



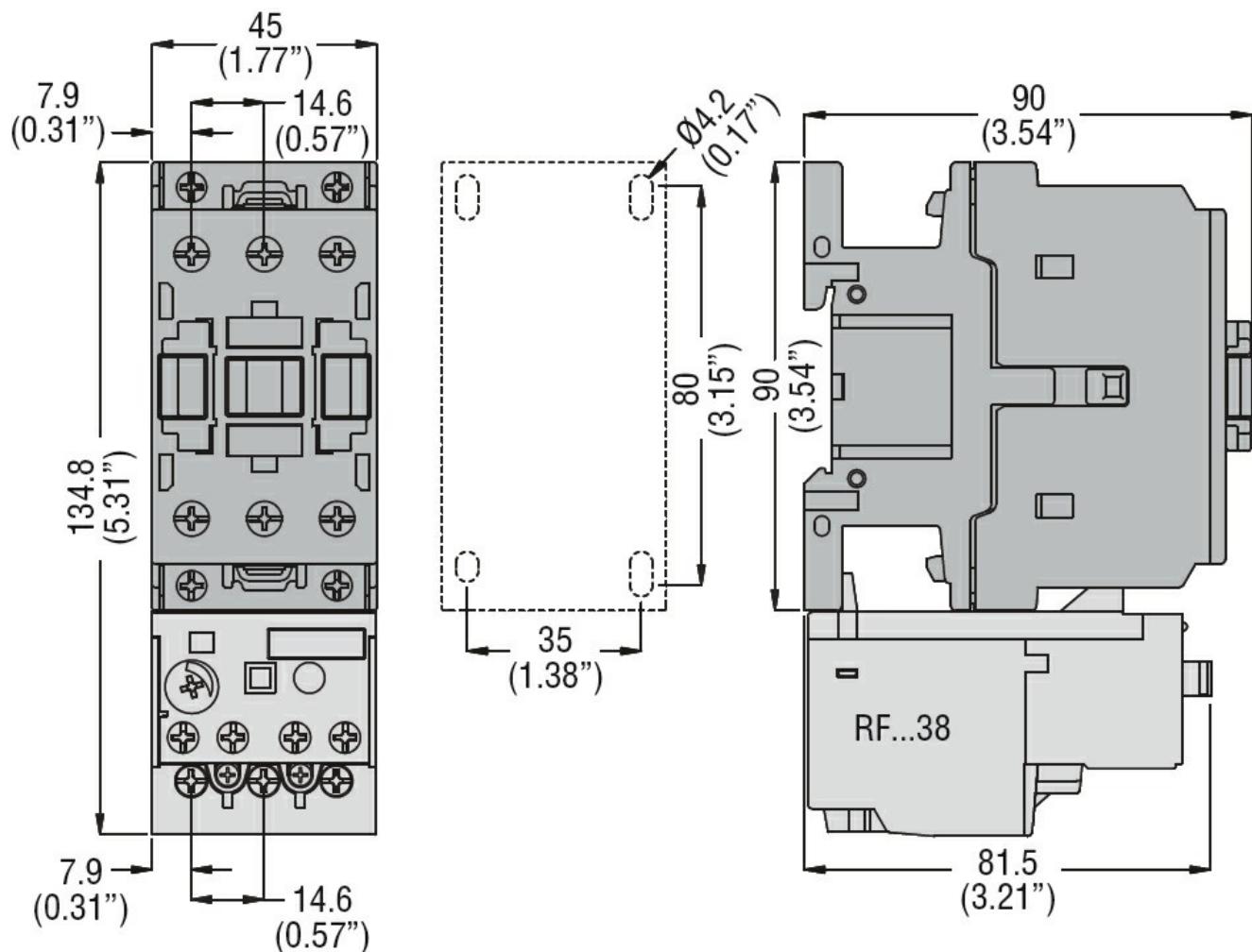
Product designation	Power contactor		
Product type designation	BF32		
Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage U_i IEC/EN	V	690	
Rated impulse withstand voltage U_{imp}	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current I_{th}		A	56
Operational current I_e			
	AC-1 ($\leq 40^\circ C$)	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	$\leq 24V$ 48V 75V 110V 220V	A	— — — — —
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series	$\leq 24V$ 48V 75V 110V 220V	A	20 17 15 2,5 —
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series	$\leq 24V$ 48V 75V 110V 220V	A	25 22 20 15 3
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 3 poles in series	$\leq 24V$ 48V 75V 110V 220V	A	30 28 28 20 23
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 4 poles in series	$\leq 24V$ 48V 75V 110V 220V	A	— — — — —
Short-time allowable current for 10s (IEC/EN60947-1)		A	320
Protection fuse	gG (IEC) aM (IEC)	A	63 32
Making capacity (RMS value)		A	320
Breaking capacity at voltage	440V 500V 690V	A	256 240 192
Resistance per pole (average value)		$\text{m}\Omega$	2
Power dissipation per pole (average value)	I _{th} AC-3	W	6 2
Tightening torque for terminals	min max min max	Nm Nm I _{bin} I _{bin}	2.5 3 1.8 2.2
Tightening torque for coil terminal	min max min	Nm Nm I _{bin}	0.8 1 0.8

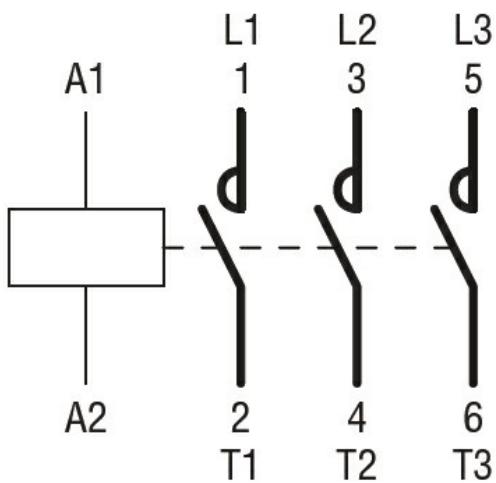
	max	I _{bin}	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil	max		6
Flexible w/o lug conductor section	min	mm ²	2.5
	max	mm ²	16
Flexible c/w lug conductor section	min	mm ²	1
	max	mm ²	10
Flexible with insulated spade lug conductor section	min	mm ²	1
	max	mm ²	10
Power terminal protection according to IEC/EN 60529			IP20 when properly wired
Mechanical features			
Operating position	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight	g	430	
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
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 50/60Hz	V	48	
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up	min max	%Us %Us	80 110
drop-out	min max	%Us %Us	20 55
of 50/60Hz coil powered at 60Hz			
pick-up	min max	%Us %Us	85 110
drop-out	min max	%Us %Us	20 55
AC average coil consumption at 20°C			
of 50/60Hz coil powered at 50Hz			
in-rush holding	VA VA	75 9	
of 50/60Hz coil powered at 60Hz			
in-rush	VA	70	

of 60Hz coil powered at 60Hz	holding	VA	6.5
	in-rush	VA	75
	holding	VA	9
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz		W	2.5
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			
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

UL 60947-4-1

Certificates

CCC

cULus

EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching