



Product designation Product type designation			Power contactor BF65
Contact characteristics			
Number of poles		nr.	3
Rated insulation voltage Ui		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operating frequency			
	Operational frequency min	Hz	25
	Operational frequency max	Hz	400
Conventional free air thermal current Ith		А	100
Operating current			
	Operational current AC1 (≤40°C)	А	100
	Operational current AC3 (≤440V ≤55°C)	А	65
	Operational current AC4 (400V)	А	31
Rated operational power AC1 (T≤40°C)			
	230V	kW	38
	400V	kW	65
	500V	kW	82
	690V	kW	114
Rated operational power AC3 (T≤55°C)			
	230V	kW	18.5
	400V	kW	30
	415V	kW	37
	440V	kW	37
	500V	kW	37
	690V	kW	45
	1000V	kW	30
Short-time allowable current for 10s (IEC/EN6	60947-1)	A	640
Protection fuse			
	gG (IEC)	A	125
	aM (IEC)	A	80
Making capacity (RMS value)		Α	650
Breaking capacity at voltage			
	Breaking capacity 440V	А	520
	Breaking capacity 500V	А	425
	Breaking capacity 690V	A	376
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
	Power dissipation pole (average value) Ith	W	8
	AC3	W	3.4
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	lbft	2.95

BF6500E024

lbft

max

3.69



BF6500E024 THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 65A, AC/DC COIL, 20...48VAC/DC

ENERGY AND AUTOMATION				20101710/20
Tightening torque for	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	lbft	0.8
		max	lbft	0.74
	simultaneously connectable		nr.	2
Conductor section				
	AWG			
		min		14
		max		2
	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	35
	ction according to IEC/EN 60529			IP20 front
Auxiliary contact chara	acteristics			
Operational current A	C1 (≤40°C)		А	100
Operating current DC	13			
		110V	А	Screw / DIN rail
		1100	~	35mm
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude			m	3000
Operating position				
		normal		Vertical plan
		allowable		±30°
				Screw / DIN rail
Mounting				35mm
Weight			g	1.06
Operations			Ŭ	
			. .	

Mechanical life		Cycles	15000000
Electrical life		Cycles	1400000
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	rated load	Cicli	1400000
	mechanical load	Cicli	15000000

	mechanical load	Cicli	15000000
Mirror contats according to IEC/EN 609474-4-1			yes
EMC compatibility			yes
AC coil operating			
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up			
	min	%Us	0.8
	max	%Us	1.1

drop-out

BF6500E024



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 65A, AC/DC COIL, 20...48VAC/DC

		max	%Us	≤0.75 Us min
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	0.8
		max	%Us	1.1
	drop-out			
		max	%Us	0.75
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			40 400
		in-rush	VA	40130
		holding	VA	1.34.4
	of 50/60Hz coil powered at 60Hz	in much		40 400
		in-rush	VA	40130
Dissipation at holding :	-20°C 50H-	holding	VA W	1.34.4 12.5
Dissipation at holding s	\$20 C 50H2		VV	12.0
DC con operating DC rated control voltage	10			
	1e	min	V	20
DC operating voltage		11111	v	20
	pick-up			
	how ab	min	%Us	0.8
		max	%Us	1.10
	drop-out	max	/000	
		min	%Us	0.2
		max	%Us	0.55
Average coil consuption	n ≤20°C			
. .		in-rush	W	60125
		holding	W	1.72.3
		noiuing	~ ~	1.7
Max cycles frequency		Tolding	vv	111
Mechanical operations		noiding	Cycles/ł	
Mechanical operations Operating times		noung		
Mechanical operations		noung		
Mechanical operations Operating times	in AC			
Mechanical operations Operating times)	Cycles/ł	n 1500
Mechanical operations Operating times	in AC) min	Cycles/h ms	1500
Mechanical operations Operating times	in AC Closing NC) min max	Cycles/ł	n 1500
Mechanical operations Operating times	in AC) min max O	Cycles/h ms ms	1500 12 28
Mechanical operations Operating times	in AC Closing NC) min max O min	Cycles/h ms ms ms	1500 12 28 8
Mechanical operations Operating times	in AC Closing NC Opening N) min max O	Cycles/h ms ms	1500 12 28
Mechanical operations Operating times	in AC Closing NC Opening N in DC) min max O min max	Cycles/h ms ms ms	1500 12 28 8
Mechanical operations Operating times	in AC Closing NC Opening N) min max O min max	Cycles/r ms ms ms ms	1500 12 28 8 22
Mechanical operations Operating times	in AC Closing NC Opening N in DC) min max O min max) min	Cycles/h ms ms ms ms	12 28 8 22 40
Mechanical operations Operating times	in AC Closing NC Opening N in DC Closing NC) min max O min max) min max	Cycles/r ms ms ms ms	1500 12 28 8 22
Mechanical operations Operating times	in AC Closing NC Opening N in DC) min max O min max) min max O	Cycles/r ms ms ms ms ms	1500 12 28 8 22 40 85
Mechanical operations Operating times	in AC Closing NC Opening N in DC Closing NC) min max O min max) min max	Cycles/h ms ms ms ms	12 28 8 22 40
Mechanical operations Operating times	in AC Closing NC Opening N in DC Closing NC) min max O min max) min max O min	Cycles/r ms ms ms ms ms ms	12 28 8 22 40 85 20
Mechanical operations Operating times Average time for Us co	in AC Closing NC Opening N in DC Closing NC) min max O min max) min max O min	Cycles/r ms ms ms ms ms ms	12 28 8 22 40 85 20
Mechanical operations Operating times Average time for Us co	in AC Closing NC Opening N in DC Closing NC Opening N) min max O min max) min max O min	Cycles/r ms ms ms ms ms ms	12 28 8 22 40 85 20
Mechanical operations Operating times Average time for Us co	in AC Closing NC Opening N in DC Closing NC Opening N) min max O min max) min max O min max	Cycles/r ms ms ms ms ms ms ms	12 28 8 22 40 85 20 55
Mechanical operations Operating times Average time for Us co	in AC Closing NC Opening N in DC Closing NC Opening N for three-phase AC motor) min max O min max) min max O min max O min max at 480V	Cycles/r ms ms ms ms ms ms ms ms ms	12 28 8 22 40 85 20 55 65
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC Closing NC Opening N in DC Closing NC Opening N for three-phase AC motor) min max O min max) min max O min max O min max at 480V	Cycles/r ms ms ms ms ms ms ms ms ms	12 28 8 22 40 85 20 55 65
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC Closing NC Opening N in DC Closing NC Opening N for three-phase AC motor) min max O min max O min max O min max O min max at 480V at 600V	Cycles/r ms ms ms ms ms ms ms ms ms	12 28 8 22 40 85 20 55 65 62 20
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC Closing NC Opening N in DC Closing NC Opening N for three-phase AC motor) min max O min max O min max O min max at 480V at 600V	Cycles/r ms ms ms ms ms ms ms as ms	12 28 8 22 40 85 20 55 65 62

BF6500E024

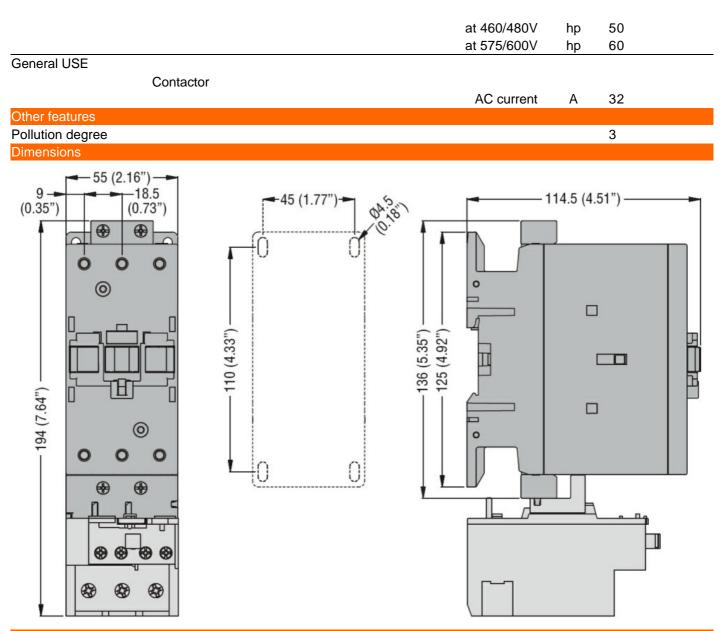
The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



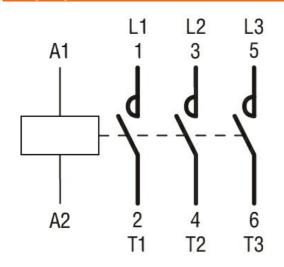
THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 65A, AC/DC COIL,

20...48VAC/DC

BF6500E024



Wiring diagrams



Certifications and compliance

Certifications

CSA C22.2 n° 60947-1

BF6500E024

The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



BF6500E024 THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 65A, AC/DC COIL, 20...48VAC/DC

CSA C22.2 n° 60947-4-1	
IEC/EN 60947-1	
IEC/EN 60947-4-1	
UL 60947-1	
UL 60947-4-1	

Compliance

cULus

ETIM 6 classification

EC000066 - Power contactor, AC switching

BF6500E024