

7GN20T897U47

Product type designation 7GN20 General characteristics	Product designation			Enclosed rotary cam switch	
General characteristics 86 - Multi-step Switching diagram 2-3 2 poles N° of elements 3 Mounting form P - Plastic enclosure with black handle Contact characteristics 1EC/EN V Rated insulation voltage Ui 1EC/EN V 600 Conventional free air thermal current tth 1EC/EN A 20 Rated operational voltage V 480 480 Rated operational impulse voltage V 480 Rated operational impulse voltage KV 4 Maximum fuse size for short-circuit protection In (gG) 10kA A 20 Conductivity 10 s A 16 Conductivity 10/KA A 20 Conductivity 10/KA A 20 Conductivity 10/KA A 20 Conductivity 10/KA A 20 Conductivity 10 225/KA 16 Conductivity 10 220/230V KW 3 Cod	Product type designation				
Switching diagram 2-3 2 poles N° of elements 3 Mounting form P - Plastic enclosure with black handle Contact characteristics IEC/EN V Rated insulation voltage Ui IEC/EN V Rated insulation voltage Ump kV 6 Conventional free air thermal current lth IEC/EN A 20 Rated operational voltage V 480 A 20 Rated operational impulse voltage kV 4 Maximum fuse size for short-circuit protection In (gG) 10kA A 20 Rated short time current lcw 1s A 20 10/5 mA/V Qperational current lcw 1s A 20 Conductivity 10/5 mA/V 10/5 mA/V Operational current lcw 10/5 mA/V 20/22/02/40/4 A AC15 110/V A 10 220/23/07/4 A AC15 110/V A 10 220/23/07/4 A 5 Rated operational power in AC Three-phase AC-3 10/V					
Mounting form P - Plastic enclosure with black handle Contact characteristics enclosure with black handle Rated insulation voltage Ui IEC/EN V 690 Rated insulation voltage Uimp kV 6 Conventional free air thermal current lth IEC/EN A 20 Rated operational voltage V 480 480 Rated operational impulse voltage KV 4 Maximum fuse size for short-circuit protection In (gG) 10kA A 20 Conductivity 10kA A 20 10/5 mA/V Operational current lcw 1s A 250 Conductivity 1s A 20 Querational current lcw 1s A 20 AC1/AC21A A 20 A 10/5 mA/V Querational power in AC 100V A 8 380/400V A 6 Single-phase AC-3 10V KW 5.5 380/440V KW 5 Single-phase AC23A 220/230V KW	Switching diagram			86 - Multi-step 1- 2-3 2 poles	
Mounting form enclosure with black handle Contact characteristics IEC/EN V 690 Rated insulation voltage Ui IEC/EN V 690 Rated insulation voltage withstand voltage Uimp KV 6 Conventional free air thermal current Ith IEC/EN A 20 Rated operational voltage V 480 Rated operational impulse voltage kV 4 Maximum fuse size for short-circuit protection In (gG) 10kA A 20 15kA A 16 16 Rated short time current Icw 1s A 250 Conductivity 10% mAV 00/5 mAV 00/5 mAV Operational current Ie IEC/EN 4 20 10% mAV Operational current Ie IEC/EN 20/2020V A 8 380/400V A 6 6 220/230V KW 3 380/40V KW 5 Single-phase AC-3 110V KW 3 380/40V KW 5 Single-ph	N° of elements				
black handle Contact characteristics Rated insulation voltage Ui IEC/EN V 690 Conventional insulation voltage Uimp KV 6 Conventional free air thermal current Ith IEC/EN A 20 Rated operational voltage V 480 A 20 Rated operational voltage KV 4 A 20 Itated operational voltage KV 4 A Maximum fuse size for short-circuit protection In (gG) 10kA A 20 15kA A 16 A 16 Conductivity 1s A 250 Conductivity 1s A 250 Conductivity 10/5 mA/V Operational current Icw A 20 A 20/230V A 8 A 20/230V A 8	Mounting form				
