



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 ( $\leq 40^\circ C$ )	A	56
	AC-1 ( $\leq 55^\circ C$ )	A	45
	AC-1 ( $\leq 70^\circ C$ )	A	40
	AC-3 ( $\leq 440V \leq 55^\circ C$ )	A	32
	AC-4 (400V)	A	13.5
Rated operational power AC-3 ( $T \leq 55^\circ C$ )	230V	kW	8.8
	400V	kW	16
	415V	kW	17
	440V	kW	17
	500V	kW	20
	690V	kW	22
Rated operational power AC-1 ( $T \leq 40^\circ C$ )	230V	kW	21
	400V	kW	36
	500V	kW	45
	690V	kW	62
IEC max current $I_e$ in DC1 with $L/R \leq 1ms$ with 1 poles in series	$\leq 24V$	A	30
	48V	A	26
	75V	A	22
	110V	A	8
	220V	A	—
IEC max current $I_e$ in DC1 with $L/R \leq 1ms$ with 2 poles in series	$\leq 24V$	A	32
	48V	A	32
	75V	A	28
	110V	A	25
	220V	A	3
IEC max current $I_e$ in DC1 with $L/R \leq 1ms$ with 3 poles in series	$\leq 24V$	A	32
	48V	A	32
	75V	A	32
	110V	A	27

	220V	A	23
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series			
	$\leq 24V$	A	—
	48V	A	—
	75V	A	—
	110V	A	—
	220V	A	—
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series			
	$\leq 24V$	A	20
	48V	A	17
	75V	A	15
	110V	A	2,5
	220V	A	—
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series			
	$\leq 24V$	A	25
	48V	A	22
	75V	A	20
	110V	A	15
	220V	A	3
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 3 poles in series			
	$\leq 24V$	A	30
	48V	A	28
	75V	A	28
	110V	A	20
	220V	A	23
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 4 poles in series			
	$\leq 24V$	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)			$\text{m}\Omega$ 2
Power dissipation per pole (average value)			
	I <sub>th</sub>	W	6
	AC-3	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	Ibin	0.74		
Max number of wires simultaneously connectable	Nr. 2				
Conductor section					
AWG/Kcmil	max	6			
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 properly wired				
<b>Mechanical features</b>					
Operating position	normal allowable	Vertical plan ±30°			
Fixing	Screw / DIN rail 35mm				
Weight	g	414			
<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 20000000		
EMC compatibility	yes				
<b>AC coil operating</b>					
Rated AC voltage at 60Hz	V	575			
AC operating voltage					
of 60Hz coil powered at 60Hz					
pick-up	min max	%Us	80 110		
drop-out	min max	%Us	20 55		
AC average coil consumption at 20°C					
of 60Hz coil powered at 60Hz	in-rush holding	VA VA	75 9		
Dissipation at holding ≤20°C 50Hz	W	2.5			
<b>Max cycles frequency</b>					
Mechanical operation	cycles/h 3600				
<b>Operating times</b>					
Average time for Us control					
in AC					
Closing NO	min max	ms	8 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

**UL technical data**

Rated operational voltage AC (UL)	V	600
Full-load current (FLA) for three-phase AC motor		
at 480V	A	27
at 600V	A	27

