

Product designation			Power contactor
Product type designation			BF32
Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage Ui IEC/EN	V	690	
Rated impulse withstand voltage Uimp	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	A	56	
Operational current Ie	AC-1 (≤40°C)	A	56
	AC-1 (≤55°C)	A	45
	AC-1 (≤70°C)	A	40
	AC-3 (≤440V ≤55°C)	A	32
	AC-4 (400V)	A	13.5
Rated operational power AC-3 (T≤55°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°C)	230V	kW	21
	400V	kW	36
	500V	kW	45
	690V	kW	62
IEC max current Ie in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A	30
	48V	A	26
	75V	A	22
	110V	A	8
	220V	A	–
IEC max current Ie in DC1 with L/R ≤ 1ms with 2 poles in series	≤24V	A	32
	48V	A	32
	75V	A	28
	110V	A	25
	220V	A	3
IEC max current Ie in DC1 with L/R ≤ 1ms 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 I _e 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 I _e 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 I _e 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)		mΩ	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	