Lovato electric

ENERGY AND AUTOMATION

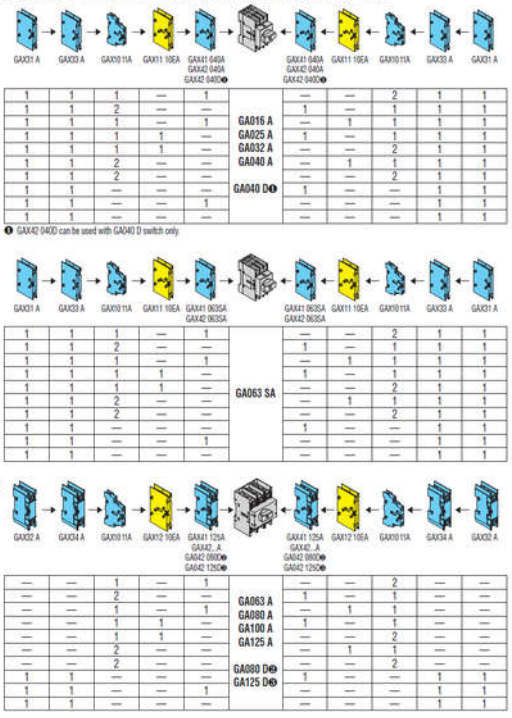
Order code	IEC conventional free air thermal current Ith AC21A (≤690V)	IEC rated operational current Ie AC22A (≤690V) AC23A (≤415V)	Qty per pkg	Wt
	[A]	[A]	n°	[kg]
Direct operating version, complete with black handle. For door-coupling version, separately purchase the handle and shaft extension;				
GA016 A	16	16	1	0.146
GA025 A	25	25	1	0.146
GA032 A	32	32	1	0.146
GA040 A	40	40	1	0.146
GA063 SA	63	45	1	0.148
GA063 A	63	63	1	0.388
GA080 A	80	80	1	0.388
GA100 A	100	100	1	0.388
GA125 A	125	125	1	0.388
Simultaneous closing operation as switch poles. For GA...A version.				
GAX42 040A❶	40	40	1	0.045
GAX42 063SA❷	63	45	1	0.045
GAX42 063A	63	63	1	0.126
GAX42 080A	80	80	1	0.126
GAX42 100A	100	100	1	0.126
GAX42 125A	125	125	1	0.126

Order code	Characteristics	Qty per pkg	Wt
		n°	[kg]
Auxiliary contacts, simultaneous operation as switch poles.			
GAX10 11A	1NO+1NC for GA...A, GA063 SA and GA...D	1	0.030
Auxiliary contacts, early-break operation with respect to switch poles.			
GAX11 10EA	1EB (NO) for GA016 A-GA040 A, GA063 SA and GA040 D	1	0.035





Sequence and maximum combination of add-on blocks on direct operating switch disconnectors



❶ GAX42 040D can be used with GA040 D switch only.

Order code	IEC conventional free air thermal current Ith AC21A (≤690V)
	[A]
THREE POLE. With rotating red/yellow handle.	
GAZ016	16
GAZ025	25
GAZ032	32
GAZ040	40
GAZ063 SA	63
GAZ063 C	63
GAZ080 C	80

General characteristics
- Enclosure material: ABS
- For four-pole types not indicated, separately purchase corresponding fourth pole GAX42...A and install on enclosed 3-pole version
- Possible accessories to mount afterwards, if any required:
  - GAZ016-GAZ040 types: 1 contact block both on the right and left disconnector side unless 4th pole is installed
  - All other types: 2 contact blocks both on the right and left disconnector side unless 4th pole is installed
  - For GAZ125 types: if any earth/ground and/or neutral terminal required, separately purchase types GAX3... given on page 11-8
- Padlockable handle
- Sealable cover
- Tightening torque for cover screws:
  - GAZ016-GAZ040 types: 1.3Nm/16lbin
  - All other types: 1.5Nm/13lbin
- IEC/EN degree of protection: IP65
- Cable entry:
  - GAZ016-GAZ040 types: PG16/M25 and PG13.5/M20 knockouts
  - GAZ063SA-GAZ100 types: PG29/M32 and PG16/M25 knockouts
  - GAZ125 types: Smooth surfaces; can be drilled by customer.

