

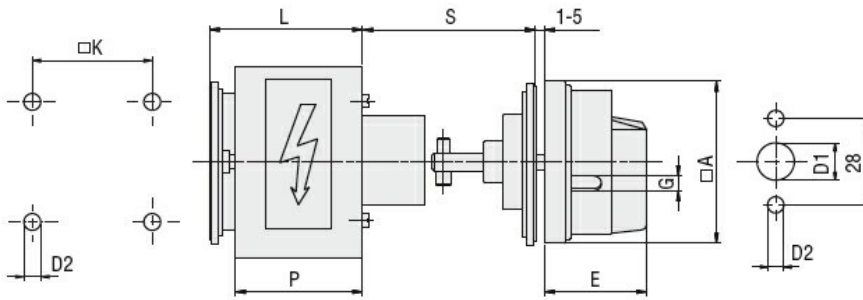
General characteristics

Switching diagram	12 - Star-delta motor starter switch
N° of elements	4
Mounting form	O88 - Rear mounting with red/yellow handle padlockable in 0, door coupling and protection covers

Contact characteristics

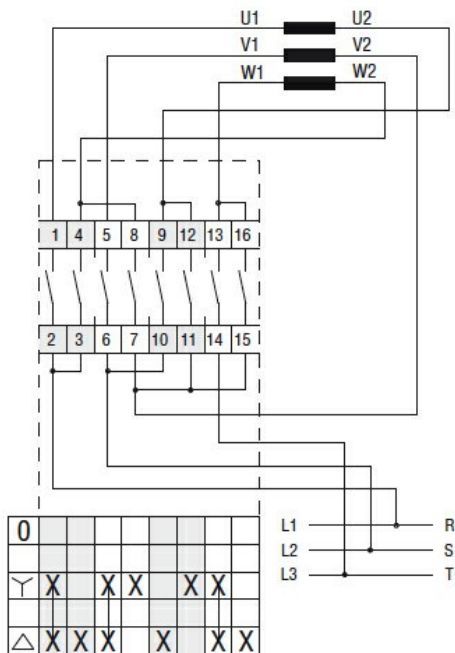
Rated insulation voltage U_i	IEC/EN	V	480	
	UL/CSA	V	240	
Rated impulse withstand voltage U_{imp}		kV	4	
Conventional free air thermal current I_{th}	IEC/EN	A	20	
	UL/CSA	A	15	
Rated operational voltage		V	480	
Rated operational impulse voltage		kV	4	
Maximum fuse size for short-circuit protection I_n (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			
	110V	A	10	
	220/230V	A	8	
	380/400V	A	6	
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
DC13		24V	A	6
		48V	A	6
		60V	A	3
		110V	A	1
		220V	A	0.4
		440V	A	0.15
Power dissipation			W	0.8
Mechanical features				
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	12
	Conductor size (IEC) - Flexible cable			
		min	mm ²	0.5
		Max	mm ²	2.5
	Conductor size (IEC) - Rigid cable			
		min	mm ²	0.5
		Max	mm ²	2.5
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
Ambient conditions				
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				IP20
Dimensions				



Series	Dimensions							L			
	□A	D1	D2	E	G	□K	S	1	2	3...12	
GF20	48	12	5	34.2	5	36	45-55	46	59.5	73	194.5

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