

General characteristics

Switching diagram	13 - Dahlander motor control switch 1-0-2
N° of elements	4
Mounting form	P - Plastic enclosure 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	40
	UL/CSA	A	50
Rated operational voltage		V	480
Rated operational impulse voltage		kV	4
Maximum fuse size for short-circuit protection I_n (gG)	10kA	A	40
	15kA	A	40
	25kA	A	40
	50kA	A	40
	63kA	A	40
Rated short time current I_{cw}	1s	kA	1000
			10/5 mA/V
Conductivity			
Operational current I_e 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
	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
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Mechanical features

Terminals screw	M4
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Tightening torque for terminals max	Nm	1.2
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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	mm ²	1.5
Max	mm ²	6

Conductor size (IEC) - Rigid cable

min	mm ²	1.5
Max	mm ²	10

Mechanical life	cycles	5x10 ⁶
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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
max	°C	+70

Resistance & Protection

Frontal IP degree	IP65
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Terminals IP degree

IP00

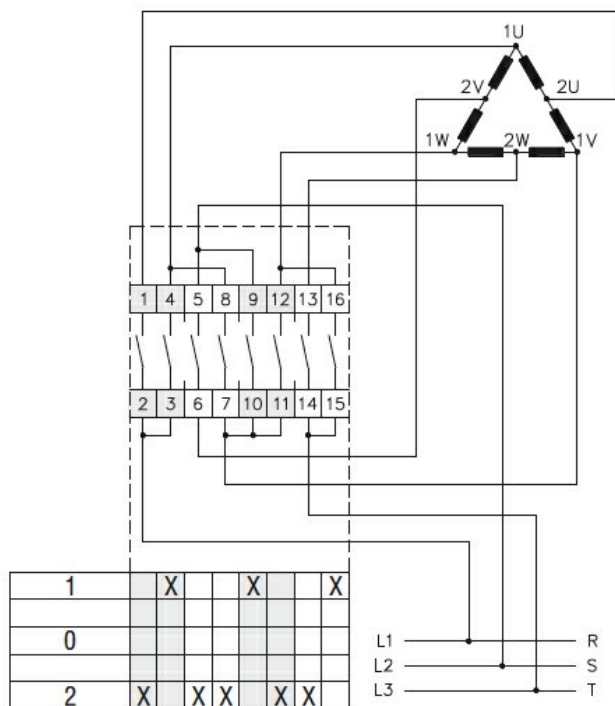
Dimensions

Series	Enclosure size	Number of elements		Dimensions										Cable entry	Protection degree
		L	L1	A	A1	C	C1	D	F	M	N	L	L1		
7GN12 ^①	75x75 ^②	1 - 2	3 - 4	75	75	50	64	4.5	19	14	28	57.5	79.8	4xPG13.5	IP65
7GN20 ^①		1 - 2	3 - 4												
7GN25 ^①		1	2 - 3												
7GN12 ^②	90x90	1 - 3	4 - 6	90	90	79	63	4.5	25	19	30	71.3	98.3	4xPG16	IP65
7GN20 ^②		1 - 3	4 - 6												
7GN25 ^②		1 - 2	3 - 4												
7GN32 ^②		1	2 - 3												
7GN40 ^②	110x110	1	2 - 3	110	110	98.4	83	4.5	32	21	39.5	85.5	119.5	4xPG21	IP65
7GN12 ^②		1 - 4	5 - 8												
7GN20 ^②		1 - 4	5 - 8												
7GN25 ^②		1 - 3	4 - 5												
7GN32 ^②		1 - 2	3 - 5												
7GN40 ^②		1 - 2	3 - 5												
7GN63 ^②	125x175	1 - 2	3 - 4	125	175	146	112	5.5	32	21	68	84.3	118.3	4xPG21 2xPG11	IP65
7GN32 ^②		1 - 2	3 - 4												
7GN40 ^②		1 - 2	3 - 4												
7GN125 ^②		1	2												
7GN32 ^②	198x248	—	1 - 7	198	248	190-210	140-180	5.5	32	35	104	—	166.5	6xPG16- 21-29	IP65
7GN40 ^②		—	1 - 7												
7GN63 ^②		—	1 - 6												
7GN125 ^②		—	1 - 4												

① Standard dimensions for cam switch in plastic enclosure with black handle (P).

② Standard dimensions for cam switch in plastic enclosure with red/yellow handle padlockable in 0 (P25).

Wiring diagrams



Certifications and compliance

Compliance

IEC/EN/BS 60947-1

IEC/EN/BS 60947-3

IEC/EN/BS 60947-5-1

Certificates

EAC

ETIM classification

ETIM 8.0

EC001029 -
Selector switch,
complete