Lovato electric
ENERGY AND AUTOMATION

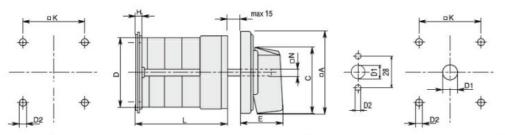|			
Product designation			Rotary cam switches
Product type designation			7GN40
General characteristics			
Switching diagram			13 - Dahlander motor control switch 1-0-2
N° of elements			4
Mounting form			O - Rear mounting with black handle
Contact characteristics			
Rated insulation voltage Ui			
	IEC/EN	V	690
	UL/CSA	V	600
Rated impulse withstand voltage Uimp		kV	6
Conventional free air thermal current Ith			
	IEC/EN	A	40
	UL/CSA	A	50
Rated operational voltage		V	480
Rated operational impulse voltage		kV	4
Maximum fuse size for short-circuit protection In (gG)			
	10kA	A	40
	15kA	A	40
	25kA	A	40
	50kA	A	40
	63kA	A	40
Rated short time current Icw			
	1s	A	1000
Conductivity			10/5 mA/V
Operational current Ie IEC/EN			
AC1/AC21A			
		A	40
AC15			
	110V	A	25
	220/230V	A	22
	380/400V	A	12
	660/690V	A	2
Rated operational power in AC			
Three-phase AC-3			
	220/230V	kW	8
	380/440V	kW	15
	500/690V	kW	15
Single-phase AC-3			
	110V	kW	3
	220/230V	kW	6.5
	380/440V	kW	8
Three-phase AC23A			
	220/230V	kW	8
	380/440V	kW	18.5
	500/690V	kW	22
Single-phase AC23A			
	110V	kW	3

ROTARY CAM SWITCH 7GN SERIES, DAHLANDER MOTOR CONTROL SWITCH 1-0-2, 40A, FOR REAR MOUNTING WITH BLACK HANDLE, FRONT PLATE 65X65MM

		220/230V	kW	6
		380/440V	kW	11
Rated operational current in DC				
	DC21A			
		48V	A	40
		60V	A	40
		110V	A	6
		220V	A	0.9
	DC23A (poles in series)			
		24V	A	40 (1)
		48V	A	40 (2)
		60V	A	40 (3)
		110V	A	20 (3)
		220V	A	12 (4)
	DC13			
		24V	A	40
		48V	A	32
		60V	A	16
		110V	A	3
Power dissipation			W	2.0

Mechanical features

Terminals screw				M4
Tightening torque for terminals max			Nm	1.2
Conductor size				
	AWG - Rigid cable			
		min	AWG	16
		Max	AWG	8
	AWG - Flexible cable			
		min	AWG	16
		Max	AWG	10
	Conductor size (IEC) - Flexible cable			
		min	mm²	1.5
		Max	mm²	6
	Conductor size (IEC) - Rigid cable			
		min	mm²	1.5
		Max	mm²	10
Mechanical life			cycles	5×10^6

UL technical data

Motor power for direct-on-line control				
	for three-phase motor			
		120V	HP	5
		240V	HP	10
		480V	HP	20
		600V	HP	20
	for single-phase motor			
		120V	HP	2
		240V	HP	5

Ambient conditions

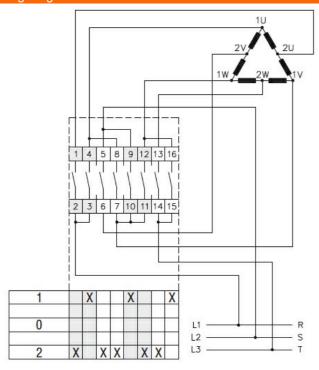|				
Temperature				
	Operating temperature			
		min	°C	-25
		max	°C	+55
	Storage temperature			
		min	°C	-40

7GN4013O

ROTARY CAM SWITCH 7GN SERIES, DAHLANDER MOTOR CONTROL SWITCH 1-0-2, 40A, FOR REAR MOUNTING WITH BLACK HANDLE, FRONT PLATE 65X65MM

	max	°C	+70

Resistance & Protection

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

7GN4013O

The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding

3 / 4

7GN4013O

ROTARY CAM SWITCH 7GN SERIES, DAHLANDER MOTOR CONTROL SWITCH 1-0-2, 40A, FOR REAR MOUNTING WITH BLACK HANDLE, FRONT PLATE 65X65MM

Certificates

cCSAus	
EAC	
UL	

ETIM classification

ETIM 8.0	EC001029 - Selector switch, complete