



Product designation			Power contactor
Product type designation			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		А	450
Operational current le			
	AC-1 (≤40°C)	А	450
	AC-1 (≤55°C)	А	370
	AC-1 (≤70°C)	А	300
	AC-3 (≤440V ≤55°C)	А	320
	AC-4 (400V)	Α	150
Rated operational power AC-1 (T≤40°C)			
	230V	kW	158
	400V	kW	270
	500V	kW	350
	690V	kW	488
IEC max current le in DC1 with $L/R \le 1$ ms with 1 poles in series			
	75V	A	375
	110V	A	195
	220V	A	
	330V	A	
	460V	A	
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
	75V	A	375
	110V	A	350
	220V	A	300
	330V	A	
	460V	A	
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series			075
	75V	A	375
	110V	A	350
	220V	A	350
	330V	A	300
IFC may autrant to in DC1 with 1/D < 1mg with 1 nation in action	460V	A	
IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series	751/	^	075
	75V	A	375
	110V	A	350
	220V 330V	A	350 350
	330V 460V	A	350
	40UV	A	300

11B31040048



IEC max current le in DC3-DC5 with L/R \leq 15ms with 1 poles in series			
	75V	А	310
	110V	А	170
	220V	А	
	330V	А	
	460V	Α	
EC max current le in DC3-DC5 with $L/R \le 15$ ms with 2 poles in series			
	75V	А	310
	110V	А	290
	220V	А	230
	330V	А	
	460V	А	
EC max current le in DC3-DC5 with L/R \leq 15ms with 3 poles in series			
	75V	А	310
	110V	А	310
	220V	А	290
	330V	А	230
	460V	А	
EC max current le in DC3-DC5 with L/R \leq 15ms with 4 poles in series			
	75V	А	310
	110V	А	310
	220V	А	310
	330V	А	230
	460V	А	230
Short-time allowable current for 10s (IEC/EN60947-1)		А	2900
Protection fuse			
	gG (IEC)	А	500
	aM (IEC)	A	400
Making capacity (RMS value)	(A	3150
Breaking capacity at voltage			
	440V	А	3000
	500V	A	2700
	690V	A	2520
Resistance per pole (average value)		mΩ	0.2
Power dissipation per pole (average value)			0.2
	lth	W	40.5
	AC-3	Ŵ	20
Tightening torque for terminals	//0/0	••	20
	min	Nm	35
	max	Nm	35
	min	Ibin	25.8
	max	Ibin	25.8
Tightening torque for coil terminal	Παλ	1011	20.0
	min	Nm	1
	max	Nm	1
	min	Ibin	0.74
	max	Ibin	0.74
Max number of wires simultaneously connectable	Παλ	Nr.	2
•		INI.	۷
Conductor costion			
Conductor section AWG/Kcmil			0x 0/0
AWG/Kcmil	max		2x 3/0
Conductor section AWG/Kcmil Power terminal protection according to IEC/EN 60529 Mechanical features	max		2x 3/0 IP00

11B31040048



11B31040048 FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 450A, AC/DC COIL, 48VAC/DC

Operating position

Operating position	normal allowable		Vertical plan ±30°
Fixing			Screw
Weight		g	1110
Conductor section			
AWG/kcmil conductor section			
	max		2x 3/0
Operations			
Mechanical life		cycles	1000000
Electrical life		cycles	700000
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	rated load	cycles	700000
	mechanical load	cycles	1000000
Mirror contats according to IEC/EN 609474-4-1			yes
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 50/60Hz		V	48
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up			
	min	%Us	80
	max	%Us	110
drop-out			
	min	%Us	20
(50/0011 - 1 - 0011	max	%Us	60
of 50/60Hz coil powered at 60Hz			
pick-up		0/11-	00
	min	%Us	80
	max	%Us	110
drop-out	min	%Us	20
	min	%Us %Us	60
of 60Hz and noward at 60Hz	max	/005	00
of 60Hz coil powered at 60Hz pick-up			
ρισκ-αρ	min	%Us	80
	max	%Us	110
drop-out	Шал	/003	110
	min	%Us	20
	max	%Us	60
AC average coil consumption at 20°C	Пах	,	
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		W	10
DC coil operating			-
DC rated control voltage		V	48
DC operating voltage			

pick-up

ENERGY AND AUTOMATION

Resistance & Protection

11B31040048 FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 450A, AC/DC COIL, 48VAC/DC

			min	%Us	80
			max	%Us	110
	drop-out				
			min	%Us	20
			max	%Us	60
Average coil consum	ption ≤20°C				
			in-rush	W	300
Max avalas fraguesa	,		holding	W	10
Max cycles frequency Mechanical operation				cycles/h	2400
Operating times				Cycles/II	2400
Average time for Us of	control				
, wordge time for 00 v	in AC				
		Closing NO			
		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	ma	20
			min max	ms ms	30 75
UL technical data			max	1113	13
	A) for three-phase AC	motor			
Υ.	/		at 480V	А	301
			at 600V	А	289
Yielded mechanical p	performance				
	for three-phase AC	motor			
			200/208V	HP	100
			220/230V	HP	125
			460/480V	HP	250
			575/600V	HP	300
General USE	Operational				
	Contactor			۸	450
Short airquit protoction	~ 600		AC current	A	450
Short-circuit protection	Standard fault				
	Stanuaru iault		Short circuit current	kA	18
			Fuse rating	A	800
			Fuse class		L
Ambient conditions					
Temperature					
	Operating temperat	ture			
			min	°C	-50
			max	°C	70
	Storage temperatur	re			
	Storage temperatur	re	min	°C	-60
Max altitude	Storage temperatur	re	min max	°C °C m	-60 80 3000

11B31040048The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and
functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding

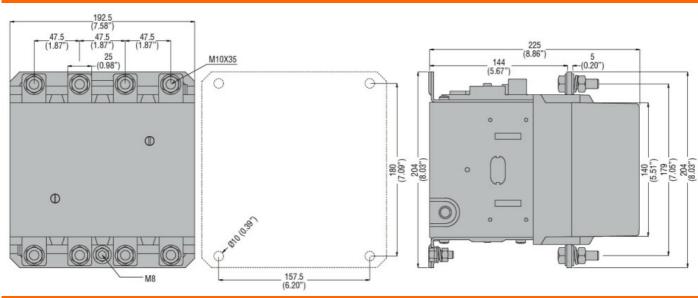


ENERGY AND AUTOMATION

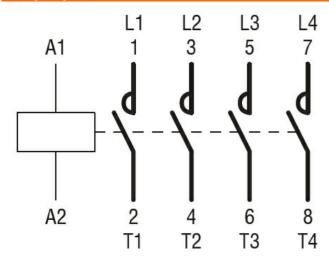
11B31040048 FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 450A, AC/DC COIL, 48VAC/DC

3





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	
ETIM classification		
ETIM 8.0		EC000066 - Power contactor, AC switching

11B31040048