



Product designation				Power contactor
Product type designation				B310
Contact characteristics				
Number of poles	nr.			4
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			450
Operating current	Operational current AC1 (≤40°C)	A	450	
	Operational current AC3 (≤440V ≤55°C)	A	320	
	Operational current AC4 (400V)	A	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	
Short-time allowable current for 10s (IEC/EN60947-1)	1000V	kW	180	
		A	2900	
Protection fuse	gG (IEC)	A	500	
	aM (IEC)	A	400	
Making capacity (RMS value)	A			3150
Breaking capacity at voltage	Breaking capacity 440V	A	3000	
	Breaking capacity 500V	A	2700	
	Breaking capacity 690V	A	2520	
Resistance per pole (average value)	mΩ			0.2
Power dissipation per pole (average value)	Power dissipation pole (average value) I _{th}	W	40.5	
	AC3	W	20	
Tightening torque for terminals	min	Nm	35	
	max	Nm	35	
	min	lbft	25.8	
	max	lbft	25.8	

max number of wires simultaneously connectable		nr.	2
Conductor section	AWG	max	2x 3/0
Power terminal protection according to IEC/EN 60529			IP00
Auxiliary contact characteristics			
Operational current AC1 ($\leq 40^{\circ}\text{C}$)		A	450
Operating current DC13		110V	A Screw
Ambient conditions			
Temperature	Operating temperature	min	$^{\circ}\text{C}$ -50
		max	$^{\circ}\text{C}$ 70
	Storage temperature	min	$^{\circ}\text{C}$ -60
		max	$^{\circ}\text{C}$ 80
Max altitude		m	3000
Operating position		normal allowable	Vertical plan $\pm 30^{\circ}$
Mounting			Screw
Weight		g	11.36
Operations			
Mechanical life		Cycles	10000000
Electrical life		Cycles	700000
Safety related data			
Performance level B10d according to EN/ISO 13489-1		rated load mechanical load	Cicli 700000 Cicli 10000000
Mirror contacts according to IEC/EN 60947-4-1			yes
EMC compatibility			yes
AC coil operating			
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 0.6
	of 50/60Hz coil powered at 60Hz		
	pick-up	min	%Us 0.8
		max	%Us 1.1
	drop-out	min	%Us 0.2
		max	%Us 0.6
AC operating voltage	of 50/60Hz coil powered at 50Hz	in-rush holding	VA 300 VA 10
	of 50/60Hz coil powered at 60Hz		

	in-rush	VA	300
	holding	VA	10
Dissipation at holding ≤20°C 50Hz		W	10

DC coil operating

DC rated control voltage	min	V	24
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DC operating voltage

pick-up	min	%Us	0.8
	max	%Us	1.10

drop-out	min	%Us	0.2
	max	%Us	0.60

Average coil consumption ≤20°C

in-rush	W	300
holding	W	10

Max cycles frequency

Mechanical operations	Cycles/h	2400
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Operating times

Average time for Us control

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
		max	ms	120
	Opening NO	min	ms	30
		max	ms	75

UL technical data

Full-load current (FLA) for three-phase AC motor

at 480V	A	301
at 600V	A	289

Yielded mechanical performance

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

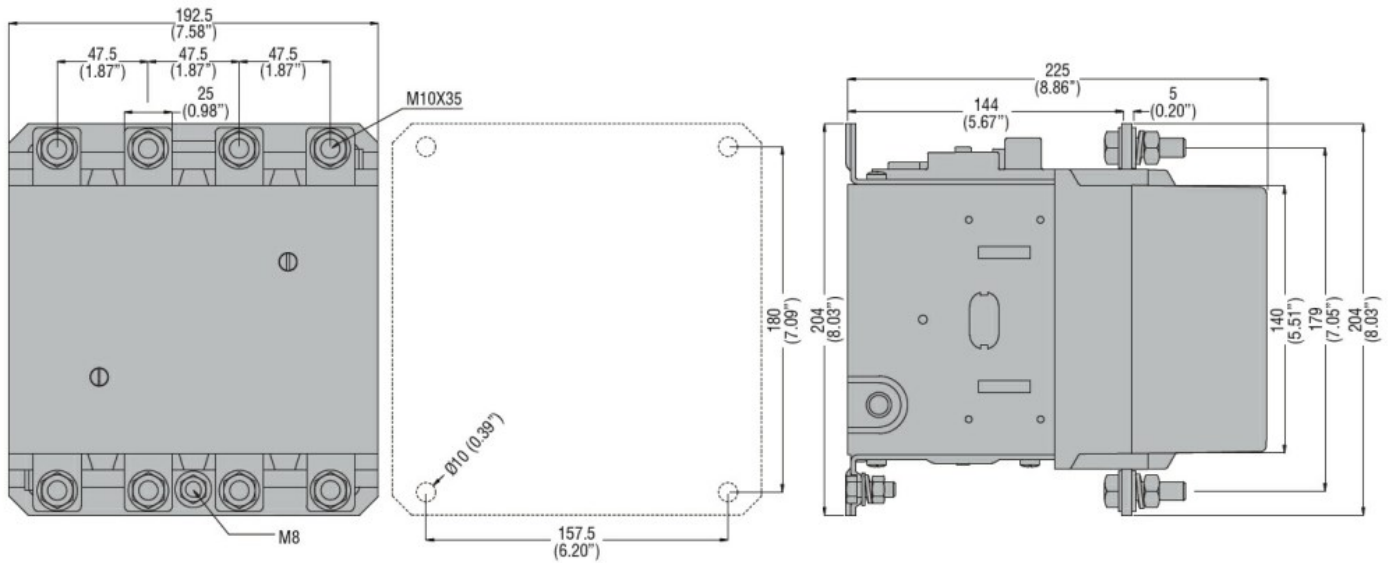
General USE

Contactor	AC current	A	450
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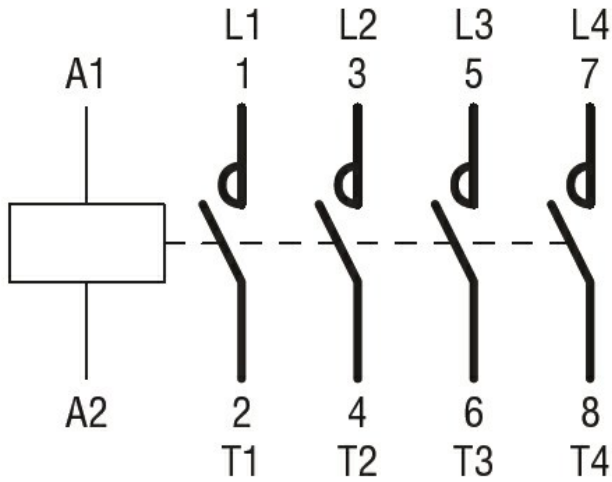
Other features

Pollution degree	3
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Dimensions



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
 UL 60947-4-1

Compliance

CCC
 cULus
 EAC

ETIM 6 classification

EC000066 - Power contactor, AC switching