



Product designation				Power contactor
Product type designation				11BF110
<b>Contact characteristics</b>				
Number of poles	nr.			3
Rated insulation voltage $U_i$	V			1000
Rated impulse withstand voltage $U_{imp}$	kV			8
Operating frequency	Operational frequency min	Hz	25	
	Operational frequency max	Hz	400	
	Conventional free air thermal current $I_{th}$	A	125	
Operating current	Operational current AC1 ( $\leq 40^\circ\text{C}$ )	A	125	
	Operational current AC3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ )	A	110	
	Rated operational power AC1 ( $T \leq 40^\circ\text{C}$ )	230V	kW	47
400V		kW	82	
500V		kW	108	
690V		kW	128	
Rated operational power AC3 ( $T \leq 55^\circ\text{C}$ )	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)	A	880		
Protection fuse	gG (IEC)	A	160	
	aM (IEC)	A	125	
Making capacity (RMS value)	A	1200		
Breaking capacity at voltage	Breaking capacity 440V	A	1200	
	Breaking capacity 500V	A	1050	
	Breaking capacity 690V	A	800	
Resistance per pole (average value)	m $\Omega$	0.6		
Power dissipation per pole (average value)	Power dissipation pole (average value) $I_{th}$	W	9.4	
	AC3	W	7.3	
Tightening torque for terminals	min	Nm	4	
	max	Nm	5	
	min	lbft	2.95	
	max	lbft	3.7	
Tightening torque for coil terminal				

	min	Nm	0.8
	max	Nm	1
	min	lbft	0.8
	max	lbft	0.74
max number of wires simultaneously connectable		nr.	1
Conductor section			
AWG	min		14
	max		2/0
Flexible w/o lug conductor section	min	mm <sup>2</sup>	6
	max	mm <sup>2</sup>	50
Flexible c/w lug conductor section	min	mm <sup>2</sup>	6
	max	mm <sup>2</sup>	50
Power terminal protection according to IEC/EN 60529			IP20 front
<b>Auxiliary contact characteristics</b>			
Operational current AC1 (≤40°C)		A	125
Operating current DC13	110V	A	Screw / DIN rail 35mm
<b>Ambient conditions</b>			
Temperature			
Operating temperature	min	°C	-50
	max	°C	70
Storage temperature	min	°C	-60
	max	°C	80
Max altitude		m	3000
Operating position	normal allowable		Vertical plan ±30°
Mounting			Screw / DIN rail 35mm
Weight		g	1352
<b>Operations</b>			
Mechanical life		Cycles	15000000
Electrical life		Cycles	800000
<b>Safety related data</b>			
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	Cicli	800000 15000000
Mirror contacts according to IEC/EN 60947-4-1			yes
EMC compatibility			yes
<b>AC coil operating</b>			
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up	min	%Us	0.8
	max	%Us	1.1
drop-out	min	%Us	0.2
	max	%Us	0.55

of 50/60Hz coil powered at 60Hz			
pick-up	min	%Us	0.85
	max	%Us	1.1
drop-out			
min	%Us	0.4	
max	%Us	0.55	

of 60Hz coil powered at 60Hz			
pick-up	min	%Us	0.8
	max	%Us	1.1
drop-out			
min	%Us	0.2	
max	%Us	0.55	

AC operating voltage

of 50/60Hz coil powered at 50Hz			
in-rush	VA	200	
	VA	18	
of 50/60Hz coil powered at 60Hz			
in-rush	VA	200	
	VA	15	
of 60Hz coil powered at 60Hz			
in-rush	VA	220	
	VA	18	

Dissipation at holding  $\leq 20^{\circ}\text{C}$  50Hz W 6

Max cycles frequency

Mechanical operations Cycles/h 3600

Operating times

Average time for Us control

in AC			
Closing NO	min	ms	13
	max	ms	28
Opening NO	min	ms	6
	max	ms	19

in DC			
Closing NO	min	ms	40
	max	ms	85
Opening NO	min	ms	20
	max	ms	55

UL technical data

Full-load current (FLA) for three-phase AC motor			
at 480V	A	96	
at 600V	A	99	

Yielded mechanical performance

for three-phase AC motor			
at 200/208V	hp	30	
at 220/230V	hp	40	
at 460/480V	hp	75	
at 575/600V	hp	100	

General USE

Contactor

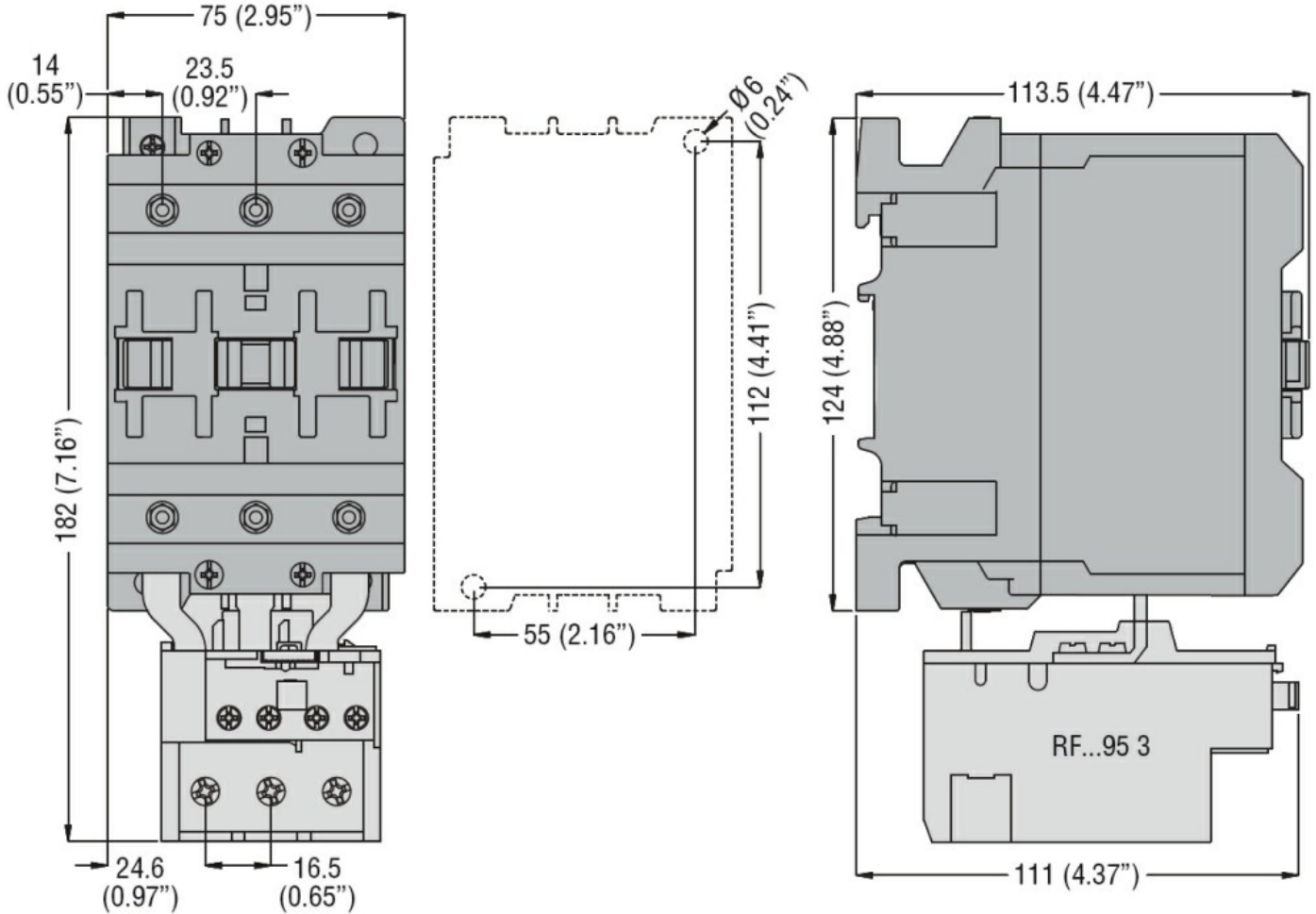
AC current A 125

Other features

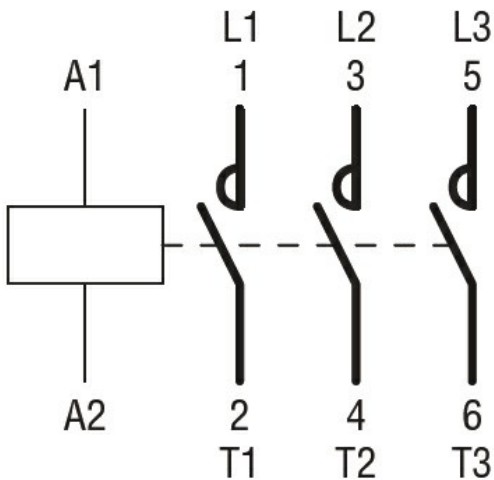
Pollution degree

3

Dimensions



Wiring diagrams



Certifications and compliance

Certifications

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

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IEC/EN 60947-1

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IEC/EN 60947-4-1

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UL 60947-1

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UL 60947-4-1

Compliance

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CCC

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EAC

**ETIM 6 classification**

EC000066 - Power contactor, AC switching