## THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 40A, AC COIL 60HZ,



			30 10 15
Product designation			Power contactor
Product type designation			BF40
Contact characteristics			
Number of poles		Nr.	3
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		Α	70
Operational current le			
·	AC-1 (≤40°C)	Α	70
	AC-1 (≤55°C)	Α	60
	AC-1 (≤70°C)	Α	50
	AC-3 (≤440V ≤55°C)	Α	40
	AC-4 (400V)	Α	24
Rated operational power AC-3 (T≤55°C)	,		
· · · · · · · · · · · · · · · · · · ·	230V	kW	11
	400V	kW	18.5
	415V	kW	22
	440V	kW	22
	500V	kW	22
	690V	kW	30
	1000V	kW	30
Rated operational current AC-3 (T≤55°C)			
	230V	Α	40
	400V	Α	40
	415V	Α	40
	440V	Α	40
	500V	Α	33
	690V	Α	32
	1000V	Α	21
Rated operational power AC-1 (T≤40°C)			
	230V	kW	26
	400V	kW	46
	500V	kW	58
	690V	kW	79
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	40
	48V	Α	35
	75V	Α	30
	110V	Α	8
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	48



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	48V	Α	48
	75V	Α	45
	110V	Α	42
	220V	Α	5
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
•	≤24V	Α	48
	48V	Α	48
	75V	Α	48
	110V	Α	44
	220V	Α	56
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	2201		
TEO Max outfolk to in Bo 1 wait Eff = This wait 1 polos in conce	≤24V	Α	_
	48V	A	_
	75V	A	_
			_
	110V	A	-
150 DOS DOS 111 / D 4 45 111 4 1 1 1 1	220V	Α	70
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	.0.43.4		
	≤24V	Α	27
	48V	Α	23
	75V	Α	19
	110V	Α	3
	220V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	32
	48V	Α	30
	75V	Α	27
	110V	Α	22
	220V	Α	5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
·	≤24V	Α	40
	48V	Α	40
	75V	Α	38
	110V	Α	27
	220V	Α	32
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	220 1	- , ,	
TEO Max carrent to in 200 200 mar 2/10 Tomo mar 1 poloc in conce	≤24V	Α	_
	48V	A	
	75V	A	_
	110V		<del>-</del>
		A	_
Chart time allowable correct for 40s (IEC/ENCO047.4)	220V	A	40
Short-time allowable current for 10s (IEC/EN60947-1)		Α	400
Protection fuse	0 (150)	•	400
	gG (IEC)	A	100
	aM (IEC)	Α	50
Making capacity (RMS value)		A	400
Breaking capacity at voltage			
	440V	Α	320
	500V	Α	265
	690V	Α	256
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)		·	
	lth	W	3.9
	AC-3	W	1.3
Tightening torque for terminals			





# THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 40A, AC COIL 60HZ, 24VAC

		min	Nm	4
		max	Nm	5
		min	lbin	2.95
		max	lbin	3.69
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		2
	Flexible w/o lug conductor section			
	Tionible wie lag defladator deditori	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section	IIIdA	111111	33
	Flexible C/W lug conductor section	min	mm²	1 5
		min		1.5 35
Dower terminal and	ation according to IEC/EN 60500	max	mm²	
	ction according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	1020
Conductor section				
Conductor section	AWG/kcmil conductor section			
Conductor section	AWG/kcmil conductor section	max		2
Operations	AWG/kcmil conductor section	max		2
	AWG/kcmil conductor section	max	cycles	15000000
Operations	AWG/kcmil conductor section	max	cycles cycles	
Operations Mechanical life	AWG/kcmil conductor section	max		15000000
Operations  Mechanical life  Electrical life  Safety related data		max		15000000
Operations  Mechanical life  Electrical life  Safety related data	AWG/kcmil conductor section  Od according to EN/ISO 13489-1		cycles	15000000 1500000
Operations  Mechanical life  Electrical life  Safety related data		rated load	cycles	1500000 1500000 1500000
Operations Mechanical life Electrical life Safety related data Performance level B1	0d according to EN/ISO 13489-1		cycles	1500000 1500000 1500000 15000000
Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats according		rated load	cycles	1500000 1500000 1500000 15000000 yes
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats according	0d according to EN/ISO 13489-1	rated load	cycles	1500000 1500000 1500000 15000000
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats accordi EMC compatibility AC coil operating	0d according to EN/ISO 13489-1 ing to IEC/EN 609474-4-1	rated load	cycles cycles cycles	1500000 1500000 1500000 15000000 yes yes
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats accordi EMC compatibility AC coil operating Rated AC voltage at 6	0d according to EN/ISO 13489-1 ing to IEC/EN 609474-4-1	rated load	cycles	1500000 1500000 1500000 15000000 yes
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats accordi EMC compatibility AC coil operating	Od according to EN/ISO 13489-1 ing to IEC/EN 609474-4-1	rated load	cycles cycles cycles	1500000 1500000 1500000 15000000 yes yes
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats accordi EMC compatibility AC coil operating Rated AC voltage at 6	Od according to EN/ISO 13489-1 ing to IEC/EN 609474-4-1 60Hz of 60Hz coil powered at 60Hz	rated load	cycles cycles cycles	1500000 1500000 1500000 15000000 yes yes
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats accordi EMC compatibility AC coil operating Rated AC voltage at 6	Od according to EN/ISO 13489-1 ing to IEC/EN 609474-4-1	rated load mechanical load	cycles cycles cycles	1500000 1500000 1500000 15000000 yes yes
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats accordi EMC compatibility AC coil operating Rated AC voltage at 6	Od according to EN/ISO 13489-1 ing to IEC/EN 609474-4-1 60Hz of 60Hz coil powered at 60Hz	rated load mechanical load min	cycles cycles cycles	1500000 1500000 1500000 15000000 yes yes 24
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats accordi EMC compatibility AC coil operating Rated AC voltage at 6	Od according to EN/ISO 13489-1 ing to IEC/EN 609474-4-1  60Hz  of 60Hz coil powered at 60Hz pick-up	rated load mechanical load	cycles cycles cycles	1500000 1500000 1500000 15000000 yes yes
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats accordi EMC compatibility AC coil operating Rated AC voltage at 6	Od according to EN/ISO 13489-1 ing to IEC/EN 609474-4-1 60Hz of 60Hz coil powered at 60Hz	rated load mechanical load min max	cycles cycles cycles	1500000 1500000 1500000 15000000 yes yes 24
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats accordi EMC compatibility AC coil operating Rated AC voltage at 6	Od according to EN/ISO 13489-1 ing to IEC/EN 609474-4-1  60Hz  of 60Hz coil powered at 60Hz pick-up	rated load mechanical load min max min	cycles cycles cycles V  %Us %Us %Us	1500000 1500000 1500000 15000000 yes yes 24
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats accordi EMC compatibility AC coil operating Rated AC voltage at 6 AC operating voltage	Od according to EN/ISO 13489-1 ing to IEC/EN 609474-4-1  60Hz  of 60Hz coil powered at 60Hz pick-up  drop-out	rated load mechanical load min max	cycles cycles cycles	1500000 1500000 1500000 15000000 yes yes 24
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats accordi EMC compatibility AC coil operating Rated AC voltage at 6	Od according to EN/ISO 13489-1  ing to IEC/EN 609474-4-1  60Hz  of 60Hz coil powered at 60Hz  pick-up  drop-out	rated load mechanical load min max min	cycles cycles cycles V  %Us %Us %Us	1500000 1500000 1500000 15000000 yes yes 24
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats accordi EMC compatibility AC coil operating Rated AC voltage at 6 AC operating voltage	Od according to EN/ISO 13489-1 ing to IEC/EN 609474-4-1  60Hz  of 60Hz coil powered at 60Hz pick-up  drop-out	rated load mechanical load min max min max	cycles cycles cycles V  %Us %Us %Us %Us %Us	1500000 1500000 1500000 15000000 yes yes 24 80 110 20 55
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats accordi EMC compatibility AC coil operating Rated AC voltage at 6 AC operating voltage	Od according to EN/ISO 13489-1  ing to IEC/EN 609474-4-1  60Hz  of 60Hz coil powered at 60Hz  pick-up  drop-out	rated load mechanical load  min max  min max  in-rush	cycles cycles cycles V  %Us %Us %Us %Us %Us	1500000 1500000 1500000 15000000 yes yes 24 80 110 20 55
Operations Mechanical life Electrical life Safety related data Performance level B1  Mirror contats accordi EMC compatibility AC coil operating Rated AC voltage at 6 AC operating voltage	Od according to EN/ISO 13489-1  ing to IEC/EN 609474-4-1  60Hz  of 60Hz coil powered at 60Hz  pick-up  drop-out	rated load mechanical load min max min max	cycles cycles cycles V  %Us %Us %Us %Us %Us	1500000 1500000 1500000 15000000 yes yes 24 80 110 20 55

# THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 40A, AC COIL 60HZ,

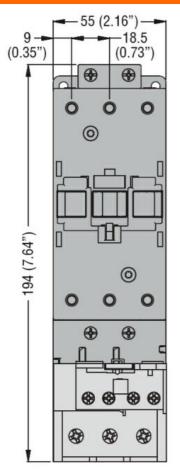
Dissipation at holding ≤	20°C 50Hz		W	5
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us co				
	in AC			
	Closing NO	min	mo	12
		max	ms ms	28
	Opening NO	IIIax	1115	20
	Opening NO	min	ms	8
		max	ms	22
	in DC	max	1113	
	Closing NO			
	Closing NO	min	ms	40
		max	ms	85
	Opening NO	IIIdX	1113	00
	Opening NO	min	ms	20
		max	ms	55
UL technical data		Пах	1113	33
	for three-phase AC motor			
. an load outlott (I LA)	ioi ando phado No motor	at 480V	Α	40
		at 600V	A	32
Yielded mechanical per	formance	ut 000 v		
riciaca mediameai per	for single-phase AC motor			
	Tot single-phase Ac motor	110/120V	HP	3
		230V	HP	7.5
	for three-phase AC motor	230 V	111	7.5
	Tol tillee-pliase AC motol	200/208V	HP	10
		220/230V	HP	15
		460/480V	HP	30
		575/600V	HP	30
General USE		07070001	- ' ''	
Ochoral OOL	Contactor			
	Contactor	AC current	Α	70
Short-circuit protection	fuso 600V	AC current		70
Chort-ondait protection	High fault			
	riigiriault	Short circuit current	kA	100
		Fuse rating	A	150
		Fuse class	$\overline{\Lambda}$	J
	Standard fault	1 436 01433		
	Standard Iddit	Short circuit current	kA	5
		Fuse rating	A	150
		Fuse class	, ,	RK5
Ambient conditions		. 255 0,255		
Temperature				
	Operating temperature			
	epotating temperature	min	°C	-50
		max	°C	70
	Storage temperature	max		. •
	Clorago temperaturo	min	°C	-60
		max	°C	80
Max altitude		max		3000
Resistance & Protectio	n			
1.00.014.100 4.1 1010010				

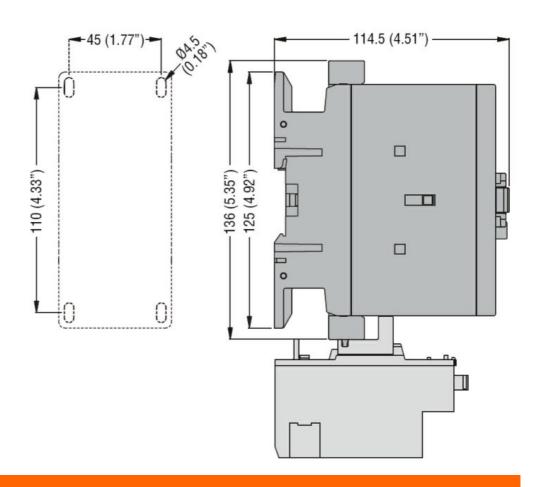
**ENERGY AND AUTOMATION** 

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 40A, AC COIL 60HZ,

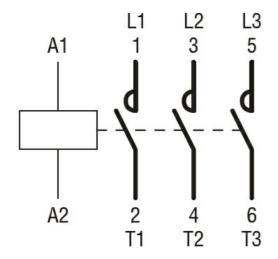
Pollution degree 3

#### **Dimensions**





#### Wiring diagrams



#### Certifications and compliance

#### Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1



### BF4000A02460

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 40A, AC COIL 60HZ,

Certificates				
	CCC			
	cULus			
CTIM algorification	20			

ETIM 8.0

EC000066 -Power contactor, AC switching