



Product designation			Power contactor
Product type designation			BF80
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	115
Operational current le			
	AC-1 (≤40°C)	Α	115
	AC-1 (≤55°C)	Α	95
	AC-1 (≤70°C)	Α	80
	AC-3 (≤440V ≤55°C)	Α	80
	AC-4 (400V)	Α	38
Rated operational power AC-3 (T≤55°C)	,		
, ,	230V	kW	22
	400V	kW	45
	415V	kW	45
	440V	kW	45
	500V	kW	55
	690V	kW	55
	1000V	kW	37
Rated operational current AC-3 (T≤55°C)			
	230V	Α	80
	400V	Α	80
	415V	Α	80
	440V	Α	80
	500V	Α	78
	690V	Α	57
	1000V	Α	28
Rated operational power AC-1 (T≤40°C)			
	230V	kW	43
	400V	kW	76
	500V	kW	95
	690V	kW	120
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	70
	48V	Α	60
	75V	Α	60
	110V	Α	8
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	100



	48V	Α	100
	75V	Α	100
	110V	Α	80
	220V	Α	9
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	220 V	- / \	
ILO max current le in DOT with L/1\ 2 mis with 5 poles in series	≤24V	۸	100
		A	
	48V	Α	100
	75V	Α	100
	110V	Α	85
	220V	Α	95
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	100
	48V	Α	100
	75V	Α	100
	110V	A	100
	220V	A	115
IFC may ourrent to in DC2 DC5 with 1/D < 45 mg with 4 mg to 1 mg s	22U V	Α	110
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	-0.01	Δ.	40
	≤24V	Α	40
	48V	Α	30
	75V	Α	30
	110V	Α	3
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	60
	48V	Α	50
	75V	A	50
	110V	A	40
150 U.S. DOO DOE 311 L/D 4.45 311 O.S. L. S. S.	220V	Α	5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series		_	
	≤24V	Α	80
	48V	Α	70
	75V	Α	70
	110V	Α	60
	220V	Α	64
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
·	≤24V	Α	90
	48V	Α	90
	75V	A	90
	110V	A	75
Object fine allowable company (c. 40) (IEO/ENIOCO (Z. 4))	220V	A	80
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse	_		
	gG (IEC)	Α	125
	aM (IEC)	Α	80
Making capacity (RMS value)		Α	800
Breaking capacity at voltage			
	440V	Α	640
	500V	Α	625
	690V	Α	456
Resistance per pole (average value)	2001	mΩ	0.6
Power dissipation per pole (average value)		11122	
i owei dissipation pei pole (average value)	IIL	۱۸/	7.0
	Ith	W	7.9
This control is a few to see the second of	AC-3	W	3.8
Tightening torque for terminals			



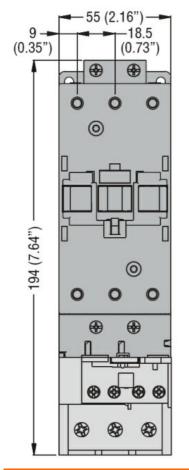
		min	Nm	4
		max	Nm	5
		min	lbin	2.95
		max	Ibin	3.69
Tightening torque for c	coil terminal			
riginioning torquo for o	on torrinar	min	Nm	0.8
			Nm	1
		max		
		min	lbin	0.8
		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
	3	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section	max		
	I IONIDIE O'W IUG CONUUCION SECTION	min	mm²	1 5
		min	mm²	1.5
-		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	1060
Conductor section			9	1000
Conductor Section	AWG/kcmil conductor section			
	AVVG/Remii conductor section			2
Operations		max		
Operations			a alaa	45000000
Mechanical life			cycles	15000000
Electrical life			cycles	1300000
Safety related data				
Performance level B10	0d according to EN/ISO 13489-1			
		rated load	cycles	1300000
		mechanical load	cycles	15000000
Mirror contats according	ng to IEC/EN 609474-4-1			yes
EMC compatibility	<u> </u>			yes
AC coil operating				, 55
	0/60Hz 60Hz			
Rated AC voltage at 50	U/UUTIZ, UUTIZ	. •		400
		min	V	100
		max	V	250
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	of 50/60Hz coil powered at 50Hz pick-up			
	-	min	%Us	80 Us min
	-			
	pick-up	min max	%Us %Us	80 Us min 110 Us max
	-	max	%Us	110 Us max
	pick-up drop-out			
	pick-up drop-out of 50/60Hz coil powered at 60Hz	max	%Us	110 Us max
	pick-up drop-out	max max	%Us %Us	110 Us max ≤70 Us min
	pick-up drop-out of 50/60Hz coil powered at 60Hz	max	%Us	110 Us max

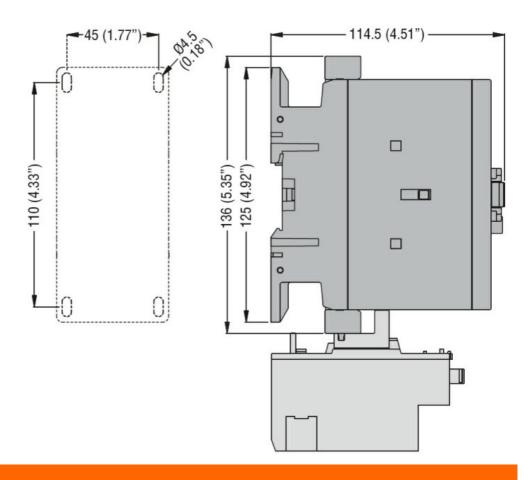


		0/11-	440 Ha
drop-out	max	%Us	110 Us max
Giop out	max	%Us	≤70 Us min
AC average coil consumption at 20°C			
of 50/60Hz coil powered at 50Hz			
	in-rush	VA	35120
of 50/60Hz coil powered at 60Hz	holding	VA	1.53.7
of 30/00112 coll powered at 00112	in-rush	VA	35120
	holding	VA	1.53.7
Dissipation at holding ≤20°C 50Hz		W	12.5
DC coil operating			
DC rated control voltage	_		
	min	V	100
DC enerating voltage	max	V	250
DC operating voltage pick-up			
ριοκ αρ	min	%Us	80 Us min
	max	%Us	110 Us max
drop-out			
	max	%Us	≤70 Us min
Average coil consumption ≤20°C			
	in-rush	W	2368
Max cycles frequency	holding	W	1.21,9
Mechanical operation		cycles/h	1500
Operating times		<i>ay 616 6711</i>	1000
Average time for Us control			
in AC			
Closing NO			
	min	ms	12
Opening NO	max	ms	28
Opening NO	min	ms	8
	max	ms	22
in DC			
Closing NO			
	min		
		ms	40
On an in a NO	max	ms	40 85
Opening NO	max	ms	85
Opening NO	max min	ms ms	85 20
Opening NO UL technical data	max	ms	85
	max min	ms ms	85 20
UL technical data	max min max at 480V	ms ms ms	85 20 55 77
UL technical data Full-load current (FLA) for three-phase AC motor	max min max	ms ms ms	85 20 55
UL technical data Full-load current (FLA) for three-phase AC motor Yielded mechanical performance	max min max at 480V	ms ms ms	85 20 55 77
UL technical data Full-load current (FLA) for three-phase AC motor	max min max at 480V at 600V	ms ms ms	85 20 55 77 77
UL technical data Full-load current (FLA) for three-phase AC motor Yielded mechanical performance	max min max at 480V at 600V	ms ms ms	85 20 55 77 77 25
UL technical data Full-load current (FLA) for three-phase AC motor Yielded mechanical performance	max min max at 480V at 600V 200/208V 220/230V	ms ms ms A A	85 20 55 77 77 25 30
UL technical data Full-load current (FLA) for three-phase AC motor Yielded mechanical performance	max min max at 480V at 600V	ms ms ms	85 20 55 77 77 25
UL technical data Full-load current (FLA) for three-phase AC motor Yielded mechanical performance	max min max at 480V at 600V 200/208V 220/230V 460/480V	ms ms ms	20 55 77 77 77 25 30 60



		AC current	Α	115
Short-circuit protect	ion fuse, 600V			
	High fault			
	-	Short circuit current	kA	100
		Fuse rating	Α	200
		Fuse class		J
	Standard fault			
		Short circuit current	kA	10
		Fuse rating	Α	200
		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude			m	3000
Resistance & Protect	ction			
Pollution degree				3
Dimensions				

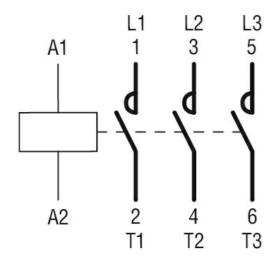




Wiring diagrams

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 80A, AC/DC COIL, 100...250VAC/DC



Certif	ficat	ione	and	comp	liance
OCITI	loat	10113	anu	COTTIP	manico

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