Lovato electric
ENERGY AND AUTOMATION

11BGF0040D024

CONTROL RELAY WITH DC COIL, 24VDC, 4NO, FASTON TERMINALS

Product designation			Auxiliary contactor
Product type designation			BGF00
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
Short-time allowable current for 10s (IEC/EN60947-1)		A	0
Protection fuse			
	gG (IEC)	A	16
Tightening torque for terminals			
	min	Nm	0.8
	max	Nm	1
	min	lbin	9
	max	lbin	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	9
	max	lbin	9
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil			
	max		12
Flexible w/o lug conductor section			
	min	mm²	0.75
	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 when properly wired
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°
Fixing			Screw / DIN rail 35mm
Weight		g	212

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	1.1
		125V	A	0.3
		220V	A	0.1
		600V	A	0.6
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
DC coil operating				
DC rated control voltage			V	24
DC operating voltage				
	pick-up			
		min	%Us	75
		max	%Us	115
	drop-out			
		min	%Us	10
		max	%Us	25
Average coil consumption ≤20°C				
		in-rush	W	3.2
		holding	W	3.2
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

Contact rating of auxiliary contacts according to UL	A600 - Q600

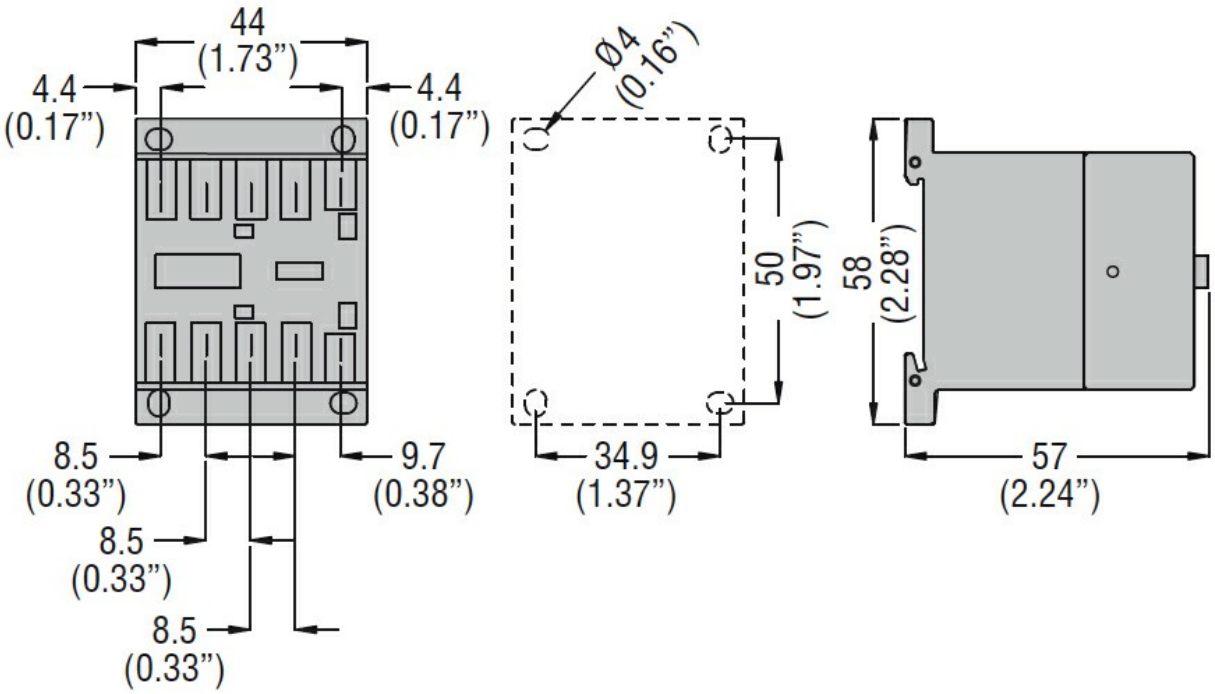
Ambient conditions

Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	+70
	Storage temperature			
		min	°C	-60
		max	°C	+80
Max altitude			m	3000

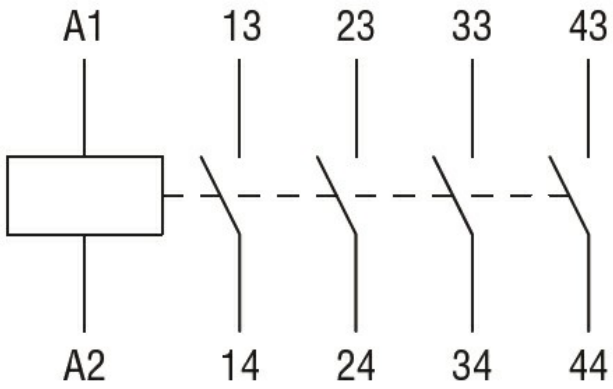
Resistance & Protection

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

CCC
cULus
EAC

ETIM classification

ETIM 8.0	EC000196 - Contactor relay