



Product designation	Power contactor		
Product type designation	BF32		
<b>Contact characteristics</b>			
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 $Ith$		A	56
Operational current $le$			
	AC-1 ( $=40^{\circ}\text{C}$ )	A	56
	AC-1 ( $=55^{\circ}\text{C}$ )	A	45
	AC-1 ( $=70^{\circ}\text{C}$ )	A	40
	AC-3 ( $=440\text{V} = 55^{\circ}\text{C}$ )	A	32
	AC-4 (400V)	A	13.5
Rated operational power AC-3 ( $T=55^{\circ}\text{C}$ )			
	230V	kW	8.8
	400V	kW	16
	415V	kW	17
	440V	kW	17
	500V	kW	20
	690V	kW	22
Rated operational power AC-1 ( $T=40^{\circ}\text{C}$ )			
	230V	kW	21
	400V	kW	36
	500V	kW	45
	690V	kW	62
IEC max current $le$ in DC1 with $L/R = 1\text{ms}$ with 1 poles in series			
	=24V	A	30
	48V	A	26
	75V	A	22
	110V	A	8
	220V	A	—
IEC max current $le$ in DC1 with $L/R = 1\text{ms}$ with 2 poles in series			
	=24V	A	32
	48V	A	32
	75V	A	28
	110V	A	25
	220V	A	3
IEC max current $le$ in DC1 with $L/R = 1\text{ms}$ with 3 poles in series			
	=24V	A	32
	48V	A	32
	75V	A	32
	110V	A	27

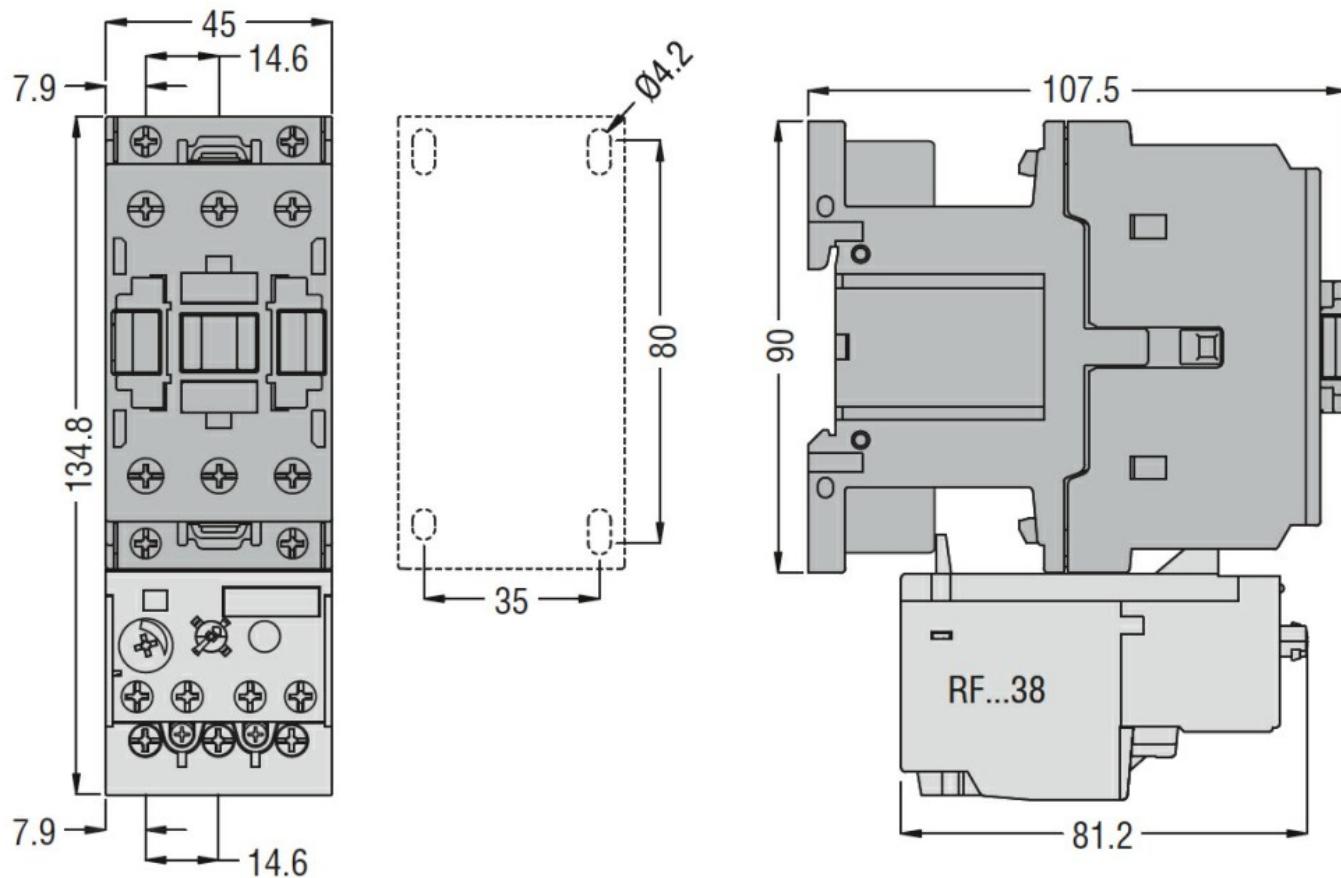
	220V	A	23
IEC max current Ie in DC1 with L/R = 1ms with 4 poles in series	=24V	A	—
	48V	A	—
	75V	A	—
	110V	A	—
	220V	A	—
IEC max current Ie in DC3-DC5 with L/R = 15ms with 1 poles in series	=24V	A	20
	48V	A	17
	75V	A	15
	110V	A	2,5
	220V	A	—
IEC max current Ie in DC3-DC5 with L/R = 15ms with 2 poles in series	=24V	A	25
	48V	A	22
	75V	A	20
	110V	A	15
	220V	A	3
IEC max current Ie in DC3-DC5 with L/R = 15ms with 3 poles in series	=24V	A	30
	48V	A	28
	75V	A	28
	110V	A	20
	220V	A	23
IEC max current Ie in DC3-DC5 with L/R = 15ms with 4 poles in series	=24V	A	—
	48V	A	—
	75V	A	—
	110V	A	—
	220V	A	—
Short-time allowable current for 10s (IEC/EN60947-1)		A	320
Protection fuse			
	gG (IEC)	A	63
	aM (IEC)	A	32
Making capacity (RMS value)		A	320
Breaking capacity at voltage			
	440V	A	256
	500V	A	240
	690V	A	192
Resistance per pole (average value)		m?	2
Power dissipation per pole (average value)			
	I <sub>th</sub>	W	6
	AC3	W	2
Tightening torque for terminals			
	min	Nm	2.5
	max	Nm	3
	min	I <sub>bin</sub>	1.8
	max	I <sub>bin</sub>	2.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	I <sub>bin</sub>	0.8

