



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 min Nm 1.5 Nm 1.8 Tightening torque for coil terminal min Nm 1.5 Nm 1.8 Tightening torque for coil terminal min Nm 1.8 Nm	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 Mechanical features Operating 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 rail 35mm
Weight		g	500
Conductor section			
A	AWG/kcmil conductor section		
	max		10
Auxiliary contact characte	eristics		
Thermal current Ith		Α	10
IEC/EN 60947-5-1 desig	nation		A600 - P600
Operating current AC15			
	230V	Α	3
	400V	Α	1.9
	500V	Α	1.4
Operating current DC12			
	110V	Α	5.7
Operating current DC13			
	24V	Α	5.7
	48V	Α	2.9
	60V	Α	2.3
	110V	Α	1.25
	125V	Α	1.1
	220V	Α	0.55
	600V	Α	0.2
Operations			
Mechanical life		cycles	20000000
Safety related data			
Performance level B10d	according to EN/ISO 13489-1		
	mechanical load	cycles	20000000
Mirror contats according	mechanical load	cycles	20000000 YES
Mirror contats according EMC compatibility	mechanical load	cycles	
	mechanical load	cycles	YES
EMC compatibility	mechanical load	cycles	YES
EMC compatibility DC coil operating	mechanical load		YES yes
EMC compatibility DC coil operating DC rated control voltage DC operating voltage	mechanical load		YES yes
EMC compatibility DC coil operating DC rated control voltage DC operating voltage	mechanical load to IEC/EN 609474-4-1		YES yes
EMC compatibility DC coil operating DC rated control voltage DC operating voltage	mechanical load to IEC/EN 609474-4-1	V	YES yes 24
EMC compatibility DC coil operating DC rated control voltage DC operating voltage	mechanical load to IEC/EN 609474-4-1 pick-up min	V %Us	YES yes 24
EMC compatibility DC coil operating DC rated control voltage DC operating voltage	mechanical load to IEC/EN 609474-4-1	V %Us	YES yes 24
EMC compatibility DC coil operating DC rated control voltage DC operating voltage	mechanical load to IEC/EN 609474-4-1 pick-up min max drop-out min max	V %Us %Us	YES yes 24 80 110
EMC compatibility DC coil operating DC rated control voltage DC operating voltage	mechanical load to IEC/EN 609474-4-1 pick-up min max drop-out min max	V %Us %Us %Us	YES yes 24 80 110
EMC compatibility DC coil operating DC rated control voltage DC operating voltage	mechanical load to IEC/EN 609474-4-1 pick-up min max drop-out min max	V %Us %Us %Us	YES yes 24 80 110
EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumptio	mechanical load to IEC/EN 609474-4-1 Dick-up min max drop-out min max n ≤20°C	V %Us %Us %Us %Us	YES yes 24 80 110
EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumptio	mechanical load to IEC/EN 609474-4-1 pick-up min max drop-out min max n ≤20°C in-rush	V %Us %Us %Us %Us W W	YES yes 24 80 110 10 40 2.4 2.4
EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumptio Max cycles frequency Mechanical operation	mechanical load to IEC/EN 609474-4-1 pick-up min max drop-out min max n ≤20°C in-rush	V %Us %Us %Us %Us %Us	YES yes 24 80 110 10 40 2.4 2.4
EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumptio Max cycles frequency Mechanical operation Operating times	mechanical load to IEC/EN 609474-4-1 Dick-up min max drop-out min max n ≤20°C in-rush holding	V %Us %Us %Us %Us W W	YES yes 24 80 110 10 40 2.4 2.4
EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumption Max cycles frequency Mechanical operation Operating times Average time for Us control	mechanical load to IEC/EN 609474-4-1 Dick-up min max drop-out min max n ≤20°C in-rush holding	V %Us %Us %Us %Us W W	YES yes 24 80 110 10 40 2.4 2.4
EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumption Max cycles frequency Mechanical operation Operating times Average time for Us control	mechanical load to IEC/EN 609474-4-1 pick-up min max drop-out min max n ≤20°C in-rush holding	V %Us %Us %Us %Us W W	YES yes 24 80 110 10 40 2.4 2.4
EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumption Max cycles frequency Mechanical operation Operating times Average time for Us control	mechanical load to IEC/EN 609474-4-1 Dick-up min max drop-out min max n ≤20°C in-rush holding trol n DC Closing NO	V %Us %Us %Us %Us W W	YES yes 24 80 110 10 40 2.4 2.4 3600
EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumption Max cycles frequency Mechanical operation Operating times Average time for Us control	mechanical load to IEC/EN 609474-4-1 pick-up min max drop-out min max n ≤20°C in-rush holding	V %Us %Us %Us %Us W W	YES yes 24 80 110 10 40 2.4 2.4 3600
EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumption Max cycles frequency Mechanical operation Operating times Average time for Us control	mechanical load to IEC/EN 609474-4-1 Dick-up min max drop-out min max n ≤20°C in-rush holding trol n DC Closing NO min max	V %Us %Us %Us W W cycles/h	YES yes 24 80 110 10 40 2.4 2.4 3600
EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumption Max cycles frequency Mechanical operation Operating times Average time for Us control	mechanical load to IEC/EN 609474-4-1 bick-up min max drop-out min max n ≤20°C in-rush holding trol n DC Closing NO min max Opening NO	V %Us %Us %Us W W cycles/h	YES yes 24 80 110 10 40 2.4 2.4 3600
EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumption Max cycles frequency Mechanical operation Operating times Average time for Us control	mechanical load to IEC/EN 609474-4-1 pick-up min max drop-out min max n ≤20°C in-rush holding trol n DC Closing NO min max Opening NO min	V %Us %Us %Us W W cycles/h ms ms	YES yes 24 80 110 10 40 2.4 2.4 3600 75 91 15
EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumption Max cycles frequency Mechanical operation Operating times Average time for Us control	mechanical load to IEC/EN 609474-4-1 bick-up min max drop-out min max n ≤20°C in-rush holding trol n DC Closing NO min max Opening NO	V %Us %Us %Us W W cycles/h	YES yes 24 80 110 10 40 2.4 2.4 3600



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C	osing	INC	٠

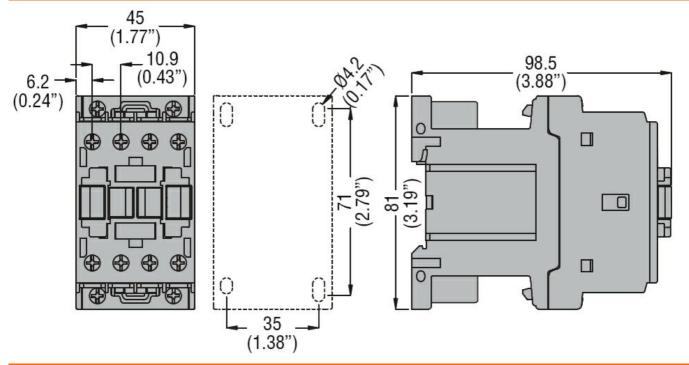
Opening NC	min max	ms ms	24 30
	min	ms	67
	max	ms	81

UL technical data

General USE

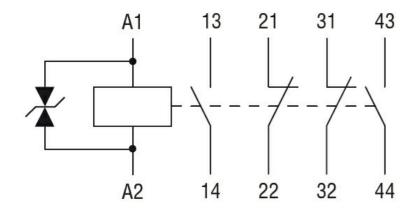
Auxiliary contacts

	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 & 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