



Product designation					Auxiliary
Product type designation BF00 Contact characteristics Number of poles Nr. 4 Rated insulation voltage UirEC/EN V 690 Rated insulation voltage Uirpe kV 6 Operational frequency min Hz 25 max Hz 400 400 IEC Conventional free air thermal current lth A 10 0 Operational current le AC-1 (≤55°C) A 0 Protection fuse gG (IEC) A 25 Tightening torque for terminals min Nm 1.5 max Nm 1.5 Nm 1.8 min Nm 1.5 Nm 1.8 min Nm 1.5 Nm 1.8	Product designation				_
Number of poles	Product type designa	tion			
Rated insulation voltage Ui IEC/EN V 690 Rated impulse withstand voltage Uimp kV 6 Operational frequency min Hz 25 max Hz 400 10 Department Ire air thermal current Ith A 10 0 Operational current Ie AC-1 (≤55°C) A 0 Protection fuse gG (IEC) A 25 Tightening torque for terminals min Nm 1.5 max Nm 1.8 nm 1.8 min bin 1.1 nm 1.8 min bin 1.5 nm 1.8 min bin 0.8 nm 1.5 Tightening torque for coil terminal min nm 0.8 nm 1.5 1.5 1.5 1.0	Contact characteristic	es estate de la constant de la const			
Rated impulse withstand voltage Uimp	Number of poles			Nr.	4
Operational frequency min max bit max Hz bit	Rated insulation volta	ge Ui IEC/EN		V	690
Main Hz 25 max Hz 400 IEC Conventional free air thermal current Ith	Rated impulse withsta	and voltage Uimp		kV	6
IEC Conventional free air thermal current Ith	Operational frequency	у			
EC Conventional free air thermal current Ith Operational current Ie			min	Hz	25
None			max	Hz	400
Protection fuse gG (IEC)	IEC Conventional free	e air thermal current Ith		Α	10
Protection fuse gG (IEC)	Operational current le	;			
Tightening torque for terminals			AC-1 (≤55°C)	Α	0
Tightening torque for terminals	Protection fuse				
Tightening torque for terminals			gG (IEC)	Α	25
Min	Tightening torque for	terminals			
Min			min	Nm	1.5
Tightening torque for coil terminal			max	Nm	1.8
Tightening torque for coil terminal			min	lbin	1.1
Min Nm 0.8 max Nm 1 min min lbin 0.8 max lbin 0.74			max	lbin	1.5
Max number of wires simultaneously connectable Max number of wires simultaneously connectable Nr. 2	Tightening torque for	coil terminal			
min max lbin lbin lbin lbin lbin lbin lbin lbin			min	Nm	0.8
max Ibin 0.74 Max number of wires simultaneously connectable Nr. 2 Conductor section Max 10 Flexible W/o lug conductor section min mm² 1 mm² 1 max mm² 6 Flexible c/w lug conductor section min mm² mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min max mm² 4 Flexible with insulated spade lug conductor section min max mm² 4 Power terminal protection according to IEC/EN 60529 IP20 when properly wired Mechanical features Operating position Vertical plan			max	Nm	1
Max number of wires simultaneously connectable 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 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 Mechanical features Operating position Nr. 2 ID Vertical plan			min	lbin	0.8
Conductor section AWG/Kcmil Flexible w/o lug conductor section min mm² 1 max mm² 6 Flexible c/w lug conductor section 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 Flexible with insulated spade lug conductor section Min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 Mechanical features Operating position Normal Vertical plan			max	lbin	0.74
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 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 Departing position Normal Vertical plan	Max number of wires	simultaneously connectable		Nr.	2
Flexible w/o lug conductor section min mm² 1 max mm² 6	Conductor section				
Flexible w/o lug conductor section min mm² 1 max mm² 6 Flexible c/w lug conductor section min mm² 1 max mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 1 max mm² 1 max mm² 1 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 Mechanical features Operating position Normal Vertical plan		AWG/Kcmil			
min mm² 1 max mm² 6 Flexible c/w lug conductor section min mm² 1 max mm² 6 Flexible with insulated spade 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 Mechanical features Operating position Vertical plan			max		10
Flexible c/w lug conductor section min mm² 1 max mm² 4		Flexible w/o lug conductor section			
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 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 Mechanical features Operating position Normal Vertical plan			min	mm²	1
min mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 1 max mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 Mechanical features Operating position Normal Vertical plan			max	mm²	6
Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 Mechanical features Operating position max mm² 4 IP20 when properly wired Vertical plan		Flexible c/w lug conductor section			
Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 Mechanical features Operating position normal Vertical plan			min	mm²	1
min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 Mechanical features Operating position normal Vertical plan			max	mm²	4
Power terminal protection according to IEC/EN 60529 Mechanical features Operating position The max mm² 4 IP20 when properly wired Normal Vertical plan		Flexible with insulated spade lug conductor section			
Power terminal protection according to IEC/EN 60529 Mechanical features Operating position IP20 when properly wired Normal Vertical plan			min	mm²	1
Mechanical features Operating position Normal Operating position Operating position Operating position Operating position			max	mm²	
Mechanical features Operating position normal Vertical plan	Power terminal prote	ction according to IEC/EN 60529			
Operating position normal Vertical plan	Mechanical features				property wired
normal Vertical plan					
	- r - · · · · · · · · · · · · · · · · ·		normal		Vertical plan
			allowable		±30°