	max	lbin	0.74			
Max number of wires simultaneously connectable	Nr. 2					
<b>Conductor section</b>						
AWG/Kcmil						
Flexible w/o lug conductor section	max		6			
	min	mm <sup>2</sup>	2.5			
	max	mm <sup>2</sup>	16			
Flexible c/w lug conductor section		min	mm <sup>2</sup> 1			
		max	mm <sup>2</sup> 10			
Flexible with insulated spade lug conductor section		min	mm <sup>2</sup> 1			
		max	mm <sup>2</sup> 10			
Power terminal protection according to IEC/EN 60529	IP20 when wired					
<b>Mechanical features</b>						
Operating position	normal allowable	Vertical plan ±30°				
Fixing	Screw / DIN rail 35mm					
Weight	g	568				
<b>Conductor section</b>						
AWG/kcmil conductor section	max		6			
<b>Operations</b>						
Mechanical life	cycles	20000000				
Electrical life	cycles	1600000				
<b>Safety related data</b>						
Performance level B10d according to EN/ISO 13489-1	rated load	cycles	1600000			
	mechanical load	cycles	20000000			
Mirror contacts according to IEC/EN 609474-4-1	yes					
EMC compatibility	yes					
<b>DC coil operating</b>						
DC rated control voltage	V	24				
DC operating voltage						
pick-up	min	%Us	80			
	max	%Us	110			
drop-out	min	%Us	10			
	max	%Us	40			
Average coil consumption =20°C	in-rush	W	2.4			
	holding	W	2.4			
<b>Max cycles frequency</b>						
Mechanical operation	cycles/h 3600					
<b>Operating times</b>						
Average time for Us control						
in AC	Closing NO					
		min	ms 8			

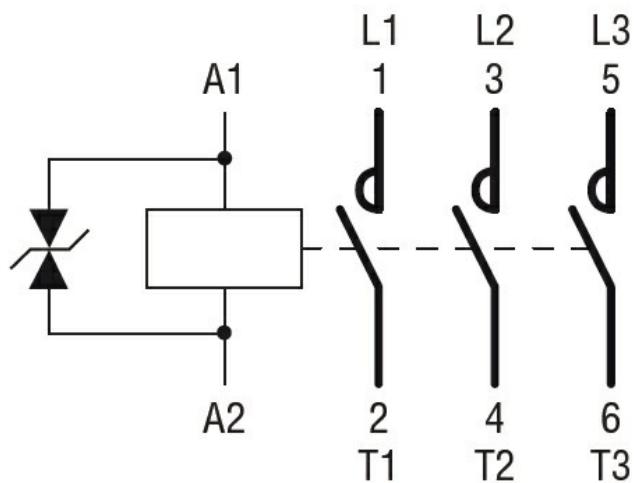
		max	ms	24
	Opening NO	min	ms	5
		max	ms	15
	Closing NC	min	ms	9
		max	ms	20
	Opening NC	min	ms	9
		max	ms	17
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in DC				
	Closing NO	min	ms	76
		max	ms	92
	Opening NO	min	ms	16
		max	ms	20
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<b>UL technical data</b>				
Full-load current (FLA) for three-phase AC motor				
		at 480V	A	27
		at 600V	A	27
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<b>Yielded mechanical performance</b>				
for single-phase AC motor				
	110/120V	HP	3	
	230V	HP	7.5	
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for three-phase AC motor				
	200/208V	HP	10	
	220/230V	HP	10	
	460/480V	HP	20	
	575/600V	HP	25	
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<b>General USE</b>				
Contactor		AC current	A	55
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Short-circuit protection fuse, 600V				
High fault		Short circuit current	kA	100
		Fuse rating	A	100
		Fuse class	J	
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Standard fault		Short circuit current	kA	5
		Fuse rating	A	125
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<b>Ambient conditions</b>				
Temperature		Operating temperature		
			min	°C
			max	°C
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		Storage temperature		
			min	°C
			max	°C
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Max altitude			m	3000
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<b>Resistance &amp; Protection</b>				
Pollution degree				3
Dimensions				
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### Wiring diagrams



### Certifications and compliance

#### Compliance

CSA C22.2 n° 60947-1  
CSA C22.2 n° 60947-4-1  
IEC/EN 60947-1  
IEC/EN 60947-4-1  
UL 60947-1  
UL 60947-4-1

#### Certificates

CCC

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cULus  
EAC

ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching