11BF11000110



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 110A, AC COIL 50/60HZ, 110VAC



Product designation		Power contactor
Product type designation		11BF110
Contact characteristics		
Number of poles	nr.	3
Rated insulation voltage Ui	V	1000
Rated impulse withstand voltage Uimp	kV	8
Operating frequency		
Operational frequency min	Hz	25
Operational frequency max	Hz	400
Conventional free air thermal current Ith	А	125
Operating current		
Operational current AC1 (≤40°C)	А	125
Operational current AC3 (≤440V ≤55°C)	А	110
Rated operational power AC1 (T≤40°C)		
230V	kW	47
400V	kW	82
500V	kW	108
690V	kW	128
Rated operational power AC3 (T≤55°C)		
230V	kW	33
400V	kW	61
415V	kW	66
440V	kW	70
500V	kW	59
690V	kW	80
1000V	kW	45
Short-time allowable current for 10s (IEC/EN60947-1)	А	880
Protection fuse		
gG (IEC)	А	160
aM (IEC)	А	125
Making capacity (RMS value)	А	1200
Breaking capacity at voltage		
Breaking capacity 440V	А	1200
Breaking capacity 500V	А	1050
Breaking capacity 690V	А	800
Resistance per pole (average value)	mΩ	0.6
Power dissipation per pole (average value)		
Power dissipation pole (average value) Ith	W	9.4
AC3	W	7.3
Tightening torque for terminals	••	
min	Nm	4
max	Nm	5
min	lbft	2.95
max	lbft	3.69

Tightening torque for coil terminal



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 110A, AC COIL 50/60HZ, 110VAC

11BF11000110

Nm

0.8

min

		max	Nm	1
		min	lbft	0.8
		max	lbft	0.74
max number of wires	simultaneously connectable		nr.	1
Conductor section	,			
	AWG			
	AWG			
		min		14
		max		2/0
	Flexible w/o lug conductor section			
		min	mm²	6
		max	mm²	50
	Flexible c/w lug conductor section			
		min	mm²	6
		max	mm²	50
	ction according to IEC/EN 60529			IP20 front
Auxiliary contact chara	acteristics			
Operational current A	C1 (≤40°C)		А	125
Operating current DC				
	-			Screw / DIN rail
		110V	A	35mm
Ambient conditions				5511111
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
			°C	80
Max altitude		max		
			m	3000
		normal		Vertical plan
		normal allowable		Vertical plan ±30°
Operating position				±30°
Operating position				±30° Screw / DIN rail
Operating position			q	±30° Screw / DIN rail 35mm
Operating position Mounting Weight			g	±30° Screw / DIN rail
Operating position Mounting Weight Operations				±30° Screw / DIN rail 35mm 1.37
Operating position Mounting Weight Operations Mechanical life			Cycles	±30° Screw / DIN rail 35mm 1.37 15000000
Operating position Mounting Weight Operations Mechanical life Electrical life				±30° Screw / DIN rail 35mm 1.37
Operating position Mounting Weight Operations Mechanical life Electrical life			Cycles	±30° Screw / DIN rail 35mm 1.37 15000000
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data	0d according to EN/ISO 13489-1		Cycles	±30° Screw / DIN rail 35mm 1.37 15000000
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data	0d according to EN/ISO 13489-1	allowable	Cycles Cycles	±30° Screw / DIN rail 35mm 1.37 15000000 800000
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data	0d according to EN/ISO 13489-1	allowable	Cycles Cycles Cicli	±30° Screw / DIN rail 35mm 1.37 15000000 800000
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data Performance level B1	-	allowable	Cycles Cycles	±30° Screw / DIN rail 35mm 1.37 15000000 800000 800000 15000000
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi	0d according to EN/ISO 13489-1 ing to IEC/EN 609474-4-1	allowable	Cycles Cycles Cicli	±30° Screw / DIN rail 35mm 1.37 15000000 800000 800000 15000000 yes
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi EMC compatibility	-	allowable	Cycles Cycles Cicli	±30° Screw / DIN rail 35mm 1.37 15000000 800000 800000 15000000
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi EMC compatibility AC coil operating	-	allowable	Cycles Cycles Cicli	±30° Screw / DIN rail 35mm 1.37 15000000 800000 800000 15000000 yes
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi EMC compatibility AC coil operating	-	allowable	Cycles Cycles Cicli	±30° Screw / DIN rail 35mm 1.37 15000000 800000 800000 15000000 yes
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi EMC compatibility AC coil operating	ing to IEC/EN 609474-4-1	allowable	Cycles Cycles Cicli	±30° Screw / DIN rail 35mm 1.37 15000000 800000 800000 15000000 yes
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi EMC compatibility AC coil operating	ing to IEC/EN 609474-4-1 of 50/60Hz coil powered at 50Hz	allowable	Cycles Cycles Cicli	±30° Screw / DIN rail 35mm 1.37 15000000 800000 800000 15000000 yes
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi EMC compatibility AC coil operating	ing to IEC/EN 609474-4-1	allowable	Cycles Cycles Cicli Cicli	±30° Screw / DIN rail 35mm 1.37 15000000 800000 800000 15000000 yes yes
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi EMC compatibility AC coil operating	ing to IEC/EN 609474-4-1 of 50/60Hz coil powered at 50Hz	allowable	Cycles Cycles Cicli Cicli	±30° Screw / DIN rail 35mm 1.37 15000000 800000 800000 15000000 yes yes yes 0.8
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi EMC compatibility AC coil operating	ing to IEC/EN 609474-4-1 of 50/60Hz coil powered at 50Hz pick-up	allowable	Cycles Cycles Cicli Cicli	±30° Screw / DIN rail 35mm 1.37 15000000 800000 800000 15000000 yes yes
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi EMC compatibility AC coil operating	ing to IEC/EN 609474-4-1 of 50/60Hz coil powered at 50Hz	allowable	Cycles Cycles Cicli Cicli Sicli	±30° Screw / DIN rail 35mm 1.37 15000000 800000 800000 15000000 yes yes yes
Operating position Mounting Weight Operations Mechanical life Electrical life Safety related data Performance level B1	ing to IEC/EN 609474-4-1 of 50/60Hz coil powered at 50Hz pick-up	allowable	Cycles Cycles Cicli Cicli	±30° Screw / DIN rail 35mm 1.37 15000000 800000 800000 15000000 yes yes yes

11BF11000110

11BF11000110



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 110A, AC COIL 50/60HZ,

110VAC

	of 50/60Hz coil powered at 6	0Hz		
	pick-			
	pick	min	%Us	0.85
			%Us %Us	1.1
	I	max	%US	1.1
	drop		o / I ·	0.4
		min	%Us	0.4
		max	%Us	0.55
	of 60Hz coil powered at 60Hz	Ζ		
	pick-	up		
	-	min	%Us	0.8
		max	%Us	1.1
	drop			
		min	%Us	0.2
		max	%Us	0.55
		IIIdx	/005	0.00
AC operating voltage		011-		
	of 50/60Hz coil powered at 5		• • •	
		in-rush	VA	200
		holding	VA	18
	of 50/60Hz coil powered at 6	0Hz		
		in-rush	VA	200
		holding	VA	15
	of 60Hz coil powered at 60Hz			
		- in-rush	VA	220
		holding	VA VA	18
Dissinction at halding		noiding	 W	6
Dissipation at holding			٧V	U
Max cycles frequency			0	0000
Mechanical operation	8		Cycles/h	n 3600
Operating times				
Average time for Us o				
	in AC			
		ing NO		
		ing NO min	ms	13
		-	ms ms	13 28
	Closi	min max		
	Closi	min max ning NO	ms	28
	Closi	min max ning NO min	ms ms	28 6
	Closi Oper	min max ning NO	ms	28
	Closi Oper in DC	min max ning NO min max	ms ms	28 6
	Closi Oper in DC	min max ming NO min max	ms ms ms	28 6 19
	Closi Oper in DC	min max min min max ing NO min	ms ms ms	28 6 19 40
	Closi Oper in DC Closi	min max min max min max min max	ms ms ms	28 6 19
	Closi Oper in DC Closi	min max min min max ing NO min	ms ms ms	28 6 19 40 85
	Closi Oper in DC Closi	min max min max min max min max	ms ms ms	28 6 19 40
	Closi Oper in DC Closi	ning NO min max min max min max ning NO	ms ms ms ms	28 6 19 40 85
JL technical data	Closi Oper in DC Closi	ning NO ning NO ning NO ning NO ning NO min max ning NO min	ms ms ms ms ms	28 6 19 40 85 20
	Closi Oper in DC Closi Oper	ning NO ning NO ning NO ning NO ning NO min max ning NO min	ms ms ms ms ms	28 6 19 40 85 20
	Closi Oper in DC Closi	min max min max min max min max hing NO min max	ms ms ms ms ms ms	28 6 19 40 85 20 55
	Closi Oper in DC Closi Oper	min max min max min max min max min max min max at 480V	ms ms ms ms ms ms ms	28 6 19 40 85 20 55 96
Full-load current (FLA	Closi Oper in DC Closi Oper	min max min max min max min max hing NO min max	ms ms ms ms ms ms	28 6 19 40 85 20 55
Full-load current (FLA	Closi Oper in DC Closi Oper	min max min max min max min max min max min max at 480V	ms ms ms ms ms ms ms	28 6 19 40 85 20 55 96
Full-load current (FLA	Closi Oper in DC Closi Oper	min max min max min max min max min max min max at 480V at 600V	ms ms ms ms ms ms ms	28 6 19 40 85 20 55 96 99
Full-load current (FLA	Closi Oper in DC Closi Oper	min max min max min max min max min max min max at 480V	ms ms ms ms ms ms ms	28 6 19 40 85 20 55 96
Full-load current (FLA	Closi Oper in DC Closi Oper	min max min max min max min max min max min max at 480V at 600V	ms ms ms ms ms ms A A	28 6 19 40 85 20 55 96 99
<mark>UL technical data</mark> Full-load current (FLA Yielded mechanical p	Closi Oper in DC Closi Oper	min max min max min max min max min max min max at 480V at 600V at 200/208V	ms ms ms ms ms Ms A A A	28 6 19 40 85 20 55 96 99 30
Full-load current (FLA	Closi Oper in DC Closi Oper	hing NO min max max min max min max hing NO min max at 480V at 600V at 200/208V at 220/208V at 220/208V	ms ms ms ms ms A A A	28 6 19 40 85 20 55 96 99 99 30 40

General USE

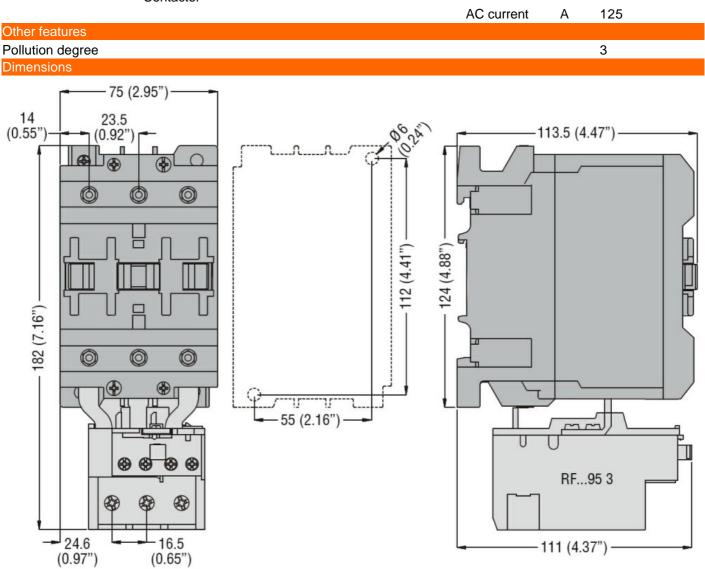
11BF11000110



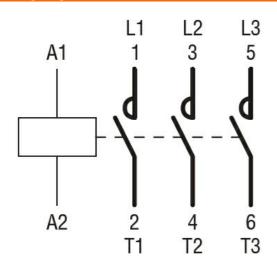
THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 110A, AC COIL 50/60HZ,

110VAC





Wiring diagrams



Certifications and compliance

Certifications

CSA C22.2 n°	60947-1
CSA C22.2 n°	60947-4-1



11BF11000110 THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 110A, AC COIL 50/60HZ, 110VAC

	IEC/EN 60947-1
	IEC/EN 60947-4-1
	UL 60947-1
	UL 60947-4-1
Compliance	
	CCC
	cULus
	EAC

ETIM 6 classification

EC000066 - Power contactor, AC switching

11BF11000110