



Product designation				Auxiliary contactor
Product type designat	tion			BF00
Contact characteristic				Broo
Number of poles	-		Nr.	4
Rated insulation volta	ae 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
Operational current le				
		AC-1 (≤55°C)	А	0
Protection fuse		- ( /		
		gG (IEC)	А	25
Tightening torque for	terminals	9- ()		
		min	Nm	1.5
		max	Nm	1.8
		min	Ibin	1.1
		max	Ibin	1.5
Tightening torque for	coil terminal		-	
		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
Max number of wires simultaneously connectable			Nr.	2
Conductor section	·			
	AWG/Kcmil			
		max		10
	Flexible w/o lug conductor section			
	, , , , , , , , , , , , , , , , , , ,	min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section			
		min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			
		min	mm²	1
		max	mm²	4
Power terminal protection according to IEC/EN 60529				IP20 when
			properly wired	
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°

BF0031D012



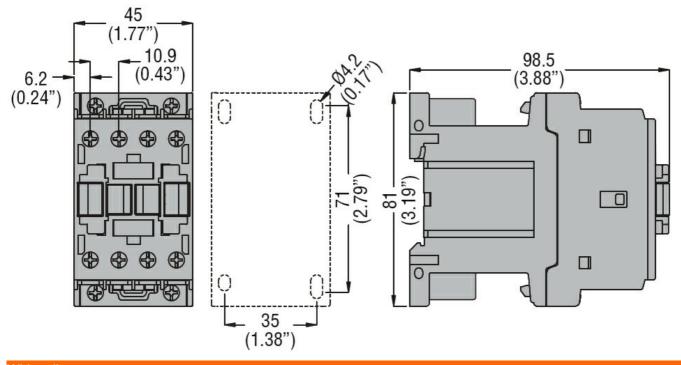
Fixing				Screw / DIN rai 35mm
Weight			g	496
Conductor section				
AWG/kcmil conduct	tor section			
		max		10
Auxiliary contact characteristics				
Thermal current Ith			А	10
EC/EN 60947-5-1 designation				A600 - P600
Operating current AC15				
		230V	А	3
		400V	А	1.9
		500V	А	1.4
Operating current DC12				
		110V	А	5.7
Operating current DC13				
		24V	А	5.7
		48V	А	2.9
		60V	А	2.3
		110V	А	1.25
		125V	А	1.1
		220V	А	0.55
		600V	А	0.2
Dperations				
lechanical life			cycles	20000000
Safety related data				
Performance level B10d according to EN/IS	SO 13489-1			
		mechanical load	cycles	20000000
lirror contate according to IEC/EN COO 474				
vintor contats according to IEC/EN 609474-	-4-1			YES
	-4-1			YES yes
EMC compatibility	-4-1			
MC compatibility OC coil operating	-4-1		V	
MC compatibility OC coil operating OC rated control voltage	-4-1		V	yes
MC compatibility OC coil operating OC rated control voltage	-4-1		V	yes
MC compatibility OC coil operating OC rated control voltage OC operating voltage	-4-1	min		yes 12
MC compatibility OC coil operating OC rated control voltage OC operating voltage	-4-1	min max	%Us	yes 12 70
	-4-1			yes 12
MC compatibility C coil operating C rated control voltage C operating voltage	-4-1		%Us	yes 12 70
MC compatibility OC coil operating OC rated control voltage OC operating voltage pick-up	-4-1	max	%Us %Us	yes 12 70 125
MC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up drop-out	-4-1	max min	%Us %Us %Us	yes 12 70 125 10
MC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up drop-out	-4-1	max min max	%Us %Us %Us	yes 12 70 125 10 40
MC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up drop-out	-4-1	max min max in-rush	%Us %Us %Us %Us	yes 12 70 125 10 40 5.4
MC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up drop-out Average coil consumption ≤20°C	-4-1	max min max	%Us %Us %Us %Us W	yes 12 70 125 10 40
MC compatibility C coil operating DC rated control voltage DC operating voltage pick-up drop-out Average coil consumption ≤20°C	-4-1	max min max in-rush	%Us %Us %Us %Us W W	yes 12 70 125 10 40 5.4 5.4
MC compatibility C coil operating DC rated control voltage DC operating voltage pick-up drop-out Average coil consumption ≤20°C Max cycles frequency Mechanical operation	-4-1	max min max in-rush	%Us %Us %Us %Us W	yes 12 70 125 10 40 5.4 5.4
MC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up drop-out Average coil consumption ≤20°C Max cycles frequency Mechanical operation Dperating times	-4-1	max min max in-rush	%Us %Us %Us %Us W W	yes 12 70 125 10 40 5.4 5.4
MC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up drop-out Average coil consumption ≤20°C Max cycles frequency Mechanical operation Dperating times Average time for Us control	-4-1	max min max in-rush	%Us %Us %Us %Us W W	yes 12 70 125 10 40 5.4 5.4
MC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up drop-out Average coil consumption ≤20°C Max cycles frequency Mechanical operation Dperating times		max min max in-rush	%Us %Us %Us %Us W W	yes 12 70 125 10 40 5.4 5.4
MC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up drop-out Average coil consumption ≤20°C Max cycles frequency Mechanical operation Dperating times Average time for Us control	-4-1	max min max in-rush holding	%Us %Us %Us %Us W W V	yes 12 70 125 10 40 5.4 5.4 5.4 3600
MC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up drop-out Average coil consumption ≤20°C Max cycles frequency Mechanical operation Dperating times Average time for Us control		max min max in-rush holding min	%Us %Us %Us W W w cycles/h	yes 12 70 125 10 40 5.4 5.4 3600
MC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up drop-out Average coil consumption ≤20°C Max cycles frequency Mechanical operation Dperating times Average time for Us control	Closing NO	max min max in-rush holding	%Us %Us %Us %Us W W V	yes 12 70 125 10 40 5.4 5.4 3600
MC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up drop-out Average coil consumption ≤20°C Max cycles frequency Mechanical operation Dperating times Average time for Us control		max min max in-rush holding min max	%Us %Us %Us W W V cycles/h	yes 12 70 125 10 40 5.4 5.4 3600 54 66
MC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up drop-out Average coil consumption ≤20°C Max cycles frequency Mechanical operation Dperating times Average time for Us control	Closing NO	max min max in-rush holding min	%Us %Us %Us W W w cycles/h	yes 12 70 125 10 40 5.4 5.4 3600

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CONTROL RELAY WITH DC COIL, 12VDC, 3NO AND 1NC

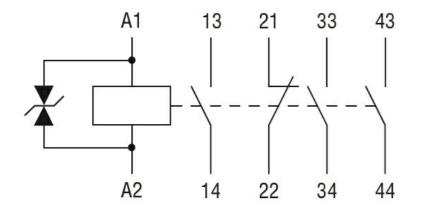
	Closing NC			
		min	ms	24
		max	ms	30
	Opening NC			
		min	ms	47
		max	ms	57
UL technical data				
General USE				
	Auxiliary contacts			
		AC current	Α	10
Contact rating of auxiliary contacts according to UL				A600 - P600
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Protect	ion			
<b>B</b> . II. <i>C</i>				
Pollution degree Dimensions				3



Wiring diagrams



BF0031D012 CONTROL RELAY WITH DC COIL, 12VDC, 3NO AND 1NC



## 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 EC000196 -ETIM 8.0

Contactor relay