

## Rotary Disconnect Switch, SQ Series, Type R, Door or Thru Panel Mounting



### REGOLUS SWITCH DISCONNECTORS

The Giovenzana Disconnectors Regolus Series, built to the most stringent European and international standards (IEC / EN 60947-3, UL508), meets all the safety requirements.

The long industrial experience combined with the use of the best materials, plant and most modern design tools, enables us to produce a range of high quality equipment placing Giovenzana brand as synonymous of reliability, operational reliability and durability of its products.

### SQ SERIES

The disconnectors modular SQ Series from 32A to 80A, 2-3 poles have the possibility to install additional poles, auxiliary contacts and terminal IP20 protections.

### CHARACTERISTICS

- Rated current from 32A to 80A
- Series modular with 3 extensible poles
- Additional pole (4th pole)

### AVAILABLE VERSIONS

- Switch disconnectors 6 poles and changeover 3 poles
- Panel mounting Screw Fixing
- Panel mounting Ø22.5mm Central Hole Fixing (SQ025 - SQ032 only)
- Base Mounting
- Door locking
- Direct command

### COMPLY WITH RULES

- IEC/EN 60947-3, UL508
- IEC/EN 60947-5-1, UL508 (auxiliary contacts)

SERIES		SQ025 - SQ032	SQ040 - SQ063	AUXILIARY CONTACTS		
Protection class	control terminals	EN 60529 (UL50 ♦) NEMA 4X	EN 60529	-		
Material Group		EN 60947-1	EN 60947-1	IP20		
Pollution Grade		II	II	II		
Flammability		3	3	3		
Ambient Temperature		VO (Live Electric parts)	VO (Live Electric parts)	VO (Live Electric parts)		
		Operating: -25 +55	Operating: -25 +55	Operating: -25 +55		
		Storage: -30 +70	Storage: -30 +70	Storage: -30 +70		
Climate Withstand		Constant Hot Damp	Constant Hot Damp	Constant Hot Damp		
		Cyclical Hot Damp	Cyclical Hot Damp	Cyclical Hot Damp		
Connections	Terminal Block Caliber	EN60947-1	A6	A2		
	Terminal Screw	M4	M5	M3,5		
	Screwing Torque	EN60947-1	1,2 Nm	0,8 Nm		
		UL508	7 lb. in. (0,8 Nm)	12 lb. in.		
Connectable Section	Flexible Conductors n°1 min/max	mm <sup>2</sup>	1,5 - 10	6 - 25		
		AWG	12 - 8	10 - 2		
	Solid Conductors n°1 min/max	mm <sup>2</sup>	1,5 - 10	10 - 35		
		AWG	12 - 8	10 - 2		
Contacts		Slow Opening	Slow Opening	Slow opening Double-Break		
		Double-Break	Double-Break	Positive opening for NC ♦		
Opening Angles		90°	90°	-		
Mechanical Lifetime		100.000	100.000	1.500.000		
at 120 operations per hour						
Maximum Altitude	Until 2000 mt	Derating	Standard	Standard		
	Over 2000 mt	Voltage Derating (V)	< 1% ogni 100 m	< 1% ogni 100 m		
		Power Derating (A)	< 1% ogni 1000 m	< 1% ogni 1000 m		
CERTIFICATIONS		SQ025	SQ032	SQ040	SQ063	AUXILIARY CONTACTS
CE	CE mark - Europe	■	■	■	■	■
cULus	cUL Listed - USA and Canada	●	●	●	●	●
IMQ	Istituto Marchio Qualità (IMQ) - Italy	●	●	●	●	●
CCC	CCC China					●
ERC	EAC Russia					●

