



Product designation		Power contactor
Product type designation		BF150
Contact characteristics		
Number of poles	Nr.	3

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	165
Operational current le			
	AC-1 (≤40°C)	Α	165
	AC-1 (≤55°C)	Α	135
	AC-1 (≤70°C)	Α	118
	AC-3 (≤440V ≤55°C)	Α	150
	AC-4 (400V)	Α	70
Rated operational power AC-3 (T≤55°C)			
	230V	kW	45
	400V	kW	75
	415V	kW	75
	440V	kW	75
	500V	kW	90
	690V	kW	110
	1000V	kW	55
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	150
	110V	Α	10
	220V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series		_	
	≤24V	Α	165
	48V	Α	165
	75V	A	165
	110V	A	150
150	220V	Α	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	.0.0.7		4.0-
	≤24V	A	165
	48V	A	165
	75V	A	165
	110V	A	160
IFC may current le in DC4 with L/D < 4 may with 4 malas in a min-	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	20 AV	^	405
	≤24V	A	165
	48V	Α	165



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	75V	Α	165
	110V	Α	165
	220V	A	165
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	.0.43.4		
	≤24V	A	165
	48V	A	60
	75V	A	44
	110V 220V	A A	6 _
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	220 V		
The max current le in boo-boo with bit 2 forms with 2 poles in series	≤24V	Α	165
	48V	A	82
	75V	Α	70
	110V	Α	80
	220V	Α	7
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			<u> </u>
	≤24V	Α	165
	48V	Α	195
	75V	Α	110
	110V	Α	120
	220V	Α	120
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	165
	48V	Α	130
	75V	Α	130
	110V	Α	150
	220V	Α	150
Short-time allowable current for 10s (IEC/EN60947-1)		Α	1200
Protection fuse			
	gG (IEC)	Α	250
	aM (IEC)	Α	160
Making capacity (RMS value)		Α	1500
Breaking capacity at voltage			
	440V	Α	1200
	500V	Α	1025
	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	Ith	W	12
	AC3	W	10.1
Tightening torque for terminals			•
	min	Nm	6
	max	Nm	7
	min	Ibin	4.4
Tinhtonia a tanana fan asil tanania d	max	Ibin	5.2
Tightening torque for coil terminal	!	Nima	0.0
	min	Nm Nm	0.8
	max	Nm	1
	min	lbin Ibin	0.59
Conductor section	max	Ibin	0.74
AWG/Kcmil	may		2/0
	max		2/0



	Flexible w/o lug conductor section			
	Tickible widing conductor section	min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section	Пах		7.0
	Tiexible 6/W lag conductor section	min	mm²	1.5
		max	mm²	70
Power terminal protect	ction according to IEC/EN 60529	παλ	111111	IP20 front
Mechanical features	ction according to IEC/EN 00323			11 20 110111
Operating position				
Operating position		normal		Vertical plan
		allowable		±30°
		allowable		Screw / DIN rail
Fixing				35mm
Weight			α	2020
Conductor section			g	2020
Conductor Section	ANA/O/I : I			
	AWG/kcmil conductor section			0/0
Operations		max		2/0
Operations				45000000
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data				
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 5	50/60Hz		V	24
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	85
		max	%Us	110
	drop-out			
	·	min	%Us	40
		max	%Us	55
AC average coil cons	umption at 20°C			
· ·	of 50/60Hz coil powered at 50Hz			
	'	in-rush	VA	300
		holding	VA	20
	of 50/60Hz coil powered at 60Hz			
	5. 55/55 <u> </u>	in-rush	VA	275
		holding	VA	17
	of 60Hz coil powered at 60Hz	noiding	V/N	• •
	or our iz con powered at our iz	in-rush	VA	300
Dissipation at balding	<20°C 50U=	holding	VA	20
Dissipation at holding			W	6.5
Max cycles frequency			, ,,	4500
Mechanical operation			cycles/h	1500
O 0 0				
Operating times Average time for Us of				



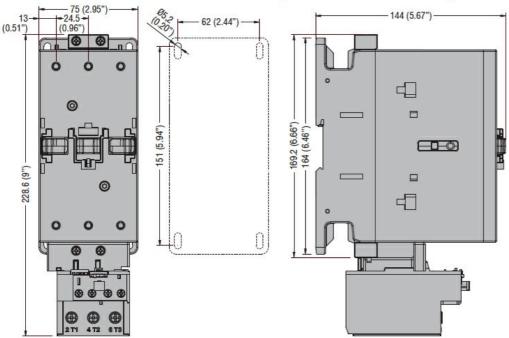


	in AC				
		Closing NO			
			min	ms	45
			max	ms	32
		Opening NO			
			min	ms	9
			max	ms	24
UL technical data					
Yielded mechanical per	rformance				
	for three-phase AC mo	otor			
			200/208V	HP	50
			220/230V	HP	50
			460/480V	HP	100
			575/600V	HP	125
General USE					
	Contactor				
			AC current	Α	165
Short-circuit protection	fuse, 600V				_
·	High fault				
	3		Short circuit current	kA	100
			Fuse rating	Α	200
			Fuse class		J
	Standard fault				
			Short circuit current	kA	10
			Fuse rating	Α	250
			Fuse class		RK5
Ambient conditions					
Temperature					
l	Operating temperature				
	Tronaming tomporation		min	°C	-50
			max	°C	70
	Storage temperature		max		
	Storago tomporaturo		min	°C	-60
			max	°C	80
Max altitude			max	m	3000
Dimensions				111	3000
Dimonolono					

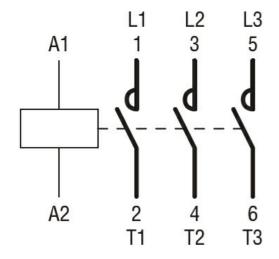
ENERGY AND AUTOMATION

13 75 (2.95")
(0.51") (0.96")

144 (5.67")



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

Certificates

CCC

cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching





Product designation	Power contactor
Product type designation	BF150
Contact characteristics	

Product type designation			BF150
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	165
Operational current le			
	AC-1 (≤40°C)	Α	165
	AC-1 (≤55°C)	Α	135
	AC-1 (≤70°C)	Α	118
	AC-3 (≤440V ≤55°C)	Α	150
	AC-4 (400V)	Α	70
Rated operational power AC-3 (T≤55°C)			
	230V	kW	45
	400V	kW	75
	415V	kW	75
	440V	kW	75
	500V	kW	90
	690V	kW	110
	1000V	kW	55
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	150
	110V	Α	10
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	150
	220V	Α	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	160
	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	165
	48V	Α	165



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	75V	Α	165
	110V	Α	165
	220V	Α	165
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	60
	75V	Α	44
	110V	A	6
150 H. J. DOO DOE 111 L/D 445 111 O. L. J. J.	220V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	-0.1V		405
	≤24V	A	165
	48V	A	82
	75V	A	70
	110V	A	80
IFC many assert to in DC2 DC5 with L/D < 45 may with 2 males in agrica	220V	A	7
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	~241 /	۸	105
	≤24V 48V	A	165 105
	48 V 75 V	A A	195 110
	110V		120
	220V	A A	120
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	220 V		120
TEC max current le in DC3-DC3 with E/N = 13ms with 4 poles in series	≤24V	Α	165
	48V	A	130
	75V	A	130
	110V	A	150
	220V	A	150
Short-time allowable current for 10s (IEC/EN60947-1)	220 0	A	1200
Protection fuse			
	gG (IEC)	Α	250
	aM (IEC)	Α	160
Making capacity (RMS value)	(- /	Α	1500
Breaking capacity at voltage			
	440V	Α	1200
	500V	Α	1025
	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	Ith	W	12
	AC3	W	10.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	lbin	4.4
	max	lbin	5.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.59
	max	Ibin	0.74
Conductor section			
AWG/Kcmil			
	max		2/0