IEC/EN V 690 IEC/EN V 690 Rated inpulse withstand voltage Uimp KV 6 Conventional free air thermal current lth IEC/EN A 20 Rated operational voltage V 480 Rated operational inpulse voltage KV 4 Rated operational voltage KV 4 30 30 4 20 Rated operational inpulse voltage KV 4 480 30 30 4 16 Rated operational inpulse voltage KV 4 30 30 4 16 Rated short time current low 10KA A 250 20 30					
IEC/EN V 690 Rated impulse withstand voltage Uimp KV 6 Conventional free air thermal current Ith IEC/EN A 20 Rated operational voltage V 480 480 Rated operational impulse voltage KV 4 Maximum fuse size for short-circuit protection In (gG) 10kA A 20 15kA A 16 16 Rated short time current Icw 1s A 250 Conductivity 1s A 250 Conductivity 1s A 250 Conductivity 1s A 250 Conductivity 10/5 mA/V 00/5 mA/V Operational current Ic A 20 AC1/AC21A A 20 AC15 110V A 10 220/230V A 8 380/440V KW 5.5 Single-phase AC-3 110V KW 3.5 380/440V KW 5.5 Single-phase AC-3					
UL/CSA V 600 Rated impulse withstand voltage Uimp KV 6 Conventional free air thermal current Ith IEC/EN A 20 Rated operational voltage V 480 Rated operational impulse voltage KV 4 Maximum fuse size for short-circuit protection In (gG) 10kA A 20 15kA A 16 25kA A 16 Rated short time current Icw 1s A 250 Conductivity 10/5 mA/V Operational current le IEC/EN A 20 AC15 10/V A 10 Z20/230V A 8 380/400V A 6 660/690V A 1.5 Rated operational power in AC Three-phase AC-3 200/230V KW 3.5 500/690V KW 3.5 Single-phase AC-3 110V KW 0.8 220/230V KW 3.5 Single-phase AC-3 110V KW 3.8 3.5 5.5 5.5 5.5 5.5 <t< td=""><td>Rated insulation voltage Ui</td><td></td><td></td><td></td></t<>	Rated insulation voltage Ui				
Rated impulse withstand voltage Ulimp kV 6 Conventional free air thermal current Ith IEC/EN A 20 Rated operational voltage V 480 Rated operational impulse voltage KV 4 Maximum fuse size for short-circuit protection In (gG) 10kA A 20 15kA A 16 16 16 Rated short time current Icw 1s A 250 Conductivity 1s A 250 Conductivity 10/5 mA/V 10/5 mA/V Operational current Ic IEC/EN A 10 220/230V A 8 AC15 110V A 10 220/230V A 8 Rated operational power in AC Three-phase AC-3 220/230V kW 3 Single-phase AC-3 110V KW 0.8 220/230V kW 3 Single-phase AC-3 110V KW 3 380/440V KW 3 Single-phase AC23A 220/230V KW 3 <td></td> <td></td> <td></td> <td></td>					
Conventional free air thermal current lth IEC/EN A 20 Rated operational voltage V 480 Rated operational impulse voltage kV 4 Maximum fuse size for short-circuit protection ln (gG) 10kA A 20 15kA A 16 25kA A 16 Rated short time current lcw 1s A 250 10kA A 20 Conductivity 1s A 250 100/5 mA/V 0perational current lcw 1s A 250 Conductivity 10/5 mA/V 0perational current lc IEC/EN 4C1/AC21A A 20 AC15 110V A 10 220/230V A 8 Rated operational power in AC Three-phase AC-3 220/230V kW 3 Single-phase AC-3 110V kW 3.80/440V kW 2.2 380/440V kW 3.5 380/440V kW 3.5 Single-phase AC-3 110V kW 3.80/440V kW		UL/CSA			
IEC/EN A 20 Rated operational voltage V 480 Rated operational impulse voltage KV 4 Maximum fuse size for short-circuit protection ln (gG) 10kA A 20 15kA A 16 25kA A 16 Rated short time current lcw 1s A 250 250 Conductivity 10/5 mA/V 00perational current le IEC/EN AC1/AC21A A 20 AC15 110V A 10 220/230V A 8 380/4400V A 6 6 6 6 6 660/690V A 1.5 S S S S S Rated operational power in AC Three-phase AC-3 220/230V KW 3 3 S Single-phase AC-3 110V KW 3.8 S S S 220/230V KW 5.5 S S S S S Single-phase AC-3 10			kV	6	