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EN 60947-3 CHARACTERISTICS			SQ025	SQ032	SQ040	SQ063	AUXILIARY CONTACTS
Rated operating voltage Ue	V		690	690	690	690	690
Rated insulation voltage Ui	V		690	690	690	690	690
Rated impulse withstand voltage Uimp (sectionable)	kV		8	8	8	8	4
Rated thermal current Ith	A		32	40	63	80	16
Rated thermal current in enclosed Ithe	A		32	40	63	80	10
Frequency	Hz		50/60	50/60	50/60	50/60	50/60
RATED OPERATING CURRENT Ie: alternate current			SQ025	SQ032	SQ040	SQ063	AUXILIARY CONTACTS
<b>AC-21A</b> Switching resistive loads with light overloads	690V	A	32	40	63	80	AC-15 240V - 5A
<b>AC-22A</b> Switching mixed resistive and inductive loads at light overloads	500V	A	-	-	-	-	DC-13
	690V	A	25	32	63	80/-	250V - 0,44A
<b>AC-23A</b> Periodic switching of motors 3 phases - 3 poles	230V	A/kW	25/7,5	32/10	63/-	80/-	-
	400V	A/kW	25/15	32/18,5	50/-	75/-	-
	500V	A/kW	25/15	32/22	50/-	75/-	-
	690V	A/kW	16/15	20/18,5	26/-	32/-	-
<b>AC3</b> Starting of cage motors (interruption hile running) 3 phases - 3 poles	230V	A/kW	22/5,5	27/7,5	45/-	60/-	-
	400V	A/kW	22/11	27/15	40/-	60/-	-
	500V	A/kW	22/11	27/18,5	35/-	45/-	-
	690V	A/kW	16/11	20/15	22/-	25/-	-
Nominal interruption power <b>AC-23A</b> (cosfi 0,45)	230V	A	200	256	360	600	-
	400V	A	200	256	360	536	-
	500V	A	200	256	280	536	-
	690V	A	128	160	176	256	-
SHORT CIRCUIT CHARACTERISTICS			SQ025	SQ032	SQ040	SQ063	AUXILIARY CONTACTS
Rated short-time short circuit withstand current Icw (1 s)	A		800	800	1200	1500	-
Rated short circuit making capacity Icm	A		1500	1500	2200	2800	-
Conditional rated short circuit withstand current	kA		10	10	10   5	10   5	1
Fuse rating gG	500V	A	-	-	-	-	10
	690V	A	40	40	63   80	63   80	-
UL 508 CHARACTERISTICS			SQ025	SQ032	SQ040	SQ063	AUXILIARY CONTACTS
General Use	600V AC	A	32	40	60	80	HD A600 AC Q600 DC
Standard motor load single phase - 2 poles	120V AC	HP (FLA)	1,5 (20)	2 (24)	2 (24)	3 (34)	-
	200-208V AC	HP	2	3	3	5	-
	240V AC	HP (FLA)	3 (17)	5 (28)	5 (28)	7,5 (40)	-
Standard motor load 3 phases - 3 poles	200-208V AC	HP	7,5	10	7,5	10	-
	240V AC	HP (FLA)	7,5 (22)	10 (28)	10 (28)	15 (42)	-
	480V AC	HP (FLA)	10 (14)	15 (21)	25 (34)	30 (40)	-
	600V AC	HP (FLA)	15 (17)	20 (22)	30 (32)	40 (41)	-

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## TYPE R

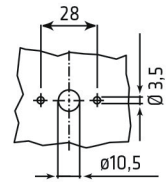
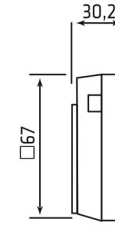
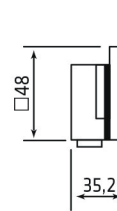
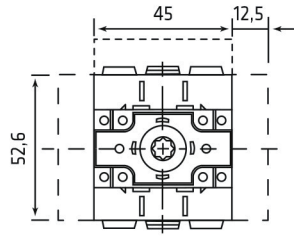
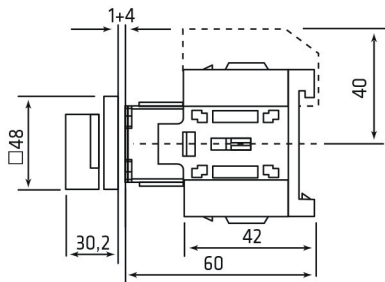
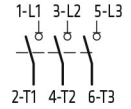
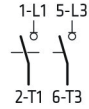
➔ Screw Fixing.



SERIES	AC-21A	AC-23A	CODE	
	AMP. 690V	AMP. 400V	2 POLES	3 POLES
SQ025	32	25	SQ025002R	SQ025003R
SQ032	40	32	SQ032002R	SQ032003R

### 2 POLES

### 3 POLES




Actuator Type  001  
 002


003  
 004

009  
 010

**ADDITIONAL POLES**

	SERIES	DESCRIPTION	CODE	DIAGRAM
		SQ025 SQ032	Additional Pole NO	SQ025AFPR SQ032AFPR
4 <sup>th</sup> Pole (early make contact)			SQ025ANIR SQ032ANIR	N — N
Neutral Terminal		SQ025ANPR SQ032ANPR	N — N	
Ground Terminal		SQ025APER SQ032APER	PE — PE	


**AUXILIARY CONTACTS**

	SERIES	DESCRIPTION	CODE	DIAGRAM
		SQ025 SQ032	AUX 1NC	SQ010AS1R
AUX 1NO			SQ010AS2R	1NO 3 — 4

**TERMINAL PROTECTION**

	<b>3 POLES</b>	<b>1 POLE</b>	
	20900024	20900025	

**INSTALLATION TOOL**

	<b>INSTALLATION TOOL FOR FIXING HOLE Ø 22.5 mm</b>
	PCF