	Flexible w/o lug conductor section			
	· ·	min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	70
Power terminal protect	tion according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fiving				Screw / DIN rail
Fixing				35mm
Weight			g	2020
Conductor section				
	AWG/kcmil conductor section			
		max		2/0
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data			0,0.00	
EMC compatibility				yes
AC coil operating				jee
Rated AC voltage at 50	0/60Hz		V	48
AC operating voltage	.,		•	
710 operating vertage	of 50/60Hz coil powered at 50Hz			
	pick-up			
	ριοκ αρ	min	%Us	80
		max	%Us	110
	drop-out	max	7003	110
	drop out	min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz	max	7003	
	pick-up			
	ριοκ-αρ	min	%Us	85
		max	%Us	110
	drop-out	IIIdx	/003	110
	diop-out	min	%Us	40
		max	%Us	55
AC average coil consu	umption at 20°C	Παλ	/003	33
AO average con consu	·			
	of 50/60Hz coil powered at 50Hz	عامريس منا	١/٨	300
		in-rush	VA VA	300 20
	of FO/COLLE and provinced at COLLE	holding	VA	20
	of 50/60Hz coil powered at 60Hz	اء، سيا.	١/٨	275
		in-rush	VA VA	275
	of COLLE and powered at COLLE	holding	VA	17
	of 60Hz coil powered at 60Hz		1/4	200
		in-rush	VA	300
District C 12	400°0 FOLL	holding	VA	20
Dissipation at holding :	≤20°C 50Hz		W	6.5
Max cycles frequency				4=00
Mechanical operation			cycles/h	1500
Operating times				
Average time for Us co	ontrol			



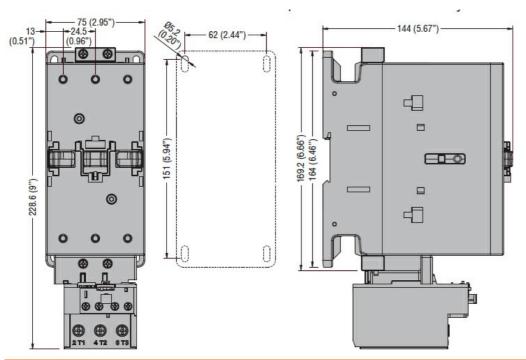


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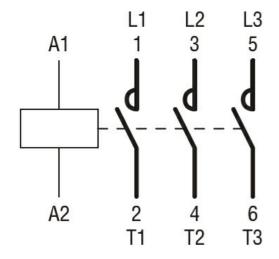
	in AC				
		Closing NO			
			min	ms	45
			max	ms	32
		Opening NO			
			min	ms	9
			max	ms	24
UL technical data					
Yielded mechanical per	rformance				
	for three-phase AC mo	otor			
			200/208V	HP	50
			220/230V	HP	50
			460/480V	HP	100
			575/600V	HP	125
General USE					
	Contactor				
			AC current	Α	165
Short-circuit protection	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	250
			Fuse class		RK5
Ambient conditions					
Temperature					
	Operating temperature)			
			min	°C	-50
			max	°C	70
	Storage temperature				
			min	°C	-60
			max	°C	80
Max altitude				m	3000
Dimensions					

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC COIL 50/60HZ,



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

Certificates

CCC

cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching





Product designation			Power contactor
Product type designation			BF150
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	165
Operational current le			
	AC-1 (≤40°C)	Α	165
	AC-1 (≤55°C)	Α	135
	AC-1 (≤70°C)	Α	118
	AC-3 (≤440V ≤55°C)	Α	150
	AC-4 (400V)	Α	70
Rated operational power AC-3 (T≤55°C)			
	230V	kW	45
	400V	kW	75
	415V	kW	75
	440V	kW	75
	500V	kW	90
	690V	kW	110
	1000V	kW	55
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	150
	110V	Α	10
	220V	Α	=
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	150
	220V	Α	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	160
	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	165
	48V	Α	165



	75V	Α	165
	110V	Α	165
	220V	Α	165
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	60
	75V	Α	44
	110V	Α	6
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	165
	48V	Α	82
	75V	Α	70
	110V	Α	80
	220V	Α	7
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
·	≤24V	Α	165
	48V	Α	195
	75V	Α	110
	110V	Α	120
	220V	Α	120
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	165
	48V	Α	130
	75V	Α	130
	110V	A	150
	220V	Α	150
Short-time allowable current for 10s (IEC/EN60947-1)		A	1200
Protection fuse			
	gG (IEC)	Α	250
	aM (IEC)	Α	160
Making capacity (RMS value)	a (120)	A	1500
Breaking capacity at voltage		- , ,	1000
Drouking duputoky at voltage	440V	Α	1200
	500V	A	1025
	690V	A	905
Resistance per pole (average value)	000 V	mΩ	0.45
Power dissipation per pole (average value)		11132	0.40
rowei dissipation per pole (average value)	Ith	W	12
	AC3	W	10.1
Tightening torque for terminals	ACS	VV	10.1
rightening torque for terminals		Nine	0
	min	Nm Nm	6
	max	Nm	7
	min	lbin Ibin	4.4
Tightoning targue for call targets at	max	Ibin	5.2
Tightening torque for coil terminal		N 1 .	0.0
	min	Nm	0.8
	max	Nm	1
	min	lbin 	0.59
	max	lbin	0.74
Conductor section			
AWG/Kcmil			
	max		2/0



	Flexible w/o lug conductor section			
	-	min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	70
Power terminal prote	ction according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
Fixing				35mm
Weight			g	2020
Conductor section				
	AWG/kcmil conductor section			
		max		2/0
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data			.,	
EMC compatibility				yes
AC coil operating				yee
Rated AC voltage at	50/60Hz		V	110
AC operating voltage			<u> </u>	
, to operating remage	of 50/60Hz coil powered at 50Hz			
	pick-up			
	ριοκ αρ	min	%Us	80
		max	%Us	110
	drop-out	max	7003	110
	αιορ σαι	min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz	max	7003	33
	pick-up			
	рюк-ир	min	%Us	85
		max	%Us	110
	drop-out	Παλ	/003	110
	diop-out	min	%Us	40
			%Us	55
AC average seil sons	numntion at 20°C	max	7005	55
AC average coil cons	·			
	of 50/60Hz coil powered at 50Hz	المناسبة	\/^	200
		in-rush	VA	300
	-4 F0/001	holding	VA	20
	of 50/60Hz coil powered at 60Hz		1/4	075
		in-rush	VA	275
		holding	VA	17
	of 60Hz coil powered at 60Hz			000
		in-rush	VA	300
		holding	VA	20
Dissipation at holding			W	6.5
Max cycles frequency				
Mechanical operation	<u> </u>		cycles/h	1500
Operating times				
Average time for Us	. •			

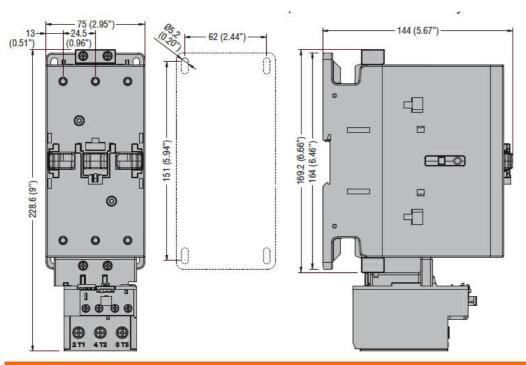




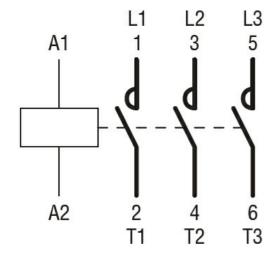
	in AC				
		Closing NO			
			min	ms	45
			max	ms	32
		Opening NO			
			min	ms	9
			max	ms	24
UL technical data					
Yielded mechanical per					
	for three-phase AC mo	otor			
			200/208V	HP	50
			220/230V	HP	50
			460/480V	HP	100
			575/600V	HP	125
General USE	• • •				
	Contactor		40		405
01 - 4 - 2 - 2 - 2 - 2 - 2 - 2	(AC current	Α	165
Short-circuit protection					
	High fault		Ob ant aiment annuar	1. 4	100
			Short circuit current	kΑ	100
			Fuse rating	Α	200
	Standard fault		Fuse class		
	Standard rault		Chart aircuit aurrant	IεΛ	10
			Short circuit current	kA A	10 250
			Fuse rating Fuse class	А	250 RK5
Ambient conditions			1 use class		IXIXO
Temperature					
Tomporature	Operating temperature	1			
	Operating temperature	•	min	°C	-50
			max	°C	70
	Storage temperature		max		. •
	Clorage temperature		min	°C	-60
			max	°C	80
Max altitude			max		3000
Dimensions					

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC COIL 50/60HZ,



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

Certificates

CCC

cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching





Product designation Power contactor
Product type designation BF150

Product type designation			BF150
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	165
Operational current le			
	AC-1 (≤40°C)	Α	165
	AC-1 (≤55°C)	Α	135
	AC-1 (≤70°C)	Α	118
	AC-3 (≤440V ≤55°C)	Α	150
	AC-4 (400V)	Α	70
Rated operational power AC-3 (T≤55°C)			
	230V	kW	45
	400V	kW	75
	415V	kW	75
	440V	kW	75
	500V	kW	90
	690V	kW	110
	1000V	kW	55
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series		_	
	≤24V	Α	165
	48V	Α	165
	75V	A	150
	110V	A	10
150	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	40.4) /	•	405
	≤24V	A	165
	48V	A	165
	75V	A	165
	110V	A	150
	220V	Α	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	-0.07	^	405
	≤24V	A	165
	48V	A	165
	75V	A	165
	110V	A	160
150	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	-0.07	^	405
	≤24V	A	165
	48V	Α	165



	75V	Α	165
	110V	Α	165
	220V	Α	165
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	60
	75V	Α	44
	110V	A	6
150 H. J. DOO DOE 111 L/D 445 111 O. L. J. J.	220V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	-0.1V		405
	≤24V	A	165
	48V	A	82
	75V	A	70
	110V	A	80
IFC many assert to in DC2 DC5 with L/D < 45 may with 2 males in agrica	220V	A	7
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	~241 /	۸	105
	≤24V 48V	A	165 105
	48 V 75 V	A A	195 110
	110V		120
	220V	A A	120
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	220 V		120
TEC max current le in DC3-DC3 with E/N = 13ms with 4 poles in series	≤24V	Α	165
	48V	A	130
	75V	A	130
	110V	A	150
	220V	A	150
Short-time allowable current for 10s (IEC/EN60947-1)	220 0	A	1200
Protection fuse			
	gG (IEC)	Α	250
	aM (IEC)	Α	160
Making capacity (RMS value)	(- /	Α	1500
Breaking capacity at voltage			
	440V	Α	1200
	500V	Α	1025
	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	Ith	W	12
	AC3	W	10.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	lbin	4.4
	max	lbin	5.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.59
	max	Ibin	0.74
Conductor section			
AWG/Kcmil			
	max		2/0



	Flexible w/o lug conductor section			
	r lexible w/o lag corladetor section	min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section	Пах		10
	r lexible c/w lug corrudctor section	min	mm²	1.5
		max	mm²	70
Power terminal protec	tion according to IEC/EN 60529	Παλ	111111	IP20 front
Mechanical features	tion according to 120/214 00029			11 20 110111
Operating position				
Operating position		normal		Vertical plan
		allowable		±30°
_		allowable		Screw / DIN rail
Fixing				35mm
Weight				2020
Conductor section			g	2020
Conductor section	ANA/O//			
	AWG/kcmil conductor section			0/0
Operations		max		2/0
Operations Machanian Life				45000000
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data				
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 5	0/60Hz		V	230
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	85
		max	%Us	110
	drop-out			
		min	%Us	40
		max	%Us	55
AC average coil consu	umption at 20°C			
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	300
		holding	VA	20
	of 50/60Hz coil powered at 60Hz	<u> </u>		
	,	in-rush	VA	275
		holding	VA	17
	of 60Hz coil powered at 60Hz			
		in-rush	VA	300
		holding	VA	20
Dissipation at holding	<20°C 50Hz	noiding	W	6.5
Max cycles frequency			v v	J.U
Mechanical operation			cycles/h	1500
Operating times			Cycles/II	1300
-	ontrol			
Average time for Us co	UHUU			

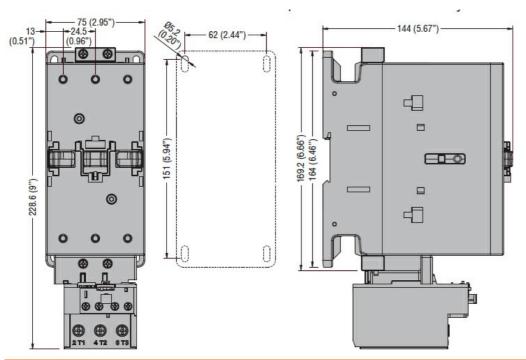




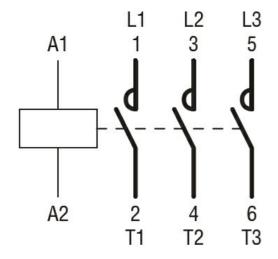
	in AC				
		Closing NO			
			min	ms	45
			max	ms	32
		Opening NO			
			min	ms	9
			max	ms	24
UL technical data					
Yielded mechanical per	rformance				
	for three-phase AC mo	otor			
			200/208V	HP	50
			220/230V	HP	50
			460/480V	HP	100
			575/600V	HP	125
General USE					
	Contactor				
			AC current	Α	165
Short-circuit protection	fuse, 600V				_
·	High fault				
	3		Short circuit current	kA	100
			Fuse rating	Α	200
			Fuse class		J
	Standard fault				
			Short circuit current	kA	10
			Fuse rating	Α	250
			Fuse class		RK5
Ambient conditions					
Temperature					
l	Operating temperature				
	Tronaming tomporation		min	°C	-50
			max	°C	70
	Storage temperature		max		
	Storago tomporaturo		min	°C	-60
			max	°C	80
Max altitude			max	m	3000
Dimensions				111	3000
Dimonolono					

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC COIL 50/60HZ,



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

Certificates

CCC

cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching



Product designation Power contactor Product type designation BF150

Product type designation			BF150
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	165
Operational current le			
	AC-1 (≤40°C)	Α	165
	AC-1 (≤55°C)	Α	135
	AC-1 (≤70°C)	Α	118
	AC-3 (≤440V ≤55°C)	Α	150
	AC-4 (400V)	Α	70
Rated operational power AC-3 (T≤55°C)			
	230V	kW	45
	400V	kW	75
	415V	kW	75
	440V	kW	75
	500V	kW	90
	690V	kW	110
	1000V	kW	55
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	150
	110V	Α	10
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	150
	220V	Α	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	160
	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	165
	48V	Α	165



BF15000A400

	75V	Α	165
	110V	Α	165
	220V	Α	165
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	60
	75V	Α	44
	110V	A	6
150 H. J. DOO DOE 111 L/D 445 111 O. L. J. J.	220V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	-0.1V		405
	≤24V	A	165
	48V	A	82
	75V	A	70
	110V	A	80
IFC many assert to in DC2 DC5 with L/D < 45 may with 2 males in agrica	220V	A	7
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	~241 /	۸	105
	≤24V 48V	A	165 105
	48 V 75 V	A A	195 110
	110V		120
	220V	A A	120
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	220 V		120
TEC max current le in DC3-DC3 with E/N = 13ms with 4 poles in series	≤24V	Α	165
	48V	A	130
	75V	A	130
	110V	A	150
	220V	A	150
Short-time allowable current for 10s (IEC/EN60947-1)	220 0	A	1200
Protection fuse			
	gG (IEC)	Α	250
	aM (IEC)	Α	160
Making capacity (RMS value)	(- /	Α	1500
Breaking capacity at voltage			
	440V	Α	1200
	500V	Α	1025
	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	Ith	W	12
	AC3	W	10.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	lbin	4.4
	max	lbin	5.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.59
	max	Ibin	0.74
Conductor section			
AWG/Kcmil			
	max		2/0





Weight					
Per Per		Flexible w/o lug conductor section			
Flexible c/w lug conductor section		r lexible w/o rag corradator section	min	mm²	1.5
Flexible c/w lug conductor section					
Main		Flexible c/w lug conductor section			
Power terminal protection according to IEC/EN 60529 IP20 front		rioxible s, wiag confidence decilor	min	mm²	1.5
Power terminal protection according to IEC/EN 60529					
Mechanical features	Power terminal protect	tion according to IEC/EN 60529			
Operating position normal allowable size in increase increase in increase		according to 120/211 00020			11 20 1101K
Normal allowable Normal all					
Ebking Screw / DIN rail S	Operating position		normal		Vertical plan
Screw / DIN rail Samm S					
Meight Samm Samm			allowable		
Weight	Fixing				
AWG/kcmil conductor section max 2/0	Weight			α	
AWG/kcmil conductor section max				9	2020
Machanical life cycles 15000000 Electrical life cycles 8000000 Safety related data EMC compatibility yes AC coll operating Rated AC voltage at 50/60Hz V 400 AC operating voltage min %Us 80 Mack AC voltage at 50/60Hz coil powered at 50Hz min %Us 80 Mack AC acceptable with a collapse of 50/60Hz coil powered at 60Hz min %Us 80 min %Us 80 min %Us 20 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300 AC average coil consumption at 20°C of 50/60Hz coil powered at 60Hz in-rush VA 300 of 50/60Hz coil powered at 60Hz in-rush VA 300 holding VA 275 holding VA	Conductor Section	ANAC/komil conductor costion			
Operations Mechanical life cycles 15000000 Safety related data EMC compatibility yes AC coil operating Rated AC voltage at 50/60Hz V 400 AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 Max %Us 110 drop-out min %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz AC average coil consumption at 20°C of 50/60Hz coil powered at 60Hz In-rush		AVVG/RCMII conductor section	may		2/0
Mechanical life	Operations		max		∠/ U
Electrical life cycles 800000 Safety related data EMC compatibility yes AC coil operating Rated AC voltage at 50/60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 150 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300 holding VA 20 of 60Hz coil powered at 60Hz in-rush VA 275 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz Max cycles frequency Macchanical operation cycles/h 1500 Operating times					45000000
Safety related data EMC compatibility Rated AC voltage at 50/60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 150 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 300 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz Max cycles frequency Macchanical operation Cycles/h 1500 Operating times				-	
EMC compatibility AC coll operating Rated AC voltage at 50/60Hz coil powered at 50Hz pick-up Min %Us 80 max %Us 110				cycles	800000
Rated AC voltage at 50/60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz a in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 275 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation cycles/h 1500 Operating times	•				
Rated AC voltage at 50/60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 275 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation cycles/h 1500 Operating times					yes
AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 275 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times					
of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 275 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times Cycles/h 1500 Cycles/h 1500 Cycles/h 1500 Cycles/h 1500 According times Cycles/h 1500 Cycles/h		0/60Hz		V	400
pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 275 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation cycles/h 1500 Operating times	AC operating voltage				
Min Mus 80 max Mus 110 Mus 110 Mus Mus 110 Mus Mus 110 Mus Mus 55 Mus Mus 55 Mus Mus 55 Mus Mus Mus 55 Mus Mu		of 50/60Hz coil powered at 50Hz			
Max WUs 110 min wUs 20 max wUs 55		pick-up			
drop-out min %Us 20 max %Us 55			min	%Us	80
min max wus 20 max wus 55 of 50/60Hz coil powered at 60Hz pick-up min win wus 85 max wus 110 drop-out min wus 40 max wus 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush vA 300 holding vA 20 of 50/60Hz coil powered at 60Hz in-rush vA 275 holding vA 17 of 60Hz coil powered at 60Hz in-rush vA 300 holding vA 20 Dissipation at holding ≤20°C 50Hz w 6.5 Max cycles frequency w 6.5 Mechanical operation cycles/h 1500			max	%Us	110
min max wus 20 max wus 55 of 50/60Hz coil powered at 60Hz pick-up min win wus 85 max wus 110 drop-out min wus 40 max wus 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush vA 300 holding vA 20 of 50/60Hz coil powered at 60Hz in-rush vA 275 holding vA 17 of 60Hz coil powered at 60Hz in-rush vA 300 holding vA 20 Dissipation at holding ≤20°C 50Hz w 6.5 Max cycles frequency w 6.5 Mechanical operation cycles/h 1500		drop-out			
of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 275 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation Cycles/h 1500 Operating times		·	min	%Us	20
pick-up min %Us 85 max %Us 110 drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush vA 300 holding vA 20 of 50/60Hz coil powered at 60Hz in-rush vA 275 holding vA 17 of 60Hz coil powered at 60Hz in-rush vA 300 holding vA 20 Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Cycles/h 1500 Operating times			max	%Us	55
pick-up min %Us 85 max %Us 110 drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush vA 300 holding vA 20 of 50/60Hz coil powered at 60Hz in-rush vA 275 holding vA 17 of 60Hz coil powered at 60Hz in-rush vA 300 holding vA 20 Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Cycles/h 1500 Operating times		of 50/60Hz coil powered at 60Hz			
min %Us 85 max %Us 110					
Max %Us 110		1 1	min	%Us	85
AC average coil consumption at 20°C Of 50/60Hz coil powered at 50Hz In-rush VA 300 holding VA 275 holding VA 275 holding VA 20 Of 60Hz coil powered at 60Hz In-rush VA 300 holding VA 17 Of 60Hz coil powered at 60Hz In-rush VA 300 holding VA 17 Of 60Hz coil powered at 60Hz In-rush VA 300 holding VA 20 Dissipation at holding VA					
MC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush holding VA		drop-out		,,,,	
max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 275 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times		arop cut	min	%Us	40
AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 275 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times					
of 50/60Hz coil powered at 50Hz in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 275 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times	AC average coil consu	umption at 20°C	HILL	7003	
in-rush vA 300 holding vA 20	AC average con consc	•			
holding VA 20		or 50/00Hz coil powered at 50Hz	طميس من	\/^	200
of 50/60Hz coil powered at 60Hz in-rush VA 275 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times					
in-rush		-f 50/0011	noiding	VA	∠∪
holding VA 17		oi bu/buhz coii powered at 60Hz		1/4	075
of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation cycles/h 1500 Operating times					
in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times		- (ADI)	holding	VA	1/
holdingVA20Dissipation at holding ≤20°C 50HzW6.5Max cycles frequencyCycles/h1500Mechanical operationCycles/h1500Operating times		ot 60Hz coil powered at 60Hz			
Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Cycles/h 1500 Operating times					
Max cycles frequency Mechanical operation cycles/h 1500 Operating times			holding		
Mechanical operation cycles/h 1500 Operating times		≤20°C 50Hz		W	6.5
Operating times	Max cycles frequency				
Operating times	Mechanical operation			cycles/h	1500
	Operating times				
	-	ontrol			

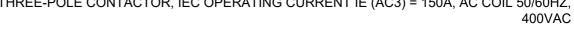


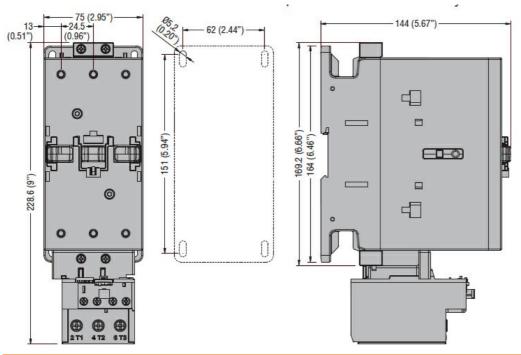


	in AC				
		Closing NO			
			min	ms	45
			max	ms	32
		Opening NO			
			min	ms	9
			max	ms	24
UL technical data					
Yielded mechanical per					
	for three-phase AC mo	otor			
			200/208V	HP	50
			220/230V	HP	50
			460/480V	HP	100
			575/600V	HP	125
General USE	• • •				
	Contactor		40	۸	405
01 - 4 - 2 - 2 - 2 - 2 - 2 - 2	(AC current	Α	165
Short-circuit protection					
	High fault		Ob ant aiment annuar	1. 4	100
			Short circuit current	kΑ	100
			Fuse rating	Α	200
	Standard fault		Fuse class		
	Standard rault		Chart aircuit aurrant	IεΛ	10
			Short circuit current	kA A	10 250
			Fuse rating Fuse class	А	250 RK5
Ambient conditions			1 use class		IXIXU
Temperature					
Tomporature	Operating temperature	1			
	Operating temperature	•	min	°C	-50
			max	°C	70
	Storage temperature		max		. •
	Clorage temperature		min	°C	-60
			max	°C	80
Max altitude			max		3000
Dimensions					

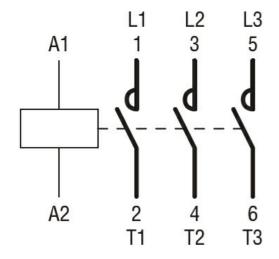
ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC COIL 50/60HZ,





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

Certificates

CCC

cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching





Product designation Power contactor Product type designation BF150

Product type designation			DF 130
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	165
Operational current le			
	AC-1 (≤40°C)	Α	165
	AC-1 (≤55°C)	Α	135
	AC-1 (≤70°C)	Α	118
	AC-3 (≤440V ≤55°C)	Α	150
	AC-4 (400V)	Α	70
Rated operational power AC-3 (T≤55°C)			
	230V	kW	45
	400V	kW	75
	415V	kW	75
	440V	kW	75
	500V	kW	90
	690V	kW	110
	1000V	kW	55
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	150
	110V	Α	10
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	150
	220V	Α	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	160
	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
			405
	≤24V	Α	165



	75V	Α	165
	110V	Α	165
	220V	Α	165
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	60
	75V	Α	44
	110V	A	6
150 H. J. DOO DOE 111 L/D 445 111 O. L. J. J.	220V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	-0.1V		405
	≤24V	A	165
	48V	A	82
	75V	A	70
	110V	A	80
IFC many assert to in DC2 DC5 with L/D < 45 may with 2 males in agrica	220V	Α	7
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	~241 /	۸	105
	≤24V 48V	A	165 105
	48 V 75 V	A A	195 110
	110V		120
	220V	A A	120
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	220 V		120
TEC max current le in DC3-DC3 with E/N = 13ms with 4 poles in series	≤24V	Α	165
	48V	A	130
	75V	A	130
	110V	A	150
	220V	A	150
Short-time allowable current for 10s (IEC/EN60947-1)	220 0	A	1200
Protection fuse			
	gG (IEC)	Α	250
	aM (IEC)	Α	160
Making capacity (RMS value)	(- /	Α	1500
Breaking capacity at voltage			
	440V	Α	1200
	500V	Α	1025
	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	Ith	W	12
	AC3	W	10.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	lbin	4.4
	max	lbin	5.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.59
	max	Ibin	0.74
Conductor section			
AWG/Kcmil			
	max		2/0

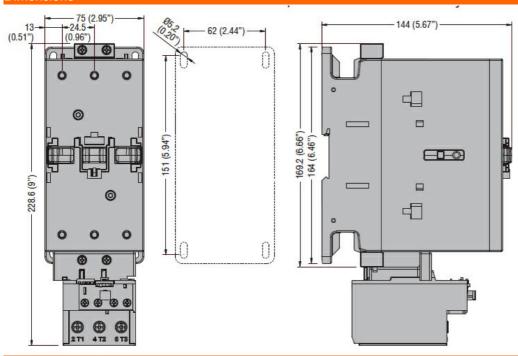


	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	70
	on according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	2020
Conductor section				
	AWG/kcmil conductor section			
		max		2/0
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data				
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 60	Hz		V	24
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	drop-out			
		max	%Us	55
	of 60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80
	_	max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
AC average coil consur	•			
	of 60Hz coil powered at 60Hz			
		in-rush	VA	300
		holding	VA	20
Dissipation at holding ≤	20°C 50Hz		W	6.5
Max cycles frequency				
			cycles/h	1500
-				
Operating times				
Operating times				
Operating times	in AC			
Operating times				
Operating times	in AC	min	ms	45
Mechanical operation Operating times Average time for Us con	in AC Closing NO	min max		45 32
Operating times	in AC	max	ms ms	32
Operating times	in AC Closing NO	max min	ms ms ms	329
Operating times	in AC Closing NO	max	ms ms	32

for three-phase AC motor

		200/208V	HP	50
		220/230V	HP	50
		460/480V	HP	100
		575/600V	HP	125
General USE				·
	Contactor			
		AC current	Α	165
Short-circuit protection	n 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	250
		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			·
	•	min	°C	-60
		max	°C	80
Max altitude			m	3000

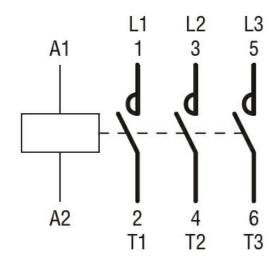
Dimensions



Wiring diagrams

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC COIL 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





Product designation Power contactor Product type designation BF150

Product type designation			BF150
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	165
Operational current le			
	AC-1 (≤40°C)	Α	165
	AC-1 (≤55°C)	Α	135
	AC-1 (≤70°C)	Α	118
	AC-3 (≤440V ≤55°C)	Α	150
	AC-4 (400V)	Α	70
Rated operational power AC-3 (T≤55°C)			
	230V	kW	45
	400V	kW	75
	415V	kW	75
	440V	kW	75
	500V	kW	90
	690V	kW	110
	1000V	kW	55
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	150
	110V	Α	10
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	150
	220V	Α	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
·	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	160
	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
·	≤24V	Α	165
	48V	Α	165



	75V	Α	165
	110V	Α	165
	220V	Α	165
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			_
	≤24V	Α	165
	48V	Α	60
	75V	Α	44
	110V	Α	6
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			_
	≤24V	Α	165
	48V	Α	82
	75V	Α	70
	110V	Α	80
	220V	Α	7
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	165
	48V	Α	195
	75V	Α	110
	110V	Α	120
	220V	Α	120
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	165
	48V	Α	130
	75V	Α	130
	110V	Α	150
	220V	Α	150
Short-time allowable current for 10s (IEC/EN60947-1)		Α	1200
Protection fuse	0 (150)	_	
	gG (IEC)	Α	250
	aM (IEC)	A	160
Making capacity (RMS value)		Α	1500
Breaking capacity at voltage		_	
	440V	Α	1200
	500V	A	1025
	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	Ith	W	12
	AC3	W	10.1
Tightening torque for terminals			•
	min	Nm	6
	max	Nm	7
	min	lbin	4.4
This character is the control of	max	lbin	5.2
Tightening torque for coil terminal			2.2
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.59
Out to the continu	max	lbin	0.74
Conductor section			
AWG/Kcmil			0/0
	max		2/0

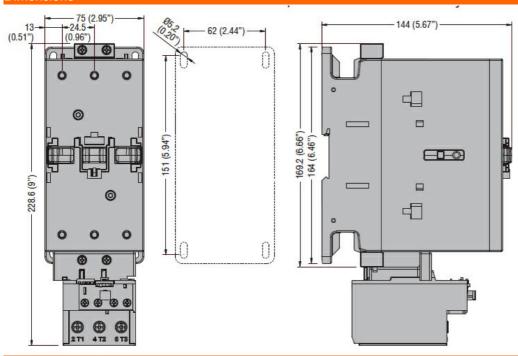


	Flexible w/o lug conductor sectio	n		
	-	min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section	n		
		min	mm²	1.5
		max	mm²	70
	on according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	2020
Conductor section				
	AWG/kcmil conductor section			
		max		2/0
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data				
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 60	-lz		V	48
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	drop-out			
		max	%Us	55
	of 60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
AC average coil consur	•			
	of 60Hz coil powered at 60Hz			
		in-rush	VA	300
		holding	VA	20
Dissipation at holding ≤	20°C 50Hz		W	6.5
Max cycles frequency				
Mechanical operation			cycles/h	1500
Operating times				
	in AC			
_ -				
_ ·	in AC	min	ms	45
_ ·	in AC Closing I	min max	ms ms	45 32
	in AC	min max NO	ms	32
_ -	in AC Closing I	min max NO min	ms ms	329
Average time for Us cor	in AC Closing I	min max NO	ms	32

for three-phase AC motor

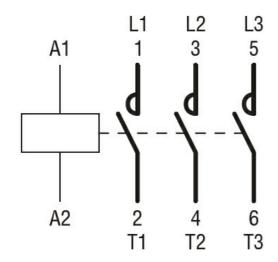
		200/208V	HP	50
		220/230V	HP	50
		460/480V	HP	100
		575/600V	HP	125
General USE				·
	Contactor			
		AC current	Α	165
Short-circuit protection	n fuse, 600V			
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	200
		Fuse class		J
	Standard fault			
		Short circuit current	kA	10
		Fuse rating	Α	250
		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			·
	•	min	°C	-60
		max	°C	80
Max altitude			m	3000

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

Certificates

CCC

cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching





Product designation Power contactor Product type designation BF150

Product type designation			BF150
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	165
Operational current le			
	AC-1 (≤40°C)	Α	165
	AC-1 (≤55°C)	Α	135
	AC-1 (≤70°C)	Α	118
	AC-3 (≤440V ≤55°C)	Α	150
	AC-4 (400V)	Α	70
Rated operational power AC-3 (T≤55°C)			
	230V	kW	45
	400V	kW	75
	415V	kW	75
	440V	kW	75
	500V	kW	90
	690V	kW	110
	1000V	kW	55
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	150
	110V	Α	10
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	150
	220V	Α	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	160
	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	165
	48V	Α	165



	75V	Α	165
	110V	Α	165
	220V	Α	165
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	60
	75V	Α	44
	110V	Α	6
	220V	Α	-
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	165
	48V	Α	82
	75V	Α	70
	110V	Α	80
	220V	Α	7
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	165
	48V	Α	195
	75V	Α	110
	110V	A	120
150 DOS DOS 111 L/D + 45	220V	Α	120
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	-0.11.4	•	405
	≤24V	A	165
	48V	A	130
	75V	A	130
	110V	A	150
Short-time allowable current for 10s (IEC/EN60947-1)	220V	A A	150 1200
Protection fuse		A	1200
Florection ruse	gG (IEC)	Α	250
	aM (IEC)	A	160
Making capacity (RMS value)	aw (izo)		1500
Breaking capacity at voltage		- , ,	1000
Disaling supusity at voltage	440V	Α	1200
	500V	Α	1025
	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	lth	W	12
	AC3	W	10.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	lbin	4.4
	max	lbin	5.2
Tightening torque for coil terminal			
-	min	Nm	0.8
	max	Nm	1
	min	lbin	0.59
	max	Ibin	0.74
Conductor section			
AWG/Kcmil			
	max		2/0



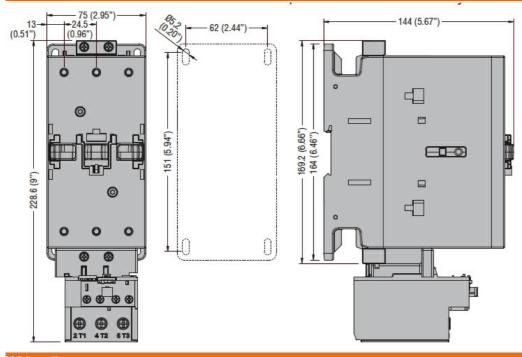


	Flexible w/o lug conductor section			
	Tionible W/o lag conductor coolien	min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section			
	Tioxibio of Wilag Contactor Cocton	min	mm²	1.5
		max	mm²	70
Power terminal protect	tion according to IEC/EN 60529			IP20 front
Mechanical features				0
Operating position				
operating peetiters		normal		Vertical plan
		allowable		±30°
		anomabio		Screw / DIN rail
Fixing				35mm
Weight			g	2020
Conductor section				
	AWG/kcmil conductor section			
	7 (V C/Rollin conductor section	max		2/0
Operations		max		_, 5
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data			Oy 0100	000000
EMC compatibility				yes
AC coil operating				yes
Rated AC voltage at 6	0Hz		V	120
AC operating voltage	0112		V	120
AC operating voltage	of 60Hz coil powered at 60Hz			
	pick-up			
	рюк-ир	min	%Us	80
		max	%Us	110
	drop-out	Παλ	/003	110
	αιορ-οαι	min	%Us	20
		max	%Us	55
AC average coil consu	umption at 20°C	Пих	7000	
AC average con const	of 60Hz coil powered at 60Hz			
	or our iz con powered at our iz	in-rush	VA	300
		holding	VA VA	20
Dissipation at holding	<20°C 50Hz	riolaling	W	6.5
Max cycles frequency			VV	0.5
Mechanical operation			cycles/h	1500
Operating times			Cycles/11	1300
Average time for Us of	ontrol			
Average time for Us C	in AC			
	Closing NO			
	Closing IVO	min	mo	45
		min	ms ms	32
	Ononing NO	max	ms	JZ
	Opening NO	min	me	9
		min	ms ms	24
UL technical data		max	ms	۷٦
Yielded mechanical pe	orformanco			
neiueu mechanical pe				
	for three-phase AC motor	200/2001	ПD	50
		200/208V 220/230V	HP up	50
			HP up	50
		460/480V	HP	100

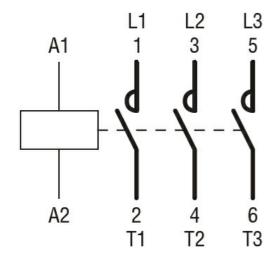


		575/600V	HP	125
General USE				
	Contactor			
		AC current	Α	165
Short-circuit protect	tion fuse, 600V			
·	High fault			
	· ·	Short circuit current	kA	100
		Fuse rating	Α	200
		Fuse class		J
	Standard fault			
		Short circuit current	kA	10
		Fuse rating	Α	250
		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Dimensions				

Dimensions







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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



Product designation

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC COIL 60HZ, 220VAC



Power contactor

BF150 Product type designation Contact characteristics Number of poles Nr. 3 Rated insulation voltage Ui IEC/EN ٧ 1000 Rated impulse withstand voltage Uimp kV 8 Operational frequency min Η 25 max Hz 400 IEC Conventional free air thermal current Ith 165 Α Operational current le AC-1 (≤40°C) Α 165 AC-1 (≤55°C) Α 135 AC-1 (≤70°C) Α 118 AC-3 (≤440V ≤55°C) Α 150 AC-4 (400V) 70 Rated operational power AC-3 (T≤55°C) 45 230V kW 400V kW 75 415V kW 75 440V kW 75 500V kW 90

690V

1000V

≤24V

48V

75V

kW

kW

Α

Α

Α

110

55

165

165

150

	110V	Α	10
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	150
	220V	Α	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			

IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series

	≥24 V	А	105	
	48V	Α	165	
	75V	Α	165	
	110V	Α	160	
	220V	Α	150	
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series				
	≤24V	Α	165	
	48\/	Δ	165	



	75V	Α	165
	110V	Α	165
	220V	Α	165
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	60
	75V	Α	44
	110V	Α	6
	220V	Α	-
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	165
	48V	Α	82
	75V	Α	70
	110V	Α	80
	220V	Α	7
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	165
	48V	Α	195
	75V	Α	110
	110V	A	120
150 DOS DOS 111 L/D + 45	220V	Α	120
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	-0.11.4	•	405
	≤24V	A	165
	48V	A	130
	75V	A	130
	110V	A	150
Short-time allowable current for 10s (IEC/EN60947-1)	220V	A A	150 1200
Protection fuse		A	1200
Florection ruse	gG (IEC)	Α	250
	aM (IEC)	A	160
Making capacity (RMS value)	aw (izo)		1500
Breaking capacity at voltage		- , ,	1000
Disaling supusity at voltage	440V	Α	1200
	500V	Α	1025
	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	lth	W	12
	AC3	W	10.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	lbin	4.4
	max	lbin	5.2
Tightening torque for coil terminal			
-	min	Nm	0.8
	max	Nm	1
	min	lbin	0.59
	max	Ibin	0.74
Conductor section			
AWG/Kcmil			
	max		2/0

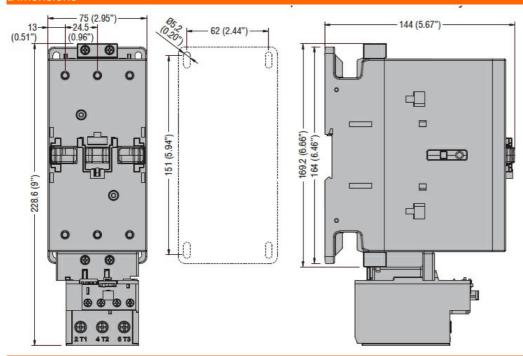


	Flexible w/o lug conductor section			
	-	min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	70
Power terminal protection	on according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	2020
Conductor section				
	AWG/kcmil conductor section			
		max		2/0
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data				
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 60	Hz		V	220
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	drop-out			
		max	%Us	55
	of 60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out		0/11	
		min	%Us	20
		max	%Us	55
AC average coil consur	•			
	of 60Hz coil powered at 60Hz			
		in-rush	VA	300
		holding	VA	20
Dissipation at holding ≤	20°C 50Hz		W	6.5
Max cycles frequency				
Mechanical operation			cycles/h	1500
_ -	_			
_ -				
	in AC			
	in AC	min	ms	45
	in AC Closing NO	min max	ms ms	45 32
	in AC	max	ms	32
	in AC Closing NO	max min	ms ms	329
Operating times Average time for Us con UL technical data	in AC Closing NO	max	ms	32



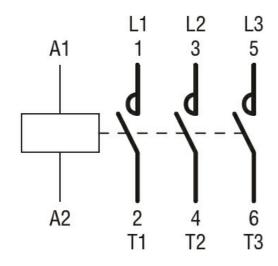
		200/208V	HP	50
		220/230V	HP	50
		460/480V	HP	100
		575/600V	HP	125
General USE				_
	Contactor			
		AC current	Α	165
Short-circuit protection	on fuse, 600V			
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	200
		Fuse class		J
	Standard fault			
		Short circuit current	kA	10
		Fuse rating	Α	250
		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000

Dimensions



ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC COIL 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





Product designation Power contactor
Product type designation BF150

Product type designation			BF150
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	165
Operational current le			
	AC-1 (≤40°C)	Α	165
	AC-1 (≤55°C)	Α	135
	AC-1 (≤70°C)	Α	118
	AC-3 (≤440V ≤55°C)	Α	150
	AC-4 (400V)	Α	70
Rated operational power AC-3 (T≤55°C)			
	230V	kW	45
	400V	kW	75
	415V	kW	75
	440V	kW	75
	500V	kW	90
	690V	kW	110
	1000V	kW	55
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series		_	
	≤24V	Α	165
	48V	Α	165
	75V	A	150
	110V	A	10
150	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	40.4) /	•	405
	≤24V	A	165
	48V	A	165
	75V	A	165
	110V	A	150
	220V	Α	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	-0.01	^	405
	≤24V	A	165
	48V	A	165
	75V	A	165
	110V	A	160
150	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	-0.01	^	405
	≤24V	A	165
	48V	Α	165



	75V	Α	165
	110V	Α	165
	220V	Α	165
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	60
	75V	Α	44
	110V	Α	6
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	165
	48V	Α	82
	75V	Α	70
	110V	Α	80
	220V	Α	7
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	165
	48V	Α	195
	75V	Α	110
	110V	Α	120
	220V	Α	120
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
·	≤24V	Α	165
	48V	Α	130
	75V	Α	130
	110V	Α	150
	220V	Α	150
Short-time allowable current for 10s (IEC/EN60947-1)		Α	1200
Protection fuse			
	gG (IEC)	Α	250
	aM (IEC)	Α	160
Making capacity (RMS value)	, ,	Α	1500
Breaking capacity at voltage			
	440V	Α	1200
	500V	Α	1025
	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			<u> </u>
Total dissipation por pole (avolage value)	lth	W	12
	AC3	W	10.1
Tightening torque for terminals	7100	• • • • • • • • • • • • • • • • • • • •	10.1
rightening torque for terminals	min	Nm	6
	max	Nm	7
	min	Ibin	<i>7</i> 4.4
		lbin	5.2
Tightoning targue for call terminal	max	ווטו	J.L
Tightening torque for coil terminal	min	Nim	0.0
	min	Nm Nm	0.8
	max	Nm	1
	min	Ibin	0.59
One desired as a time	max	lbin	0.74
Conductor section			
AWG/Kcmil			0/0
	max		2/0

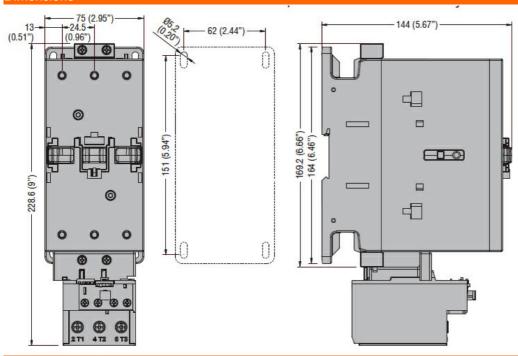


	Flexible w/o lug conductor section			
	-	min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section			
	· ·	min	mm²	1.5
		max	mm²	70
Power terminal protect	tion according to IEC/EN 60529			IP20 front
Mechanical features	i i			
Operating position				
		normal		Vertical plan
		allowable		±30°
F' '				Screw / DIN rail
Fixing				35mm
Weight			g	2020
Conductor section				
	AWG/kcmil conductor section			
		max		2/0
Operations				
Mechanical life			cycles	15000000
Electrical life	_		cycles	800000
Safety related data			.,	
EMC compatibility				yes
AC coil operating				,
Rated AC voltage at 60)Hz		V	230
AC operating voltage	/ 		<u> </u>	
re operating vertage	of 50/60Hz coil powered at 50Hz			
	drop-out			
	diop out	max	%Us	55
	of 60Hz coil powered at 60Hz	max	7000	
	pick-up			
	plox up	min	%Us	80
		max	%Us	110
	drop-out	Hax	7003	110
	diop out	min	%Us	20
		max	%Us	55
AC average coil consu	umption at 20°C	IIIdx	/003	33
AC average con consu	of 60Hz coil powered at 60Hz			
	or our iz con powered at our iz	in-rush	VA	300
		holding	VA VA	20
Dissipation at holding ≤	<20°C F0H-7	Holding	W	6.5
Dissipation at notding :	20 C 30HZ		VV	0.0
Max cycles frequency			avalaa/b	1500
Max cycles frequency Mechanical operation			cycles/h	1500
Max cycles frequency Mechanical operation Operating times			cycles/h	1500
Max cycles frequency Mechanical operation Operating times			cycles/h	1500
Max cycles frequency Mechanical operation Operating times	in AC		cycles/h	1500
Max cycles frequency Mechanical operation Operating times				
Max cycles frequency Mechanical operation Operating times	in AC	min	ms	45
Max cycles frequency Mechanical operation Operating times	in AC Closing NO	min max		
Max cycles frequency Mechanical operation Operating times	in AC	max	ms ms	45 32
Max cycles frequency Mechanical operation Operating times Average time for Us co	in AC Closing NO		ms	45

for three-phase AC motor

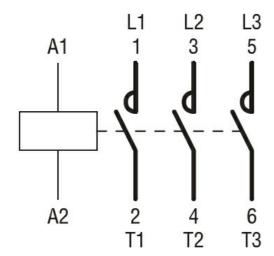
		200/208V	HP	50
		220/230V	HP	50
		460/480V	HP	100
		575/600V	HP	125
General USE				
	Contactor			
		AC current	Α	165
Short-circuit protection	n fuse, 600V			
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	200
		Fuse class		J
	Standard fault			
		Short circuit current	kA	10
		Fuse rating	Α	250
		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
	•	min	°C	-60
		max	°C	80
Max altitude			m	3000

Dimensions





ENERGY AND AUTOMATION



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





Product designation Power contactor Product type designation BF150

Product type designation			DF 130
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	165
Operational current le			
	AC-1 (≤40°C)	Α	165
	AC-1 (≤55°C)	Α	135
	AC-1 (≤70°C)	Α	118
	AC-3 (≤440V ≤55°C)	Α	150
	AC-4 (400V)	Α	70
Rated operational power AC-3 (T≤55°C)			
	230V	kW	45
	400V	kW	75
	415V	kW	75
	440V	kW	75
	500V	kW	90
	690V	kW	110
	1000V	kW	55
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	150
	110V	Α	10
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	150
	220V	Α	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	160
	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series		_	
	≤24V	Α	165





	75V	Α	165
	110V	Α	165
	220V	Α	165
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	60
	75V	Α	44
	110V	A	6
150 H. J. DOO DOE 111 L/D 445 111 O. L. J. J.	220V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	-0.1V		405
	≤24V	A	165
	48V	A	82
	75V	A	70
	110V	A	80
IFC many assert to in DC2 DC5 with L/D < 45 may with 2 males in agrica	220V	Α	7
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	~241 /	۸	105
	≤24V 48V	A	165 105
	48 V 75 V	A A	195 110
	110V		120
	220V	A A	120
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	220 V		120
TEC max current le in DC3-DC3 with E/N = 13ms with 4 poles in series	≤24V	Α	165
	48V	A	130
	75V	A	130
	110V	A	150
	220V	A	150
Short-time allowable current for 10s (IEC/EN60947-1)	220 0	A	1200
Protection fuse			
	gG (IEC)	Α	250
	aM (IEC)	Α	160
Making capacity (RMS value)	(- /	Α	1500
Breaking capacity at voltage			
	440V	Α	1200
	500V	Α	1025
	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	Ith	W	12
	AC3	W	10.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	lbin	4.4
	max	lbin	5.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.59
	max	Ibin	0.74
Conductor section			
AWG/Kcmil			
	max		2/0



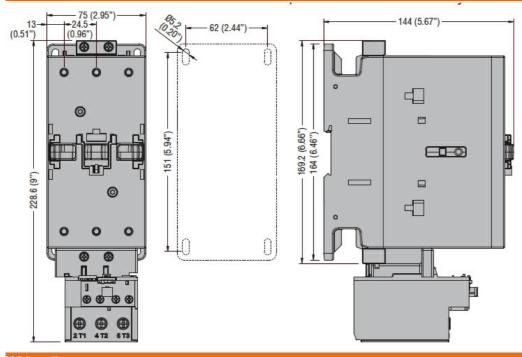


	Flexible w/o lug conductor section			
	Tioxible We lag conductor decitor	min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section			
	Tioxible of Wilag conductor decitors	min	mm²	1.5
		max	mm²	70
Power terminal protec	tion according to IEC/EN 60529			IP20 front
Mechanical features				0
Operating position				
operating peetite.		normal		Vertical plan
		allowable		±30°
		anowabio		Screw / DIN rail
Fixing				35mm
Weight			g	2020
Conductor section				
	AWG/kcmil conductor section			
	700 G/Romin conductor section	max		2/0
Operations		IIIUX		_, 5
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data			Oy 0100	000000
EMC compatibility				yes
AC coil operating				yes
Rated AC voltage at 6	0H ₇		V	460
AC operating voltage	JI IZ		V	400
AC operating voltage	of 60Hz coil powered at 60Hz			
	pick-up			
	ρισκ-αρ	min	%Us	80
		max	%Us	110
	drop-out	Παλ	/003	110
	αιορ-οαι	min	%Us	20
		max	%Us	55
AC average coil consu	umption at 20°C	Hax	/003	33
AC average con consc				
	of 60Hz coil powered at 60Hz	in-rush	VA	300
		holding	VA VA	20
Dissipation at holding	<20°C E0H-7	riolaling	W	6.5
Max cycles frequency	≥20 C 30112		VV	0.5
Mechanical operation			cycles/h	1500
Operating times			Cycles/II	1300
Average time for Us co	ontrol			
Average time for US Co				
	in AC			
	Closing NO		ma	1 E
		min	ms	45
	Openia z NO	max	ms	32
	Opening NO	mai-	ma	0
		min	ms	9
III toobnigal data		max	ms	24
UL technical data	priormonos			
Yielded mechanical pe				
	for three-phase AC motor	000/000:	LID	50
		200/208V	HP	50
		220/230V	HP	50
		460/480V	HP	100



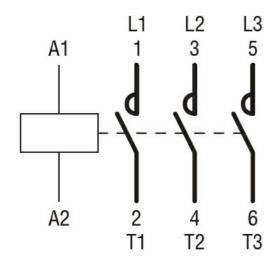
		575/600V	HP	125
General USE				
	Contactor			
		AC current	Α	165
Short-circuit protect	tion fuse, 600V			
·	High fault			
	· ·	Short circuit current	kA	100
		Fuse rating	Α	200
		Fuse class		J
	Standard fault			
		Short circuit current	kA	10
		Fuse rating	Α	250
		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Dimensions				

Dimensions



ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC COIL 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





Product designation Power contactor Product type designation BF150

Product type designation			BF150
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	165
Operational current le			
	AC-1 (≤40°C)	Α	165
	AC-1 (≤55°C)	Α	135
	AC-1 (≤70°C)	Α	118
	AC-3 (≤440V ≤55°C)	Α	150
D. () () () () () () () () () (AC-4 (400V)	Α	70
Rated operational power AC-3 (T≤55°C)			
	230V	kW	45
	400V	kW	75 75
	415V	kW	75 75
	440V	kW	75 00
	500V 690V	kW kW	90 110
	1000V	kW	55
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	1000 V	KVV	- 33
TEO HIGA GUITORI TO IN DOT WILL ETC = THIS WILL I POICS III SCHOS	≤24V	Α	165
	48V	Α	165
	75V	A	150
	110V	Α	10
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
·	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	150
	220V	Α	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	160
	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	165
	48V	Α	165



	75V	Α	165
	110V	Α	165
	220V	Α	165
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	60
	75V	Α	44
	110V	A	6
150 H. J. DOO DOE 111 L/D 445 111 O. L. J. J.	220V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	-0.1V		405
	≤24V	A	165
	48V	A	82
	75V	A	70
	110V	A	80
IFC many assert to in DC2 DC5 with L/D < 45 may with 2 males in agrica	220V	Α	7
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	~241 /	۸	105
	≤24V 48V	A	165 105
	48 V 75 V	A A	195 110
	110V		120
	220V	A A	120
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	220 V		120
TEC max current le in DC3-DC3 with E/N = 13ms with 4 poles in series	≤24V	Α	165
	48V	A	130
	75V	A	130
	110V	A	150
	220V	A	150
Short-time allowable current for 10s (IEC/EN60947-1)	220 0	A	1200
Protection fuse			
	gG (IEC)	Α	250
	aM (IEC)	Α	160
Making capacity (RMS value)	(- /	Α	1500
Breaking capacity at voltage			
	440V	Α	1200
	500V	Α	1025
	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	Ith	W	12
	AC3	W	10.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	lbin	4.4
	max	lbin	5.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.59
	max	Ibin	0.74
Conductor section			
AWG/Kcmil			
	max		2/0



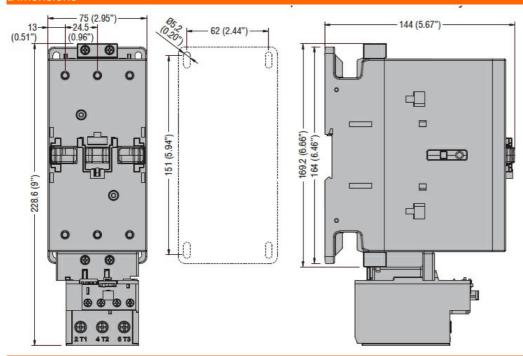
	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	70
-	on according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	2020
Conductor section				
	AWG/kcmil conductor section			
		max		2/0
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data				
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 60	Hz		V	575
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	drop-out			
		max	%Us	≤70 Us min
	of 60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
AC average coil consur	nption at 20°C			
	of 60Hz coil powered at 60Hz			
		in-rush	VA	300
		holding	VA	20
Dissipation at holding ≤	20°C 50Hz		W	6.5
Max cycles frequency				
			cycles/h	1500
Mechanical operation				
Mechanical operation Operating times	ntrol			
Mechanical operation Operating times	ntrol in AC			
Mechanical operation Operating times				
Mechanical operation Operating times	in AC	min	ms	45
Mechanical operation Operating times	in AC	min max		45 32
Mechanical operation Operating times	in AC		ms	
Mechanical operation Operating times	in AC Closing NO		ms	
Mechanical operation Operating times Average time for Us cor	in AC Closing NO	max	ms ms	32

for three-phase AC motor

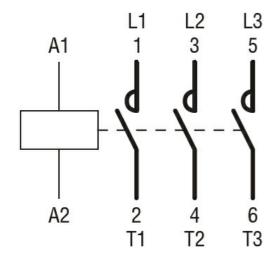


		200/208V	HP	50
		220/230V	HP	50
		460/480V	HP	100
		575/600V	HP	125
General USE				
	Contactor			
		AC current	Α	165
Short-circuit protecti	ion fuse, 600V			
•	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	200
		Fuse class		J
	Standard fault			
		Short circuit current	kA	10
		Fuse rating	Α	250
		Fuse class		RK5
Ambient conditions				
Temperature				
·	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000

Dimensions







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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