UL/CSA A 20 Rated operational impulse voltage V 480 Rated operational impulse voltage kV 4 Maximum fuse size for short-circuit protection ln (gG) 10kA A 20 15kA A 16 25kA A 16 Rated short time current lcw 1s A 250 250 Conductivity 10/5 mA/V 10/5 mA/V 0/5 mA/V Operational current le IEC/EN A 20 AC15 AC15 110V A 10 220/230V A 8 380/400V A 6 AC15 110V A 10 220/230V A 8 Rated operational power in AC 1.5 380/440V KW 5.5 Single-phase AC-3 110V KW 0.8 220/230V KW 3 Actis 220/230V kW 5.5 500/690V kW 2.2 Bold/400V kW 2.2 380/440V KW <td>Conventional free air thermal current Ith</td> <td></td> <td>•</td> <td>00</td>	Conventional free air thermal current Ith		•	00	
Rated operational voltage V 480 Rated operational impulse voltage kV 4 Maximum fuse size for short-circuit protection ln (gG) 10kA A 20 15kA A 16 25kA A 16 Rated short time current lcw 1s A 250 0 Conductivity 1s A 250 0 Operational current le IEC/EN AC1/AC21A A 20 AC15 110V A 10 220/230V A 8 380/400V A 6 660/690V A 1.5 S S S Rated operational power in AC Three-phase AC-3 220/230V kW 3 3 Single-phase AC-3 110V kW 0.8 220/230V kW 3 Single-phase AC-3 110V kW 3 3 3 3 Single-phase AC23A 220/230V kW 5 3 3 3 Single-ph					
Rated operational impulse voltage kV 4 Maximum fuse size for short-circuit protection ln (gG) 10kA A 20 15kA A 16 Rated operational impulse voltage 18 A 20 15kA A 16 Rated short time current lcw 1s A 250 Conductivity 10/5 mA/V 10/5 mA/V Operational current le IEC/EN A 20 AC15 110V A 10 220/230V A 8 380/400V A 6 660/690V A 1.5 1.5 1.5 1.5 Rated operational power in AC 220/230V kW 3 380/400V A 6 500/690V kW 5.5 5 5 5 5 5 Single-phase AC-3 110V kW 0.8 220/230V kW 3 200/230V kW 3.8 380/440V kW 3.5 Single-phase AC23A	Poted operational voltage	UL/CSA			
Maximum fuse size for short-circuit protection ln (gG) 10kA A 20 15kA A 16 25kA A 16 Rated short time current lcw Is A 250 Conductivity 10/5 mA/V Operational current le 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 110V KW 3 380/440V kW 5.5 Single-phase AC-3 10V kW 2.2 380/440V kW 2.2 380/440V kW 2.5 Single-phase AC23A 220/230V kW 5 <td co<="" td=""><td></td><td></td><td>-</td><td></td></td>	<td></td> <td></td> <td>-</td> <td></td>			-	
10kA A 20 15kA A 16 Rated short time current Icw 1s A 250 Conductivity 10/5 mA/V 10/5 mA/V Operational current Ic IEC/EN A 20 AC1/AC21A A 20 AC15 110V A 10 220/230V A 8 380/400V A 6 660/690V A 1.5 15 15 15 Rated operational power in AC Three-phase AC-3 220/230V KW 3 380/400V KW 5.5 Single-phase AC-3 110V KW 0.8 220/230V KW 3 220/230V kW 5.5 500/690V kW 5.5 500/690V kW 3 380/440V kW 0.8 220/230V kW 2.2 380/440V kW 3 Three-phase AC23A 220/230V kW 5 380/440V kW 5 380/440V kW			ΓV	4	
15kA A 16 Rated short time current lcw 1s A 250 Conductivity 1s A 250 Operational current le IEC/EN AC1/AC21A A 20 AC15 110V A 10 220/230V A 8 380/400V A 6 660/690V A 1.5 5 5 5 Rated operational power in AC Three-phase AC-3 220/230V KW 3 3 Single-phase AC-3 110V KW 0.8 220/230V kW 3 Three-phase AC-3 110V kW 3 3 3 220/230V kW 3 3 3 3 380/440V kW 3 3 3 3 110V kW 0.8 2 3 3 220/230V kW 3 3 3 3 110V kW 0.8 3 3 3 <td>Maximum ruse size for short-circuit protection in (go)</td> <td>10kA</td> <td>Δ</td> <td>20</td>	Maximum ruse size for short-circuit protection in (go)	10kA	Δ	20	
25kA A 16 Rated short time current lcw 1s A 250 Conductivity 10/5 mA/V Operational current le IEC/EN 10/5 mA/V AC1/AC21A A 20 AC15 100V A 10 AC15 110V A 10 220/230V A 8 380/400V A 6 660/690V A 1.5 15 A 15 A 15 Rated operational power in AC Three-phase AC-3 220/230V kW 3 380/440V kW 5.5 Single-phase AC-3 110V kW 0.8 220/230V kW 3 Three-phase AC-3 110V kW 3 380/440V kW 3 Three-phase AC23A 220/230V kW 3 380/440V kW 3 Three-phase AC23A 220/230V kW 5 380/440V kW 3 Three-phase AC23A 220/230V kW 5 380/440V					
Rated short time current low 1s A 250 Conductivity 10/5 mA/V 10/5 mA/V Operational current le IEC/EN AC1/AC21A A 20 AC15 110V A 10 220/230V A 8 380/400V A 6 660/690V A 1.5 Three-phase AC-3 220/230V kW 3 Rated operational power in AC Three-phase AC-3 220/230V kW 3 380/440V kW 5.5 500/690V kW 5.5 500/690V kW 2.2 380/440V kW 3					
Conductivity 10/5 mA/V Operational current le IEC/EN AC1/AC21A A 20 AC15 110V A 10 220/230V A 8 380/400V A 6 660/690V A 1.5 1.5 1.5 1.5 Rated operational power in AC Three-phase AC-3 220/230V kW 3 380/440V kW 5.5 Single-phase AC-3 110V KW 0.8 220/230V kW 2.2 380/440V kW 3 380/440V kW 3 Three-phase AC-3 110V kW 0.8 220/230V kW 3 Three-phase AC-3 110V kW 0.8 220/230V kW 3 Three-phase AC23A 220/230V kW 5 380/440V kW 7.5 Single-phase AC23A 220/230V kW 5 500/690V kW 7.5 Single-phase AC23A 110V kW 0.8 20/230V	Rated short time current Icw				
Operational current le 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 3 380/40V kW 5.5 500/690V kW 5.5 Single-phase AC-3 110V kW 0.8 220/230V kW 2.2 380/440V kW 3 380/440V kW 3 380/440V kW 3 Three-phase AC23A 110V kW 0.8 220/230V kW 5 Single-phase AC23A 220/230V kW 5 380/440V kW 7.5 Single-phase AC23A 110V kW 0.8 380/440V kW 7.5		1s	А	250	
Operational current le IEC/EN AC1/AC21A A 20 AC15 110V A 10 220/230V A 8 380/400V A 6 660/690V A 1.5 1.5 1.5 1.5 Rated operational power in AC Three-phase AC-3 220/230V kW 3 Single-phase AC-3 Three-phase AC23A Three-phase AC23A Three-phase AC23A Three-phase AC23A Single-phase AC23A Three-phase AC23A Three-phase AC23A Three-phase AC23A	Conductivity			10/5 mA/V	
A 20 AC15 110V A 10 220/230V A 8 380/400V A 6 660/690V A 1.5 15 15 15 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 2.2 380/440V KW 3 Three-phase AC-3 220/230V KW 2.2 380/440V KW 3 Three-phase AC23A 220/230V KW 5 Single-phase AC23A 220/230V KW 5 Single-phase AC23A X Single-phase AC23A					
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 3 380/440V kW 3 Three-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 5 380/440V kW 7.5 Single-phase AC23A 110V kW 0.8	AC1/AC21A				
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 3 380/40V kW 3 380/40V 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 AC-3 110V kW 0.8 220/230V kW 2.2 380/440V kW 3 3 3 Three-phase AC23A 220/230V kW 5 380/440V kW 5 380/440V kW 5 380/440V kW 7.5 500/690V kW 7.5 Single-phase AC23A Three-phase AC23A X			А	20	
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 3 380/40V kW 3 380/440V kW 5.5 Single-phase AC-3 110V kW 0.8 220/230V kW 2.2 380/440V kW 3 Three-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 5 380/440V kW 7.5 Single-phase AC23A 110V kW 7.5 Single-phase AC23A	AC15				
380/400V A 6 660/690V A 1.5 Rated operational power in AC Three-phase AC-3 220/230V kW 3 220/230V kW 5.5 500/690V kW 5.5 Single-phase AC-3 110V kW 0.8 220/230V kW 2.2 380/440V kW 2.2 380/440V kW 3 Three-phase AC-3 Three-phase AC23A 220/230V kW 2.2 380/440V kW 3 3 Single-phase AC23A 220/230V kW 5 380/440V kW 7.5 500/690V kW 7.5 Single-phase AC23A 110V kW 0.8 3		110V	А	10	
660/690V A 1.5 Rated operational power in AC Three-phase AC-3 220/230V kW 3 380/440V kW 5.5 Single-phase AC-3 500/690V 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 5.5 5 Single-phase AC23A 220/230V kW 5 380/440V kW 7.5 Single-phase AC23A 110V kW 0.8 110V kW 0.8			А	8	
Rated operational power in AC Three-phase AC-3 220/230V kW 3 380/440V kW 5.5 Single-phase AC-3 110V kW 0.8 220/230V kW 2.2 380/440V kW 3 Three-phase AC-3 Three-phase AC23A Three-phase AC23A 220/230V kW 5 380/440V kW 5 380/440V kW 7.5 Single-phase AC23A Three-phase AC23A 110V kW 5 Single-phase AC23A					
Three-phase AC-3 220/230V kW 3 380/440V kW 5.5 Single-phase AC-3 110V kW 0.8 220/230V kW 2.2 380/440V kW 3 Three-phase AC-3 Three-phase AC23A 220/230V kW 5 380/440V kW 5 380/440V kW 7.5 Single-phase AC23A 110V kW 0.8		660/690V	A	1.5	
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 5 380/440V kW 7.5 Single-phase AC23A 110V kW 0.8					
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 5 380/440V kW 7.5 Single-phase AC23A 7.5 Single-phase AC23A 110V kW 0.8	Three-phase AC-3			2	
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 5 380/440V kW 7.5 500/690V kW 7.5 Single-phase AC23A 110V kW 0.8					
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					
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	Single-phase AC-3	500/0901	r v v	5.5	
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	Ungle-phase AU-U	110\/	k\//	0.8	
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					
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 5 380/440V kW 7.5 500/690V kW 7.5 Single-phase AC23A 110V kW 0.8	Three-phase AC23A				
380/440V kW 7.5 500/690V kW 7.5 Single-phase AC23A 110V kW 0.8		220/230V	kW	5	
500/690V kW 7.5 Single-phase AC23A 110V kW 0.8					
110V kW 0.8					
110V kW 0.8	Single-phase AC23A				
220/230V kW 2.5		110V	kW		
Rated operational current in DC		380/440V	kW	3.7	

Rated operational current in DC



	DC21A			
	DOLIN	48V	А	20
		60V	A	20
		110V	A	4
		220V	A	0.6
		440V	A	0.25
	DC23A (poles in series)	440 V	~	0.23
	DOZSA (poles in series)	24V	А	20 (1)
		24V 48V	A	20 (1) 20 (2)
		48V 60V		
		110V	A	20 (3)
			A	10 (3)
	DC13	220V	A	8 (4)
	DC13	241/	٨	20
		24V	A	20
		48V	A	16
		60V	Α	12
		110V	A	1
		220V	А	0.4
		440V	А	0.15
Power dissipation			W	0.8
Mechanical features				
Terminals screw				M3
Tightening torque for te	erminals 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	mm²	0.5
		Max	mm²	2.5
	Conductor size (IEC) - Rigid cable			
		min	mm²	0.5
		Max	mm²	2.5
Mechanical life		max	cycles	5x10 ⁶
UL technical data			0,0100	UNIT OF THE OWNER OF
Motor power for direct-	-on-line control			
	for three-phase motor			
		120V	HP	1.5
		240V	HP	3
		240V 480V	HP	5 7.5
		400V 600V	HP	10
	for single phase motor	600 v		10
	for single-phase motor	1001/	ЦП	0.75
		120V	HP	0.75 2
Ambient conditions		240V	HP	2
Ambient conditions		2400	HP	2
Ambient conditions Temperature		2400	HP	2
	Operating temperature			
	Operating temperature	min	°C	-25
	Operating temperature Storage temperature	min	°C	-25

7GN20T897U47The 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



7GN20T897U47

	max	°C	+70
Resistance & Protection			
Frontal IP degree			IP40
Terminals IP degree			IP00
ETIM classification			
ETIM 8.0			EC001029 - Selector switch, complete