



Product designation			Power contactor
Product type designation			BF65
Contact characteristics			
Number of poles		Nr.	4
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		А	100
Operational current le			
	AC-1 (≤40°C)	А	100
	AC-1 (≤55°C)	А	80
	AC-1 (≤70°C)	А	70
	AC-3 (≤440V ≤55°C)	А	65
	AC-4 (400V)	А	31
Rated operational current AC-3 (T≤55°C)			
	230V	А	65
	400V	А	65
	415V	А	65
	440V	А	65
	500V	А	53
	690V	А	47
	1000V	А	25
Rated operational power AC-1 (T≤40°C)			
	230V	kW	38
	400V	kW	65
	500V	kW	82
	690V	kW	114
IEC max current le in DC1 with $L/R \le 1$ ms with 1 poles in series			
	≤24V	А	50
	48V	А	50
	75V	А	50
	110V	А	8
	220V	A	_
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
	≤24V	А	70
	48V	А	70
	75V	А	70
	110V	А	60
	220V	A	9
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series			
	≤24V	А	70
	48V	А	70
	75V	А	70



FOUR-POLE CONTACTOR, IEC OPERATING CURREN

BF65T4E024
IT ITH (AC1) = 100A, AC/DC COIL,

24VAC/DC

	110V	А	60
	220V	А	90
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	А	70
	48V	А	70
	75V	А	70
	110V	А	70
	220V	А	110
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 1 poles in series			
	≤24V	А	35
	48V	А	25
	75V	А	25
	110V	А	3
	220V	А	_
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 2 poles in series			
	≤24V	А	45
	48V	А	40
	75V	А	40
	110V	А	30
	220V	А	5
IEC max current le in DC3-DC5 with L/R $\leq$ 15ms with 3 poles in series			
	≤24V	А	55
	48V	А	50
	75V	А	50
	110V	А	35
	220V	A	52
IEC max current le in DC3-DC5 with L/R $\leq$ 15ms with 4 poles in series			
	≤24V	А	60
	48V	А	60
	75V	А	60
	110V	А	50
	220V	A	65
Short-time allowable current for 10s (IEC/EN60947-1)		A	640
Protection fuse			
	gG (IEC)	А	125
	aM (IEC)	A	80
Making capacity (RMS value)		A	650
Breaking capacity at voltage			
	440V	А	520
	500V	А	425
	690V	A	376
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
	lth	W	8
	AC-3	W	3.4
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	lbin	2.95
	max	Ibin	3.69
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1



**BF65T4E024** FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 100A, AC/DC COIL, 24VAC/DC

		min	Ibin	0.8
		max	Ibin	0.74
Max number of wires	simultaneously connectable		Nr.	2
Conductor section	, , , , , , , , , , , , , , , , , , , ,			
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
		min	mm²	1.5
	<u></u>	max	mm²	35
	Flexible c/w lug conductor section			4 5
		min max	mm² mm²	1.5 35
Power terminal prote	ction according to IEC/EN 60529	Παλ	111111	IP20 front
Mechanical features				11 20 11011
Operating position				
51		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	1280
Conductor section				
	AWG/kcmil conductor section			
Operationa		max		2
Operations Mechanical life			ovoloo	15000000
Mechanical life			cycles	1500000
Electrical life			cycles	1400000
Electrical life Safety related data			cycles	1400000
Safety related data	10d according to EN/ISO 13489-1		cycles	1400000
Safety related data	10d according to EN/ISO 13489-1	rated load		
Safety related data	10d according to EN/ISO 13489-1	rated load mechanical load	cycles cycles cycles	1400000 1400000 15000000
Safety related data Performance level B <sup>-</sup>	10d according to EN/ISO 13489-1 ding to IEC/EN 609474-4-1		cycles	1400000
Safety related data Performance level B <sup>-</sup>			cycles	1400000 15000000
Safety related data Performance level B Mirror contats accord			cycles	1400000 15000000 yes
Safety related data Performance level B <sup>-</sup> Mirror contats accord EMC compatibility	ling to IEC/EN 609474-4-1		cycles cycles	1400000 15000000 yes yes
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating	ling to IEC/EN 609474-4-1		cycles cycles V	1400000 15000000 yes yes 20
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz	mechanical load	cycles cycles	1400000 15000000 yes yes
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz	mechanical load	cycles cycles V	1400000 15000000 yes yes 20
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz of 50/60Hz coil powered at 50Hz	mechanical load	cycles cycles V	1400000 15000000 yes yes 20
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz	mechanical load min max	cycles cycles V V	1400000 15000000 yes yes 20 48
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz of 50/60Hz coil powered at 50Hz	mechanical load min max min	cycles cycles V V V	1400000 15000000 yes yes 20 48 85 Us min
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up	mechanical load min max	cycles cycles V V	1400000 15000000 yes yes 20 48
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz of 50/60Hz coil powered at 50Hz	mechanical load min max min max	cycles cycles V V V	1400000 15000000 yes yes 20 48 85 Us min 110 Us max
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out	mechanical load min max min	cycles cycles V V V	1400000 15000000 yes yes 20 48 85 Us min
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	mechanical load min max min max	cycles cycles V V V	1400000 15000000 yes yes 20 48 85 Us min 110 Us max
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out	mechanical load min max min max	cycles cycles V V V	1400000 15000000 yes yes 20 48 85 Us min 110 Us max
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	mechanical load min max min max max	cycles cycles V V V W S %Us %Us	1400000 15000000 yes yes 20 48 85 Us min 110 Us max ≤70 Us min
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	mechanical load min max min max max max	cycles cycles V V V V S %Us %Us	1400000 15000000 yes yes 20 48 85 Us min 110 Us max ≤70 Us min 85 Us min
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s AC operating voltage	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	mechanical load min max min max max max	cycles cycles V V V V S %Us %Us	1400000 15000000 yes yes 20 48 85 Us min 110 Us max ≤70 Us min 85 Us min
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out	mechanical load	cycles cycles V V V V S %Us %Us %Us %Us	1400000 15000000 yes yes 20 48 85 Us min 110 Us max ≤70 Us min 110 Us max
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s AC operating voltage	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	mechanical load min max min max max max max	cycles cycles V V V %Us %Us %Us %Us %Us %Us	1400000 15000000 yes yes 20 48 85 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min
Safety related data Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at s AC operating voltage	ding to IEC/EN 609474-4-1 50/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out	mechanical load	cycles cycles V V V V S %Us %Us %Us %Us	1400000 15000000 yes yes 20 48 85 Us min 110 Us max ≤70 Us min 110 Us max



FOUR-POLE CONTACTOR, IEC OPERATI

BF65T4E024	
ING CURRENT ITH (AC1) = 100A, AC/DC COIL,	
24VAC/DC	

of 50/60Hz coil pow	vered at 60Hz	1 I		05 400
				35120
		noiding		1.53.7 12.5
SZU C 50HZ			VV	12.5
je		min	V	20
				48
		Пах	v	-10
nick-un				
plott up		min	%Us	80 Us min
				110 Us max
drop-out			,	
		max	%Us	≤70 Us min
tion ≤20°C				
-		in-rush	W	2368
			W	1.21,9
			cycles/h	1500
			-	
ontrol				
in AC				
	Closing NO			
		min	ms	12
		max	ms	28
	Opening NO			
		min	ms	8
		max	ms	22
in DC				
	Closing NO			
		min	ms	40
		max	ms	85
	Opening NO			
			ms	20
		max	ms	55
tor three-phase AC r	notor		-	
				65
		at 600V	A	62
tor three-phase AC	motor	000/0001		0.0
				20
				25
				50
		575/600V	ΗΥ	60
Contactor		10		100
(		AC current	A	100
High fault		<b>.</b>		
		Short circuit current	kA	100
		Euco roting	Α	200
		Fuse rating	73	
Standard fault		Fuse class		J
	≤20°C 50Hz ge pick-up drop-out tion ≤20°C ontrol in AC in DC for three-phase AC r	ge pick-up drop-out tion ≤20°C ontrol in AC Closing NO Opening NO opening NO opening NO opening NO opening NO Closing NO opening NO opening NO opening NO opening NO opening NO	s20°C 50Hz  Je min max  pick-up min max  drop-out max  drop-out max  tion <20°C in-rush holding  ontrol in AC Closing NO min max Opening NO min max Opening NO min max Opening NO min max for three-phase AC motor at 480V at 600V s75/600V Contactor AC current of use, 600V High fault	in-rush VA holding VA s20°C 50Hz W ge min V max V pick-up min %Us max %Us drop-out max %Us tion \$20°C in-rush W holding W cycles/h ontrol in AC Closing NO min ms max ms in DC Closing NO min ms max ms in DC Closing NO min ms max ms for three-phase AC motor at 480V A at 600V A rformance for three-phase AC motor 200/208V HP 220/208V HP 460/480V HP 575/600V HP Contactor AC current A



FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 100A, AC/DC COIL, 24VAC/DC

BF65T4E024

Ambient conditions Temperature		Short circuit current Fuse rating Fuse class	kA A	10 200 RK5	
Operating tempera	iture				
		min	°C	-40	
		max	°C	70	
Storage temperatu	ire				
		min	°C	-50	
NA 100 1.		max	°C	80	
Max altitude Resistance & Protection			m	3000	
Pollution degree				3	
Dimensions				U	
73 (2.87") 18 (0.71") (0.35	- 45 (1.77")- 04.56	136 (5.35") 125 (4.92")		(4.51")	

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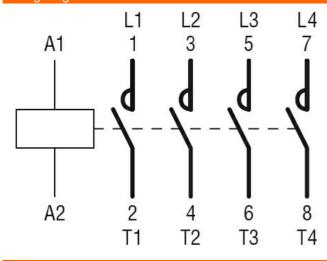
## Wiring diagrams

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## Certifications and compliance

Compliance

CSA C22.2 n° 6094	7-1
CSA C22.2 n° 6094	7-4-1



## **BF65T4E024** FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 100A, AC/DC COIL, 24VAC/DC

	IEC/EN/BS 60947-1	
	IEC/EN/BS 60947-4-1	
	UL 60947-1	
	UL 60947-4-1	
Certificates		
	CCC	
	cULus	
ETIM classification		
		EC000066 -

ETIM 8.0

EC000066 -Power contactor, AC switching