

Product designation				Rotary cam switches
Product type designation				7GN20
<b>General characteristics</b>				
Switching diagram				12 - Star-delta motor starter switch
N° of elements				4
Mounting form				Front mounting with black handle (U)
<b>Contact characteristics</b>				
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 $I_{cw}$		1 s	A	250
				10/5 mA/V
Conductivity				10/5 mA/V
Operational current $I_e$ IEC/EN	AC1/AC21A			A 20
	AC15			
Rated operational power in AC				110V
				A 10
				220/230V
				A 8
				380/400V
				A 6
				660/690V
				A 1.5
	Three-phase AC3			
				220/230V
			kW 3	
			380/440V	
			kW 5.5	
			500/690V	
			kW 5.5	
Single-phase AC3				
			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	
<b>Rated operational current in DC</b>				

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	
<b>Mechanical features</b>				
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 <sup>2</sup>	0.5	
	Max	mm <sup>2</sup>	2.5	
Conductor size (IEC) - Rigid cable				
	min	mm <sup>2</sup>	0.5	
	Max	mm <sup>2</sup>	2.5	
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	1.5	
	240V	HP	3	
	480V	HP	7.5	
	600V	HP	10	
for single-phase motor				
	120V	HP	0.75	
	240V	HP	2	
<b>Ambient conditions</b>				
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**

**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