



Power contactor
BG09

Product designation

Product type designation

Contact characteristics

Number of poles	nr.	4
Rated insulation voltage U_i IEC/EN	V	690
Rated impulse withstand voltage U_{imp}	kV	6
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I_{th}	A	20
Operational current I_e	AC-1 ($\leq 40^\circ C$)	A 160
	AC-3 ($\leq 440V \leq 55^\circ C$)	A 9
	AC-4 (400V)	A 4
Rated operational power AC-1 ($T \leq 40^\circ C$)	230V	kW 8
	400V	kW 14
	500V	kW 16
	690V	kW 22
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
	690V	A 72
Resistance per pole (average value)	m Ω	10
Power dissipation per pole (average value)	I_{th}	W 4
	AC3	W 0.81
Tightening torque for terminals	min	Nm 0.8
	max	Nm 1
	min	lbin 0.59
	max	lbin 0.74
Tightening torque for coil terminal	min	Nm 0.8
	max	Nm 1
	min	lbft 0.8
	max	lbft 0.74
Max number of wires simultaneously connectable	nr.	2
Conductor section	Flexible w/o lug conductor section	

	min	mm ²	0.75
	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			IP20 when wired
Mechanical features			
Operating position			
	normal allowable		vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight			g 179
Auxiliary contact characteristics			
Type of contact			1 NO
Thermal current I _{th}			A 10
IEC/EN 60947-5-1 designation			A600
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	cycles	500000
	mechanical load	cycles	20000000
Mirror contacts according to IEC/EN 60947-4-1			true
EMC compatibility			Yes
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz			
	min	V	12
	max	V	575
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
	pick-up		
	min	%Us	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
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AC operating voltage at 20°C				
	of 50/60Hz coil powered at 50Hz	in-rush	VA	30
		holding	VA	4
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	of 50/60Hz coil powered at 60Hz	in-rush	VA	25
		holding	VA	3
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	of 60Hz coil powered at 60Hz	in-rush	VA	30
		holding	VA	4
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Dissipation at holding ≤20°C 50Hz			W	0.95
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DC coil operating				
DC rated control voltage				
		min	V	6
		max	V	480
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Average coil consumption ≤20°C				
		in-rush	W	3.2
		holding	W	3.2
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Max cycles frequency				
Mechanical operations			cycles/h	3600
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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
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	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

	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
	220/230V	hp	3
	460/480V	hp	5
	575/600V	hp	5

General USE

Contactor

AC current A 20

Ambient conditions

Temperature

Operating temperature

min °C -40
max °C 60

Storage temperature

min °C -55
max °C 70

Max altitude

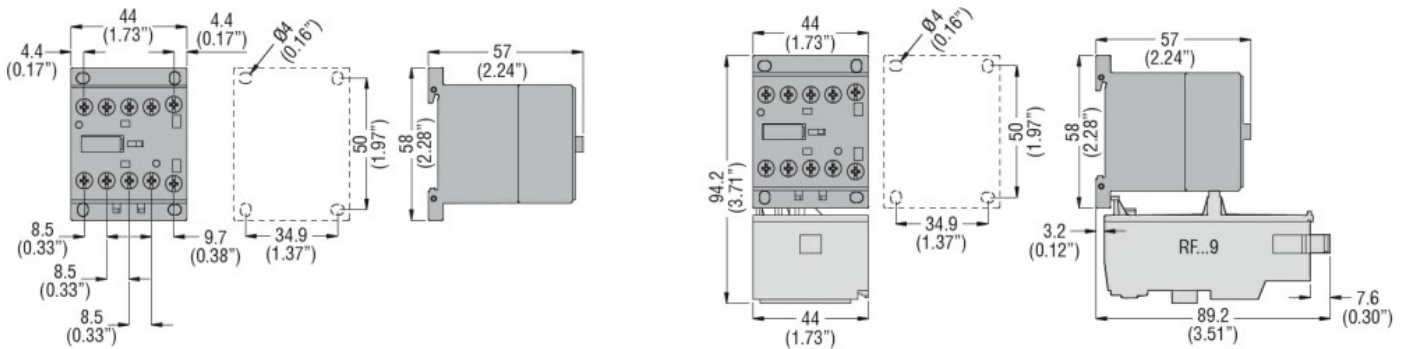
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Resistance & Protection

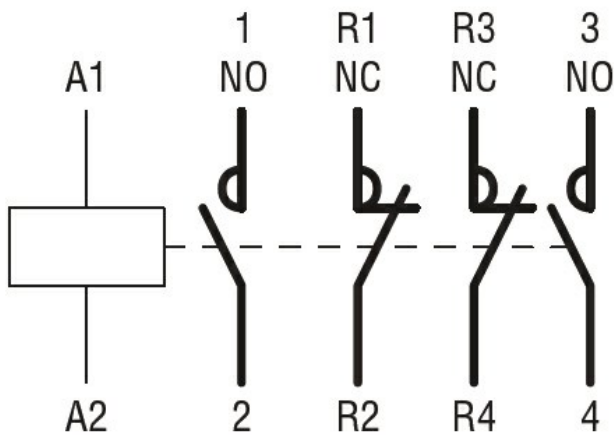
Pollution degree

3

Dimensions



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

CCC

cULus

EAC

ETIM 6 classification

EC000066 - Power contactor, AC switching