



Product designation	Power contactor		
Product type designation	BF32		
Contact characteristics			
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	16
	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
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	—	
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	—	
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	
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	
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	—	
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 _{th}	W	6
	AC3	W	2
Tightening torque for terminals			
	min	Nm	2.5
	max	Nm	3
	min	lbin	1.8
	max	lbin	2.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8

	max	lbin	0.74
Max number of wires simultaneously connectable	Nr. 2		
Conductor section			
AWG/Kcmil	max	6	
Flexible w/o lug conductor section	min	mm ²	2.5
	max	mm ²	16
Flexible c/w lug conductor section	min	mm ²	1
	max	mm ²	10
Flexible with insulated spade lug conductor section	min	mm ²	1
	max	mm ²	10
Power terminal protection according to IEC/EN 60529	IP20 when wired		
Mechanical features			
Operating position	normal allowable	Vertical plan ±30°	
Fixing	Screw / DIN rail 35mm		
Weight	g	558	
Conductor section			
AWG/kcmil conductor section	max	6	
Operations			
Mechanical life	cycles	20000000	
Electrical life	cycles	1600000	
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	cycles	1600000 20000000
Mirror contacts according to IEC/EN 609474-4-1	yes		
EMC compatibility	yes		
DC coil operating			
DC rated control voltage	V	110	
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 holding	W	5.4 5.4
Max cycles frequency			
Mechanical operation	cycles/h 3600		
Operating times			
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

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

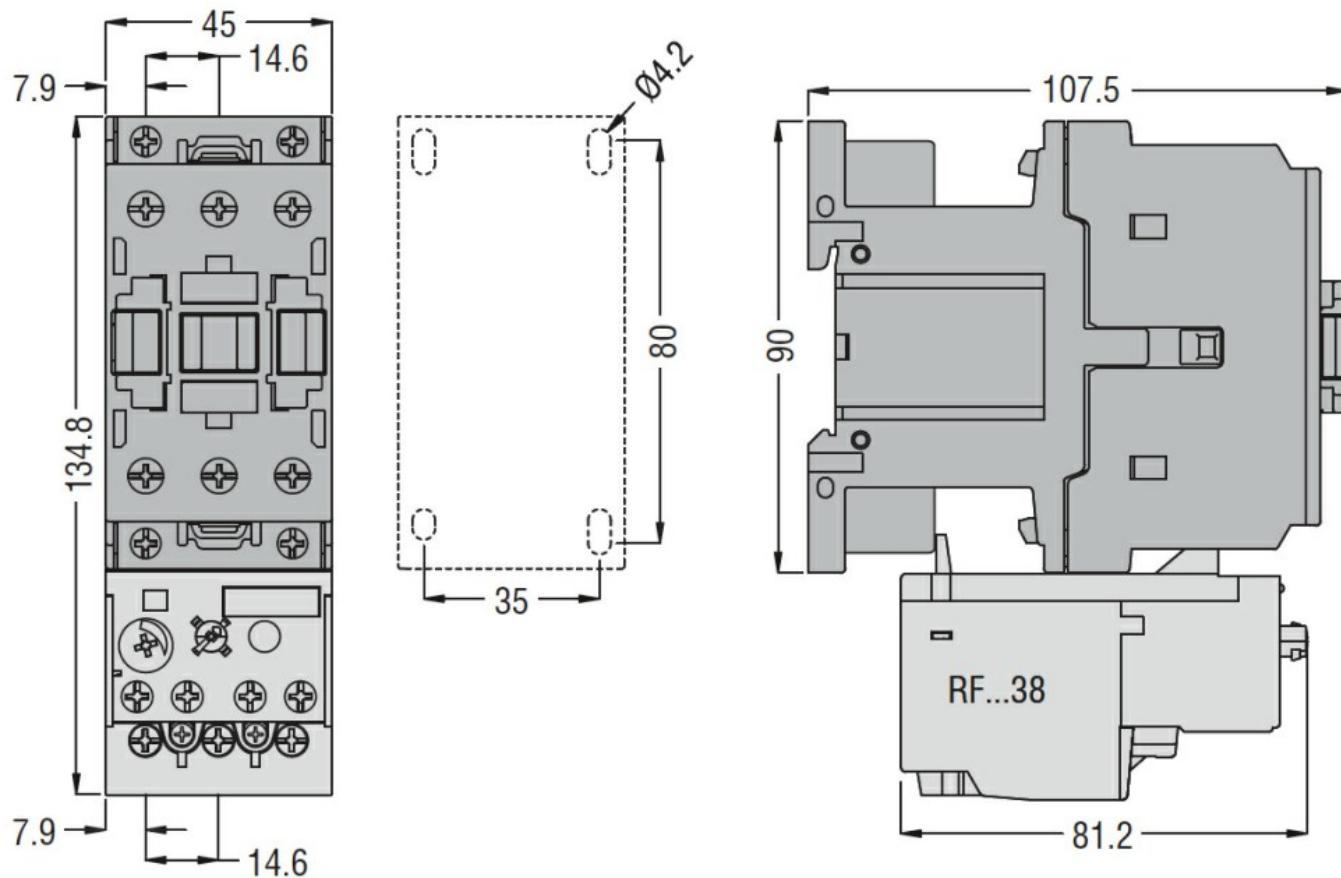
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Resistance & Protection

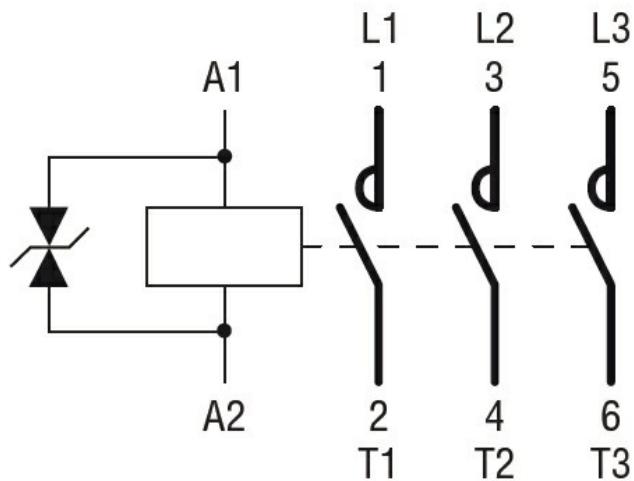
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Pollution degree

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

cULus
EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching