



Product designation			Power contactor
Product designation  Product type designation			BF40
Contact characteristics			DI 40
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency		ΚV	0
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	IIIdx	A	70
Operational current le			70
Operational current le	AC-1 (≤40°C)	Α	70
	AC-1 (≤55°C)	A	60
	AC-1 (≤33°C) AC-1 (≤70°C)	A	50
	AC-3 (≤440V ≤55°C)	A	40
	AC-4 (400V)	A	24
Rated operational power AC-3 (T≤55°C)	AO-4 (400V)		
Nated operational power AO-5 (1-200 O)	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



	48V	Α	48
	75V	Α	45
	110V	A	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
		A	56
150 11 : B04 : 11 1 /B 44 : 11 4 1 : : :	220V	A	30
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	_
	48V	Α	_
	75V	Α	_
	110V	Α	_
	220V	Α	70
IFC may current le in DC2 DC5 with L/D < 15mg with 1 nelse in series	220 V		
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	.0.0.1		27
	≤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	220 1	- / \	
TEC max current le in DC3-DC3 with L/N = 13ms with 2 poles in series	10.43.7		00
	≤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			
120 max current to in 200-200 with 27(2 forms with 5 poics in 30103	<04)/	۸	40
	≤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			
TEO MAX CANONCIO IN BOO BOO WAT ETC = TOTAL WALL I POIGO IN CONOC	≤24V	Α	
			_
	48V	Α	_
	75V	Α	_
	110V	Α	_
	220V	Α	40
Short-time allowable current for 10s (IEC/EN60947-1)		Α	400
Protection fuse			
	gG (IEC)	Α	100
	• , ,		
TO 1.1	aM (IEC)	Α	50
Making capacity (RMS value)		Α	400
Breaking capacity at voltage			
	440V	Α	320
	500V	Α	265
	690V	Α	256
Desigtance nor note (every go value)	090 v		
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
	Ith	W	3.9
	AC-3	W	1.3
Tightening torque for terminals			
<u> </u>			



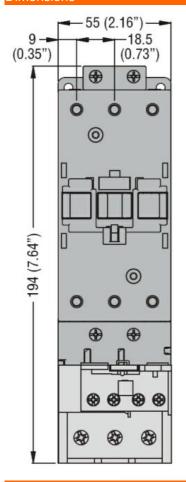
		min	Nm	4
		max	Nm	5
		min	Ibin	2.95
		max	Ibin	3.69
Tightening torque for c	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
Max number of wires s	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
	Tioxibio W/o lag conductor cocuon	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section	Παλ	111111	33
	I ICAIDIE GIW IUG CONUUCIOI SECIION	min	mm²	1.5
Dower terminal protect	tion according to IEC/EN 60500	max	mm²	35
	tion 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				
	AWG/kcmil conductor section			
		max		2
Operations		max		2
Operations Mechanical life		max	cycles	15000000
		max	cycles	
Mechanical life Electrical life		max	cycles cycles	15000000
Mechanical life Electrical life Safety related data	Od according to EN/ISO 13489-1	max		15000000
Mechanical life Electrical life Safety related data	0d according to EN/ISO 13489-1		cycles	15000000 1500000
Mechanical life Electrical life Safety related data	0d according to EN/ISO 13489-1	rated load	cycles	1500000 1500000 1500000
Mechanical life Electrical life Safety related data Performance level B10			cycles	1500000 1500000 1500000 15000000
Mechanical life Electrical life Safety related data Performance level B10 Mirror contats according	0d according to EN/ISO 13489-1 ng to IEC/EN 609474-4-1	rated load	cycles	1500000 1500000 1500000 15000000 yes
Mechanical life Electrical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility		rated load	cycles	1500000 1500000 1500000 15000000
Mechanical life Electrical life Safety related data Performance level B10  Mirror contats accordin EMC compatibility AC coil operating	ng to IEC/EN 609474-4-1	rated load	cycles cycles cycles	15000000 1500000 1500000 15000000 yes yes
Mechanical life Electrical life Safety related data Performance level B10  Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	ng to IEC/EN 609474-4-1	rated load	cycles	1500000 1500000 1500000 15000000 yes
Mechanical life Electrical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility AC coil operating	ng to IEC/EN 609474-4-1 0/60Hz	rated load	cycles cycles cycles	15000000 1500000 1500000 15000000 yes yes
Mechanical life Electrical life Safety related data Performance level B10  Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz	rated load	cycles cycles cycles	15000000 1500000 1500000 15000000 yes yes
Mechanical life Electrical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	ng to IEC/EN 609474-4-1 0/60Hz	rated load mechanical load	cycles cycles cycles	15000000 1500000 1500000 15000000 yes yes
Mechanical life Electrical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz	rated load mechanical load min	cycles cycles cycles	15000000 1500000 1500000 15000000 yes yes 24
Mechanical life Electrical life Safety related data Performance level B10  Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	rated load mechanical load	cycles cycles cycles	15000000 1500000 1500000 15000000 yes yes
Mechanical life Electrical life Safety related data Performance level B10  Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz	rated load mechanical load min max	cycles cycles cycles	1500000 1500000 1500000 15000000 yes yes 24
Mechanical life Electrical life Safety related data Performance level B10  Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	rated load mechanical load min	cycles cycles cycles V  %Us %Us %Us	15000000 1500000 15000000 150000000 yes yes 24
Mechanical life Electrical life Safety related data Performance level B10  Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	rated load mechanical load min max	cycles cycles cycles	1500000 1500000 1500000 15000000 yes yes 24
Mechanical life Electrical life Safety related data Performance level B10  Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	rated load mechanical load min max min	cycles cycles cycles V  %Us %Us %Us	15000000 1500000 15000000 150000000 yes yes 24
Mechanical life Electrical life Safety related data Performance level B10  Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	rated load mechanical load min max min	cycles cycles cycles V  %Us %Us %Us	15000000 1500000 15000000 150000000 yes yes 24
Mechanical life Electrical life Safety related data Performance level B10  Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up  of 50/60Hz coil powered at 60Hz	rated load mechanical load min max min	cycles cycles cycles V  %Us %Us %Us	15000000 1500000 15000000 150000000 yes yes 24
Mechanical life Electrical life Safety related data Performance level B10  Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up  of 50/60Hz coil powered at 60Hz	rated load mechanical load  min max  min max	cycles cycles cycles V  %Us %Us %Us %Us %Us	15000000 1500000 1500000 15000000 yes yes 24 80 110 20 55

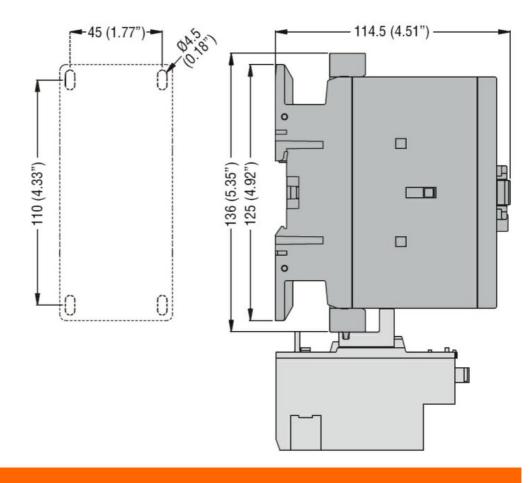


	drop-out			
	•	min	%Us	40
		max	%Us	55
AC average coil consu	mption at 20°C			
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	210
		holding	VA	15
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz			
		in-rush	VA	210
<del></del>	2000 5011	holding	VA	15
Dissipation at holding ≤	20°C 50Hz		W	5
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times	atual .			
Average time for Us co				
	in AC			
	Closing NO	:	nc -	10
		min	ms	12 28
	Opening NO	max	ms	20
	Opening NO	min	ms	8
		max	ms	22
	in DC	Παλ	1113	
	Closing NO			
	Closing NO	min	ms	40
		max	ms	85
	Opening NO			
	o p = 3 · · · ·	min	ms	20
		max	ms	55
UL technical data				
Full-load current (FLA)	for three-phase AC motor			
		at 480V	Α	40
		at 600V	Α	32
Yielded mechanical per	rformance			
	for single-phase AC motor			
		110/120V	HP	3
		230V	HP	7.5
	for three-phase AC motor			
		200/208V	HP	10
		220/230V	HP	15
		460/480V	HP	30
		575/600V	HP	30
General USE				
	Contactor		_	
<u></u>	( 000)	AC current	Α	70
Short-circuit protection				
	High fault	01		400
		Short circuit current	kA	100
		Fuse rating	Α	150
	Chan doubt facility	Fuse class		J
	Standard fault			



	Short circuit current Fuse rating Fuse class	kA A	5 150 RK5
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
Dimensions			

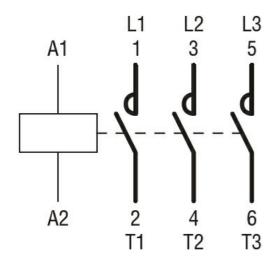




Wiring diagrams

**ENERGY AND AUTOMATION** 

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 40A, AC COIL 50/60HZ,



#### 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

Certificates

CCC

cULus

#### ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching