

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 $L/R \leq 1ms$ 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 $L/R \leq 15ms$ with 1 poles in series			

	≤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			
	≤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			
	≤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			
	≤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_{th}	W	6
	AC-3	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	16
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		424
Operations			
Mechanical life	cycles		20000000
Electrical life	cycles		1600000
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load	cycles	1600000
	mechanical load	cycles	20000000
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 60Hz	V		230
AC operating voltage	of 60Hz coil powered at 60Hz		
	pick-up	min	%Us 80
		max	%Us 110
	drop-out	min	%Us 20
		max	%Us 55
AC average coil consumption at 20°C			
of 60Hz coil powered at 60Hz	in-rush	VA	75
	holding	VA	9
Dissipation at holding ≤20°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
	220/240V	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
ETIM classification			
ETIM 8.0			EC000066 - Power contactor, AC switching