15	□ 65	1	0.362
<b>GX40 11 U</b>		40	18.5	□ 65	1	0.383

Pole-changing switches. 4 wafers – scheme 13.

<b>GX16 13 U</b>		16	6.5	□ 48	1	0.161
<b>GX20 13 U</b>		20	7.5	□ 48	1	0.171
<b>GX32 13 U</b>		32	15	□ 65	1	0.447
<b>GX40 13 U</b>		40	18.5	□ 65	1	0.478

Star-delta switches. 2 wafers – scheme 12.

<b>GX16 12 U</b>		16	6.5	□ 48	1	0.158
<b>GX20 12 U</b>		20	7.5	□ 48	1	0.171
<b>GX32 12 U</b>		32	15	□ 65	1	0.448
<b>GX40 12 U</b>		40	18.5	□ 65	1	0.478

3-pole motor reversing switches with spring return to 0.

3 wafers – scheme 26.

<b>GX16 26 U</b>		16	6.5	□ 48	1	0.134
<b>GX20 26 U</b>		20	7.5	□ 48	1	0.141
<b>GX32 26 U</b>		32	15	□ 65	1	0.185

**General characteristics**

- 16 to 40A rated thermal current Ith ratings
- Extended mechanical and electrical life
- Switching angles: 30°, 45°, 60° and 90°
- Silver-alloy dual-breaking contacts
- IP40 front degree of protection (for IP65, see "Optional" below); IP20 contact degree of protection
- Operating temperature: -25° to +55°C
- Legend marking is standard supplied as illustrated in the order code table; any other on request.

**Certifications and compliance**

Certifications obtained: cULus.  
Compliant to standards: IEC/EN 60947-3, IEC/EN 60204-1, IEC/EN 61058-1.

**Selection**

See page 14.

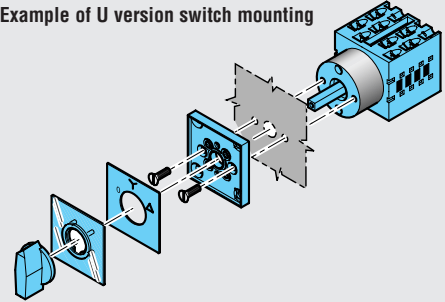
**Optional**

IP65 protection front plate: Add "51" at the end of the order code E.g. GX16 11 U 51.

Enlarged front plate for GX16-GX20 (65x65mm instead of standard 48x48): Add "H" after the switch rating in the order code E.g. GX16H 11 U.

Enlarged front plate for GX32-GX40 (90x90mm instead of standard 65x65): Add "H" after the switch rating in the order code E.g. GX32H 11 U.

**Example of U version switch mounting**



### U version front mounting. Voltmeter switches. Ammeter switches



Order code	Rated current AC1	Front plate size	Q.ty per pkg	Weight
	[A]	[mm]	n°	[kg]

**VOLTMETER SWITCHES.**

Phase-Neutral L1-N/L2-N/L3-N – 2 wafers – scheme 68.

<b>GX16 68 U</b>		16	□ 48	1	0.118
------------------	--	----	------	---	-------

Phase-Phase L1-L2/L2-L3/L3-L1 – 2 wafers – scheme 67.

<b>GX16 67 U</b>		16	□ 48	1	0.118
------------------	--	----	------	---	-------

For 3 phase to phase voltage and 3 phase voltage readings  
3 wafers – scheme 66.

<b>GX16 66 U</b>		16	□ 48	1	0.128
------------------	--	----	------	---	-------

For 1 phase voltage and 3 phase to phase voltage readings  
3 wafers – scheme 60.

<b>GX16 60 U</b>		16	□ 48	1	0.133
------------------	--	----	------	---	-------

**AMMETER SWITCHES.**

Direct L1-L2-L3 current readings – 5 wafers – scheme 97.

<b>GX16 97 U</b>		16	□ 48	1	0.169
------------------	--	----	------	---	-------

For L1-L2-L3 readings via 3 CTs – 3 wafers – scheme 98.

<b>GX16 98 U</b>		16	□ 48	1	0.146
------------------	--	----	------	---	-------

**General characteristics**

- 16A capacity rating
- Extended mechanical and electrical life
- Switching angles: 30°, 45°, 60° and 90°
- Silver-alloy dual-breaking contacts
- IP40 front degree of protection (for IP65, see "Optional" below); IP20 contact degree of protection
- Operating temperature: -25° to +55°C
- Circuit schemes on page 12
- Legend marking is standard supplied as illustrated in the order code table; any other on request.

**Certifications and compliance**

Certifications obtained: cULus.  
Compliant to standards: IEC/EN 60947-3, IEC/EN 60204-1, IEC/EN 61058-1.

**Selection**

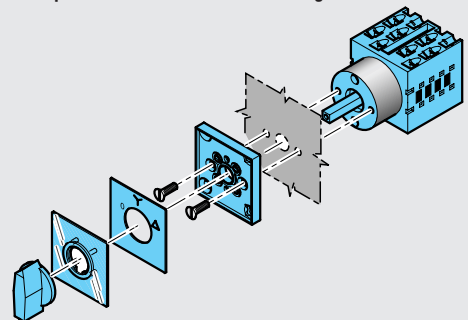
See page 14.

**Optional**

IP65 protection front plate: Add "51" at the end of the order code E.g. GX16 11 U 51.

Enlarged front plate for GX16 (65x65mm instead of standard 48x48): Add "H" after the switch rating in the order code E.g. GX16H 11 U.

**Example of U version switch mounting**



### U11 version front mounting with handle operation, for central 22mm fixing. ON/OFF switches



Order code	Rated current AC1	Front plate size	Q.ty per pkg	Weight
	[A]	[mm]	n°	[kg]
ON/OFF SWITCHES. One-pole – 1 wafer – scheme 90.				
<b>GX16 90 U11</b>	16	—	1	0.097
Two-pole – 1 wafer – scheme 91.				
<b>GX16 91 U11</b>	16	—	1	0.100
Three-pole – 2 wafers – scheme 10.				
<b>GX16 10 U11</b>	16	—	1	0.116
Four-pole – 2 wafers – scheme 92.				
<b>GX16 92 U11</b>	16	—	1	0.118

### U12 version front mounting with key operation, for central 22mm fixing. ON/OFF switches



Order code	Rated current AC1	Front plate size	Q.ty per pkg	Weight
	[A]	[mm]	n°	[kg]
ON/OFF SWITCHES. One-pole – 1 wafer – scheme 90.				
<b>GX16 90 U12</b>	16	—	1	0.126
Two-pole – 1 wafer – scheme 91.				
<b>GX16 91 U12</b>	16	—	1	0.137
Three-pole – 2 wafers – scheme 10.				
<b>GX16 10 U12</b>	16	—	1	0.165
Four-pole – 2 wafers – scheme 92.				
<b>GX16 92 U12</b>	16	—	1	0.169

### U25-U65 versions front mounting with red/yellow padlock system. ON/OFF switches



Order code	Rated current AC1	Front plate size	Q.ty per pkg	Weight
	[A]	[mm]	n°	[kg]
ON/OFF SWITCHES. Three-pole – 2 wafers – scheme 10.				
<b>GX16 10 U25</b>	16	□ 48	1	0.207
<b>GX20 10 U25</b>	20	□ 48	1	0.212
<b>GX32 10 U25</b>	32	□ 65	1	0.361
<b>GX40 10 U65</b>	40	□ 65	1	0.383
Four-pole – 2 wafers – scheme 92.				
<b>GX16 92 U25</b>	16	□ 48	1	0.211
<b>GX20 92 U25</b>	20	□ 48	1	0.218
<b>GX32 92 U25</b>	32	□ 65	1	0.371
<b>GX40 92 U65</b>	40	□ 65	1	0.388

#### General characteristics

- 16 to 40A rated thermal current I<sub>th</sub> ratings
- Extended mechanical and electrical life
- Switching angles: 30°, 45°, 60° and 90°
- Silver-alloy dual-breaking contacts
- IP40 front degree of protection (for IP65, see "Optional" below); IP20 protection of contacts
- Operating temperature: -25° to +55°C
- Legend marking for U11 and U12 versions is only for reference while for U25 and U65 types standard supplied as illustrated in the order code table; any other on request.

#### Certifications and compliance

Certifications obtained: cULus.  
Compliant to standards: IEC/EN 60947-3, IEC/EN 60204-1, IEC/EN 61058-1.

#### Selection

See page 14.

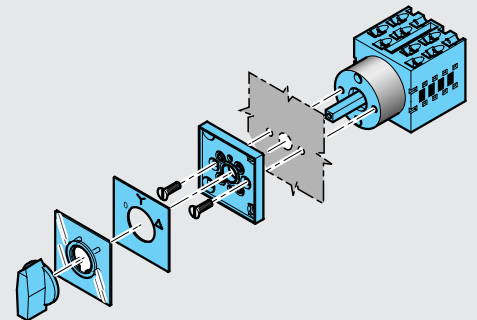
#### Optional

IP65 protection front plate:  
Add "51" at the end of the order code  
E.g. GX16 92 U11 51.

Enlarged front plate for GX16-GX20 (65x65mm instead of standard 48x48):  
Add "H" after the switch rating in the order code  
E.g. GX16H 10 U25.

