Lovato electric
ENERGY AND AUTOMATION

11BG0022A048

CONTROL RELAY WITH AC COIL 50/60HZ, 48VAC, 2NO AND 2NC

Product designation				Auxiliary contactor
Product type designation				BG00
Contact characteristics				
Number of poles			Nr.	4
Rated insulation voltage Ui IEC/EN			V	690
Rated impulse withstand voltage Uimp			kV	6
Operational frequency				
		min	Hz	25
		max	Hz	400
IEC Conventional free air thermal current Ith			A	10
Protection fuse				
	gG (IEC)		A	16
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	Ibin	9
Max number of wires simultaneously connectable			Nr.	2
Conductor section				
	AWG/Kcmil			
		max		12
	Flexible w/o lug conductor section			
		min	mm²	0.8
		max	mm²	2.5
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug conductor section			
		min	mm²	1.5
		max	mm²	2.5
Power terminal protection according to IEC/EN 60529				IP20
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	200
Conductor section				

AWG/kcmil conductor section			
	max		12

Auxiliary contact characteristics			
Thermal current Ith		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	1.2
	110V	A	0.6
	125V	A	0.55
	220V	A	0.3
	600V	A	0.1

Operations			
Mechanical life		cycles	20000000

Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	mechanical load	cycles	20000000
Mirror contats according to IEC/EN 609474-4-1			YES
EMC compatibility			YES

AC coil operating			
Rated AC voltage at 50/60Hz		V	48
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
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	0.9
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					
General USE					
	Contactor				
			AC current	A	10
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					
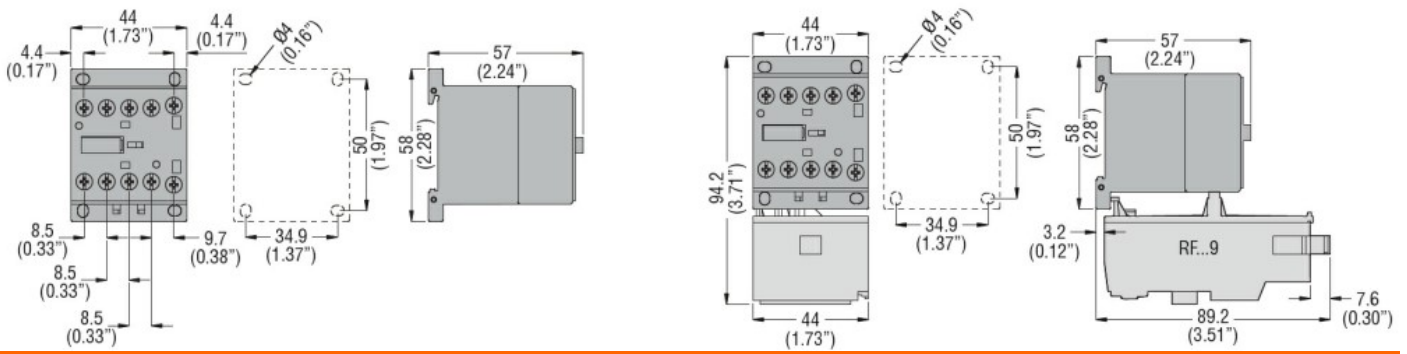
Wiring diagrams
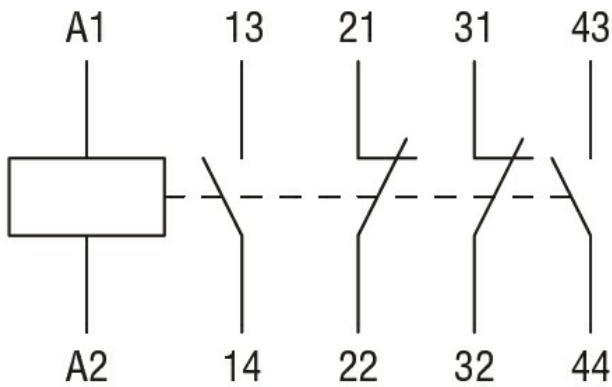
Certifications and compliance

Compliance

CSA C22.2 n° 60947-1
CSA C22.2 n° 60947-5-1
IEC/EN 60947-1
IEC/EN 60947-5-1
UL 60947-1
UL 60947-5-1

Certificates

cULus
EAC

ETIM classification

ETIM 8.0   EC000196 - Contactor relay