Lovato electric
ENERGY AND AUTOMATION

ROTARY CAM SWITCH 7GN SERIES, VOLTMETER SWITCH FOR PHASE-NEUTRAL VOLTAGES 16A, FOR REAR MOUNTING WITH BLACK HANDLE, FRONT PLATE 48X48MM

Product designation			Rotary cam switches
Product type designation			7GN12
General characteristics			
Switching diagram			68 - Voltmeter switch for phase-neutral voltages
N° of elements			2
Mounting form			O - Rear mounting with black handle
Contact characteristics			
Rated insulation voltage Ui			
	IEC/EN	V	690
	UL/CSA	V	600
Rated impulse withstand voltage Uimp		kV	6
Conventional free air thermal current Ith			
	IEC/EN	A	16
	UL/CSA	A	15
Rated operational voltage		V	480
Rated operational impulse voltage		kV	4
Maximum fuse size for short-circuit protection In (gG)			
	10kA	A	16
	15kA	A	10
	25kA	A	10
Rated short time current Icw			
	1s	kA	200
Conductivity			10/5 mA/V
Operational current Ie IEC/EN			
AC1/AC21A			
		A	16
AC15			
	110V	A	10
	220/230V	A	8
	380/400V	A	4
	660/690V	A	1.5
Rated operational power in AC			
Three-phase AC-3			
	220/230V	kW	2.5
	380/440V	kW	4
	500/690V	kW	5.5
Single-phase AC-3			
	110V	kW	0.8
	220/230V	kW	1.5
	380/440V	kW	2.2
Three-phase AC23A			
	220/230V	kW	3
	380/440V	kW	5.5
	500/690V	kW	7.5
Single-phase AC23A			
	110V	kW	0.8
	220/230V	kW	1.7
	380/440V	kW	3
Rated operational current in DC			

7GN1268O

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VOLTAGES 16A, FOR REAR MOUNTING WITH BLACK HANDLE, FRONT PLATE 48X48MM

DC21A			
	48V	A	12
	60V	A	12
	110V	A	4
	220V	A	0.6
	440V	A	0.25
DC23A (poles in series)			
	24V	A	10 (1)
	48V	A	10 (2)
	60V	A	10 (3)
	110V	A	5 (3)
	220V	A	5 (4)
DC13			
	24V	A	12
	48V	A	10
	60V	A	8
	110V	A	1
	220V	A	0.4
	440V	A	0.15
Power dissipation		W	0.8

Mechanical features

Terminals screw			M3
Tightening torque for terminals max		Nm	0.5
Conductor size			
AWG - Rigid cable			
	min	AWG	20
	Max	AWG	12
AWG - Flexible cable			
	min	AWG	20
	Max	AWG	14
Conductor size (IEC) - Flexible cable			
	min	mm²	0.5
	Max	mm²	2.5
Conductor size (IEC) - Rigid cable			
	min	mm²	0.5
	Max	mm²	2.5
Mechanical life		cycles	3×10^6

UL technical data

Motor power for direct-on-line control			
for three-phase motor			
	120V	HP	1.5
	240V	HP	3
for single-phase motor			
	120V	HP	0.5
	240V	HP	1

Ambient conditions

Temperature			
Operating temperature			
	min	°C	-25
	max	°C	+55
Storage temperature			
	min	°C	-40
	max	°C	+70

Resistance & Protection

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Frontal IP degree	IP40
Terminals IP degree	IP00

Dimensions
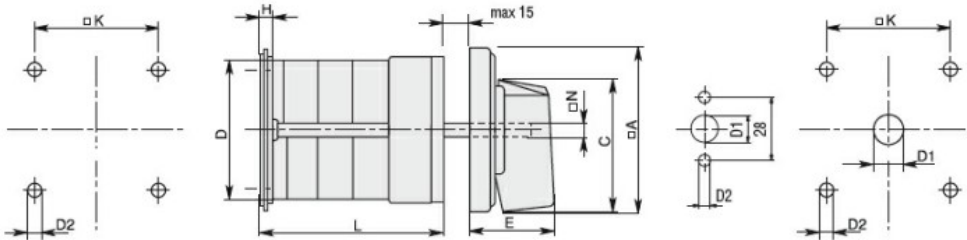
Series	Dimensions								L Number of elements											
	□A	C	ØD	ØD2	E	H	□K	□N	1	2	3	4	5	6	7	8	9	10	11	12
7GN12	48	39.5	39	5	26.5	5	36	6	38.1	47.8	57.5	67.2	76.9	86.6	96.3	106	115.7	125.4	135.1	144.8
7GN20	48	39.5	39	5	26.5	5	36	6	38.1	47.8	57.5	67.2	76.9	86.6	96.3	106	115.7	125.4	135.1	144.8
7GN25	48	39.5	43	5	26.5	5	36	6	42.5	56.1	69.7	83.3	96.9	110.5	124.1	137.7	151.3	164.9	178.5	192.1
7GN32	65	53	58	5	34.5	5.5	48	7	48.5	63.6	78.7	93.8	108.9	124	139.1	154.2	169.3	184.4	199.5	214.6
7GN40	65	53	58	5	34.5	5.5	48	7	48.5	63.6	78.7	93.8	108.9	124	139.1	154.2	169.3	184.4	199.5	214.6
7GN63	65	53	62	6	34.5	7.5	68	7	53.3	71.4	89.5	107.6	125.7	143.8	161.9	180	198.1	216.2	234.3	252.4
7GN125	90	70.5	86	6	41.4	7.5	68	9	74.8	103.9	133	162.1	191.2	220.3	249.4	278.5	307.6	336.7	365.8	394.9

Wiring diagrams
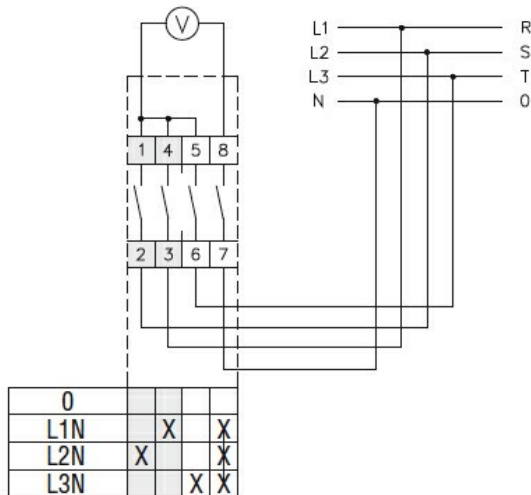
Certifications and compliance

Compliance

CSA C22.2 n° 14

IEC/EN/BS 60947-1

IEC/EN/BS 60947-3

IEC/EN/BS 60947-5-1

UL60947-4-1

Certificates

cCSAus

EAC

UL

ETIM classification

ETIM 8.0

EC001029 - Selector switch, complete