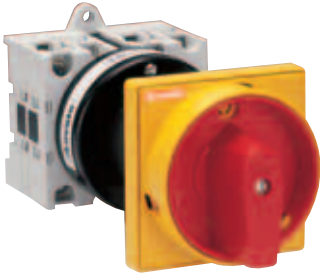
Enlarged front plate for GX32-GX40 (90x90mm instead of standard 65x65):  
Add "H" after the switch rating in the order code  
E.g. GX32H 10 U25.

#### Example of U25-U65 switch mounting





### 088 - 098 versions door coupling with red/yellow padlock system. ON/OFF switches



Order code	Rated current AC1	Front plate size	Q.ty per pkg	Weight
	[A]	[mm]	n°	[kg]

ON/OFF SWITCHES.

Three-pole – 2 wafers – scheme 10.

<b>GX16 10 088</b>	16	□ 48	1	0.263
<b>GX20 10 088</b>	20	□ 48	1	0.289
<b>GX32 10 088</b>	32	□ 65	1	0.404
<b>GX40 10 098</b>	40	□ 65	1	0.429

Four-pole – 2 wafers – scheme 92.

<b>GX16 92 088</b>	16	□ 48	1	0.289
<b>GX20 92 088</b>	20	□ 48	1	0.302
<b>GX32 92 088</b>	32	□ 65	1	0.427
<b>GX40 92 098</b>	40	□ 65	1	0.445

### 068 - 078 versions door coupling. ON/OFF switches



Order code	Rated current AC1	Front plate size	Q.ty per pkg	Weight
	[A]	[mm]	n°	[kg]

ON/OFF SWITCHES.

Three-pole – 2 wafers – scheme 10.

<b>GX16 10 068</b>	16	□ 48	1	0.219
<b>GX20 10 068</b>	20	□ 48	1	0.227
<b>GX32 10 068</b>	32	□ 65	1	0.431
<b>GX40 10 078</b>	40	□ 65	1	0.404

Four-pole – 2 wafers – scheme 92.

<b>GX16 92 068</b>	16	□ 48	1	0.219
<b>GX20 92 068</b>	20	□ 48	1	0.230
<b>GX32 92 068</b>	32	□ 65	1	0.445
<b>GX40 92 078</b>	40	□ 65	1	0.447

#### General characteristics

- 16 to 40A rated thermal current I<sub>th</sub> ratings
- Extended mechanical and electrical life
- Switching angles: 30°, 45°, 60° and 90°
- Silver-alloy dual-breaking contacts
- IP40 front degree of protection (for IP65, see "Optional" below); IP20 contact degree of protection
- Operating temperature: -25° to +55°C
- Suitable for screw fixing or mounting on 35mm DIN rail (EN 50022)
- Legend marking is standard supplied as illustrated in the order code table; any other on request.

#### Certifications and compliance

Certifications obtained: cULus.  
Compliant to standards: IEC/EN 60947-3, IEC/EN 60204-1, IEC/EN 61058-1.

#### Selection

See page 14.

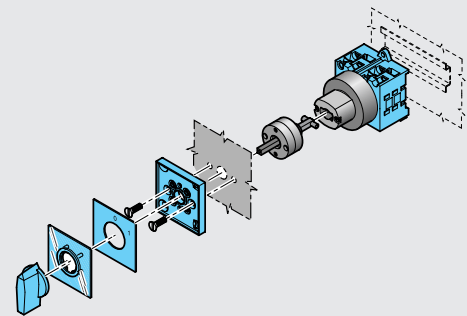
#### Optional

IP65 protection front plate:  
Add "51" at the end of the order code  
E.g. GX16 10 088 51.

Enlarged front plate for GX16-GX20 (65x65mm instead of standard 48x48):  
Add "H" after the switch rating in the order code  
E.g. GX16H 10 088.

Enlarged front plate for GX32-GX40 (90x90mm instead of standard 65x65):  
Add "H" after the switch rating in the order code  
E.g. GX32H 10 088.

#### Example of 0 version switch mounting





**048 version modular, 35mm DIN rail mounting. ON/OFF switches. Changeover switches. Voltmeter switches. Ammeter switches**