**Yielded mechanical performance**

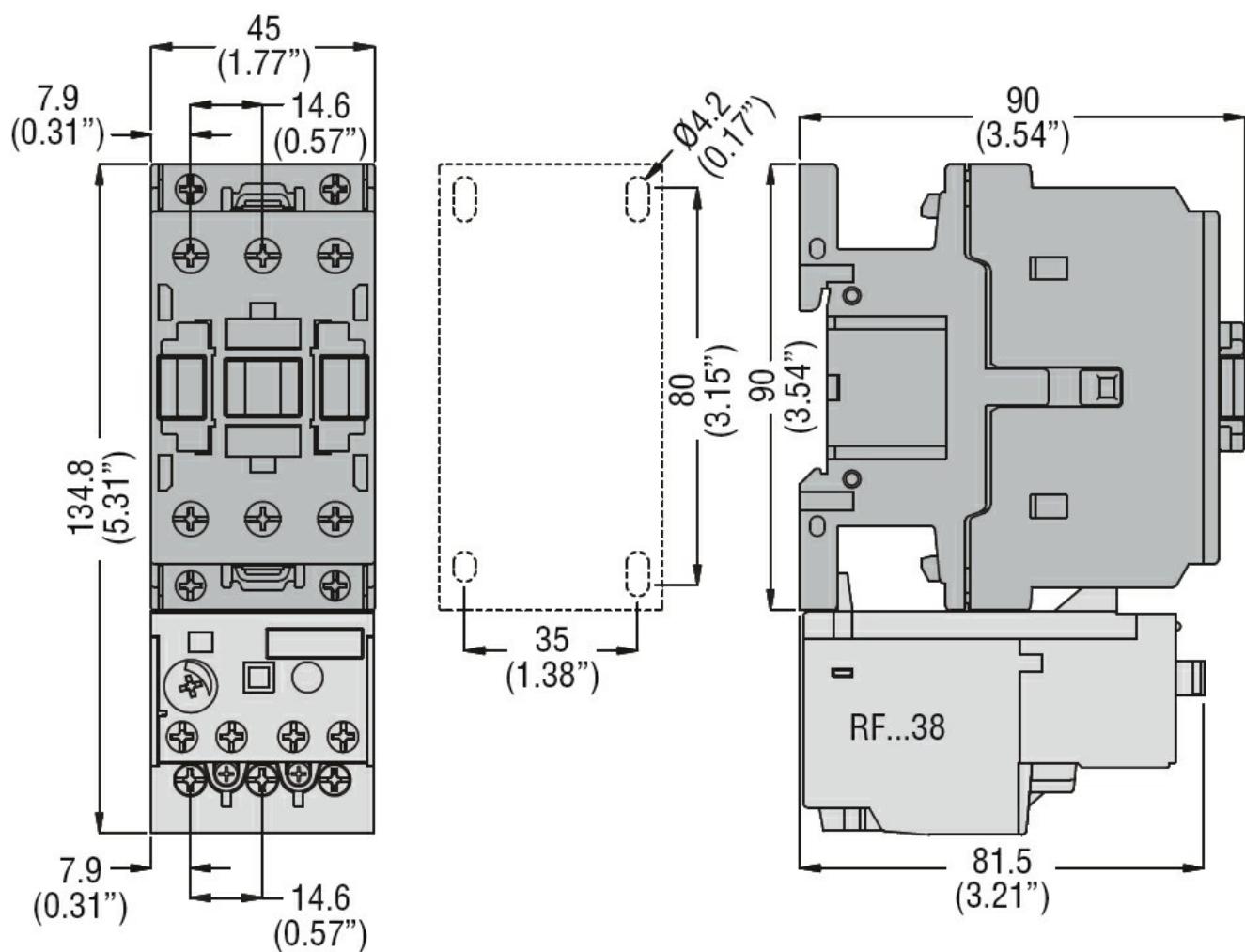
for single-phase AC motor	110/120V	HP	3
	230V	HP	7.5
for three-phase AC motor	200/208V	HP	10
	220/230V	HP	10
	460/480V	HP	20
	575/600V	HP	25

**General USE**

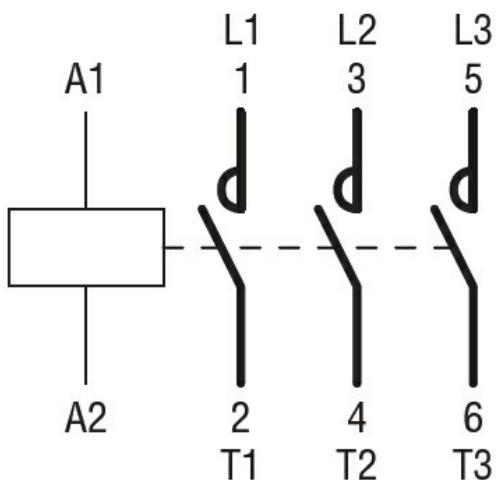
Contactor	AC current	A	55
Short-circuit protection fuse, 600V			
High fault	Short circuit current	kA	100
	Fuse rating	A	100
	Fuse class	J	
Standard fault	Short circuit current	kA	5
	Fuse rating	A	125

**Ambient conditions**

Temperature	Operating temperature	min	°C	-50
		max	°C	70
Storage temperature		min	°C	-60
		max	°C	80
Max altitude		m		3000
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](#)

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UL 60947-4-1

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Certificates

CCC

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EAC

ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching