**ENERGY AND AUTOMATION** 

# THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 320A, AC/DC COIL, 220... 240VAC/DC



Product designation		Power contactor
Product type designation		B310
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	Α	450
Operating current		
Operational current AC1 (≤40°C)	Α	450
Operational current AC3 (≤440V ≤55°C)	Α	320
Operational current AC4 (400V)	Α	110
Rated operational power AC1 (T≤40°C)		
230V	kW	158
400V	kW	270
500V	kW	350
690V	kW	488
Rated operational power AC3 (T≤55°C)		
230V	kW	100
400V	kW	170
415V	kW	188
440V	kW	200
500V	kW	213
690V	kW	256
1000V	kW	180
Short-time allowable current for 10s (IEC/EN60947-1)	Α	2900
Protection fuse		
gG (IEC)	Α	500
aM (IEC)	Α	400
Making capacity (RMS value)	Α	3150
Breaking capacity at voltage		
Breaking capacity 440V	Α	3000
Breaking capacity 500V	Α	2700
Breaking capacity 690V	Α	2520
Resistance per pole (average value)	mΩ	0.2
Power dissipation per pole (average value)		
Power dissipation pole (average value) Ith	W	40.5
AC3	W	20
Tightening torque for terminals		
min	Nm	35
max	Nm	35
min	lbft	25.8
max	lbft	25.8



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and a supply of the analysis of the supply o			
max number of wires simultaneously connectable  Conductor section		nr.	2
AWG			
AWG	max		2x 3/0
Power terminal protection according to IEC/EN 60529	IIIAX		IP00
Auxiliary contact characteristics			11 00
Operational current AC1 (≤40°C)		Α	450
Operating current DC13			
	110V	Α	Screw
Ambient conditions			
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
Max altitude		m	3000
Operating position			
	normal		Vertical plan
M	allowable		±30°
Mounting			Screw
Weight		g	9.52
Operations  Mechanical life		Cycles	10000000
Electrical life		Cycles Cycles	700000
Safety related data		Cycles	700000
Performance level B10d according to EN/ISO 13489-1			
r offermation level Broad according to Environment to 1000 f	rated load	Cicli	700000
	mechanical load	Cicli	10000000
NA'		Cicii	10000000
Mirror contats according to IEC/EN 609474-4-1	medianical load	Cicii	
	medianica load	Cicii	yes
EMC compatibility	medianicarioau	Cicii	
EMC compatibility AC coil operating	medianicarioau	Cicii	yes
EMC compatibility AC coil operating	mediancarioad	Cicii	yes
EMC compatibility AC coil operating AC operating voltage	medianicarioau	Cicii	yes
EMC compatibility  AC coil operating  AC operating voltage  of 50/60Hz coil powered at 50Hz	min	%Us	yes yes 0.8
EMC compatibility  AC coil operating  AC operating voltage  of 50/60Hz coil powered at 50Hz  pick-up			yes yes
EMC compatibility  AC coil operating  AC operating voltage  of 50/60Hz coil powered at 50Hz	min max	%Us %Us	yes yes 0.8 1.1
EMC compatibility  AC coil operating  AC operating voltage  of 50/60Hz coil powered at 50Hz  pick-up	min max min	%Us %Us %Us	yes yes 0.8 1.1
EMC compatibility  AC coil operating  AC operating voltage  of 50/60Hz coil powered at 50Hz  pick-up  drop-out	min max	%Us %Us	yes yes 0.8 1.1
EMC compatibility  AC coil operating  AC operating voltage  of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz	min max min	%Us %Us %Us	yes yes 0.8 1.1
EMC compatibility  AC coil operating  AC operating voltage  of 50/60Hz coil powered at 50Hz  pick-up  drop-out	min max min max	%Us %Us %Us %Us	yes yes 0.8 1.1 0.2 0.6
EMC compatibility  AC coil operating  AC operating voltage  of 50/60Hz coil powered at 50Hz  pick-up  drop-out  of 50/60Hz coil powered at 60Hz	min max min max min	%Us %Us %Us %Us	yes yes  0.8 1.1 0.2 0.6
AC coil operating AC operating voltage  of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up	min max min max	%Us %Us %Us %Us	yes yes 0.8 1.1 0.2 0.6
EMC compatibility  AC coil operating  AC operating voltage  of 50/60Hz coil powered at 50Hz  pick-up  drop-out  of 50/60Hz coil powered at 60Hz	min max min max min max	%Us %Us %Us %Us %Us	yes yes  0.8 1.1 0.2 0.6
AC coil operating AC operating voltage  of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up	min max min max min max min	%Us %Us %Us %Us %Us	yes yes  0.8 1.1 0.2 0.6  0.8 1.1 0.2
AC coil operating AC operating voltage  of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up  drop-out	min max min max min max	%Us %Us %Us %Us %Us	yes yes  0.8 1.1 0.2 0.6
EMC compatibility AC coil operating AC operating voltage  of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up  drop-out  AC operating voltage	min max min max min max min	%Us %Us %Us %Us %Us	yes yes  0.8 1.1 0.2 0.6  0.8 1.1 0.2
EMC compatibility AC coil operating AC operating voltage  of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up  drop-out	min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us	yes yes  0.8 1.1 0.2 0.6  0.8 1.1 0.2 0.6
of 50/60Hz coil powered at 60Hz pick-up  drop-out  drop-out	min max min max min max min	%Us %Us %Us %Us %Us	yes yes  0.8 1.1 0.2 0.6  0.8 1.1 0.2

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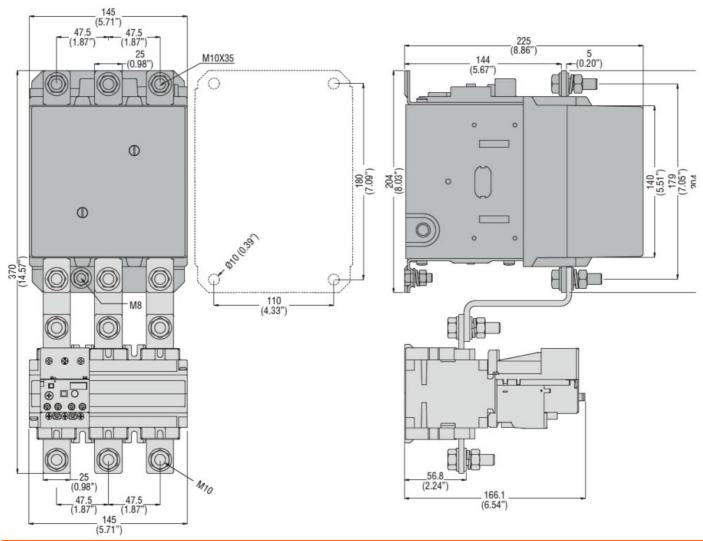
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			in-rush	VA	300
			holding	VA	10
Dissipation at holding	≤20°C 50Hz			W	10
DC coil operating					
DC rated control voltage	je				
			min	V	24
DC operating voltage					
	pick-up			0/11-	0.0
			min	%Us	0.8
	drop out		max	%Us	1.10
	drop-out		min	%Us	0.2
			max	%Us	0.60
Average coil consuption	n <20°C		тих	7000	0.00
Average oon consupue	11 =20 0		in-rush	W	300
			holding	W	10
Max cycles frequency			Holding	• •	
Mechanical operations				Cycles/h	2400
Operating times					
Average time for Us co	ontrol				
_	in AC				
		Closing NO			
			min	ms	80
			max	ms	120
		Opening NO			
			min	ms	30
			max	ms	75
	in DC				
		Closing NO			
			min	ms	80
		Opening NO	max	ms	120
		Opening NO	min	mo	30
			min	ms	75
UL technical data			max	ms	7.5
Full-load current (FLA)	for three-phase AC	motor			
oanon (1 L/1)	121 a 20 p.1.000 / 10		at 480V	Α	301
			at 600V	Α	289
Yielded mechanical pe	rformance				
•	for three-phase AC	motor			
	•		at 200/208V	hp	100
			at 220/230V	hp	125
			at 460/480V	hp	250
			at 575/600V	hp	300
General USE				_	_
	Contactor				
			AC current	Α	450
Other features					
Pollution degree					3
Dimensions					

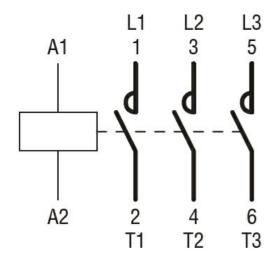
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THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 320A, AC/DC COIL, 220...

240VAC/DC



#### Wiring diagrams



### Certifications and compliance

#### Certifications

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN 60947-1

IEC/EN 60947-4-1

UL 60947-1





### THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 320A, AC/DC COIL, 220... 240VAC/DC

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	UL 60947-4-1	
Compliance		
•	CCC	
	cULus	
	EAC	

ETIM 6 classification

11B31000220

EC000066 - Power contactor, AC switching