Order code	Characteristics
DOOR COUPLING HANDLES, PADLOCKABLE. Red/yellow, rotating.	
GAX61	For GA...A, GA063 SA, GA...C and GA...D. Screw fixing. Recessed selector. ☐ 5mm/0.2" ❶. IEC IP65/UL Type 4X
GAX63	For GA...A, GA063 SA, GA016 C - GA040 C and GA...D. Ring fixing. Protruding selector. ☐ 5mm/0.2" ❶❷. IEC IP65/UL Type 4X
GAX64	For GA...A, GA063 SA, and GA...D. Ring fixing. Protruding selector with release, defeatable per UL508A; ☐ 5mm/0.2" ❶. IEC IP65/UL Type 4X
GAX66	For GA063 A-GA125 A, GA080 D, GA125 D and GAX60 01. Screw fixing. Pistol grip with release, defeatable per UL508A; ☐ 7mm/0.3" ❸. IEC IP66/UL Type 4X
ACCESSORIES FOR DOOR COUPLING CONTROL. For GAX66 and GAX66 B handles.	
GAX60 B	Adapter ☐ 7mm/0.3" for GA063 A-GA125 A,

Order code	Characteristics	Qty per pkg	Wt
		n°	[kg]
Shaft extension for door-coupling handles GAX61-GAX64, GAX61 B-GAX64 B, GAX67 B and mechanical interlock type			
GAX7 090	90mm long; ☐ 5mm/0.2"	1	0.018
GAX7 150	150mm long; ☐ 5mm/0.2"	1	0.032
GAX7 200	200mm long; ☐ 5mm/0.2"	1	0.040
GAX7 300	300mm long; ☐ 5mm/0.2"	1	0.068
Shaft extension for door-coupling handles GAX66, GAX66 B and mechanical coupling system GAX60 01.			
GAX7 300A	300mm long; ☐ 7mm/0.3"	1	0.160
Set of 2 one-pole terminal covers for fourth pole.			
GAX81	For GAX42 040A, GAX42 040C GAX42 040D, GAX41 040A, GAX41 040C, GAX41 063SA, GAX42 063SA	1	0.009
GAX82	For GAX42 063A-GAX42 125A, GAX42 063C-GAX42 125C, GAX42 080D, GAX42 125D, GAX41 125A, GAX41 125C	1	0.012
Set of 2 three-pole terminal covers.			
GAX83	For GA016 A-GA040 A, GA063 SA, GA016 C-GA040 C, GA040 D	1	0.018
GAX84	For GA063 A-GA125 A, GA063 C-GA125 C, GA080 D, GA125 D	1	0.030

Operational characteristics
- IEC rated insulation voltage Ui: 1000V
- IEC rated impulse withstand Uimp: 8kV
- Electrical life in IEC AC21A:
  - 100,000 cycles for GA016-GA040
  - 15,000 cycles for GA063 SA
  - 30,000 cycles for GA063-GA125
- Mechanical life:
  - 100,000 cycles for GA016-GA040-GA063 SA
  - 30,000 cycles for GA063-GA125.

Certifications and compliance

Certifications obtained:

Type	EAC	KEMA	cULus per UL508 / CSA C22.2 n°14 UL Listed (File E93602)	cULus per UL98 / CSA C22.2 n°4 UL Listed (File E328470)
GA016 A...GA040 A	●	●	●	—
GA063 SA	●	—	●	—
GA016 C...GA040 C	●	●	●	—
GA063 A...GA125 A	●	—	—	●
GA063 C...GA125 C	●	—	—	●

● Certification obtained.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-3, UL508, UL98, CSA C22.2.

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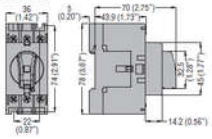
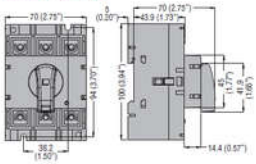
GA SERIES - 16A TO 125A SWITCH DISCONNECTORS

Direct operating version

GA016 A - GA040 A
GA063 SA
GA040 D



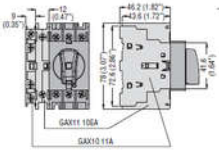
GA063 A - GA125 A
GA080 D - GA125 D



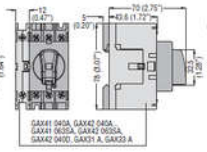
ADD-ON BLOCKS AND ACCESSORIES

For GA016 A-GA040 A, GA063 SA, GA040 D

Auxiliary contacts
GAX10 11A
GAX11 10EA

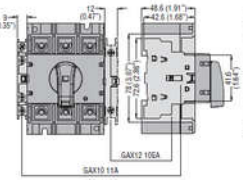


Fourth pole
GAX41 040A - GAX42 040A
GAX41 063SA - GAX42 063SA
GAX42 040D
Neutral **GAX31 A** -
earth/ground **GAX33 A** terminals

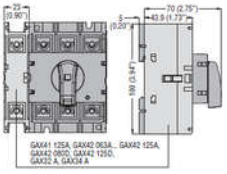


For GA063 A-GA125 A, GA080 D, GA125 D

Auxiliary contacts
GAX10 11A
GAX12 10EA

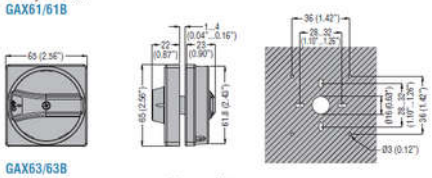


Fourth pole
GAX41 125A
GAX42 063A…GAX42 125A
GAX42 080D…GAX42 125D
Neutral **GAX32 A** -
earth/ground **GAX34 A** terminals

