



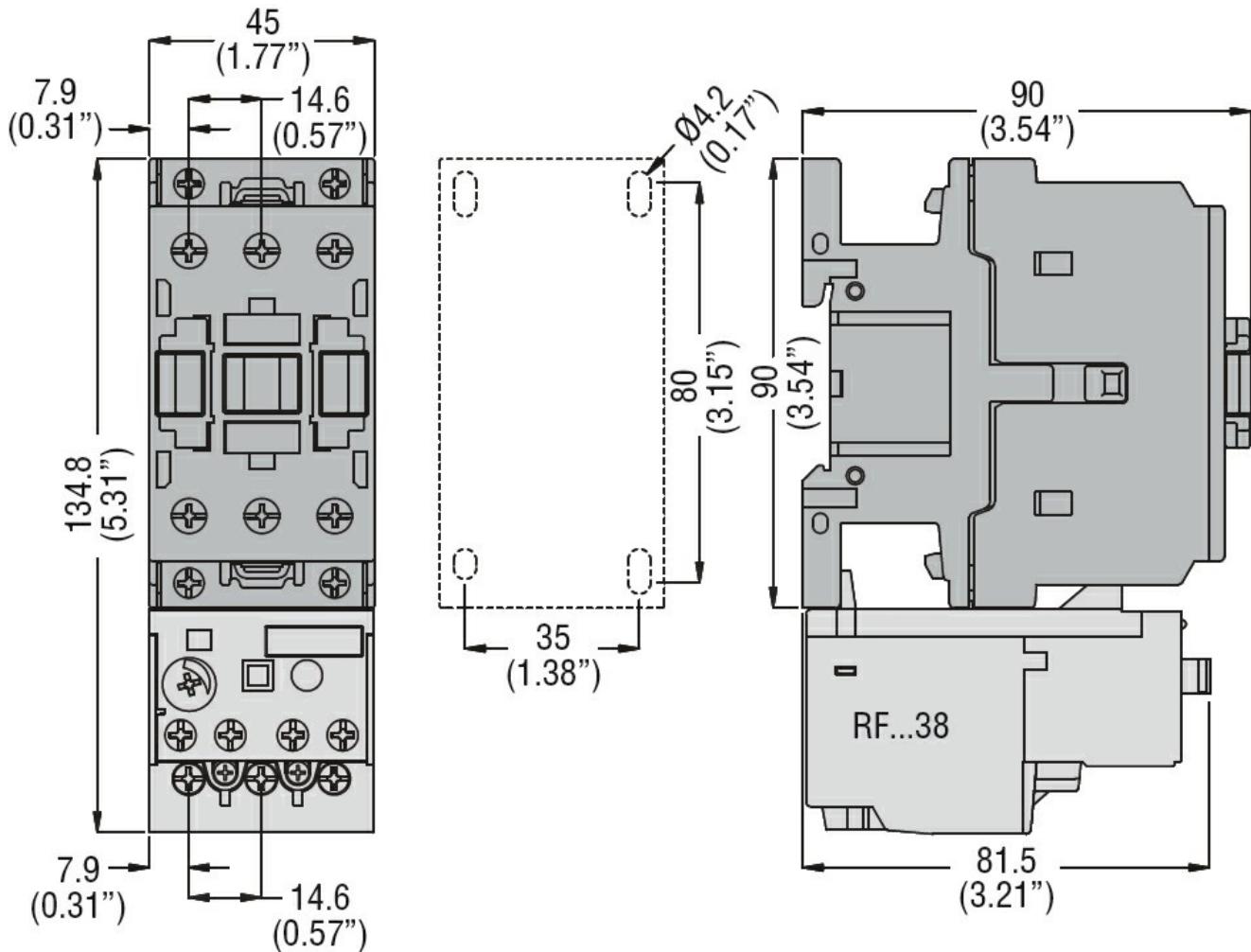
Product designation	Power contactor		
Product type designation	BF32		
Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage U_i IEC/EN	V	690	
Rated impulse withstand voltage U_{imp}	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current I_{th}		A	56
Operational current I_e			
	AC-1 ($=40^\circ\text{C}$)	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 I_e 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 I_e 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 I_e 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 _{th}	W	6
	AC3	W	2
Tightening torque for terminals			
	min	Nm	2.5
	max	Nm	3
	min	I _{bin}	1.8
	max	I _{bin}	2.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	I _{bin}	0.8

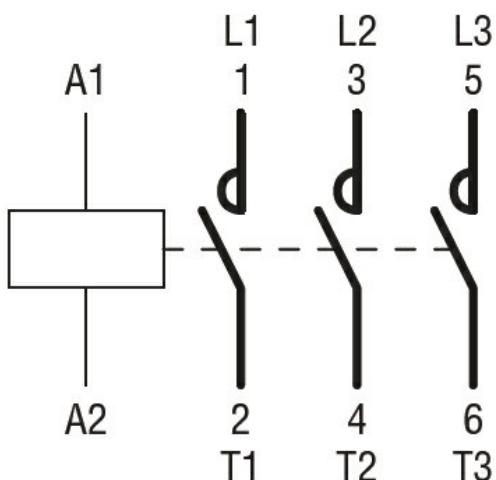
	max	lbin	0.74		
Max number of wires simultaneously connectable	Nr. 2				
Conductor section					
AWG/Kcmil	max	6			
Flexible w/o lug conductor section	min	mm ²	2.5		
	max	mm ²	16		
Flexible c/w lug conductor section	min	mm ²	1		
	max	mm ²	10		
Flexible with insulated spade lug conductor section	min	mm 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	424			
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				
AC coil operating					
Rated AC voltage at 50/60Hz	V	230			
AC operating voltage					
of 50/60Hz coil powered at 50Hz					
pick-up	min	%Us	80		
	max	%Us	110		
drop-out	min	%Us	20		
	max	%Us	55		
of 50/60Hz coil powered at 60Hz					
pick-up	min	%Us	85		
	max	%Us	110		
drop-out	min	%Us	20		
	max	%Us	55		
AC average coil consumption at 20°C					
of 50/60Hz coil powered at 50Hz					

	in-rush holding	VA	75
of 50/60Hz coil powered at 60Hz		VA	9
	in-rush holding	VA	70
of 60Hz coil powered at 60Hz		VA	6.5
	in-rush holding	VA	75
Dissipation at holding =20°C 50Hz		VA	9
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
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
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		min	°C -50
Operating temperature			

	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 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