

# Rotary Disconnect Switch, SQ Series, Type X, 22 mm Cutout, 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)		
Climate Withstand		Operating: -25 +55 Storage: -30 +70	Operating: -25 +55 Storage: -30 +70	Operating: -25 +55 Storage: -30 +70		
Connections	Terminal Block Caliber	Constant Hot Damp	Constant Hot Damp	Constant Hot Damp		
	Terminal Screw	Cyclical Hot Damp	Cyclical Hot Damp	Cyclical Hot Damp		
	Screwing Torque	A6	A8	A2		
Connectable Section	Flexible Conductors n°1 min/max	M4	M5	M3,5		
	Solid Conductors n°1 min/max	1,2 Nm	3 Nm	0,8 Nm		
Contacts		7 lb. in. (0,8 Nm)	32,0 lb. in. (3,6 Nm)	12 lb. in.		
Opening Angles		1,5 - 10	6 - 25	1 - 2,5		
Mechanical Lifetime		12 - 8	10 - 2	18 - 12		
at 120 operations per hour		1,5 - 10	10 - 35	1 - 2,5		
Maximum Altitude		12 - 8	10 - 2	18 - 12		
Derating		Slow Opening	Slow Opening	Slow opening Double-Break		
Over 2000 mt		Double-Break	Double-Break	Positive opening for NC ♦		
Power Derating (A)		90°	90°	-		
		100.000	100.000	1.500.000		
		Standard	Standard	-		
		< 1% ogni 100 m	< 1% ogni 100 m	-		
		< 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 X

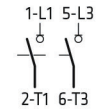


⌀22,5 mm Central hole fixing panel.

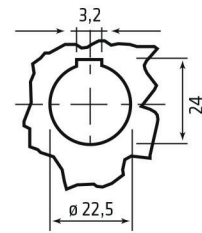
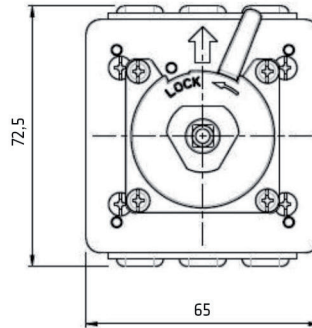
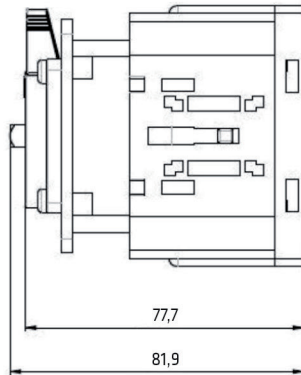
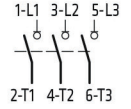
SERIES	AC-21A	AC-23A	CODE	
	AMP. 690V	AMP. 400V	2 POLES	3 POLES
SQ040	63	50	SQ040002X	SQ040003X
SQ063	80	75	SQ063002X	SQ063003X



### 2 POLES



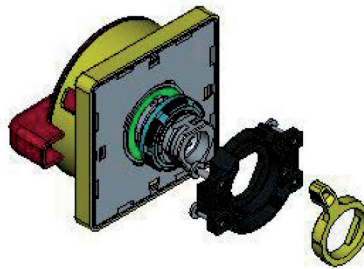
### 3 POLES



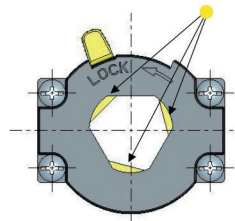
Panel

### New support D.22

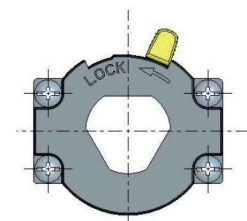
for Regulus switch disconnectors



### 3 Blocking points




Lock position




Unlock position

## ADDITIONAL POLES

	SERIES	DESCRIPTION	CODE	DIAGRAM
		SQ040 SQ063	Additional Pole NO	SQ040AFPR SQ063AFPR
4 <sup>th</sup> Pole (early make contact)			SQ040ANIR	N — N
			SQ063ANIR	N — N
Neutral Terminal			SQ040ANPR SQ063ANPR	N — N
Ground Terminal			SQ040APER SQ063APER	PE — PE


## AUXILIARY CONTACTS

	SERIES	DESCRIPTION	CODE	DIAGRAM
		SQ040 SQ063	AUX 1NC	SQ010AS3R
AUX 1NO			SQ010AS4R	1NO 3 — 4

## TERMINAL PROTECTION

	3 POLES	1 POLE	
	20900041	20900040	

## INSTALLATION TOOL

	INSTALLATION TOOL FOR FIXING HOLE Ø 22.5 mm
	PCF