

### General characteristics

Switching diagram	86 - Multi-step 1-2-3 2 poles
N° of elements	3
Mounting form	O - Rear 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	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			10/5 mA/V	
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				

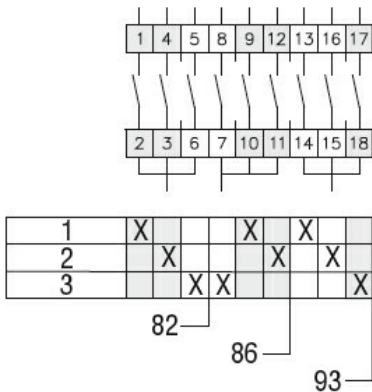
	48V	A	40
	60V	A	40
	110V	A	6
	220V	A	0.9
DC23A (poles in series)	24V	A	40 (1)
	48V	A	40 (2)
	60V	A	40 (3)
	110V	A	20 (3)
	220V	A	12 (4)
DC13	24V	A	40
	48V	A	32
	60V	A	16
	110V	A	3
Power dissipation		W	2.0
<b>Mechanical features</b>			
Terminals screw			M4
Tightening torque for terminals max		Nm	1.2
Conductor 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	mm <sup>2</sup>	1.5
	Max	mm <sup>2</sup>	6
Conductor size (IEC) - Rigid cable	min	mm <sup>2</sup>	1.5
	Max	mm <sup>2</sup>	10
Mechanical life		cycles	5x10 <sup>6</sup>
<b>UL technical data</b>			
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
<b>Ambient conditions</b>			
Temperature			
Operating temperature	min	°C	-25
	max	°C	+55
Storage temperature	min	°C	-40
	max	°C	+70
<b>Resistance &amp; Protection</b>			
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