#### FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 450A, AC/DC COIL, 110... 125VAC/DC **ENERGY AND AUTOMATION**



Product designation Product type designation		Power contactor B310
Contact characteristics		
Number of poles	nr.	4
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)	A	400
Making capacity (RMS value)	Α	3150
Breaking capacity at voltage	_	0005
Breaking capacity 440V	A	3000
Breaking capacity 500V	A	2700
Breaking capacity 690V	Α	2520
Resistance per pole (average value)	mΩ	0.2
Power dissipation per pole (average value)	107	40.5
Power dissipation pole (average value) Ith	W	40.5
AC3	W	20
Tightening torque for terminals		0.5
min	Nm	35
max	Nm	35
min	lbft lbft	25.8 25.8
max	IDII	/D N

**ENERGY AND AUTOMATION** 

## FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 450A, AC/DC COIL, 110... 125VAC/DC

35.03.00.50.00 (1994 344.00 m) yan 100 (100 400 100 400 100 400 100 400 100 100				
	simultaneously connectable		nr.	2
Conductor section				
	AWG			
		max		2x 3/0
-	tion according to IEC/EN 60529			IP00
Auxiliary contact chara			•	4=0
Operational current AC	,		Α	450
Operating current DC1	3	44074		
		110V	Α	Screw
Ambient conditions				
emperature				
	Operating temperature		0.0	50
		min	°C	-50 -70
	<u> </u>	max	°C	70
	Storage temperature		0.0	00
		min	°C	-60
Acy objected		max	°C	80
Max altitude			m	3000
Operating position		normal		\/ortios! plac
		allowable		Vertical plan ±30°
Mounting		allowable		Screw
Weight				11.1
Operations			g	11.1
Mechanical life			Cycles	10000000
Electrical life			Cycles	700000
Safety related data			Cyolco	700000
	Od according to EN/ISO 13489-1			
	, a doce, ag to, c	rated load	Cicli	700000
		mechanical load	Cicli	10000000
Mirror contats accordin	ng to IEC/EN 609474-4-1			yes
EMC compatibility	<u></u>			yes
AC coil operating				<b>,</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
	. <u></u>	max	%Us	0.6
	of 50/60Hz coil powered at 60Hz			
	pick-up			
	Pion up			0.0
	ριοίς αρ	min	%Us	8.0
	ριοίν αρ	min max	%Us %Us	0.8 1.1
	drop-out			
		max	%Us	1.1
AC operating voltage		max min	%Us %Us	1.1
AC operating voltage		max min	%Us %Us	1.1
C operating voltage	drop-out	max min	%Us %Us	1.1
C operating voltage	drop-out	max min max	%Us %Us %Us	1.1 0.2 0.6

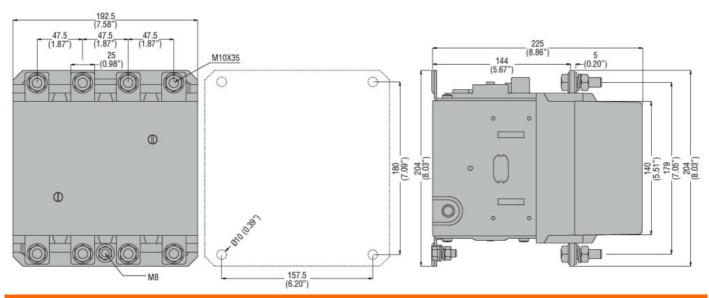
**ENERGY AND AUTOMATION** 

# electric FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 450A, AC/DC COIL, 110... 125VAC/DC

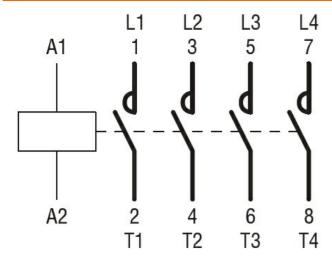
			in-rush	VA	300
			holding	VA	10
Dissipation at holding ≤	20°C 50Hz			W	10
DC coil operating	_				
DC rated control voltage	е		min	17	2.4
DC operating voltage			min	V	24
DC operating voltage	niek un				
	pick-up		min	%Us	0.8
			max	%Us	1.10
	drop-out		IIIax	/003	1.10
	diop out		min	%Us	0.2
			max	%Us	0.60
Average coil consuption	n ≤20°C		THOX	7000	0.00
7 tvo. ago oon concapac	=20 0		in-rush	W	300
			holding	W	10
Max cycles frequency			110101119		
Mechanical operations				Cycles/h	2400
Operating times				<b>,</b>	
Average time for Us co	ntrol				
· ·	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	( (				
rull-load current (FLA)	for three-phase AC mot	or	-1.40017	Α.	004
			at 480V	A	301
Yielded mechanical pe	rformanco		at 600V	A	289
пешей теспапісаі ре	normance for three-phase AC mo	otor			
	ioi unee-phase AC III0	NOI	at 200/208V	hp	100
			at 220/230V	hp	125
			at 460/480V	hp	250
			at 575/600V	hp	300
General USE			at 07 0,000 V	ייף	
20	Contactor				
	231140101		AC current	Α	450
Other features			, 13 danone	, , , , , , , , , , , , , , , , , , ,	
Pollution degree					3
Dimensions					

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 450A, AC/DC COIL, 110... 125VAC/DC

**ENERGY AND AUTOMATION** 



#### 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