THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 50A, AC COIL 50/60HZ,



Product designation			Power contacto
Product type designation			BF50
Contact characteristics			
Number of poles		nr.	3
Rated insulation voltage Ui		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operating frequency			
eporaming modulome)	Operational frequency min	Hz	25
	Operational frequency max	Hz	400
Conventional free air thermal current Ith	Operational mequency max	A	90
Operating current		- , ,	
operating current	Operational current AC1 (≤40°C)	Α	90
	Operational current AC3 (≤440V ≤55°C)	Α	50
	Operational current AC4 (400V)	Α	28
Rated operational power AC1 (T≤40°C)	operational current (1001)	,,	
	230V	kW	34
	400V	kW	59
	500V	kW	74
	690V	kW	102
Rated operational power AC3 (T≤55°C)			
,	230V	kW	15
	400V	kW	22
	415V	kW	30
	440V	kW	30
	500V	kW	30
	690V	kW	37
	1000V	kW	22
Short-time allowable current for 10s (IEC/EN6		Α	400
Protection fuse	,		
	gG (IEC)	Α	100
	aM (IEC)	Α	50
Making capacity (RMS value)		Α	500
Breaking capacity at voltage			
	Breaking capacity 440V	Α	400
	Breaking capacity 500V	Α	352
	Breaking capacity 690V	Α	312
Resistance per pole (average value)	<u> </u>	mΩ	0.8
Power dissipation per pole (average value)			
Power dissipation per pole (average value)	Power dissipation pole (average value) Ith	W	6.5
Power dissipation per pole (average value)	Power dissipation pole (average value) Ith AC3	W W	6.5 2
	AC3	W	2
Fower dissipation per pole (average value) Fightening torque for terminals	AC3	W Nm	4

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Tightening torque for co	oil terminal			
		min	Nm	0.8
		max	Nm	1
		min	lbft	8.0
		max	lbft	0.74
max number of wires s	imultaneously connectable		nr.	2
Conductor section				
	AWG			
		min		14
		max		2
	Flexible w/o lug conductor section			
	3 11 13	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
	Tioxible 6, wing conductor coolien	min	mm²	1.5
		max	mm²	35
Power terminal protect	ion according to IEC/EN 60529	IIIdx	111111	IP20 front
Auxiliary contact chara	-			11 20 110111
Operational current AC			А	90
Operational current AC			^	JU
Operating current DC1	3			Canana / DIM nail
		110V	Α	Screw / DIN rail
A mala i a materia di di a ma				35mm
Ambient conditions				
Temperature				
	Operating temperature		0.0	
		min	°C	-50
	-	max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Operating position				
		normal		Vertical plan
		allowable		±30°
Mounting				Screw / DIN rail
Mounting				35mm
Weight			g	1.02
Operations				
Mechanical life			Cycles	15000000
Electrical life			Cycles	1400000
Safety related data			·	
	od according to EN/ISO 13489-1			
	3	rated load	Cicli	1400000
		mechanical load	Cicli	15000000
Mirror contats according	ng to IEC/EN 609474-4-1	moonamou iouu	0.000	yes
EMC compatibility	.g .a .E 0/E11 000777 7 1			yes
AC coil operating				y 0.3
AC operating voltage	-t 50/0011			
	of 50/60Hz coil powered at 50Hz			
	pick-up		0/1/	
		min	%Us	0.8
		max	%Us	1.1
	drop-out			





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		min	%Us	0.2
		max	%Us	0.55
	of 50/60Hz coil powered at 60Hz		,,,,,	
	pick-up			
	pion up	min	%Us	0.85
		max	%Us	1.1
	drop-out	IIIdx	7003	1.1
	diop-out	min	%Us	0.4
		max	%Us	0.55
	of COLLE and a country of COLLE	IIIax	/005	0.55
	of 60Hz coil powered at 60Hz			
	pick-up		0/11-	0.0
		min	%Us	0.8
		max	%Us	1.1
	drop-out	_		
		min	%Us	0.2
		max	%Us	0.55
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	210
		holding	VA	15
	of 50/60Hz coil powered at 60Hz			
	·	in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz			
	5. 55. <u>1</u>	in-rush	VA	210
		holding	VA	15
Dissipation at holding	<20°C 50Hz	noising .	W	5.0
	-20 O 001 12		**	0.0
Max cycles frequency				
Max cycles frequency Mechanical operations			Cycles/h	3600
Mechanical operations	;		Cycles/h	3600
Mechanical operations Operating times			Cycles/h	3600
Mechanical operations	ontrol		Cycles/h	3600
Mechanical operations Operating times	ontrol in AC		Cycles/h	3600
Mechanical operations Operating times	ontrol			
Mechanical operations Operating times	ontrol in AC	min	ms	12
Mechanical operations Operating times	ontrol in AC Closing NO			
Mechanical operations Operating times	ontrol in AC	min max	ms ms	12 28
Mechanical operations Operating times	ontrol in AC Closing NO	min max min	ms ms	12 28 8
Mechanical operations Operating times Average time for Us of	ontrol in AC Closing NO	min max	ms ms	12 28
Mechanical operations Operating times Average time for Us of	ontrol in AC Closing NO Opening NO	min max min	ms ms	12 28 8
Mechanical operations Operating times Average time for Us of	ontrol in AC Closing NO	min max min max	ms ms ms	12 28 8 22
Mechanical operations Operating times Average time for Us of	ontrol in AC Closing NO Opening NO	min max min max at 480V	ms ms ms ms	12 28 8 22
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO) for three-phase AC motor	min max min max	ms ms ms	12 28 8 22
Mechanical operations Operating times Average time for Us of	ontrol in AC Closing NO Opening NO) for three-phase AC motor	min max min max at 480V	ms ms ms ms	12 28 8 22
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO) for three-phase AC motor	min max min max at 480V	ms ms ms ms	12 28 8 22
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO) for three-phase AC motor erformance	min max min max at 480V	ms ms ms ms	12 28 8 22
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO) for three-phase AC motor erformance	min max min max at 480V at 600V	ms ms ms ms	12 28 8 22 52 41
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO) for three-phase AC motor erformance	min max min max at 480V at 600V	ms ms ms A A	12 28 8 22 52 41
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO) for three-phase AC motor erformance for single-phase AC motor	min max min max at 480V at 600V	ms ms ms A A	12 28 8 22 52 41
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO) for three-phase AC motor erformance for single-phase AC motor	min max min max at 480V at 600V at 110/120V at 230V	ms ms ms A A	12 28 8 22 52 41
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO) for three-phase AC motor erformance for single-phase AC motor	min max min max at 480V at 600V at 110/120V at 230V at 200/208V	ms ms ms A A	12 28 8 22 52 41 5 10
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO) for three-phase AC motor erformance for single-phase AC motor	min max min max at 480V at 600V at 110/120V at 230V at 220/230V at 220/230V at 460/480V	ms ms ms A A	12 28 8 22 52 41 5 10 15 20 40
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA) Yielded mechanical pe	ontrol in AC Closing NO Opening NO) for three-phase AC motor erformance for single-phase AC motor	min max min max at 480V at 600V at 110/120V at 230V at 200/208V at 220/230V	ms ms ms A A	12 28 8 22 52 41 5 10
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	Closing NO Opening NO Opening NO Office three-phase AC motor erformance for single-phase AC motor for three-phase AC motor	min max min max at 480V at 600V at 110/120V at 230V at 220/230V at 220/230V at 460/480V	ms ms ms A A	12 28 8 22 52 41 5 10 15 20 40
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA) Yielded mechanical pe	ontrol in AC Closing NO Opening NO) for three-phase AC motor erformance for single-phase AC motor	min max min max at 480V at 600V at 110/120V at 230V at 220/230V at 220/230V at 460/480V	ms ms ms A A	12 28 8 22 52 41 5 10 15 20 40

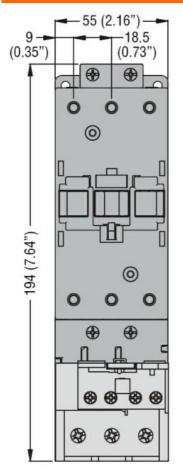
ENERGY AND AUTOMATION

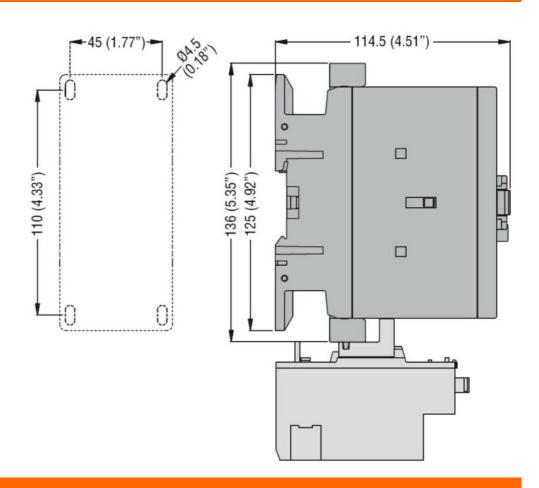
THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 50A, AC COIL 50/60HZ,

Other features

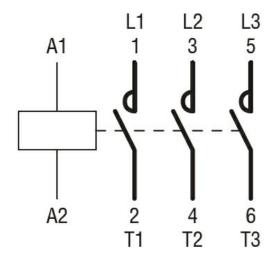
Pollution degree 3

Dimensions





Wiring diagrams



Certifications and compliance

Certifications

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN 60947-1

IEC/EN 60947-4-1

UL 60947-1





THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 50A, AC COIL 50/60HZ,

UL 60947-4-1

Compliance

cULus

ETIM 6 classification

EC000066 - Power contactor, AC switching