

# Rotary Disconnect Switch, SQ Series, Direct Control, Type DL1N, 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	IP65 (Type 1 - 4 -4X) IP20	IP65 (Type 1 - 4 -4X) IP20	- IP20		
Material Group		EN 60947-1	II	II	II		
Pollution Grade		EN 60947-1	3	3	3		
Flammability		UL94	VO (Live Electric parts)	VO (Live Electric parts)	VO (Live Electric parts)		
Ambient Temperature		°C °C	Operating: -25 +55 Storage: -30 +70	Operating: -25 +55 Storage: -30 +70	Operating: -25 +55 Storage: -30 +70		
Climate Withstand		IEC 68 part 2-3 IEC 68 part 2-30	Constant Hot Damp Cyclical Hot Damp	Constant Hot Damp Cyclical Hot Damp	Constant Hot Damp Cyclical Hot Damp		
Connections	Terminal Block Caliber Terminal Screw Screwing Torque	EN60947-1  EN60947-1	A6 M4 1,2 Nm	A8 M5 3 Nm	A2 M3,5 0,8 Nm		
Connectable Section	Flexible Conductors n°1 min/max	UL508 mm <sup>2</sup> AWG	1,5 - 10 12 - 8	6 - 25 10 - 2	1 - 2,5 18 - 12		
	Solid Conductors n°1 min/max	mm <sup>2</sup> AWG	1,5 - 10 12 - 8	10 - 35 10 - 2	1 - 2,5 18 - 12		
Contacts			Slow Opening Double-Break	Slow Opening Double-Break	Slow opening Double-Break Positive opening for NC ➤		
Opening Angles			90°	90°	-		
Mechanical Lifetime		nr. of cycles	100.000	100.000	1.500.000		
Maximum Altitude	Until 2000 mt	Derating	Standard	Standard	-		
	Over 2000 mt	Voltage Derating (V) Power Derating (A)	< 1% ogni 100 m < 1% ogni 1000 m	< 1% ogni 100 m < 1% ogni 1000 m	- -		
CERTIFICATIONS			SQ025	SQ032	SQ040	SQ063	AUXILIARY CONTACTS
CE		CE mark - Europe	■	■	■	■	■
cUL		cUL Listed - USA and Canada	●	●	●	●	●
IMQ		Istituto Marchio Qualità (IMQ) - Italy	●	●	●	●	●
CCC		CCC China					●
EAC		EAC Russia					●

# Rotary Disconnect Switch, SQ Series, Direct Control, Type DL1N, Panel Mounting



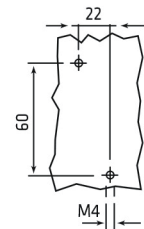
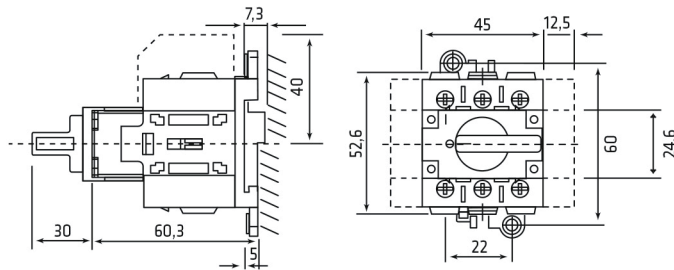
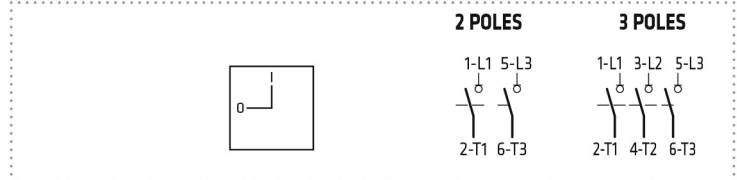
EN 60947-3 CHARACTERISTICS			SQ025	SQ032	SQ040	SQ063	AUXILIARY CONTACTS
Rated operating voltage Ue	V		690	690	690	690	690
Rated insulation voltage Ui	V		690	690	690	690	690
Rated impulse withstand voltage Uimp (sectionable)	kV		8	8	8	8	4
Rated thermal current Ith	A		32	40	63	80	16
Rated thermal current 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
<b>AC-23A</b> Periodic switching of motors 3 phases - 3 poles	690V	A	25	32	63	80/-	250V - 0,44A
	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/-	-
<b>AC3</b> Starting of cage motors (interruption hile running) 3 phases - 3 poles	690V	A/kW	16/15	20/18,5	26/-	32/-	-
	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/-	-
Nominal interruption power <b>AC-23A</b> (cosfi 0,45)	690V	A/kW	16/11	20/15	22/-	25/-	-
	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)	-

## TYPE D - L1N




- Fixing box DIN RAIL DIN-EN 50022-35.
- Black knob locking in "0-OFF" position.

SERIES	AC-21A	AC-23A	CODE	
	AMP. 690V	AMP. 400V	2 POLES	3 POLES
SQ025	32	25	SQ025002DL1N	SQ025003DL1N
SQ032	40	32	SQ032002DL1N	SQ032003DL1N




Box

## ADDITIONAL POLES

	SERIES	DESCRIPTION	CODE	DIAGRAM	
	SQ025 SQ032	Additional Pole NO		SQ025AFPB	7 — 8
				SQ032AFPB	
		4th Pole (early make contact)		SQ025ANIB	N — N
				SQ032ANIB	
	Neutral Terminal		SQ025ANPB	N — N	
		SQ032ANPB			
Ground Terminal		SQ025APEB	PE — PE		
			SQ032APEB		


## AUXILIARY CONTACTS

	SERIES	DESCRIPTION	CODE	DIAGRAM
	SQ025 SQ032	AUX 1NC	SQ010AS1B	1 — 2
		AUX 1NO	SQ010AS2B	3 — 4


## TERMINAL PROTECTION

	3 POLES	1 POLE	
	20900023	20900025	

## INSTALLATION TOOL

	INSTALLATION TOOL FOR FIXING HOLE $\varnothing$ 22.5 mm
	PCF

## SHAFT EXTENSIONS

	SHAFT EXTENSION $\square$ 5 FOR DOOR INTERLOCK TYPE B	
	L 185 mm	20401089
	L 300 mm	20401164