



Product designation Product type designation			Power contactor B310
Contact characteristics			
Number of poles		nr.	4
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			_
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	450
Operational current le			
	AC-1 (≤40°C)	Α	450
	AC-1 (≤55°C)	Α	370
	AC-1 (≤70°C)	Α	300
	AC-3 (≤440V ≤55°C)	Α	320
	AC-4 (400V)	Α	110
Rated operational power AC-1 (T≤40°C)			
	230V	kW	158
	400V	kW	270
	440480V	kW	350
	690V	kW	488
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	75V	Α	375
	110V	Α	195
	220V	Α	
	330V	Α	
	460V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	75V	Α	375
	110V	Α	350
	220V	Α	300
	330V	Α	
	460V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	75V	Α	375
	110V	Α	350
	220V	Α	350
	330V	Α	300
	460V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	75V	Α	375
	110V	Α	350
	220V	Α	350
	330V	Α	350
	460V	Α	300

EC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	75V	Α	310
	110V	Α	170
	220V	Α	
	330V	Α	
	460V	Α	
EC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
·	75V	Α	310
	110V	Α	290
	220V	Α	230
	330V	Α	
	460V	Α	
EC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	100 v	- , ,	
	75V	Α	310
	110V	A	310
	220V		290
		A	
	330V	A	230
FO	460V	Α	
EC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	751		0.1.0
	75V	Α	310
	110V	Α	310
	220V	Α	310
	330V	Α	230
	460V	Α	230
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			
	440V	Α	3000
	500V	Α	2700
	690V	Α	2520
Resistance per pole (average value)		mΩ	0.2
Power dissipation per pole (average value)			
oner alcolpation per pere (average value)	Ith	W	40.5
	AC3	W	20
Fightening torque for terminals	7.00	**	20
righterning torque for terminals	min	Nm	35
	min		
	max	Nm Ibin	35 25.8
	min	lbin Ibin	25.8
Fightoning torque for call terminal	max	Ibin	25.8
Fightening torque for coil terminal			4
	min	Nm	1
	max	Nm	1
	min	lbft	0.74
	max	Ibft	0.74
Max number of wires simultaneously connectable		nr.	2
Power terminal protection according to IEC/EN 60529			IP00
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°
	3		

11B310400220

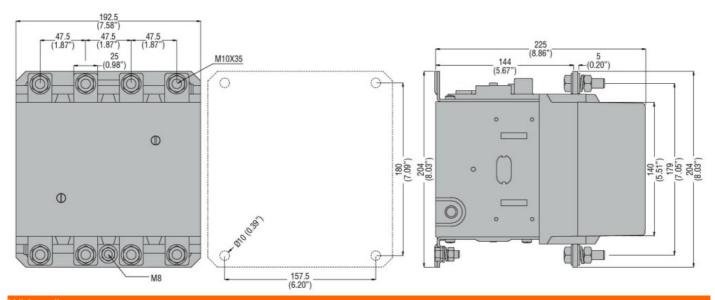
Weight	Fixing				Screw
Mechanical life				g	1114
Electrical life	Operations				
Safety rotated data Performance level B10d according to EN/ISO 13489-1 rated load cycles 700000 mechanical load cycles 10000000 mechanical load cycles 10000000 mechanical load cycles 10000000 mechanical load cycles 100000000 mechanical load cycles 10000000 mechanical load cycles cycles mechanical load cycles cycles	Mechanical life			cycles	10000000
Performance level B10d according to EN/ISO 13489-1 rated load mechanical load on cycles of 10000000 mechanical load on cycles of 100000000000000000000000000000000000				cycles	700000
Pate of the Compatibility					
Mirror contats according to IEC/EN 609474-4-1	Performance level B10	od according to EN/ISO 13489-1			
Mirror contats according to IEC/EN 609474-4-1 yes				-	
EMC compatibility yes AC coil operating min V 24 max Rated AC voltage at 50/60Hz, 60Hz min V 24 max AC operating voltage min Max WUs 110 max AC operating voltage min Max WUs 110 max drop-out min Max WUs 20 max of 50/60Hz coil powered at 60Hz pick-up min Max WUs 20 max drop-out min Max WUs 50 max drop-out min Max WUs 50 max of 60Hz coil powered at 60Hz pick-up min Max WUs 50 max pick-up min Max WUs 50 max drop-out min Max WUs 50 max drop-out min Max 50 max drop-out			mechanical load	cycles	10000000
AC coll operating Rated AC voltage at 50/60Hz, 60Hz min wax V 24 who AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min wax wus 80 wus AC operating voltage min wax wus 110 wus 20 wus AC operating voltage at 20°C of 50/60Hz coil powered at 60Hz pick-up min wus 80 wus 80 wus AC operating voltage at 20°C of 50/60Hz coil powered at 60Hz pick-up min wus 80 wus 80 wus AC operating voltage at 20°C of 50/60Hz coil powered at 50Hz min wus 80 wus 80 wus AC operating voltage at 20°C of 50/60Hz coil powered at 50Hz in-rush voltage wus 40 wus 300 wus AC operating voltage at 20°C of 50/60Hz coil powered at 60Hz in-rush voltage wus 40 wus 300 wus Dissipation at holding ≤20°C 50Hz wus 10 wus 10 wus DC coil operating voltage min wus vus 500 DC operating voltage min wus vus 500 DC operating voltage min wus vus 500		ng to IEC/EN 609474-4-1			yes
Rated AC voltage at 50/60Hz, 60Hz min V 24 max V 480					yes
Min	-				
AC operating voltage of 50/60Hz coil powered at 50Hz	Rated AC voltage at 5	0/60Hz, 60Hz			
AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 60 of 50/60Hz coil powered at 60Hz pick-up drop-out min %Us 80 max %Us 110 drop-out min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 60 of 60Hz coil powered at 60Hz pick-up of 60Hz coil powered at 60Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 80 max %Us 10 Dissipation at holding VA 10 Dissipation at holding ≤20°C 50Hz DC coil operating DC rated control voltage pick-up min V 24 max V 500 DC operating voltage pick-up min V 24 max V 500 DC operating voltage					
of 50/60Hz coil powered at 50Hz pick-up min			max	V	480
Pick-up	AC operating voltage	(50/0011 1)			
Min Wus 80 max wus 110 wus					
Max Mus 110		ріск-ир		0/11-	0.0
Accoparating voltage at 20°C Sol/60Hz coil powered at 60Hz Pick-up Min Mus Mu					
Min		d-0	max	%US	110
Max Mus 60		arop-out	min	0/110	20
of 50/60Hz coil powered at 60Hz pick-up min					
Pick-up		of E0/60Hz poil newgrad at 60Hz	Шах	/005	00
Min					
Max Mus 110 Mus 20 Mus 110 Mus Mus 20 Mus Mus 60 Mus Mus 60 Mus Mus 60 Mus Mu		ριοκ-αρ	min	% le	80
drop-out min %Us 20 max %Us 60					
min %Us 20 max %Us 60 60Hz coil powered at 60Hz pick-up min %Us 80 max %Us 110 Mus 60 max %Us 110 Mus 60 max %Us 110 Mus 60 Mus 60		drop-out	max	7003	110
Max Mus 60		diop out	min	%Us	20
of 60Hz coil powered at 60Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 60 AC operating voltage at 20°C of 50/60Hz coil powered at 50Hz in-rush holding VA 10 of 50/60Hz coil powered at 60Hz in-rush holding VA 10 Dissipation at holding ≤20°C 50Hz DC coil operating DC rated control voltage pick-up min %Us 80 min %Us 80					
Pick-up		of 60Hz coil powered at 60Hz			
min max min					
AC operating voltage at 20°C Of 50/60Hz coil powered at 50Hz In-rush holding VA 10 VA 300 holding VA 10 V		·	min	%Us	80
min wull will will will will will will will			max	%Us	110
max %Us 60 AC operating voltage at 20°C of 50/60Hz coil powered at 50Hz in-rush kolding VA 300 kolding 300 kolding VA 10 300 kolding VA 300 kolding VA 10 10 VA 10 <td></td> <td>drop-out</td> <td></td> <td></td> <td></td>		drop-out			
AC operating voltage at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300 holding VA 10 of 50/60Hz coil powered at 60Hz in-rush VA 300 holding VA 10 Dissipation at holding ≤20°C 50Hz DC coil operating DC rated control voltage min V 24 max V 500 DC operating voltage pick-up min %Us 80			min	%Us	20
of 50/60Hz coil powered at 50Hz in-rush			max	%Us	60
in-rush holding	AC operating voltage a	at 20°C			
holdingVA10of 50/60Hz coil powered at 60Hzin-rush holdingVA300 holdingVA10Dissipation at holding ≤20°C 50HzW10DC coil operatingW10DC rated control voltagemin V 24 max V 500DC operating voltagemin will will be a control voltageDC operating voltagemin will will be a control voltage		of 50/60Hz coil powered at 50Hz			
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 max V 500 DC operating voltage pick-up min %Us 80					
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 max v 500 DC operating voltage pick-up min %Us 80			holding	VA	10
holdingVA10Dissipation at holding ≤20°C 50HzW10DC coil operatingDC rated control voltageminV24maxV500DC operating voltageDC operating voltagepick-upmin%Us80		of 50/60Hz coil powered at 60Hz			
Dissipation at holding ≤20°C 50Hz DC coil operating DC rated control voltage min V 24 max V 500 DC operating voltage pick-up min %Us 80					
DC coil operating DC rated control voltage min V 24 max V 500 DC operating voltage pick-up min %Us 80			holding		
DC rated control voltage min V 24 max V 500		≤20°C 50Hz		W	10
min V 24 max V 500	-				
DC operating voltage pick-up min %Us 80	DC rated control voltage	ge			
DC operating voltage pick-up min %Us 80					
pick-up min %Us 80			max	V	500
min %Us 80	DC operating voltage				
		pick-up			
max %Us 110					
			max	%Us	110



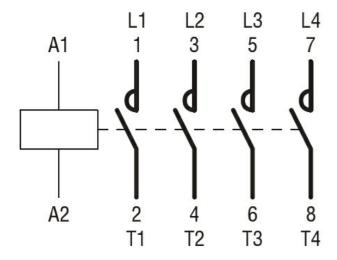
	drop-out				
	•		min	%Us	20
			max	%Us	60
Average coil consump	tion ≤20°C				
7			in-rush	W	300
			holding	W	10
Max cycles frequency			Holding	• • • • • • • • • • • • • • • • • • • •	10
Mechanical operation				cycles/h	2400
Operating times				Cycles/11	2400
Average time for Us co	antrol				
Average unie ioi us co					
	in AC	Olasia a NO			
		Closing NO			0.0
			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					
	for three-phase AC mo	tor			
,	'		at 480V	Α	301
			at 600V	A	289
Yielded mechanical pe	arformance		4,0001	- '`	200
rielded friedriaffical pe	for three-phase AC mo	otor			
	ioi tillee-pilase AC Ilit	Oloi	200/208V	hn	100
				hp	
			220/230V	hp	125
			460/480V	hp	250
0 1110=			575/600V	hp	300
General USE					
	Contactor				
			AC current	Α	450
Ambient conditions					
Temperature					
	Operating temperature)			
			min	°C	-50
			max	°C	70
	Storage temperature				
	•		min	°C	-60
			max	°C	80
Max altitude				m	3000
Resistance & Protection	on				
Pollution degree					3
Dimensions					
DITIONOIDITO -					

ENERGY AND AUTOMATION

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 450A, AC/DC COIL, 220...240VAC/DC



Wiring diagrams



Certifications and compliance

Compliance

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

Certificates

CCC

cULus

EAC