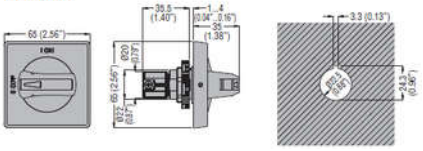


Rotary handles

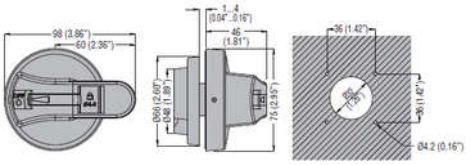
GAX61/61B



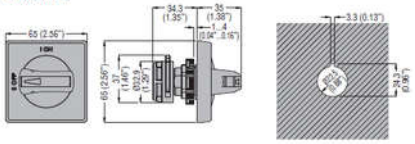
GAX64/64B



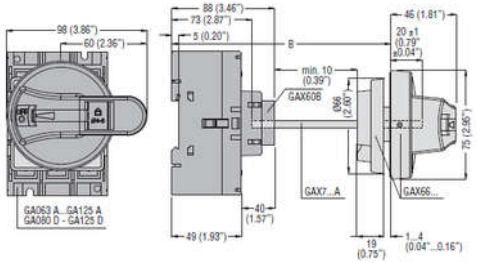
GAX66/66B



GAX63/63B

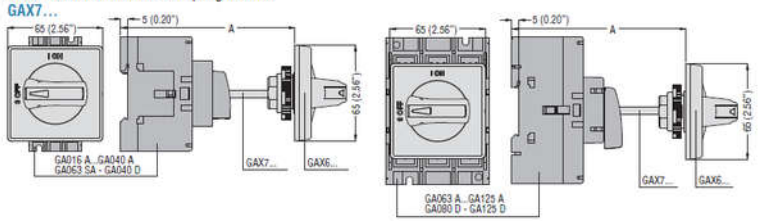


GAX7…A used with GAX60 B and GAX66/66B



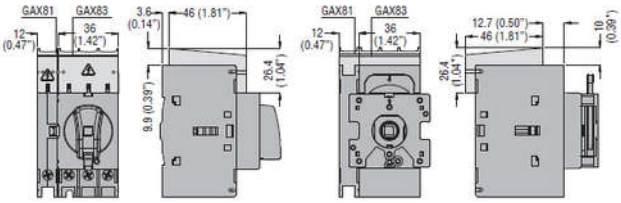
Shaft extensions for door coupling handles

GAX7…

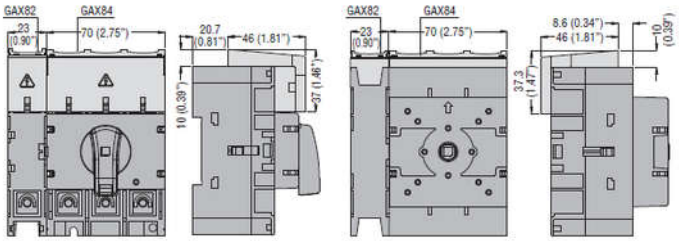


Terminal covers

GAX81 - GAX83

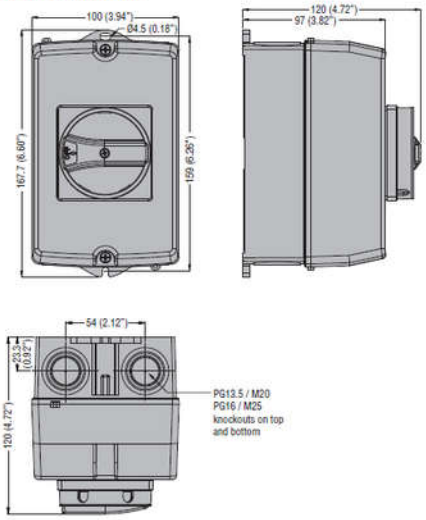


GAX82 - GAX84

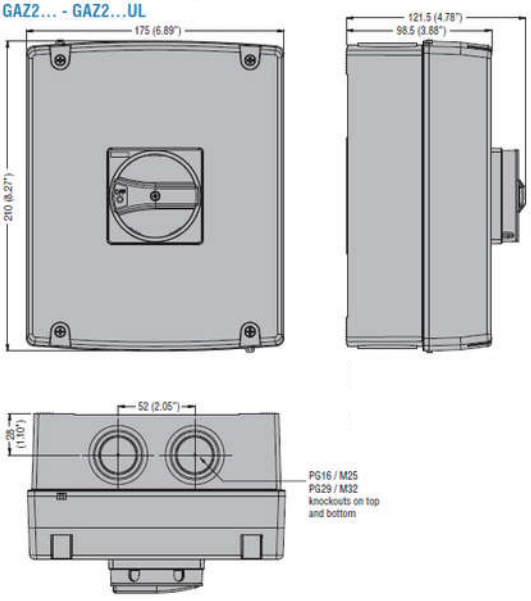


ENCLOSED SWITCH DISCONNECTORS AND EMPTY ENCLOSURES

GAZ016… - GAZ040… / GAZ016…UL - GAZ040…UL
GAZ1… - GAZ1…UL

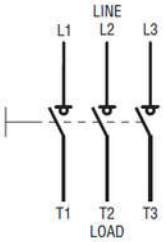


GAZ063 S… - GAZ100 C… / GAZ065S…UL - GAZ063C…UL
GAZ2… - GAZ2…UL



Three-pole disconnectors

GA016… - GA125A/C
GAZ016… - GAZ125/B
GAZ016UL… - GAZ125UL



Fourth pole

GAX42…



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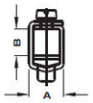
TYPE		3-pole	GA016…	GA025…	GA032…	GA040…	GA063 SA	GA063…	GA080…	GA100…	GA125…
		4th-pole	GAX42 040…	GAX42 040…	GAX42 040…	GAX42 040…	GAX42 063SA	GAX42 063…	GAX42 080…	GAX42 100…	GAX42 125…
CONTACT CHARACTERISTICS											
IEC conventional free air thernal current Ith (≤40°C)		A	16	25	32	40	63	63	80	100	125
IEC rated insulation voltage Ui		V	1000								
IEC rated impulse withstand voltage Uimp		kV	8								
IEC rated operational current Ie											
AC21A	400V	A	16	25	32	40	63	63	80	100	125
	500V	A	16	25	32	40	63	63	80	100	125
	690V	A	16	25	32	40	63	63	80	100	125
AC22A	400V	A	16	25	32	40	45	63	80	100	125
	500V	A	16	25	32	40	45	63	80	100	125
	690V	A	16	25	32	40	45	63	80	100	125
AC23A	400V	A	16	25	32	40	45	63	80	100	125
	500V	A	16	25	25	25	25	63	63	80	100
	690V	A	16	25	25	25	25	47	47	47	47
IEC rated operational power											
AC23A	400V	kW	7.5	11	15	18.5	22	30	45	55	55
	690V	kW	11	22	22	22	22	45	45	45	45
IEC reactive power for capacitor control 400V		kvar	7.5	10	12.5	15	15	25	30	40	50
IEC protection against short-circuit											
Rated short-time withstand current (1s) Icw		A rms	800					2500			
Rated conditional short-circuit current		kA rms	50								
With fuse class gG		A	16	25	32	40	63	63	80	100	125
IEC making capacity (AC23A 400V)		A	400				450	1250			
IEC breaking capacity (AC23A 400V)		A	320				360	1000			
Mechanical life		cycles	100,000				100,000	30,000			
Electrical life (IEC AC21A)		cycles	100,000				15,000	30,000			
UL/CSA general use at 600V		A	16	25	32	40	50	60	100	100	100
UL/CSA short-circuit rating at 600V		kA	5	5	5	5	5	10	10	10	10
UL/CSA fuse class/max rating at 600V		Type/A	RK5/20	RK5/30	RK5/35	RK5/45	RK5/45	–/100	–/100	–/100	–/100
UL/CSA HP ratings	120V	HP	1	1½	2	2	3	3	3	5	7½
Single phase	240V	HP	2	3	5	5	7½	7½	10	10	10
Three phase	200-208V	HP	5	7½	10	10	10	20	25	30	25
	240V	HP	5	7½	10	15	15	20	30	30	30
	480V	HP	10	15	20	20	30	40	40	50	50
	600V	HP	10	20	20	25	30	40	40	60	40
Terminals		Type	Lug clamp❶								
		A mm	5.6 (0.22")					12.4 (0.49")			
		B mm	6.5 (0.26")					10.4 (0.41")			
		Screw	M4					M8			
		Tool	Phillips 2					Metric Allen key 4			
Tightening torque min...max		Nm	1.8...2					5...6			
		lbin	16...18					45...54			
Conductor section min...max (flexible/stranded)		mm^2	0.75...16					4...50			
		AWG	18...6					12...1			
AMBIENT CONDITIONS											
Temperature	Operating	°C	-25…+55								
	Storage	°C	-40…+70								
Maximum altitude		m	3000								
Mounting position	Normal		Vertical								
	Admissible		Any								
Fixing			By screw or on 35mm DIN rail (IEC/EN 60715)								

❶ IEC/EN 60947-1 designation: Pillar terminal.