



Product designation	Power contactor		
Product type designation	BF32		
<b>Contact characteristics</b>			
Number of poles	nr.	3	
Rated insulation voltage $U_i$ IEC/EN	V	690	
Rated impulse withstand voltage $U_{imp}$	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current $I_{th}$	A	56	
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A	56
	AC-1 ( $\leq 55^\circ\text{C}$ )	A	45
	AC-1 ( $\leq 70^\circ\text{C}$ )	A	40
	AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ )	A	32
	AC-4 (400V)	A	13.5
Rated operational power AC-3 ( $T \leq 55^\circ\text{C}$ )	230V	kW	8.8
	400V	kW	18
	415V	kW	17
	440V	kW	17
	500V	kW	20
	690V	kW	22
Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )	230V	kW	21
	400V	kW	36
	500V	kW	45
	690V	kW	62
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A	30
	48V	A	26
	75V	A	22
	110V	A	8
	220V	A	–
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series	$\leq 24\text{V}$	A	32
	48V	A	32
	75V	A	28
	110V	A	25
	220V	A	3
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	$\leq 24\text{V}$	A	32
	48V	A	32
	75V	A	32
	110V	A	27

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

		max	lbft	0.74
Max number of wires simultaneously connectable			nr.	2
Conductor section	Flexible w/o lug conductor section	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	554
<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 mechanical load	cycles	1600000
			cycles	20000000
Mirror contacts according to IEC/EN 60947-4-1				yes
EMC compatibility				yes
<b>DC coil operating</b>				
DC rated control voltage			V	24
DC operating voltage	pick-up	min	%Us	70
		max	%Us	125
	drop-out	min	%Us	10
		max	%Us	40
Average coil consumption ≤20°C		in-rush	W	5.4
		holding	W	5.4
<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	54
		max	ms	66
	Opening NO			
		min	ms	14
		max	ms	17

**UL technical data**

Full-load current (FLA) for three-phase AC motor

at 480V	A	27
at 600V	A	27

Yielded mechanical performance

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	10
460/480V	HP	20
575/600V	HP	25

General USE

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

Standard fault

Short circuit current	kA	5
Fuse rating	A	125

**Ambient conditions**

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

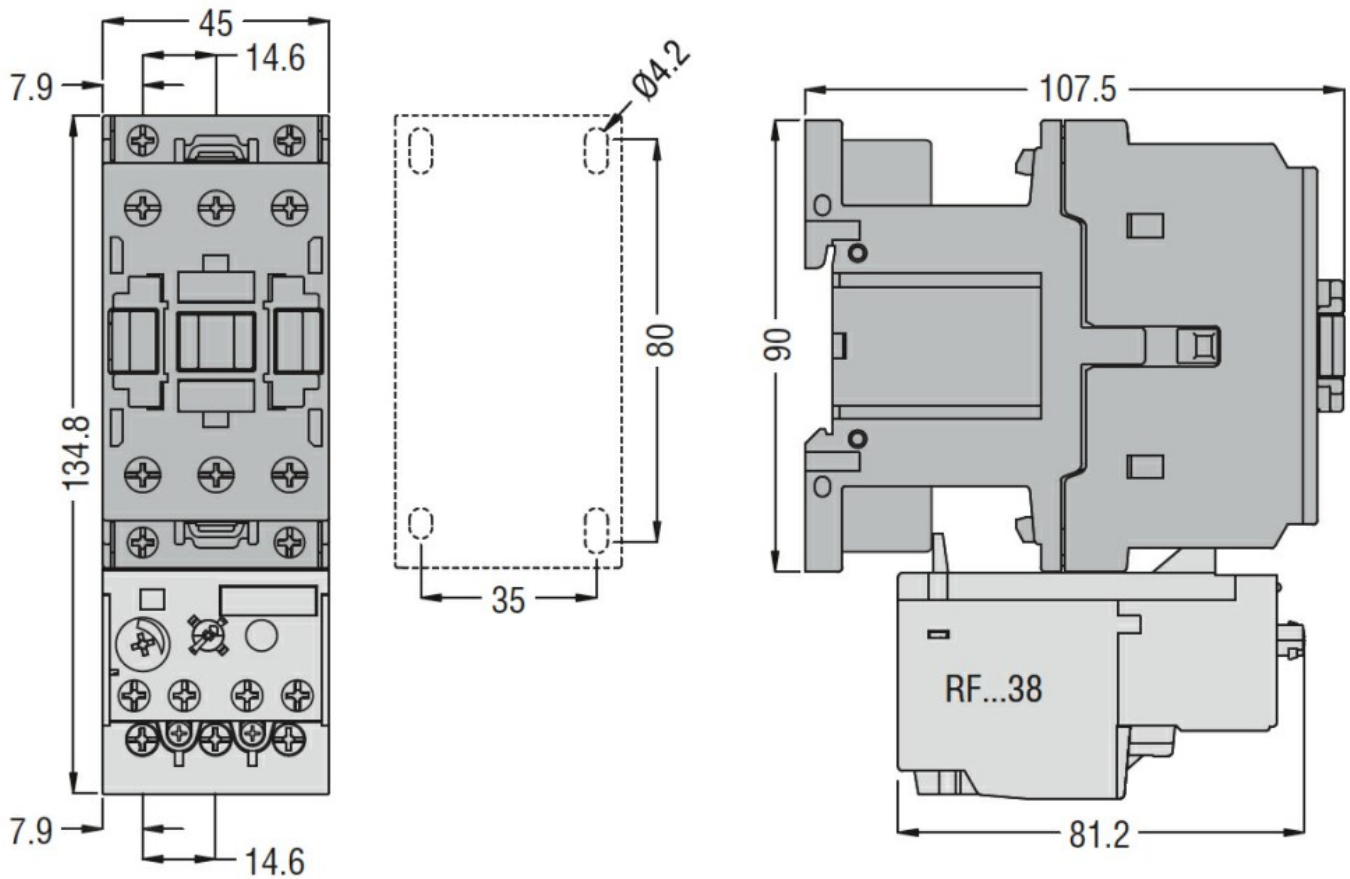
m	3000
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**Resistance & Protection**

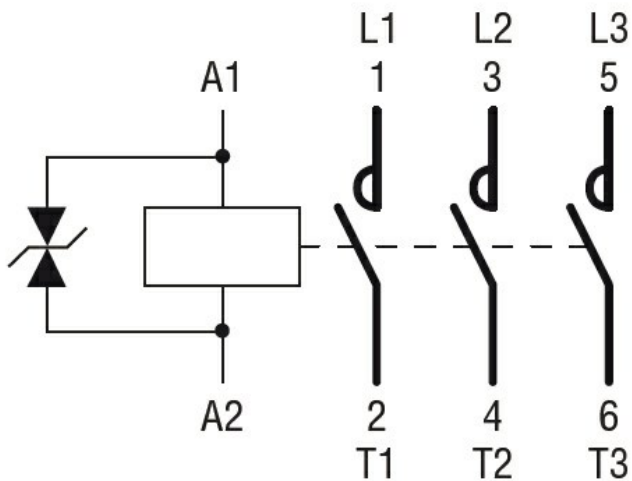
Pollution degree

3

**Dimensions**



Wiring diagrams



Certifications and compliance

Compliance

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

Certificates

CCC

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cULus

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EAC

ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching