



Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage U_i IEC/EN	V	500	
Rated impulse withstand voltage U_{imp}	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current $I_{th} \leq 40^\circ\text{C}$	A	20	
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A	20
	AC-1 ($\leq 55^\circ\text{C}$)	A	18
	AC-1 ($\leq 70^\circ\text{C}$)	A	15
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A	9
	AC-4 (400V)	A	4
Rated operational power AC-3 ($T \leq 55^\circ\text{C}$)	230V	kW	2.2
	400V	kW	4
	415V	kW	4.3
	440V	kW	4.5
	500V	kW	5
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW	8
	400V	kW	14
	500V	kW	16
Short-time allowable current for 10s (IEC/EN60947-1)	A	96	
Protection fuse	gG (IEC)	A	20
	aM (IEC)	A	10
Making capacity (RMS value)	A	92	
Breaking capacity at voltage	440V	A	72
	500V	A	72
Resistance per pole (average value)	m Ω	10	
Power dissipation per pole (average value)	I_{th}	W	4
	AC-3	W	0.81
Tightening torque for terminals	min	Nm	0.8
	max	Nm	1
	min	Ibin	9
	max	Ibin	9
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	Ibin	9

	max	I _{bin}	9
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil	max		12
Flexible w/o lug conductor section	min	mm ²	0.8
	max	mm ²	2.5
Flexible c/w lug conductor section	min	mm ²	1.5
	max	mm ²	2.5
Flexible with insulated spade lug conductor section	min	mm ²	1.5
	max	mm ²	2.5
Power terminal protection according to IEC/EN 60529			IP00
Mechanical features			
Operating position	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	200
Auxiliary contact characteristics			
Thermal current I _{th}		A	10
IEC/EN 60947-5-1 designation			A600 - Q600
Operating current AC15	230V	A	3
	400V	A	1.9
	500V	A	1.4
Operating current DC12	110V	A	2.9
Operating current DC13	24V	A	2.9
	48V	A	1.4
	60V	A	1.1
	125V	A	0.3
	220V	A	0.1
	600V	A	0.6
Operations			
Mechanical life		cycles	20000000
Electrical life		cycles	500000
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	cycles	500000
		cycles	20000000
Mirror contacts according to IEC/EN 60947-4-1 annex F			Yes
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 50/60Hz		V	230
AC operating voltage			
of 50/60Hz coil powered at 50Hz pick-up	min	%U _s	75

		max	%Us	115
	drop-out	min	%Us	20
		max	%Us	55
of 50/60Hz coil powered at 60Hz				
	pick-up	min	%Us	80
		max	%Us	115
	drop-out	min	%Us	20
		max	%Us	55
AC average coil consumption at 20°C				
of 50/60Hz coil powered at 50Hz				
		in-rush	VA	30
		holding	VA	4
of 50/60Hz coil powered at 60Hz				
		in-rush	VA	25
		holding	VA	3
of 60Hz coil powered at 60Hz				
		in-rush	VA	30
		holding	VA	4
Dissipation at holding ≤20°C 50Hz			W	0.95
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us control				
in AC				
	Closing NO	min	ms	12
		max	ms	21
	Opening NO	min	ms	9
		max	ms	18
	Closing NC	min	ms	17
		max	ms	26
	Opening NC	min	ms	7
		max	ms	17
in DC				
	Closing NO	min	ms	18
		max	ms	25
	Opening NO	min	ms	2
		max	ms	3
	Closing NC	min	ms	3
		max	ms	5
	Opening NC	min	ms	11
		max	ms	17

UL technical data

Full-load current (FLA) for three-phase AC motor

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 230VAC, 1NC AUXILIARY CONTACT, REAR PCB SOLDER PIN

	at 480V	A	7.6
	at 600V	A	6.1
Yielded mechanical performance			
for single-phase AC motor			
	110/120V	HP	0.5
	230V	HP	1.5
for three-phase AC motor			
	200/208V	HP	2
	220/240V	HP	3
	460/480V	HP	5
	575/600V	HP	5

General USE

Contactor

AC current A 20

Contact rating of auxiliary contacts according to UL

A600 - Q600

Ambient conditions

Temperature

Operating temperature

min °C -50
max °C +70

Storage temperature

min °C -60
max °C +80

Max altitude

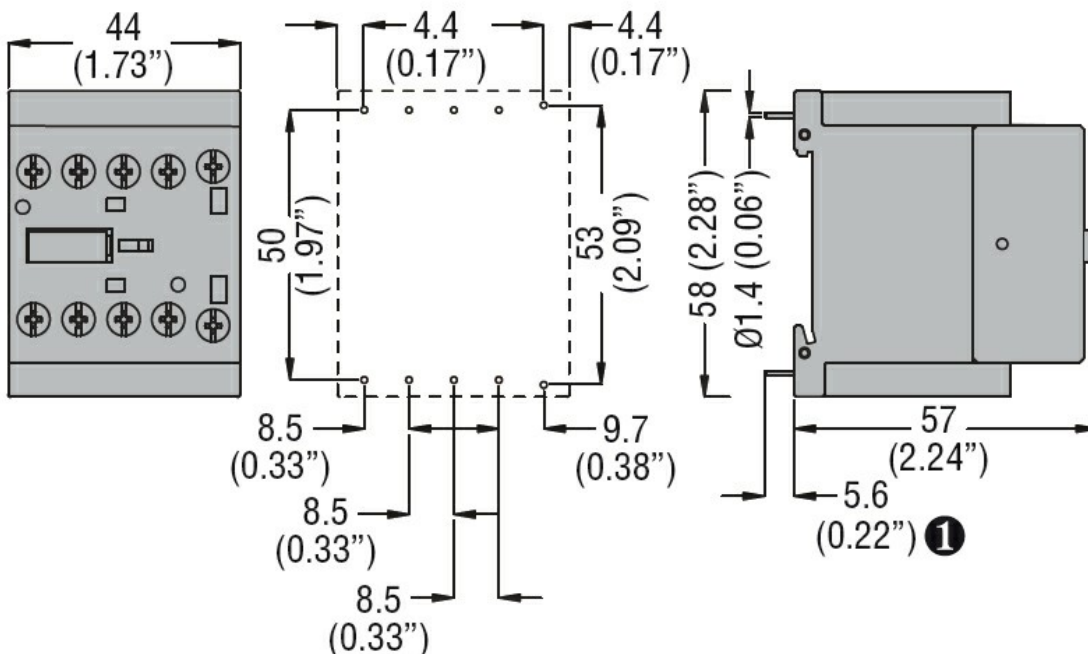
m 3000

Resistance & Protection

Pollution degree

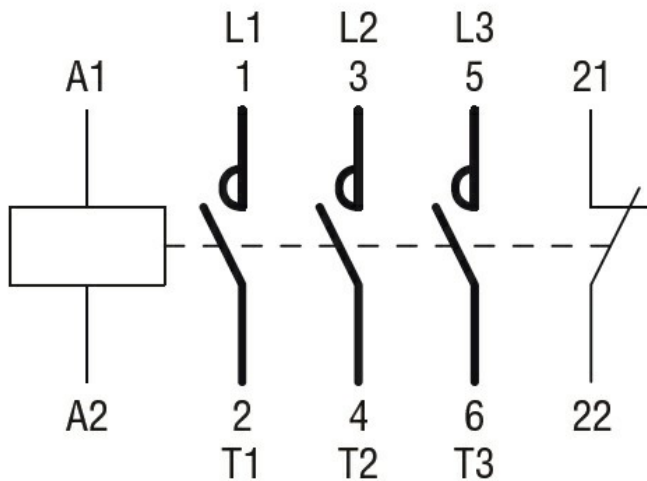
3

Dimensions



① Recommended PCB drillings 1.7-2mm.

Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN 60947-1

IEC/EN 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

cURus

EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching