



Rotary cam
switches
7GN20

Product designation

Product type designation

General characteristics

Switching diagram

N° of elements

Mounting form

13 - Dahlander
motor control
switch 1-0-2

U - Front
mounting with
black handle

Contact characteristics

Rated insulation voltage U_i

IEC/EN	V	690
UL/CSA	V	600

Rated impulse withstand voltage U_{imp}

kV 6

Conventional free air thermal current I_{th}

IEC/EN	A	20
UL/CSA	A	20

Rated operational voltage

V 480

Rated operational impulse voltage

kV 4

Maximum fuse size for short-circuit protection I_n (gG)

10kA	A	20
15kA	A	16
25kA	A	16

Rated short time current I_{cw}

1s kA 250

Conductivity

10/5 mA/V

Operational current I_e IEC/EN

AC1/AC21A

A 20

AC15

110V	A	10
220/230V	A	8
380/400V	A	6
660/690V	A	1.5

Rated operational power in AC

Three-phase AC-3

220/230V	kW	3
380/440V	kW	5.5
500/690V	kW	5.5

Single-phase AC-3

110V	kW	0.8
220/230V	kW	2.2
380/440V	kW	3

Three-phase AC23A

	220/230V	kW	5
	380/440V	kW	7.5
	500/690V	kW	7.5
Single-phase AC23A			
	110V	kW	0.8
	220/230V	kW	2.5
	380/440V	kW	3.7
Rated operational current in DC			
DC21A			
	48V	A	20
	60V	A	20
	110V	A	4
	220V	A	0.6
	440V	A	0.25
DC23A (poles in series)			
	24V	A	20 (1)
	48V	A	20 (2)
	60V	A	20 (3)
	110V	A	10 (3)
	220V	A	8 (4)
DC13			
	24V	A	20
	48V	A	16
	60V	A	12
	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	mm ²	0.5
	Max	mm ²	2.5
Conductor size (IEC) - Rigid cable			
	min	mm ²	0.5
	Max	mm ²	2.5
Mechanical life		cycles	5x10 ⁶
UL technical data			
Motor power for direct-on-line control			
for three-phase motor			
	120V	HP	1.5
	240V	HP	3
	480V	HP	7.5
	600V	HP	10
for single-phase motor			
	120V	HP	0.75

240V HP 2

Ambient conditions

Temperature

Operating temperature

min	°C	-25
max	°C	+55

Storage temperature

min	°C	-40
max	°C	+70

Resistance & Protection

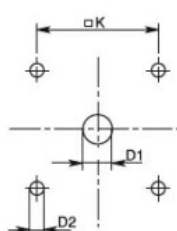
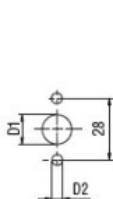
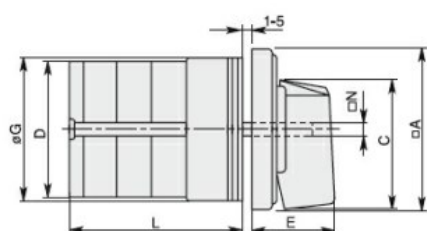
Frontal IP degree

IP40

Terminals IP degree

IP00

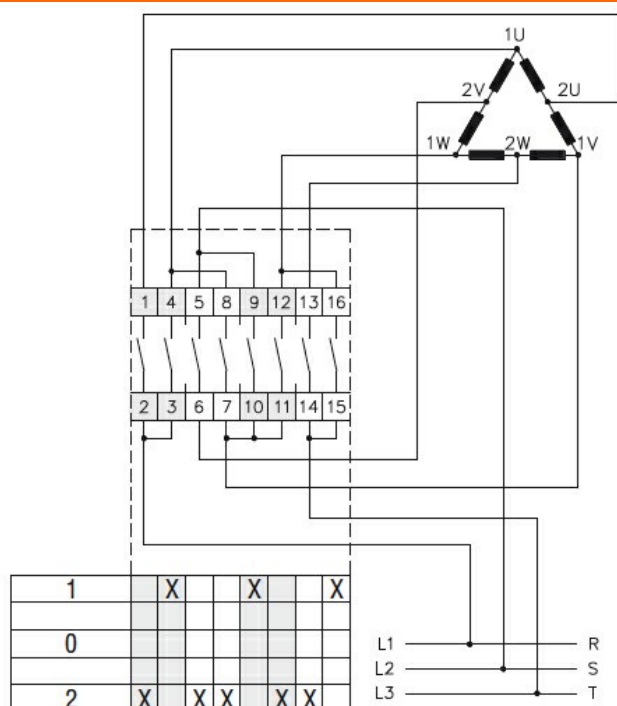
Dimensions



Standard drillings for 7GN125.
Drillings on request for 4 screws fixing
(4V version).

Series	Dimensions									L Number of elements											
	ØA	C	ØD	ØD1	ØD2	E	ØG	ØK	ØN	1	2	3	4	5	6	7	8	9	10	11	12
7GN12	48	39.5	39	12	5	26.5	38	36	6	36.1	45.8	55.5	65.2	74.9	84.6	94.3	104	113.7	123.4	133.1	142.8
7GN20	48	39.5	39	12	5	26.5	38	36	6	36.1	45.8	55.5	65.2	74.9	84.6	94.3	104	113.7	123.4	133.1	142.8
7GN25	48	39.5	43	12	5	26.5	38	36	6	40.5	54.1	67.7	81.3	94.9	108.5	122.1	135.7	147.3	162.9	176.5	190.1
7GN32	65	53	58	14	5	34.5	58.5	48	7	46.5	61.6	76.7	91.8	106.9	122	137.1	152.2	167.3	182.4	197.5	212.6
7GN40	65	53	58	14	5	34.5	58.5	48	7	46.5	61.6	76.7	91.8	106.9	122	137.1	152.2	167.3	182.4	197.5	212.6
7GN63	65	53	62	14	5	34.5	58.5	48	7	50.3	68.4	86.5	104.6	122.7	140.8	158.9	177	195.1	213.2	231.3	249.4
7GN125	90	70.5	86	16	6	41.5	84	68	9	67.3	96.4	125.5	154.6	183.7	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

EC001105 - Off-
load switch