Order code		Rated current AC1	Front plate size	Q.ty per pkg	Weight
		[A]	[mm]	n°	[kg]
<b>ON/OFF SWITCHES.</b>					
One-pole – 3 wafers – scheme 90.					
<b>GX16 90 048</b>		16	<input type="checkbox"/> 45x54	1	0.124
Two-pole – 3 wafers – scheme 91.					
<b>GX16 91 048</b>		16	<input type="checkbox"/> 45x54	1	0.130
Three-pole – 3 wafers – scheme 10.					
<b>GX16 10 048</b>		16	<input type="checkbox"/> 45x54	1	0.145
Four-pole – 3 wafers – scheme 92.					
<b>GX16 92 048</b>		16	<input type="checkbox"/> 45x54	1	0.147
<b>CHANGEOVER SWITCHES WITH 0.</b>					
One-pole – 3 wafers – scheme 51.					
<b>GX16 51 048</b>		16	<input type="checkbox"/> 45x54	1	0.132
Two-pole – 3 wafers – scheme 52.					
<b>GX16 52 048</b>		16	<input type="checkbox"/> 45x54	1	0.150
Three-pole – 3 wafers – scheme 53.					
<b>GX16 53 048</b>		16	<input type="checkbox"/> 45x54	1	0.175
Four-pole – 4 wafers – scheme 75.					
<b>GX16 75 048</b>		16	<input type="checkbox"/> 45x54	1	0.192
<b>VOLTMETER SWITCHES.</b>					
Phase-Neutral L1-N/L2-N/L3-N – 3 wafers – scheme 68.					
<b>GX16 68 048</b>		16	<input type="checkbox"/> 45x54	1	0.150
Phase-Phase L1-L2/L2-L3/L3-L1 – 3 wafers – scheme 67.					
<b>GX16 67 048</b>		16	<input type="checkbox"/> 45x54	1	0.150
For 3 phase to phase voltage and 3 phase voltage readings 3 wafers – scheme 66					
<b>GX16 66 048</b>		16	<input type="checkbox"/> 45x54	1	0.175
<b>AMMETER SWITCHES.</b>					
Direct L1-L2-L3 current readings – 5 wafers – scheme 97.					
<b>GX16 97 048</b>		16	<input type="checkbox"/> 45x54	1	0.212
For L1-L2-L3 readings via 3 CTs – 4 wafers – scheme 98.					
<b>GX16 98 048</b>		16	<input type="checkbox"/> 45x54	1	0.171

**General characteristics**

- 16A rated thermal current Ith ratings
- Extended mechanical and electrical life
- Switching angles: 30°, 45°, 60° and 90°
- Silver-alloy dual-breaking contacts
- IP40 front degree of protection ; IP20 contact degree of protection
- Operating temperature: -25° to +55°C
- Suitable for screw fixing or mounting on 35mm DIN rail (EN 50022)
- Legend marking is standard supplied as illustrated in the order code table; any other on request.

**Certifications and compliance**

Certifications obtained: cULus.  
Compliant to standards: IEC/EN 60947-3, IEC/EN 60204-1, IEC/EN 61058-1.

**Selection guide**

See page 14.

### P version in enclosure with rotating handle. On/Off switches. Changeover switches



Order code	Rated current AC1	Housing size	Qty per pkg	Wt
	[A]	[mm]	n°	[kg]

#### ON/OFF SWITCHES.

Three poles - scheme 10.

<b>GX16 10 P</b>	16	90x90	1	0.216
<b>GX20 10 P</b>	20	90x90	1	0.216
<b>GX32 10 P</b>	32	110x110	1	0.440
<b>GX40 10 P</b>	40	110x110	1	0.440



#### ON/OFF SWITCHES.

Four poles - scheme 92.

<b>GX16 92 P</b>	16	90x90	1	0.216
<b>GX20 92 P</b>	20	90x90	1	0.216
<b>GX32 92 P</b>	32	110x110	1	0.440
<b>GX40 92 P</b>	40	110x110	1	0.440



#### CHANGEOVER SWITCHES.

Three poles - scheme 53.

<b>GX16 53 P</b>	16	90x90	1	0.216
<b>GX20 53 P</b>	20	90x90	1	0.216
<b>GX32 53 P</b>	32	110x110	1	0.440
<b>GX40 53 P</b>	40	110x110	1	0.440



#### CHANGEOVER SWITCHES.

Four poles - scheme 75.

<b>GX16 75 P</b>	16	90x90	1	0.216
<b>GX20 75 P</b>	20	90x90	1	0.216
<b>GX32 75 P</b>	32	110x110	1	0.440
<b>GX40 75 P</b>	40	110x110	1	0.440



### P version in enclosure with rotating handle. Motor switches



Order code	Ith AC1	Max power AC23A	Housing size	Qty per pkg	Wt.
	[A]	[A]	[mm]	n°	[kg]

#### MOTOR SWITCHES.

Three-pole reversing switches - scheme 11.

<b>GX16 11 P</b>	16	6.5	90x90	1	0.271
<b>GX20 11 P</b>	20	7.5	90x90	1	0.271
<b>GX32 11 P</b>	32	15	110x110	1	0.482
<b>GX40 11 P</b>	40	18.5	110x110	1	0.482



### P version in enclosure with padlockable rotating handle. On/Off switches



Order code	Rated current AC1	Housing size	Qty per pkg.	Wt
	[A]	[mm]	n°	[kg]

#### ON/OFF SWITCHES.

Three poles - scheme 10.

<b>GX16 10 P25</b>	16	90x90	1	0.313
<b>GX20 10 P25</b>	20	90x90	1	0.313
<b>GX32 10 P25</b>	32	110x110	1	0.403



#### ON/OFF SWITCHES.

Four poles - scheme 92.

<b>GX16 92 P25</b>	16	90x90	1	0.314
<b>GX20 92 P25</b>	20	90x90	1	0.314
<b>GX32 92 P25</b>	32	110x110	1	0.414



#### General characteristics

- 16 to 40A rated thermal current ratings
- Extended mechanical and electrical life
- Switching angles: 30°, 45°, 60° and 90°
- Silver-alloy dual-breaking contacts
- IP65 degree of protection
- Operating temperature: -25° to +55°C
- Top and bottom entry: 4 PG16 threaded knockouts for 90x90mm types and 4 PG21 for 110x110mm
- Legend marking is standard supplied as illustrated in the order code table; any other on request.

#### Certifications and compliance

Certifications obtained: cULus.  
Compliant to standards: IEC/EN 60947-3, IEC/EN 60204-1, IEC/EN 61058-1.

#### Selection guide

See page 14.

### Accessories for GX switches



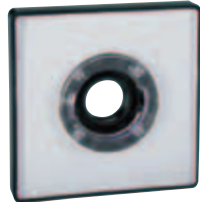
7 AO14 - 7 AR114 - 7 AR214



7 AR124 - 7 AR224



7 APRBP



GX M1 - GX M2



GX M5 - GX M6



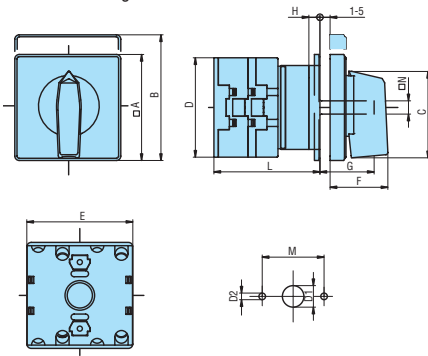
GX A01 - GX A01H - GX A11

Order code	Description	Q.ty per pkg	Weight
		n.	[kg]
Black operating handle❶.			
7 AO14	48x48mm front plate	1	0.005
7 AR114	65x65mm front plate	1	0.010
7 AR214	90x90mm front plate	1	0.015
Black operating lever❶.			
7 AR124	65x65mm front plate	1	0.019
7 AR224	90x90mm front plate	1	0.038
Adjustable door-coupling extension shaft. 70mm long max❶.			
7 APRBP	For GX16 to GX40	1	0.027
IP40 face plates❶.			
GX M1	48x48mm blank face plate	1	0.011
GX M2	65x65mm blank face plate	1	0.027
IP40 face plates with legend plates.			
GX M5	48x48mm blank face plate with legend plate	1	0.013
GX M6	65x65mm blank face plate with legend plate	1	0.029
Padlockable handles❶.			
GX A01	48x48mm yellow/red padlockable handle for GX16-GX20	1	0.030
GX A01H	65x65mm yellow/red padlockable handle for GX16-GX20	1	0.047
GX A11	65x65mm yellow/red padlockable handle for GX32-GX40	1	0.047

❶ Also suitable for GN series.



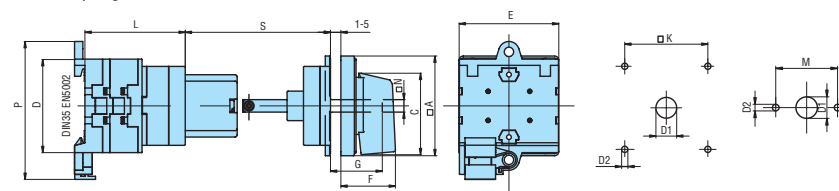
### Front mounting



Type	Dimensions														L [mm]					
	□ A	B	C	D	E	F	G	H	□ K	M	□ N	D1	D2	1 waler	2 wafers	3 wafers	4 wafers	5 wafers	6 wafers	
GX16 U	48	—	39.5	45	48	26.5	23.5	8	—	28	6	12	5	42.5	51	59.5	68	76.5	85	
GX16 U25	48	60	●	45	48	34	23.5	5	36	—	6	12	5	39.5	48	56.5	65	73.5	82	
GX20 U	48	—	39.5	45	48	26.5	23.5	8	—	28	6	12	5	42.5	51	59.5	68	76.5	85	
GX20 U25	48	60	●	45	48	34	23.5	5	36	—	6	12	5	39.5	48	56.5	65	73.5	82	
GX32 U	65	—	53	58	66	34.5	26	5	—	28	7	14	5	47.5	59.5	71.5	83.5	95.5	107.5	
GX32 U25	65	80	●	58	66	38	26	5.5	48	—	7	14	5	48	60	72	84	96	108	
GX40 U	65	—	53	58	66	34.5	26	5	—	28	7	14	5	47.5	59.5	71.5	83.5	95.5	107.5	
GX40 U25	65	80	●	58	66	38	26	5.5	48	—	7	14	5	48	60	72	84	96	108	

● Padlockable handle.

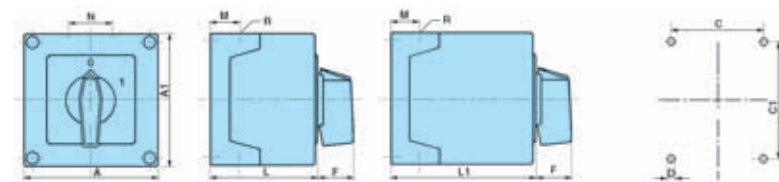
### Door coupling O version



Type	Dimensions														L [mm]					
	□ A	C	D	E	F	G	□ K	M	□ N	O	P	S	D1	D2	1 waler	2 wafers	3 wafers	4 wafers	5 wafers	6 wafers
GX16 O	48	39.5	45	48	26.5	23.5	—	28	6	52	66.5	48-58	12	5	40	48.5	57	65.5	74	82.5
GX16 O88	48	●	45	48	34	23.5	36	—	6	52	66.5	45-55	12	5	40	48.5	57	65.5	74	82.5
GX20 O	48	39.5	45	48	26.5	23.5	—	28	6	52	66.5	48-58	12	5	40	48.5	57	65.5	74	82.5
GX20 O88	48	●	45	48	34	23.5	36	—	6	52	66.5	45-55	12	5	40	48.5	57	65.5	74	82.5
GX32 O	65	53	58	66	34.5	26	—	28	7	68	78	48-58	14	5	48.7	60.7	72.7	84.7	96.7	108.7
GX32 O88	65	●	58	66	38	26	48	—	7	68	78	45-55	14	5	48.7	60.7	72.7	84.7	96.7	108.7
GX40 O	65	53	58	66	34.5	26	—	28	7	68	78	48-58	14	5	48.7	60.7	72.7	84.7	96.7	108.7
GX40 O88	65	●	58	66	38	26	48	—	7	68	78	45-55	14	5	48.7	60.7	72.7	84.7	96.7	108.7

● Padlockable handle.

### Mounting in enclosure



Type	N° of wafers		Enclosure size	Dimensions				Protection degree	Cable glands
	L	L1		A	A1	C	C1		
GX16	1-2	3-5	90x90	90	90	79	63	IP65	4 PG 16
GX20	1-2	3-5		90	90	79	63		
GX32	1-2	3-4	110x110	110	110	98.4	83	IP65	4 PG 21 + 2 PG 11
GX40	1-2	3-4		110	110	98.4	83		

### Flush mounting Ø 22mm

Type	L [mm]			
	1 waler	2 wafers	3 wafers	4 wafers
GX16	35	43.5	52	60.5

### Flush mounting Ø 22mm

Type	L [mm]			
	1 waler	2 wafers	3 wafers	4 wafers
GX16	35	43.5	52	60.5

### Modular mounting

Type	L [mm]		
	3 wafers	4 wafers	5 wafers
GX16	56.5-69.5	65-78	73.5-86.5



90 - One-pole ON/OFF switch



Number of wafers: 1  
Switching angle: 60°

91 - Two-pole ON/OFF switch



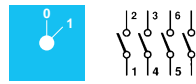
Number of wafers: 1  
Switching angle: 60°

10 - Three-pole ON/OFF switch



Number of wafers: 2  
Switching angle: 60°

92 - Four-pole ON/OFF switch



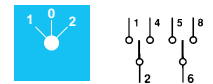
Number of wafers: 2  
Switching angle: 60°

51 - 1-pole changeover switch with 0



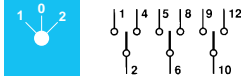
Number of wafers: 1  
Switching angle: 60°

52 - 2-pole changeover switch with 0



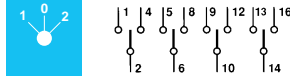
Number of wafers: 2  
Switching angle: 60°

53 - 3-pole changeover switch with 0



Number of wafers: 3  
Switching angle: 60°

75 - 4-pole changeover switch with 0



Number of wafers: 4  
Switching angle: 60°

54 - 1-pole changeover switch without 0



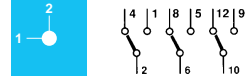
Number of wafers: 1  
Switching angle: 90°

55 - 2-pole changeover switch without 0



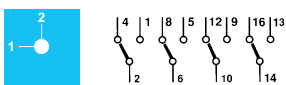
Number of wafers: 2  
Switching angle: 90°

56 - 3-pole changeover switch without 0



Number of wafers: 3  
Switching angle: 90°

69 - 4-pole changeover switch without 0



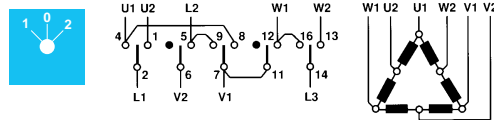
Number of wafers: 4  
Switching angle: 90°

11 - 3-pole reversing switch



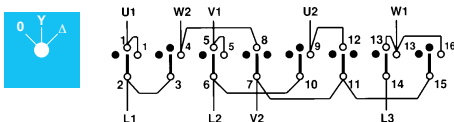
Number of wafers: 3  
Switching angle: 60°

13 - Pole-changing switch with 0 (Dahlander)



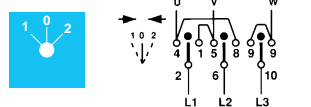
Number of wafers: 4  
Switching angle: 60°

12 - Star-delta switch



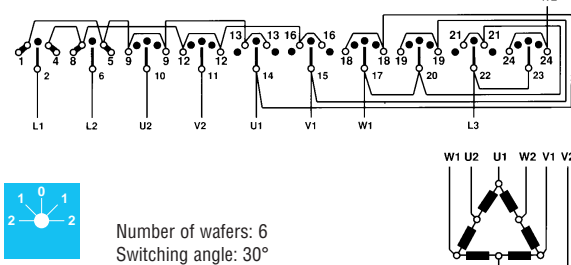
Number of wafers: 4  
Switching angle: 60°

26 - Reversing switch, spring return to 0



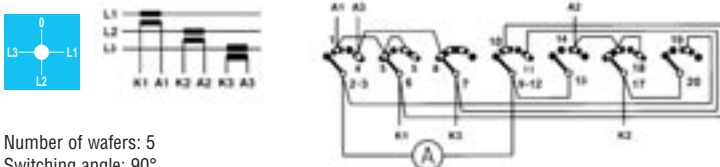
Number of wafers: 3  
Switching angle: 30°

20 - Pole-changing switch with reversing (Dahlander)



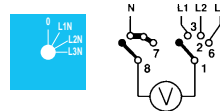
Number of wafers: 6  
Switching angle: 30°

97 - Ammeter switch direct reading or via current transformer



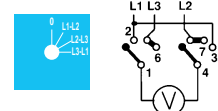
Number of wafers: 5  
Switching angle: 90°

68 - Phase-neutral voltmeter switch



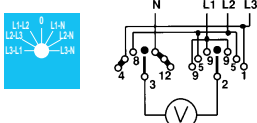
Number of wafers: 2  
Switching angle: 30°

67 - Phase-phase voltmeter switch



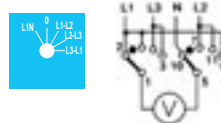
Number of wafers: 2  
Switching angle: 30°

66 - Phase-phase phase-neutral voltmeter changeover



Number of wafers: 3  
Switching angle: 30°

60 - Changeover switch 1 phase phase-neutral, 3 phase-phase voltages



Number of wafers: 3  
Switching angle: 30°

98 - L1-L2-L3 current changeover switch



Number of wafers: 3  
Switching angle: 90°

### SELECTION GUIDE

The choice of a rotary cam switch and the relative type are based on the functional diagram and the type of application as well. IEC standards provide a comprehensible and quick classification of the most frequent utilisation categories:

- AC1: Connection and disconnection of non-inductive or slightly inductive loads ( $\cos\varphi \geq 0.95$ )
- AC21: Resistance furnaces
- AC3: Starting and switching off motors during running
- AC23A: Switching of motor loads or other highly inductive loads
- AC15: Control of electromagnetic loads
- For DC applications, the rotary cam switches are used for the switching of minor loads or in control circuits, such as:
- DC13: Control of electromagnets
- DC21A: Switching of resistive loads
- DC23: Switching of highly inductive loads

Other prescriptions and recommendations concerning the use of cam switches as auxiliary equipment of electrical machines are given in IEC/EN 60204-1 standards and specifically as given under utilisation.

### UTILISATION

#### MAIN SUPPLY DISCONNECTING SWITCH WITH EMERGENCY-STOP OPERATION:

- Red operating handle with yellow background
- Lockable in open position (OFF).

#### EMERGENCY-STOP SWITCH

- Red operating handle with yellow background
- Independent operation and the breaking of the load circuit of switching devices before the opening of its main contacts
- Rated capacity is to sufficient in order to break the sum of the rated operating currents of all the connected equipment
- Breaking capacity equal to the current of the largest motor when stalled (locked rotor) together with the total of the normal running currents of the other motors or loads.

#### MAIN SUPPLY DISCONNECTING SWITCH

- Used to disconnect all live electrical equipment from the power supply circuit
- Contact clearance distance is to comply with IEC/EN 60947-3 standards
- Provided with a means in order to be locked in the OFF position
- Selection of current breaking according to AC1 and AC21 utilisation categories.

## Operational characteristics

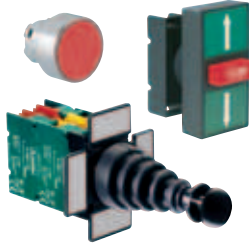
TYPE			GX16...	GX20...	GX32...	GX40...	
Rated insulation voltage ①	Ui IEC/EN	V	690	690	690	690	
	UL/CSA	V	300	300	600	600	
Rated impulse withstand voltage ①	Uimp IEC/EN 60947-3	kV	6	6	6	6	
Rated thermal current	Ith IEC/EN	A	16	20	32	40	
Maximum fuse size for short-circuit protection	10kA	A	20	20	40	40	
	25kA	A	16	16	35	35	
	50kA	A	–	–	32	35	
	63kA	A	–	–	–	35	
Short-time withstand current Icw	10 sec	A	70	80	250	300	
Rated operational current Ie	AC1/AC21A (IEC/EN)	A	16	20	32	40	
	AC15 (IEC/EN)	110V	A	10	10	25	25
		220/230V	A	8	8	20	22
		380/400V	A	4	6	10	12
		660/690V	A	1.5	1.5	2	2
Motor power for switches in AC utilisation categories	AC3 (IEC/EN) 3 phases	220-240V	kW	3	3.7	5.5	7.5
		380-440V	kW	4	5.5	11	15
		500-690V	kW	5.5	5.5	11	15
	1 phase (2 poles)	110V	kW	0.55	0.75	1.8	2.2
		220/240V	kW	1.5	1.8	3.5	4.4
		380/440V	kW	2.2	3	5.5	7
	AC23A (IEC/EN) 3 phase	220/240V	kW	3	4	9	9
		380/440V	kW	5.5	7.5	15	15
		500/690V	kW	5.5	7.5	15	15
1 phase (2 poles)		110V	kW	0.75	0.75	2.2	3
		220/240V	kW	1.8	2.2	3.5	5.2
		380/440V	kW	3	3.5	6	7.5
DOL motor powers for switches (UL/CSA) 3 phase	120V	Hp	1.5	1.5	5	5	
	240V	Hp	3	3	10	10	
	480V	Hp	–	–	20	25	
	600V	Hp	–	–	25	30	
	Mechanical life		cycles	5x10 <sup>6</sup>	5x10 <sup>6</sup>	5x10 <sup>6</sup>	5x10 <sup>6</sup>
Conductor cross section	max. r/f	2-mm <sup>2</sup>	2.5/2.5	2.5/2.5	10/6	10/6	
		2-AWG	14/14	14/14	8/10	8/10	
r: rigid f: flexible	min. r/f	2-mm <sup>2</sup>	0.5/0.5	0.5/0.5	1.5/1.5	1.5/1.5	
		2-AWG	20/20	20/20	16/16	16/16	

① Valid for systems with earthed neutral, overvoltage category III, pollution degree 3.

		1	4	5	8	9	12	13	16	17	20	21	24	25	28	29	32	33	36	37	40	41	44	45	48		
		2	3	6	7	10	11	14	15	18	19	22	23	26	27	30	31	34	35	38	39	42	43	46	47		
<b>Plate indication</b>	<b>pos.</b>																										
	7																										
<b>C</b>	8																										
	9																										
	10																										
<b>D</b>	11																										
	12																										
	1																										
<b>A</b>	2																										
	3																										
	4																										
<b>B</b>	5																										
	6																										
<b>Front plate</b>		1	X											X							X						
		2		X										X			X							X			
				<b>Overlapping contacts</b>										<b>Closed contact in 2 or more positions</b>							<b>Open/passing contact</b>				<b>Closed contact</b>	<b>Spring return</b>	
		<b>Type:</b>																									
		<b>Date:</b>													<b>Scheme:</b>												
Customer:																											



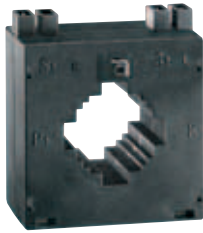
Mini-actuators, BGF series



Joysticks, push-push and triple-touch buttons



Digital multimeters DMK20, DMK25 and DMK50 series



Current transformers, DM...T series



AC motor drives, VFS11 series



Automatic power factor regulators

### Planet-SWITCH

- Motor protection circuit breakers
- Switch disconnectors
- Contactors
- Motor protection relays
- Electromechanical starters
- Push-buttons and selectors
- Position and safety switches
- Rotary cam switches

### Planet-DIN

- Modular contactors
- Time relays
- Protection relays
- Level controls
- Earth leakage relays

### Planet-LOGIC

- Digital metering instruments and current transformers
- Soft starters
- AC motor drives
- Automatic power factor regulators
- Automatic battery chargers
- Automatic transfer switches

The products described in this documentation 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.