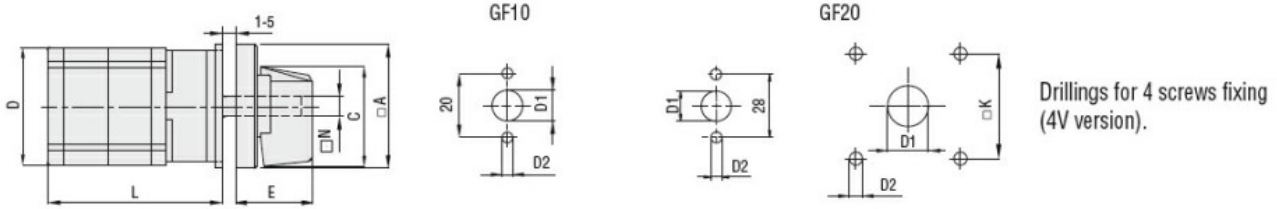


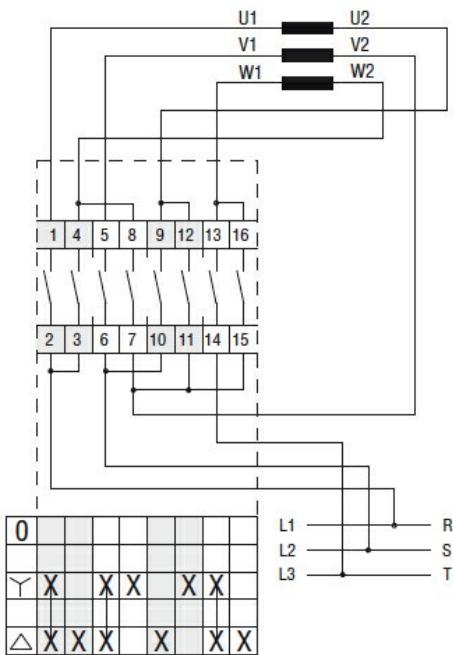
Product designation				Rotary cam switches
Product type designation				GF20
General characteristics				
Switching diagram				12 - Star-delta motor starter switch
N° of elements				4
Mounting form				U - Front mounting with black handle
Contact characteristics				
Rated insulation voltage U_i	IEC/EN	V	480	
	UL/CSA	V	240	
Rated impulse withstand voltage U_{imp}		kV	4	
Conventional free air thermal current I_{th}	IEC/EN	A	20	
	UL/CSA	A	15	
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	20	
	25kA	A	20	
Rated short time current I_{cw}		1s	kA	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	Three-phase AC-3			
	220/230V	kW	3	
	380/440V	kW	5	
Single-phase AC-3	110V	kW	0.5	
	220/230V	kW	1.5	
	380/440V	kW	2	
Three-phase AC23A	220/230V	kW	4	
	380/440V	kW	7.5	
Single-phase AC23A	110V	kW	0.75	
	220/230V	kW	2	
	380/440V	kW	2.5	
Rated operational current in DC	DC21A			
	48V	A	20	

	60V	A	20
	110V	A	4
	220V	A	0.7
	440V	A	0.2
<hr/>			
DC13	24V	A	6
	48V	A	6
	60V	A	3
	110V	A	1
	220V	A	0.4
	440V	A	0.15
<hr/>			
Power dissipation		W	0.8
Mechanical features			
Terminals screw			M3
Tightening torque for terminals max		Nm	0.5
<hr/>			
Conductor size	AWG - Rigid cable		
	min	AWG	20
	Max	AWG	12
<hr/>			
	AWG - Flexible cable		
	min	AWG	20
	Max	AWG	12
<hr/>			
	Conductor size (IEC) - Flexible cable		
	min	mm ²	0.5
	Max	mm ²	2.5
<hr/>			
	Conductor size (IEC) - Rigid cable		
	min	mm ²	0.5
	Max	mm ²	2.5
<hr/>			
Mechanical life		cycles	1x10 ⁶
UL technical data			
Motor power for direct-on-line control			
	for three-phase motor		
	240V	HP	3
	for single-phase motor		
	240V	HP	1
<hr/>			
Ambient conditions			
Temperature			
	Operating temperature		
	min	°C	-25
	max	°C	+55
	Storage temperature		
	min	°C	-40
	max	°C	+70
<hr/>			
Resistance & Protection			
Frontal IP degree			IP40
Terminals IP degree			IP20
<hr/>			
Dimensions			



Series	Dimensions								L Number of elements											
	□A	C	D	ØD1	ØD2	E	□K	N	1	2	3	4	5	6	7	8	9	10	11	12
GF10	30	24	29	9	3.2	18.5	-	Ø5	40	52	64	76	88	100	112	124	-	-	-	-
GF20	48	39.5	36	12	5	26.5	36	□6	44	57.5	71	84.5	98	111.5	125	138.5	152	165.5	179	192.5

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

cULus
EAC

ETIM classification

ETIM 8.0

EC001029 -
Selector switch,
complete