



Product designation Product type designation			Power contactor BF38
Contact characteristics			D1 00
Number of poles		Nr.	3
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		Α	56
Operational current le			
	AC-1 (≤40°C)	Α	56
A	C-1 (≤40°C) with 16mm² wire and fork end	lugA	60
	AC-1 (≤55°C)	Α	45
A	C-1 (≤55°C) with 16mm² wire and fork end	lugA	48
	AC-1 (≤70°C)	Α	40
A	C-1 (≤70°C) with 16mm² wire and fork end	lugA	42
	AC-3 (≤440V ≤55°C)	Α	38
	AC-4 (400V)	Α	15.5
Rated operational power AC-3 (T≤55°C)			
	230V	kW	11
	400V	kW	18.5
	415V	kW	18.5
	440V	kW	18.5
	500V	kW	20
Dated enerational newer AC 1 (T<10°C)	690V	kW	22
Rated operational power AC-1 (T≤40°C)	230V	kW	21
	400V	kW	36
	500V	kW	45
	690V	kW	62
IEC max current le in DC1 with L/R ≤ 1ms with 1 p		KVV	- 02
TEO MAX GAMORIC IN BOT WATE/X = THIS WATE F	≤24V	Α	35
	48V	Α	30
	75V	Α	23
	110V	Α	8
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 p			_
·	≤24V	Α	36
	48V	Α	34
	75V	Α	29
	110V	Α	32
	220V	Α	4
IEC max current le in DC1 with L/R ≤ 1ms with 3 p	oles in series ≤24V	А	36



	48V	Α	34	
	75V	A	33	
	110V	A	34	
	220V	A	30	
EC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	220 V		- 50	
in the max current le in bot with the same with a poles in series	≤24V	Α	36	
	48V	A	34	
	75V	A	33	
	110V	A	34	
	220V	A	38	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	220 V			
Lo max ourient to in Boo Boo with Lift = Tomo with 1 poles in series	≤24V	Α	24	
	48V	A	20	
	75V	A	17	
	110V	A		
	220V	A	2,5 _	
IFC may surrent to in DC2 DC5 with L/D < 15mg with 2 notes in series	220 V	A	<del>-</del>	
EC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	<b>2041</b> /	۸	00	
	≤24V	A	28	
	48V	Α	25	
	75V	A	22	
	110V	Α	18	
	220V	Α	3	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series				
	≤24V	Α	32	
	48V	Α	28	
	75V	Α	28	
	110V	Α	23	
	220V	Α	25	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series				
	≤24V	Α	32	
	48V	Α	28	
	75V	Α	28	
	110V	Α	23	
	220V	Α	15	
Short-time allowable current for 10s (IEC/EN60947-1)		Α	320	
Protection fuse				
	gG (IEC)	Α	63	
	aM (IEC)	Α	40	
Making capacity (RMS value)		Α	380	
Breaking capacity at voltage				
	440V	Α	304	
	500V	Α	240	
	690V	Α	192	
Resistance per pole (average value)		mΩ	2	
Power dissipation per pole (average value)				
, , , , , ,			6	
	lth	W		
	Ith AC-3	W W	2.9	
Tightening torque for terminals	Ith AC-3		2.9	
Tightening torque for terminals	AC-3	W		
Tightening torque for terminals	AC-3	W Nm	2.5	
Tightening torque for terminals	AC-3 min max	W Nm Nm	2.5 3	
Tightening torque for terminals	AC-3	W Nm	2.5	

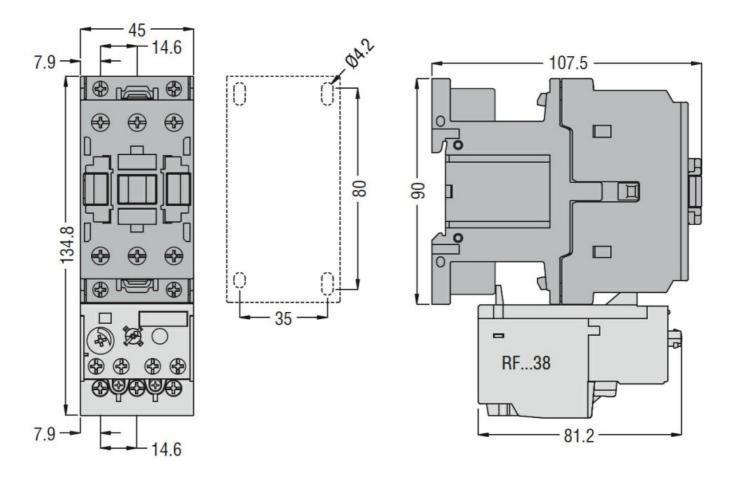


	mi	n Nm	0.8
	ma	k Nm	1
	mi	n Ibin	0.8
	ma	k Ibin	0.74
Max number of wires simultaneous	sly connectable	Nr.	2
Conductor section			
AWG/Kcm	nil		
<u></u>	ma	Κ	6
Flexible w/	o lug conductor section		
	mi	n mm²	2.5
	ma	k mm²	16
Flexible c/v	w lug conductor section		
	mi	n mm²	1
	ma	k mm²	10
Flexible wi	ith insulated spade lug conductor section		
	mi	n mm²	1
	ma	k mm²	10
Dower terminal protection according	og to IEC/EN 60500		IP20 when
Power terminal protection according	19 to IEC/EIN 60529		properly wired
Mechanical features			
Operating position			
	norma	ıl	Vertical plan
	allowable	9	±30°
Fixing			Screw / DIN rail 35mm
Weight		g	568
Operations		<u> </u>	
Mechanical life		cycles	20000000
Electrical life		-	1400000
Electrical life Safety related data		cycles	1400000
Safety related data	g to EN/ISO 13489-1	-	1400000
		cycles	1400000
Safety related data	rated load	cycles d cycles	1400000
Safety related data Performance level B10d according		cycles d cycles	1400000 20000000
Safety related data Performance level B10d according  EMC compatibility	rated load	cycles d cycles	1400000
Safety related data Performance level B10d according  EMC compatibility DC coil operating	rated load	cycles d cycles d cycles	1400000 20000000 yes
Safety related data Performance level B10d according  EMC compatibility  DC coil operating  DC rated control voltage	rated load	cycles d cycles	1400000 20000000
Safety related data Performance level B10d according  EMC compatibility  DC coil operating  DC rated control voltage  DC operating voltage	rated load	cycles d cycles d cycles	1400000 20000000 yes
Safety related data Performance level B10d according  EMC compatibility DC coil operating DC rated control voltage	rated load	cycles d cycles d cycles	1400000 20000000 yes 24
Safety related data Performance level B10d according  EMC compatibility  DC coil operating  DC rated control voltage  DC operating voltage	rated load mechanical load mi	cycles d cycles d cycles V	1400000 20000000 yes 24
Safety related data Performance level B10d according  EMC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up	rated load	cycles d cycles d cycles V	1400000 20000000 yes 24
Safety related data Performance level B10d according  EMC compatibility  DC coil operating  DC rated control voltage  DC operating voltage	rated load mechanical load mi mi ma	cycles d cycles d cycles V N %Us	1400000 200000000 yes 24 80 110
Safety related data Performance level B10d according  EMC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up	rated load mechanical load mechanical load mechanical load michanical load mechanical load michanical mi	cycles  d cycles d cycles  V  N  WUs  WUs  WUs	1400000 200000000 yes 24 80 110
Safety related data Performance level B10d according  EMC compatibility DC coil operating DC rated control voltage DC operating voltage  pick-up  drop-out	rated load mechanical load mi mi ma	cycles  d cycles d cycles  V  n %Us k %Us	1400000 200000000 yes 24 80 110
Safety related data Performance level B10d according  EMC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up	rated load mechanical load mechanical load mechanical load mile ma	cycles d cycles d cycles V  N %Us K %Us N %Us K %Us	1400000 200000000 yes 24 80 110
Safety related data Performance level B10d according  EMC compatibility DC coil operating DC rated control voltage DC operating voltage  pick-up  drop-out	rated load mechanical load mechanical load mechanical load microscopic microscopic microscopic machanical microscopic machanical microscopic machanical load microscopic machanical load microscopic machanical load microscopic machanical load mechanical load mechanical load mechanical load microscopic micro	cycles  d cycles d cycles  V  N %Us K %Us  W WUs  W W W W W W W W W W W W W W W W W W W	1400000 200000000 yes 24 80 110 10 40
Safety related data Performance level B10d according  EMC compatibility DC coil operating DC rated control voltage DC operating voltage  pick-up  drop-out  Average coil consumption ≤20°C	rated load mechanical load mechanical load mechanical load mile ma	cycles  d cycles d cycles  V  N %Us K %Us  W WUs  W W W W W W W W W W W W W W W W W W W	1400000 200000000 yes 24 80 110
Safety related data Performance level B10d according  EMC compatibility DC coil operating DC rated control voltage DC operating voltage  pick-up  drop-out  Average coil consumption ≤20°C	rated load mechanical load mechanical load mechanical load microscopic microscopic microscopic machanical microscopic machanical microscopic machanical load microscopic machanical load microscopic machanical load microscopic machanical load mechanical load mechanical load mechanical load microscopic micro	cycles  d cycles d cycles d cycles  V  n %Us k %Us  w WUs  w WUs  w WUs  w WUs	1400000 200000000 yes 24 80 110 10 40 2.4 2.4
Safety related data Performance level B10d according  EMC 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	rated load mechanical load mechanical load mechanical load microscopic microscopic microscopic machanical microscopic machanical microscopic machanical load microscopic machanical load microscopic machanical load microscopic machanical load mechanical load mechanical load mechanical load microscopic micro	cycles  d cycles d cycles  V  N %Us K %Us  W WUs  W W W W W W W W W W W W W W W W W W W	1400000 200000000 yes 24 80 110 10 40 2.4 2.4
Safety related data Performance level B10d according  EMC 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 Operating times	rated load mechanical load mechanical load mechanical load microscopic microscopic microscopic machanical microscopic machanical microscopic machanical load microscopic machanical load microscopic machanical load microscopic machanical load mechanical load mechanical load mechanical load microscopic micro	cycles  d cycles d cycles d cycles  V  n %Us k %Us  w WUs  w WUs  w WUs  w WUs	1400000 200000000 yes 24 80 110 10 40 2.4 2.4
Safety related data Performance level B10d according  EMC 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 Operating times Average time for Us control	rated load mechanical load mechanical load mechanical load microscopic microscopic microscopic machanical microscopic machanical microscopic machanical load microscopic machanical load microscopic machanical load microscopic machanical load mechanical load mechanical load mechanical load microscopic micro	cycles  d cycles d cycles d cycles  V  n %Us k %Us  w WUs  w WUs  w WUs  w WUs	1400000 200000000 yes 24 80 110 10 40 2.4 2.4
Safety related data Performance level B10d according  EMC 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 Operating times	rated load mechanical load mec	cycles  d cycles d cycles d cycles  V  n %Us k %Us  w WUs  w WUs  w WUs  w WUs	1400000 200000000 yes 24 80 110 10 40 2.4 2.4
Safety related data Performance level B10d according  EMC 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 Operating times Average time for Us control	rated load mechanical load mec	cycles  d cycles  d cycles  V  n %Us  k %Us  n %Us  k %Us  n W  g W  cycles/h	1400000 200000000 yes 24 80 110 10 40 2.4 2.4 3600
Safety related data Performance level B10d according  EMC 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 Operating times Average time for Us control	rated load mechanical load mec	cycles  d cycles  d cycles  V  n %Us  k %Us  n %Us  k %Us  n W  cycles/h	1400000 200000000 yes 24 80 110 10 40 2.4 2.4