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Fixing					Screw / DIN ra 35mm
Weight				g	490
Conductor section					
	AWG/kcmil conductor s	section			
			max		10
Auxiliary contact charac	cteristics				
Thermal current Ith				Α	10
IEC/EN 60947-5-1 des	ignation				A600 - P600
Operating current AC15	5				
			230V	Α	3
			400V	Α	1.9
			500V	Α	1.4
Operating current DC12	2				
			110V	Α	5.7
Operating current DC1:	3				
3			24V	Α	5.7
			48V	Α	2.9
			60V	A	2.3
			110V	A	1.25
			125V	Α	1.1
			220V	Α	0.55
			600V	Α	0.2
Operations					
				cvcles	20000000
Mechanical life				cycles	20000000
Mechanical life Safety related data	od according to EN/ISO	13489-1		cycles	20000000
Mechanical life Safety related data	0d according to EN/ISO	13489-1	mechanical load		
Mechanical life Safety related data Performance level B10			mechanical load	cycles	20000000
Mechanical life Safety related data Performance level B10 Mirror contats accordin	od according to EN/ISO of ag to IEC/EN 609474-4-1		mechanical load		20000000 YES
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility			mechanical load		20000000
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating	ng to IEC/EN 609474-4-1		mechanical load	cycles	20000000 YES yes
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag	ng to IEC/EN 609474-4-1		mechanical load		20000000 YES
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag	ng to IEC/EN 609474-4-1		mechanical load	cycles	20000000 YES yes
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag	ng to IEC/EN 609474-4-1			cycles	20000000 YES yes 24
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag	ng to IEC/EN 609474-4-1		min	cycles V	20000000 YES yes 24
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag	ng to IEC/EN 609474-4-1			cycles	20000000 YES yes 24
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag	ng to IEC/EN 609474-4-1		min max	cycles V %Us %Us	20000000 YES yes 24 70 125
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag	ng to IEC/EN 609474-4-1		min max min	cycles V %Us %Us %Us	20000000 YES yes 24 70 125
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag DC operating voltage	g to IEC/EN 609474-4-1 ge pick-up drop-out		min max	cycles V %Us %Us	20000000 YES yes 24 70 125
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag DC operating voltage	g to IEC/EN 609474-4-1 ge pick-up drop-out		min max min max	cycles V %Us %Us %Us %Us %Us	20000000 YES yes 24 70 125 10 40
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag DC operating voltage	g to IEC/EN 609474-4-1 ge pick-up drop-out		min max min max in-rush	cycles V %Us %Us %Us %Us W	20000000 YES yes 24 70 125 10 40 5.4
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag DC operating voltage Average coil consumpt	g to IEC/EN 609474-4-1 ge pick-up drop-out		min max min max	cycles V %Us %Us %Us %Us %Us	20000000 YES yes 24 70 125 10 40
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag DC operating voltage Average coil consumpt	g to IEC/EN 609474-4-1 ge pick-up drop-out		min max min max in-rush	cycles V %Us %Us %Us %Us W W	20000000 YES yes 24 70 125 10 40 5.4 5.4
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag DC operating voltage Average coil consumpt Max cycles frequency Mechanical operation	g to IEC/EN 609474-4-1 ge pick-up drop-out		min max min max in-rush	cycles V %Us %Us %Us %Us W	20000000 YES yes 24 70 125 10 40 5.4 5.4
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag DC operating voltage Average coil consumpt Max cycles frequency Mechanical operation Operating times	ig to IEC/EN 609474-4-1 ge pick-up drop-out		min max min max in-rush	cycles V %Us %Us %Us %Us W W	20000000 YES yes 24 70 125 10 40 5.4 5.4
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag DC operating voltage Average coil consumpt Max cycles frequency Mechanical operation	g to IEC/EN 609474-4-1 ge pick-up drop-out tion ≤20°C		min max min max in-rush	cycles V %Us %Us %Us %Us W W	20000000 YES yes 24 70 125 10 40 5.4 5.4
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag DC operating voltage Average coil consumpt Max cycles frequency Mechanical operation Operating times	ig to IEC/EN 609474-4-1 ge pick-up drop-out		min max min max in-rush	cycles V %Us %Us %Us %Us W W	20000000 YES yes 24 70 125 10 40 5.4 5.4
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag DC operating voltage Average coil consumpt Max cycles frequency Mechanical operation Operating times	g to IEC/EN 609474-4-1 ge pick-up drop-out tion ≤20°C		min max min max in-rush holding	cycles V %Us %Us %Us W W cycles/h	20000000 YES yes 24 70 125 10 40 5.4 5.4 3600
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag DC operating voltage Average coil consumpt Max cycles frequency Mechanical operation Operating times	g to IEC/EN 609474-4-1 ge pick-up drop-out tion ≤20°C		min max min max in-rush holding	cycles V %Us %Us %Us W W cycles/h	20000000 YES yes 24 70 125 10 40 5.4 5.4 3600
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag DC operating voltage Average coil consumpt Max cycles frequency Mechanical operation Operating times	g to IEC/EN 609474-4-1 ge pick-up drop-out tion ≤20°C	Closing NO	min max min max in-rush holding	cycles V %Us %Us %Us W W cycles/h	20000000 YES yes 24 70 125 10 40 5.4 5.4 3600
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag DC operating voltage Average coil consumpt Max cycles frequency Mechanical operation Operating times	g to IEC/EN 609474-4-1 ge pick-up drop-out tion ≤20°C		min max min max in-rush holding min max	cycles V %Us %Us %Us W W cycles/h	20000000 YES yes 24 70 125 10 40 5.4 5.4 3600
Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltag DC operating voltage Average coil consumpt Max cycles frequency Mechanical operation Operating times	g to IEC/EN 609474-4-1 ge pick-up drop-out tion ≤20°C	Closing NO	min max min max in-rush holding	cycles V %Us %Us %Us W W cycles/h	20000000 YES yes 24 70 125 10 40 5.4 5.4 3600



CI	osing	NC
O	oonig	110

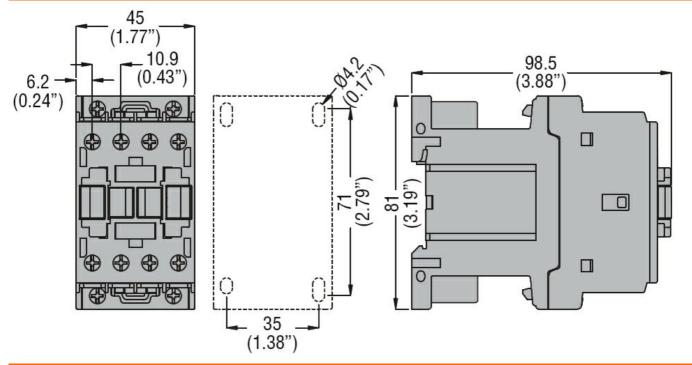
Clocking 110			
	min	ms	24
	max	ms	30
Opening NC			
	min	ms	47
	max	ms	57

UL technical data

General USE

Auxiliary contacts

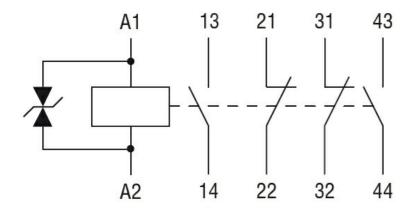
		AC current	Α	10
Contact rating of auxiliary contacts according to UL				A600 - P600
Ambient conditions				
Temperature				
Operating tem	perature			
		min	°C	-50
		max	°C	70
Storage temporal	erature			_
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Protection				
Pollution degree				3
Dimensions				



Wiring diagrams



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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