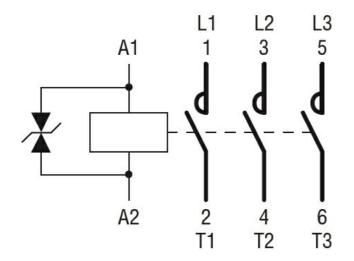


		Opening NO			
		Opening NO	min	me	5
			max	ms ms	15
		Closing NC	Παλ	1113	13
		Closing 140	min	ms	9
			max	ms	20
		Opening NC	max		20
		opolinig i to	min	ms	9
			max	ms	17
	in DC				
		Closing NO			
		3 -	min	ms	76
			max	ms	92
		Opening NO			
		. 0	min	ms	16
			max	ms	20
UL technical data					
Rated operational volta	age AC (UL)			V	600
Full-load current (FLA)	for three-phase AC r	notor			
, ,	•		at 480V	Α	40
			at 600V	Α	32
Yielded mechanical pe	erformance				
·	for single-phase AC	motor			
			110/120V	HP	3
			230V	HP	7.5
	for three-phase AC	motor			
	·		200/208V	HP	10
			220/230V	HP	15
			460/480V	HP	30
			575/600V	HP	30
General USE					
	Contactor				
			AC current	Α	55
Short-circuit protection	n fuse, 600V				
·	High fault				
			Short circuit current	kA	100
			Fuse rating	Α	100
			Fuse class		J
	Standard fault				
			Short circuit current	kA	5
			Fuse rating	Α	150
Ambient conditions					
Temperature					
	Operating temperat	ure			
			min	°C	-50
			max	°C	70
	Storage temperatur	e	<del></del>		
			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° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

#### Certificates

CCC



### BF3800L024

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 38A, DC COIL LOW CONSUMPTION, 24VDC

cULus			
EAC			

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching