

Product designation Product type designation			Power contactor B310
Contact characteristics			
Number of poles		Nr.	3
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	150
Rated operational power AC-3 (T≤55°C)			
	230V	kW	100
	400V	kW	170
	415V	kW	188
	440V	kW	200
	500V	kW	213
	690V	kW	256
	1000V	kW	180
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 ≤ 1ms with 1 poles in series		_	
	75V	Α	375
	110V	Α	195
	220V	Α	
	330V	A	
150	460V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	75V	Α	375
	110V	A	350
	220V	A	300
	330V	A	
IFO many assessment to im DOA with 1/D 4/4 may 10 On 1 min	460V	A	
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	751	^	275
	75V	A	375
	110V	A	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
IEC 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	
IEC 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	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
TEC MAR CANCIN TO IN ECC ECC MAN EAT (= Tomo MAN o police in consc	75V	Α	310
	110V	Α	310
	220V	Α	290
	330V	Α	230
	460V	A	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	100 V		
TEO Max current to in 200-200 with E/TC 2 Tomb with 4 poles in series	75V	Α	310
	110V	A	310
	220V	A	310
	330V	A	230
	460V	A	230
Short-time allowable current for 10s (IEC/EN60947-1)		A	2900
Protection fuse			2300
r rotection ruse	gG (IEC)	۸	500
		A	400
Making canacity (DMC value)	aM (IEC)	A A	
Making capacity (RMS value)		A	3150
Breaking capacity at voltage	4.40\/	Λ	2000
	440V	A	3000
	500V	A	2700
	690V	Α	2520
Resistance per pole (average value)		mΩ	0.2
Power dissipation per pole (average value)			40 =
	Ith	W	40.5
	AC3	W	20
Tightening torque for terminals			
	min	Nm	35
	max	Nm	35
	min	lbin	25.8
	max	Ibin	25.8
Tightening torque for coil terminal			
	min	Nm	1
	max	Nm	1



		min	Ibin	0.74
		max	Ibin	0.74
	multaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			0.00
D ('	max		2x 3/0
Power terminal protecti Mechanical features	ion according to IEC/EN 60529			IP00
Operating position				
Operating position		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Weight			g	9690
Conductor section				
	AWG/kcmil conductor section			
		max		2x 3/0
Operations				
Mechanical life			cycles	10000000
Electrical life			cycles	700000
Safety related data	T			
Performance level B10	d according to EN/ISO 13489-1			700000
		rated load mechanical load	cycles	700000
Mirror contate accordin	g to IEC/EN 609474-4-1	mechanicai ioau	cycles	10000000
EMC compatibility	g to 120/21 0094/4-4-1			yes
AC coil operating	l			yes
Rated AC voltage at 50)/60Hz		V	24
AC operating voltage			-	
1 0 0	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
	(50/0011 11 1 4 0011	max	%Us	60
	of 50/60Hz coil powered at 60Hz			
	pick-up	min	%Us	80
		max	%Us	110
	drop-out	IIIdA	,0 0 3	110
	3.5p 54t	min	%Us	20
		max	%Us	60
	of 60Hz coil powered at 60Hz			
	, pick-up			
	·	min	%Us	80
	pick-up	min max	%Us %Us	80 110
	·	max	%Us	110
	pick-up	max min	%Us %Us	110 20
1 0	pick-up drop-out	max	%Us	110
AC average coil consui	pick-up drop-out mption at 20°C	max min	%Us %Us	110 20
AC average coil consui	pick-up drop-out	max min max	%Us %Us %Us	110 20 60
AC average coil consui	pick-up drop-out mption at 20°C	max min	%Us %Us	110 20



	of 50/60Hz coil power	ed at 60Hz			
			in-rush	VA	300
			holding	VA	10
Dissipation at holding ≤	20°C 50Hz			W	10
DC coil operating					
DC rated control voltag	е			V	24
DC operating voltage					
	pick-up				
			min	%Us	80
	-		max	%Us	110
	drop-out				
			min	%Us	20
			max	%Us	60
Average coil consumpt	ion ≤20°C				
			in-rush	W	300
			holding	W	10
Max cycles frequency					
Mechanical operation				cycles/h	2400
Operating times					
Average time for Us co					
	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 mo	tor			
			at 480V	Α	301
			at 600V	Α	289
Yielded mechanical per					
	for three-phase AC me	otor			
			200/208V	HP	100
			220/230V	HP	125
			460/480V	HP	250
			575/600V	HP	300
General USE					_
	Contactor				
			AC current	Α	450
Short-circuit protection	fuse, 600V				
	Standard fault				
			Short circuit current	kA	18
			Fuse rating	Α	800
			Fuse class		L
Ambient conditions					
Temperature					





Operating temperature

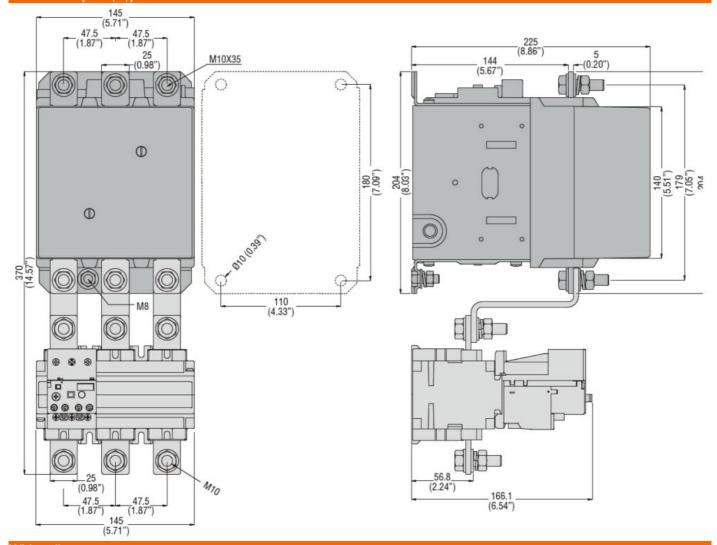
	min	°C	-50	
	max	°C	70	
Storage temperature				
	min	°C	-60	
	max	°C	80	
		m	3000	

Resistance & Protection

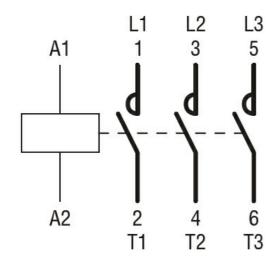
Max altitude

Pollution degree 3

Dimensions [mm (in)]



Wiring diagrams



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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



Product designation Product type designation			Power contactor B310
Contact characteristics			D310
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
C potational inoquotion	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
F	AC-3 (≤440V ≤55°C)	Α	320
	AC-4 (400V)	Α	150
Rated operational power AC-3 (T≤55°C)			
	230V	kW	100
	400V	kW	170
	415V	kW	188
	440V	kW	200
	500V	kW	213
	690V	kW	256
	1000V	kW	180
Rated operational power AC-1 (T≤40°C)			
	230V	kW	158
	400V	kW	270
	500V	kW	350
150	690V	kW	488
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	75V	A	375
	110V	A	195
	220V	A	
	330V 460V	A	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	40U V	A	
TEC max current le in DCT with L/K > This with 2 poles in series	75\/	۸	275
	75V 110V	A A	375 350
	220V	A	300
	330V	A	
	460V	A	
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	400 V	/\	
120 max sarront to in 201 with E/X = 1110 with 5 poles in series	75V	Α	375
	110V	A	350
	220V	A	350
	220 V	, ,	555



	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	A	300
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			300
TEO max current le in 200-200 with E/N = 15ms with 1 poles in series	75V	Α	310
	110V		
		A	170
	220V	A	
	330V	A	
	460V	Α	
IEC 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	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
· · · · · · · · · · · · · · · · · · ·	75V	Α	310
	110V	Α	310
	220V	Α	290
	330V	Α	230
	460V	A	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
120 max current le in 200-200 with 2/13 13ms with 4 poles in series	75V	Α	310
	110V		310
		A	
	220V	A	310
	330V	A	230
	460V	<u>A</u>	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)			
1 1 1 (3)	Ith	W	40.5
	AC3	W	20
Tightening torque for terminals	7.00	••	
ng.no.mg torquo for torrimitato	min	Nm	35
		Nm	35
	max		25.8
	min	lbin Ibin	
Tightening towns for call to resist	max	lbin	25.8
Tightening torque for coil terminal			4
	min	Nm	1
	max	Nm	1



			n .	0.74
		min	lbin	0.74
		max	Ibin	0.74
Max number of wires sim	ultaneously connectable		Nr.	2
Conductor section				
A	AWG/Kcmil			
		max		2x 3/0
Power terminal protection	n according to IEC/EN 60529			IP00
Mechanical features	J.			
Operating position				
Sporating position		normal		Vertical plan
		allowable		±30°
P. C.		allowable		
Fixing				Screw
Weight			g	9490
Conductor section				
A	AWG/kcmil conductor section			
		max		2x 3/0
Operations				
Mechanical life			cycles	10000000
Electrical life			cycles	700000
Safety related data			Cycles	700000
•	according to EN/ICO 12490 1			
Performance level B 100	according to EN/ISO 13489-1			700000
		rated load	cycles	700000
		mechanical load	cycles	10000000
Mirror contats according	to IEC/EN 609474-4-1			yes
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 50/6	60Hz		V	48
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up			
	ρισκ-αρ	min	%Us	80
				110
	In a contract	max	%Us	110
	drop-out		0/11	
		min	%Us	20
_		max	%Us	60
C	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
	·	min	%Us	20
		max	%Us	60
-	of 60Hz coil powered at 60Hz		7000	
	pick-up			
	ріск-ар	min	%Us	80
	dan	max	%Us	110
	drop-out		0/11	0.0
		min	%Us	20
		max	%Us	60
AC average coil consum	otion at 20°C			
C	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	300
		holding	VA	10
		3		



	. (50/0011				
	of 50/60Hz coil power	ered at 60Hz	:	١/٨	200
			in-rush	VA	300
District Control of Control	400°0 FOLL		holding	VA	10
Dissipation at holding ≤	\$20°C 50Hz			W	10
DC coil operating				\ /	4.0
DC rated control voltag	je			V	48
DC operating voltage					
	pick-up			0/11-	0.0
			min	%Us	80
			max	%Us	110
	drop-out			0/11-	0.0
			min	%Us	20
A	+: <00°C		max	%Us	60
Average coil consumpt	tion ≤20°C		1	107	000
			in-rush	W	300
Man and a feeting			holding	W	10
Max cycles frequency				0) (6) 5 - /1	2400
Mechanical operation				cycles/h	2400
Operating times	netral				
Average time for Us co					
	in AC	Clasing NO			
		Closing NO	min	 .	0.0
			min	ms	80
		Opening NO	max	ms	120
		Opening NO	min	 .	30
			min	ms ms	75
	in DC		max	ms	73
	III DC	Closing NO			
		Closing NO	min	ms	80
			max	ms	120
		Opening NO	max	1110	120
		Opening 140	min	ms	30
			max	ms	75
UL technical data					. •
Full-load current (FLA)	for three-phase AC m	notor			
,			at 480V	Α	301
			at 600V	Α	289
Yielded mechanical pe	rformance				
	for three-phase AC i	motor			
	,		200/208V	HP	100
			220/230V	HP	125
			460/480V	HP	250
			575/600V	HP	300
General USE					
	Contactor				
			AC current	Α	450
Short-circuit protection	fuse, 600V				_
·	Standard fault				
			Short circuit current	kA	18
			Fuse rating	Α	800
			Fuse class		L
Ambient conditions					
Temperature					

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Operating temp	perature	9
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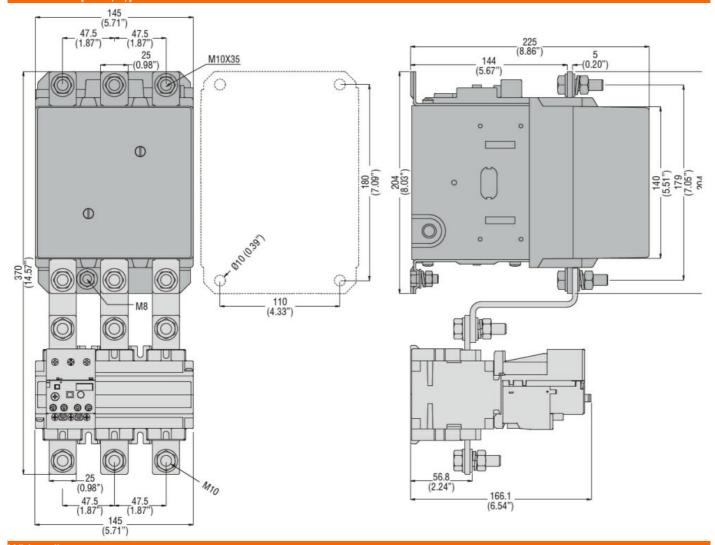
	min	°C	-50	
	max	°C	70	
Storage temperature				
	min	°C	-60	
	max	°C	80	
		m	3000	

Resistance & Protection

Pollution degree 3

Dimensions [mm (in)]

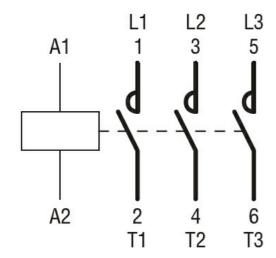
Max altitude



Wiring diagrams

ENERGY AND AUTOMATION

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



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Certificat	ione and	comr	Manca
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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



Product designation		Power contactor
Product type designation		B310
Contact characteristics		
Number of poles	Nr.	3
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	150
Rated operational power AC-3 (T≤55°C)		
230V	kW	100
400V	kW	170
415V	kW	188
440V	kW	200
500V	kW	213
690V	kW	256
1000V	kW	180
Rated operational power AC-1 (T≤40°C)		4-0
230V	kW	158
400V	kW	270
500V	kW	350
690V	kW	488
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series		075
75V	A	375
110V	A	195
220V	A	
330V	A	
460V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series		075
75V	A	375
110V	A	350
220V	A	300
330V	A	
460V	A	
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	Λ	275
75V	A	375
110V	A	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
IEC 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	
IEC 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	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
TEC MAR CANCIN TO IN ECC ECC MAN EAT (= Tomo MAN o police in consc	75V	Α	310
	110V	Α	310
	220V	Α	290
	330V	Α	230
	460V	A	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	100 V		
TEO Max current to in 200-200 with E/TC 2 Tomb with 4 poles in series	75V	Α	310
	110V	A	310
	220V	A	310
	330V	A	230
	460V	A	230
Short-time allowable current for 10s (IEC/EN60947-1)		A	2900
Protection fuse			2300
r rotection ruse	gG (IEC)	۸	500
		A	400
Making canacity (DMC value)	aM (IEC)	A A	
Making capacity (RMS value)		A	3150
Breaking capacity at voltage	4.40\/	Λ	2000
	440V	A	3000
	500V	A	2700
	690V	Α	2520
Resistance per pole (average value)		mΩ	0.2
Power dissipation per pole (average value)			40 =
	Ith	W	40.5
	AC3	W	20
Tightening torque for terminals			
	min	Nm	35
	max	Nm	35
	min	lbin	25.8
	max	Ibin	25.8
Tightening torque for coil terminal			
	min	Nm	1
	max	Nm	1



Weight g 9490 Conductor section AWG/kcmil conductor section Max 2x 3/0 Operations Cycles 10000000 Mechanical life cycles 700000 Electrical life cycles 700000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 700000 Mirror contats according to IEC/EN 609474-4-1 yes EMC compatibility yes AC coil operating V 60			min	lbin	0.74
Conductor section AWG/Kcmil max 2x 3/0 P00			max		
AWG/Kcmil max 2x 3/0 1P00 1P0		simultaneously connectable		Nr.	2
Description Properties Pr	Conductor section	ANA/O/I/C ''			
Pool Power terminal protection according to IEC/EN 60529 Pool Po		AWG/Kcmil	may		24.2/0
	Power terminal protec	tion according to IEC/EN 60520	max		
Departing position		tion according to IEC/EN 60329			IPUU
Nemation					
Section Sect	operating position		normal		Vertical plan
Neight Section AWG/kcmil conductor			allowable		
AWG/kcmil conductor section max 2x 3/0	Fixing				Screw
AWG/kcmil conductor section max	Weight			g	9490
Departs Depa	Conductor section				
Department Dep		AWG/kcmil conductor section			
Mechanical life cycles 700000 Clectrical life cycles 700000 Clectrical life cycles 700000 Cycles 7000000 Cycles 7000000 Cycles 70000000000 Cycles 7000000000 Cycles 7000000000 Cycles 70000000000 Cycles 70000000000 Cycles 70000000000 Cycles 70000000000 Cycles 700000000000 Cycles 70000000000000 Cycles 70000000000000 Cycles 7000000000000000 Cycles 7000000000000000 Cycles 700000000000000000 Cycles 7000000000000000000 Cycles 700000000000000000000000000000000000			max		2x 3/0
Performance level B10d according to EN/ISO 13489-1 rated load mechanical load occurs mechanical load mechanical load occurs mechanical loa	•				
Performance level B10d according to EN/ISO 13489-1 rated load mechanical load cycles 700000 mechanical load cycles 700000 mechanical load cycles 100000000 mechanical load cycles 100000000 mechanical load cycles 100000000 cycles 100000000 mechanical load cycles 100000000 cycles 1000000000 cycles 100000000 cycles 100000000 cycles 1000000000000 cycles 10000000000000 cycles 100000000000000000000000000000000000				-	
Performance level B10d according to EN/ISO 13489-1 rated load mechanical load vocal vocal powered at 50/FGC pick-up of 50/60Hz coil powered at 60Hz pick-up of 60Hz coil powered at 60Hz pick-up of 60Hz coil powered at 60Hz pick-up are a few a				cycles	700000
Rated load Cycles 700000 mechanical load Cycles 10000000 mechanical load Cycles 100000000 mechanical load Cycles 10000000 mechanical load Cycles 10000000 mechanical load Cycles 10000000 mechanical load Cycles 10000000 mechanical load Cycles 10000000000 mechanical load Cycles 100000000000000000000000000000000000		0d apporting to FN/ICO 42400.4			
Mechanical load Cycles 10000000	Performance level B1	ud according to EN/ISO 13489-1	roted load	ovoloo	700000
### According to IEC/EN 609474-4-1 ### Second Compatibility ### Cool operating ### Rated AC voltage at 50/60Hz ### ACC operating voltage V				•	
Marcompatibility Yes	Mirror contats accordi	ng to IFC/FN 609474-4-1	Theorianical load	Cycles	
AC coil operating Rated AC voltage at 50/60Hz V 60 AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 Min %Us 20 max %Us 60 Min %Us 80 max %Us 60 Min %Us 80 max %Us 110 Min %Us 80 max %Us 110 Min %Us 80 max %Us 110 Min %Us 20 max %Us 60 Min Min %Us 20 max %Us 60 Min Min %Us 80 max %Us 60 Min Min %Us 80 Min Min %Us 80 Min Min %Us 80 Min M		19 10 12 0/214 000 47 4 4 1			<u> </u>
No No No No No No No No					yee
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 min %Us 80 max %Us 110 drop-out min %Us 80 max %Us 110 drop-out min %Us 80 max %Us 110 drop-out min %Us 80 max %Us 60 of 60Hz coil powered at 60Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 80 max %Us 60 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz		0/60Hz		V	60
Pick-up	AC operating voltage				
min %Us 80 max %Us 110		of 50/60Hz coil powered at 50Hz			
Max %Us 110		pick-up			
Min WUs 20 max WUs 60			min		
min			max	%Us	110
max %Us 60		drop-out		0/11	
of 50/60Hz coil powered at 60Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 60 of 60Hz coil powered at 60Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 80 max %Us 110 drop-out min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 60 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300					
Pick-up		of FO/COLLE poil powered at COLLE	max	%US	60
Min %Us 80 max %Us 110					
Max %Us 110		ρισκ-αρ	min	%Us	80
drop-out min %Us 20 max %Us 60					
min %Us 20 max %Us 60		drop-out		,,,,,	
max		-r	min	%Us	20
pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 60 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300			max		60
min		of 60Hz coil powered at 60Hz			
drop-out min %Us 20 max %Us 60		pick-up			
drop-out min %Us 20 max %Us 60 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300					
min %Us 20 max %Us 60 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300			max	%Us	110
max %Us 60 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300		drop-out	•	0/11-	20
AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300					
of 50/60Hz coil powered at 50Hz in-rush VA 300	AC average coil cons	umption at 20°C	max	%US	ου
in-rush VA 300	no average con const				
		or 30/00112 con powered at 30Hz	in-ruch	\/Δ	300
Holding V/C 10					
			Holding	٧,١	. •



	. (50/0011				
	of 50/60Hz coil power	ered at 60Hz	:	١/٨	200
			in-rush	VA	300
District Control of Control	400°0 FOLL		holding	VA	10
Dissipation at holding ≤	\$20°C 50Hz			W	10
DC coil operating				\ /	0.0
DC rated control voltag	je			V	60
DC operating voltage	.1.1				
	pick-up			0/11-	0.0
			min	%Us %Us	80 110
	drop out		max	%08	110
	drop-out		min	%Us	20
			max	%Us	60
Average coil consumpt	tion <20°C		IIIax	/003	
Average con consumpt	11011 320 C		in-rush	W	300
			holding	W	10
Max cycles frequency			riolaling	VV	10
Mechanical operation				cycles/h	2400
Operating times				0,0100/11	2400
Average time for Us co	ontrol				
	in AC				
		Closing NO			
		J	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	f = 1 th = 2 = 1 A O = 2	-4			
Full-load current (FLA)	ior three-phase AC m	OlOf	at 480V	٨	301
			at 600V	A	289
Yielded mechanical pe	rformance		at 000V	A	203
nolucu mechanical pe	for three-phase AC n	notor			
	ioi unoo phaoo Ao n		200/208V	HP	100
			220/230V	HP	125
			460/480V	HP	250
			575/600V	HP	300
General USE					
	Contactor				
			AC current	Α	450
Short-circuit protection	fuse, 600V				
	Standard fault				
			Short circuit current	kA	18
			Fuse rating	Α	800
			Fuse class		L
Ambient conditions					
Temperature					



Operating temperature

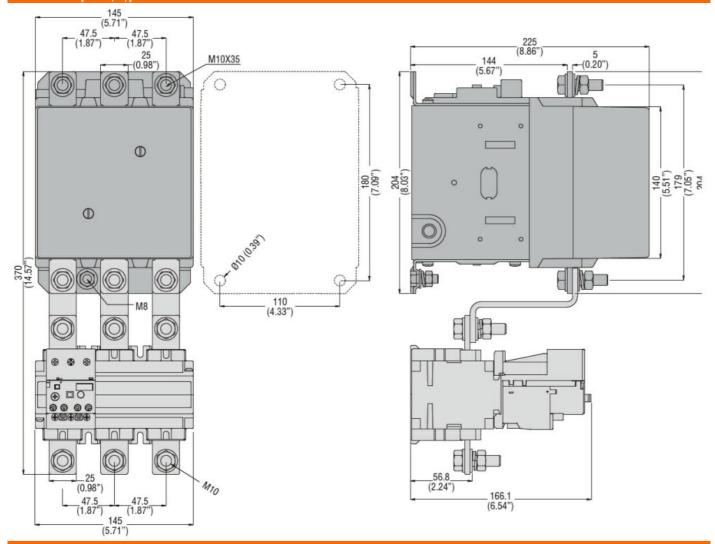
	min	°C	-50	
	max	°C	70	
Storage temperature				
	min	°C	-60	
	max	°C	80	
		m	3000	

Resistance & Protection

Max altitude

Pollution degree 3

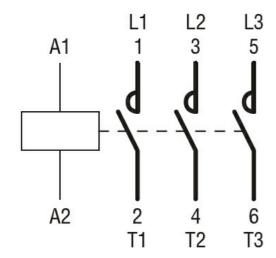
Dimensions [mm (in)]



Wiring diagrams

ENERGY AND AUTOMATION

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



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Certificat	ione and	comr	MILLANCE
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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





Product designation			Power contactor
Product type designation Contact characteristics			B310
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency		ΚV	0
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	max	A	450
Operational current le		,,	100
operational carrent to	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	150
Rated operational power AC-3 (T≤55°C)	,		
, , , ,	230V	kW	100
	400V	kW	170
	415V	kW	188
	440V	kW	200
	500V	kW	213
	690V	kW	256
	1000V	kW	180
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 ≤ 1ms with 1 poles in series			
	75V	Α	375
	110V	A	195
	220V	A	
	330V	A	
IFC many assument to in DC4 with L/D < 4 man with 2 males in agrica	460V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	75\/	۸	275
	75V 110V	A	375 350
	220V	A A	350 300
	330V	A	300
	460V	A	
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	4007		
TEO MAX CANONCIO IN DOT WITH LITE 2 THIS WITH O POICS IN SCHOOL	75V	Α	375
	110V	A	350
	220V	A	350
	220 V	, ,	300



	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
IEC 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	
IEC 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	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
TEC MAR CANCIN TO IN ECC ECC MAN EAT (= Tomo MAN o police in consc	75V	Α	310
	110V	Α	310
	220V	Α	290
	330V	Α	230
	460V	A	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	100 V		
TEO Max current to in 200-200 with E/TC 2 Tomb with 4 poles in series	75V	Α	310
	110V	A	310
	220V	A	310
	330V	A	230
	460V	A	230
Short-time allowable current for 10s (IEC/EN60947-1)		A	2900
Protection fuse			2300
r rotection ruse	gG (IEC)	۸	500
		A	400
Making canacity (DMC value)	aM (IEC)	A A	
Making capacity (RMS value)		A	3150
Breaking capacity at voltage	4.40\/	Λ	2000
	440V	A	3000
	500V	A	2700
	690V	Α	2520
Resistance per pole (average value)		mΩ	0.2
Power dissipation per pole (average value)			40 =
	Ith	W	40.5
	AC3	W	20
Tightening torque for terminals			
	min	Nm	35
	max	Nm	35
	min	lbin	25.8
	max	Ibin	25.8
Tightening torque for coil terminal			
	min	Nm	1
	max	Nm	1



		min	lbin	0.74
		max	Ibin	0.74
Max number of wires s	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2x 3/0
	tion according to IEC/EN 60529			IP00
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Weight			g	9650
Conductor section				
	AWG/kcmil conductor section			
		max		2x 3/0
Operations				
Mechanical life			cycles	10000000
Electrical life			cycles	700000
Safety related data				
	0d according to EN/ISO 13489-1			
	3	rated load	cycles	700000
		mechanical load	cycles	10000000
Mirror contats according	ng to IEC/EN 609474-4-1		0,0.00	yes
EMC compatibility	119 10 12 6/21 1 000 17 1 1			yes
AC coil operating				yes
Rated AC voltage at 50	0/60Hz 60Hz			
rated no voltage at of	0/00112, 00112	min	V	110
		max	V	125
AC operating voltage		Παλ	v	120
Ac operating voltage	of 50/60Hz coil powered at 50Hz			
	pick-up			
	pick-up			
		min	0/.1 lo	80
		min	%Us %Us	80 110
	drop out	min max	%Us %Us	80 110
	drop-out	max	%Us	110
	drop-out	max min	%Us %Us	110 20
		max	%Us	110
	of 50/60Hz coil powered at 60Hz	max min	%Us %Us	110 20
		max min max	%Us %Us %Us	110 20 60
	of 50/60Hz coil powered at 60Hz	max min max min	%Us %Us %Us	110 20 60 80
	of 50/60Hz coil powered at 60Hz pick-up	max min max	%Us %Us %Us	110 20 60
	of 50/60Hz coil powered at 60Hz	max min max min max	%Us %Us %Us %Us %Us	110 20 60 80 110
	of 50/60Hz coil powered at 60Hz pick-up	max min max min max min max min	%Us %Us %Us %Us %Us %Us %Us	110 20 60 80 110 20
	of 50/60Hz coil powered at 60Hz pick-up drop-out	max min max min max	%Us %Us %Us %Us %Us	110 20 60 80 110
	of 50/60Hz coil powered at 60Hz pick-up drop-out of 60Hz coil powered at 60Hz	max min max min max min max min	%Us %Us %Us %Us %Us %Us %Us	110 20 60 80 110 20
	of 50/60Hz coil powered at 60Hz pick-up drop-out	max min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us %Us	110 20 60 80 110 20 60
	of 50/60Hz coil powered at 60Hz pick-up drop-out of 60Hz coil powered at 60Hz	max min max min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us %Us %Us	110 20 60 80 110 20 60
	of 50/60Hz coil powered at 60Hz pick-up drop-out of 60Hz coil powered at 60Hz pick-up	max min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us %Us	110 20 60 80 110 20 60
	of 50/60Hz coil powered at 60Hz pick-up drop-out of 60Hz coil powered at 60Hz	min max min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us %Us %Us	110 20 60 80 110 20 60 80 110
	of 50/60Hz coil powered at 60Hz pick-up drop-out of 60Hz coil powered at 60Hz pick-up	max min max min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us %Us %Us	110 20 60 80 110 20 60

AC average coil consumption at 20°C

of 50/60Hz coil powered at 50Hz

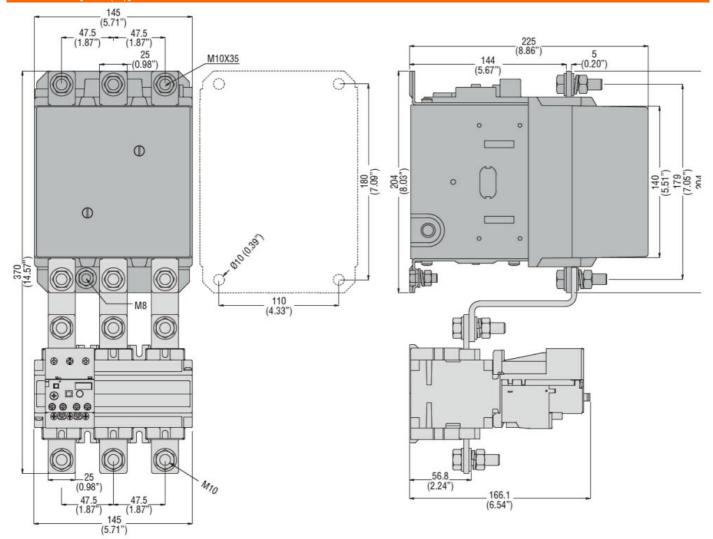


			in-rush	VA	300
			holding	VA	10
	of 50/60Hz coil power	ered at 60Hz			
			in-rush	VA	300
			holding	VA	10
Dissipation at holding	<20°C 50H-		noiding	W	10
DC coil operating	320 O 30112			VV	10
_					
DC rated control voltage	ge				
			min	V	110
			max	V	125
DC operating voltage					
	pick-up				
			min	%Us	80
			max	%Us	110
	drop-out				
	3100 000		min	%Us	20
				%Us	60
A. (a. wa w. = . = :1	tion <00°C		max	/oUS	00
Average coil consump	otion ≤20°C		_		
			in-rush	W	300
			holding	W	10
Max cycles frequency					
Mechanical operation				cycles/h	2400
Operating times					
Average time for Us co	ontrol				
7.1.0.ago	in AC				
	111710	Closing NO			
		Closing NO	min	 0	80
			min	ms	
		0 1 110	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			IIIdX	1113	10
	for three phase AC	octor			
Full-load current (FLA)	i ioi iiiilee-piiase AC II	IUIUI	-1.40037	Λ	204
			at 480V	Α	301
			at 600V	Α	289
Yielded mechanical pe					
	for three-phase AC r	motor			
			200/208V	HP	100
			220/230V	HP	125
			460/480V	HP	250
			575/600V	HP	300
General USE			2.0,000		
Solioidi GOL	Contactor				
	Contactor		AC 01100001	٨	450
01 - 4 - 12 - 12 - 13	(000) /		AC current	Α	450
Short-circuit protection					
	Standard fault				
			Short circuit current	kA	18
-					



		Fuse rating	Α	800
		Fuse class		L
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			_
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Protect	ion			
Pollution degree				3

Dimensions [mm (in)]

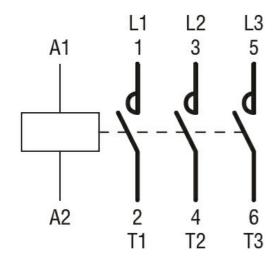


Wiring diagrams



ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 320A, AC/DC COIL, 110...125VAC/DC



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Certificat	ione and	Lcomp	lianca
Cellical	יוטוס מווט	i COHIO	пансь

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





Product designation		Power contactor
Product type designation		B310
Contact characteristics		
Number of poles	Nr.	3
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	150
Rated operational power AC-3 (T≤55°C)		
230V	kW	100
400V	kW	170
415V	kW	188
440V	kW	200
500V	kW	213
690V	kW	256
1000V	kW	180
Rated operational power AC-1 (T≤40°C)		4-0
230V	kW	158
400V	kW	270
500V	kW	350
690V	kW	488
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series		075
75V	A	375
110V	A	195
220V	A	
330V	A	
460V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series		075
75V	A	375
110V	A	350
220V	A	300
330V	A	
460V	A	
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	Λ	275
75V	A	375
110V	A	350
220V	Α	350



11B31000220

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

	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
IEC 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	
IEC 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	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
TEC MAR CANCIN TO IN ECC ECC MAN EAT (= Tomo Man o police in consc	75V	Α	310
	110V	Α	310
	220V	Α	290
	330V	Α	230
	460V	A	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	100 V		
TEO Max current to in 200-200 with E/TC 2 Tomb with 4 poles in series	75V	Α	310
	110V	A	310
	220V	A	310
	330V	A	230
	460V	A	230
Short-time allowable current for 10s (IEC/EN60947-1)		A	2900
Protection fuse			2300
r rotection ruse	gG (IEC)	۸	500
		A	400
Making canasity (DMC yelus)	aM (IEC)	A A	
Making capacity (RMS value)		A	3150
Breaking capacity at voltage	4.40\/	Λ	2000
	440V	A	3000
	500V	A	2700
	690V	Α	2520
Resistance per pole (average value)		mΩ	0.2
Power dissipation per pole (average value)			40 =
	Ith	W	40.5
	AC3	W	20
Tightening torque for terminals			
	min	Nm	35
	max	Nm	35
	min	lbin	25.8
	max	Ibin	25.8
Tightening torque for coil terminal			
	min	Nm	1
	max	Nm	1



		min	Ibin	0.74
		max	lbin	0.74
Max number of wires s	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2x 3/0
Power terminal protec	tion according to IEC/EN 60529			IP00
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Weight			g	9520
Conductor section				
	AWG/kcmil conductor section			
		max		2x 3/0
Operations				
Mechanical life			cycles	10000000
Electrical life			cycles	700000
Safety related data	<u></u>		.,	
	0d according to EN/ISO 13489-1			
	ou according to 1.4.00 to 100 t	rated load	cycles	700000
		mechanical load	cycles	10000000
Mirror contats accordi	ng to IEC/EN 609474-4-1		0,0.00	yes
EMC compatibility	19 10 12 07 21 1 000 17 1 1 1			yes
AC coil operating				yes
Rated AC voltage at 5	0/60Hz 60Hz			
Nated AO Voltage at 5	0/00112, 00112	min	V	220
				240
AC operating voltage				
AC operating voltage		max	V	240
	of EO/GOLLZ and powered at EOLLZ	max	V	240
	of 50/60Hz coil powered at 50Hz	max	V	240
	of 50/60Hz coil powered at 50Hz pick-up			
		min	%Us	80
	pick-up			
		min max	%Us %Us	80 110
	pick-up	min max min	%Us %Us %Us	80 110 20
	pick-up drop-out	min max	%Us %Us	80 110
	pick-up drop-out of 50/60Hz coil powered at 60Hz	min max min	%Us %Us %Us	80 110 20
	pick-up drop-out	min max min max	%Us %Us %Us %Us	80 110 20 60
	pick-up drop-out of 50/60Hz coil powered at 60Hz	min max min max min	%Us %Us %Us %Us	80 110 20 60
	of 50/60Hz coil powered at 60Hz pick-up	min max min max	%Us %Us %Us %Us	80 110 20 60
	pick-up drop-out of 50/60Hz coil powered at 60Hz	min max min max min max	%Us %Us %Us %Us %Us	80 110 20 60 80 110
	of 50/60Hz coil powered at 60Hz pick-up	min max min max min max min	%Us %Us %Us %Us %Us	80 110 20 60 80 110
	of 50/60Hz coil powered at 60Hz pick-up drop-out	min max min max min max	%Us %Us %Us %Us %Us	80 110 20 60 80 110
	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	80 110 20 60 80 110
	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	80 110 20 60 80 110 20 60
	of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out	min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us	80 110 20 60 80 110 20 60
	of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out of 60Hz coil powered at 60Hz pick-up	min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us	80 110 20 60 80 110 20 60
	of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out	min max min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us %Us	80 110 20 60 80 110 20 60
	of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out of 60Hz coil powered at 60Hz pick-up	min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us	80 110 20 60 80 110 20 60

AC average coil consumption at 20°C

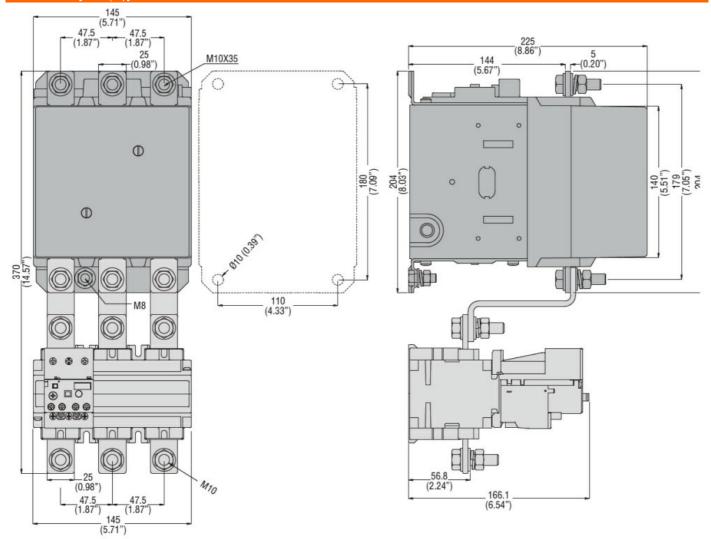
of 50/60Hz coil powered at 50Hz



			in-rush	VA	300
			holding	VA	10
	of 50/60Hz coil pow	ered at 60Hz			
			in-rush	VA	300
			holding	VA	10
Dissipation at holding:	≤20°C 50Hz			W	10
DC coil operating					
DC rated control voltage	ge				
`			min	V	220
			max	V	240
DC operating voltage			max	•	
20 operating vertage	pick-up				
	pion up		min	%Us	80
			max	%Us	110
	drop-out		IIIdx	7003	110
	arop-out		min	%Us	20
			max	%Us	60
Average coil consump	tion <20°C		IIIdX	/005	00
Average con consump	UUII ≥20 C		in-rush	W	300
Max avalos frequencies			holding	W	10
Max cycles frequency				l/l-	0.400
Mechanical operation				cycles/h	2400
Operating times					
Average time for Us co					
	in AC	OL : NO			
		Closing NO			22
			min	ms	80
		0 1 110	max	ms	120
		Opening NO			
			min	ms	30
			max	ms	75
	in DC				
		Closing NO			
			min	ms	80
			max	ms	120
		Opening NO			0.0
			min	ms	30
			max	ms	75
UL technical data					
Full-load current (FLA)) for three-phase AC r	notor		_	
			at 480V	A	301
			at 600V	Α	289
Yielded mechanical pe					
	for three-phase AC	motor		–	
			200/208V	HP	100
			220/230V	HP	125
			460/480V	HP	250
			575/600V	HP	300
General USE					
	Contactor				
			AC current	Α	450
Short-circuit protection	n fuse, 600V				
	Standard fault				
			Short circuit current	kA	18

		Fuse rating	Α	800
		Fuse class		L
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			_
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Protect	ion			
Pollution degree				3

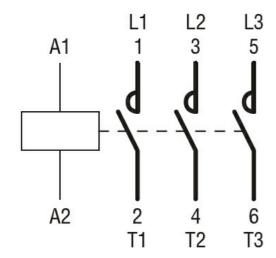
Dimensions [mm (in)]



Wiring diagrams

ENERGY AND AUTOMATION

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



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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





Product designation		Power contactor
Product type designation		B310
Contact characteristics		
Number of poles	Nr.	3
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	150
Rated operational power AC-3 (T≤55°C)		
230V	kW	100
400V	kW	170
415V	kW	188
440V	kW	200
500V	kW	213
690V	kW	256
1000V	kW	180
Rated operational power AC-1 (T≤40°C)		4-0
230V	kW	158
400V	kW	270
500V	kW	350
690V	kW	488
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series		075
75V	A	375
110V	A	195
220V	A	
330V	A	
460V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series		075
75V	A	375
110V	A	350
220V	A	300
330V	A	
460V	A	
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	Λ	275
75V	A	375
110V	A	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
IEC 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	
IEC 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	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
TEC MAR CANCIN TO IN ECC ECC MAN EAT (= Tomo Man o police in consc	75V	Α	310
	110V	Α	310
	220V	Α	290
	330V	Α	230
	460V	A	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	100 V		
TEO Max current to in 200-200 with E/TC 2 Tomb with 4 poles in series	75V	Α	310
	110V	A	310
	220V	A	310
	330V	A	230
	460V	A	230
Short-time allowable current for 10s (IEC/EN60947-1)		A	2900
Protection fuse			2300
r rotection ruse	gG (IEC)	۸	500
		A	400
Making canasity (DMC yelus)	aM (IEC)	A A	
Making capacity (RMS value)		A	3150
Breaking capacity at voltage	4.40\/	Λ	2000
	440V	A	3000
	500V	A	2700
	690V	Α	2520
Resistance per pole (average value)		mΩ	0.2
Power dissipation per pole (average value)			40 =
	Ith	W	40.5
	AC3	W	20
Tightening torque for terminals			
	min	Nm	35
	max	Nm	35
	min	lbin	25.8
	max	Ibin	25.8
Tightening torque for coil terminal			
	min	Nm	1
	max	Nm	1



		min	lbin	0.74
		max	lbin	0.74
Max number of wires s	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2x 3/0
	tion according to IEC/EN 60529			IP00
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Weight			g	9530
Conductor section				
	AWG/kcmil conductor section			
		max		2x 3/0
Operations				
Mechanical life			cycles	10000000
Electrical life			cycles	700000
Safety related data				
	0d according to EN/ISO 13489-1			
	3	rated load	cycles	700000
		mechanical load	cycles	10000000
Mirror contats accordi	ng to IEC/EN 609474-4-1		-,	yes
EMC compatibility	<u></u>			yes
AC coil operating				you
Rated AC voltage at 5	0/60Hz 60Hz			
rated 710 venage at e	3,001.12,001.12	min	V	380
		max	V	415
AC operating voltage		Пих	•	110
710 operating vertage	of 50/60Hz coil powered at 50Hz			
	pick-up			
	ριοκ αρ	min	%Us	80
		max	%Us	110
	drop-out	IIIdX	/003	110
	diop-out	min	%Us	20
		111111		60
			%I Ic	00
	of 50/60Hz coil powered at 60Hz	max	%Us	
	of 50/60Hz coil powered at 60Hz		%Us	
	of 50/60Hz coil powered at 60Hz pick-up	max		
	•	max min	%Us	80
	pick-up	max		
	•	max min max	%Us %Us	80 110
	pick-up	max min max min	%Us %Us %Us	80 110 20
	pick-up drop-out	max min max	%Us %Us	80 110
	pick-up drop-out of 60Hz coil powered at 60Hz	max min max min	%Us %Us %Us	80 110 20
	pick-up drop-out	max min max min max	%Us %Us %Us %Us	80 110 20 60
	pick-up drop-out of 60Hz coil powered at 60Hz	max min max min max	%Us %Us %Us %Us	80 110 20 60
	of 60Hz coil powered at 60Hz pick-up	max min max min max	%Us %Us %Us %Us	80 110 20 60
	pick-up drop-out of 60Hz coil powered at 60Hz	min max min max min max	%Us %Us %Us %Us %Us	80 110 20 60 80 110
	of 60Hz coil powered at 60Hz pick-up	max min max min max	%Us %Us %Us %Us	80 110 20 60

AC average coil consumption at 20°C

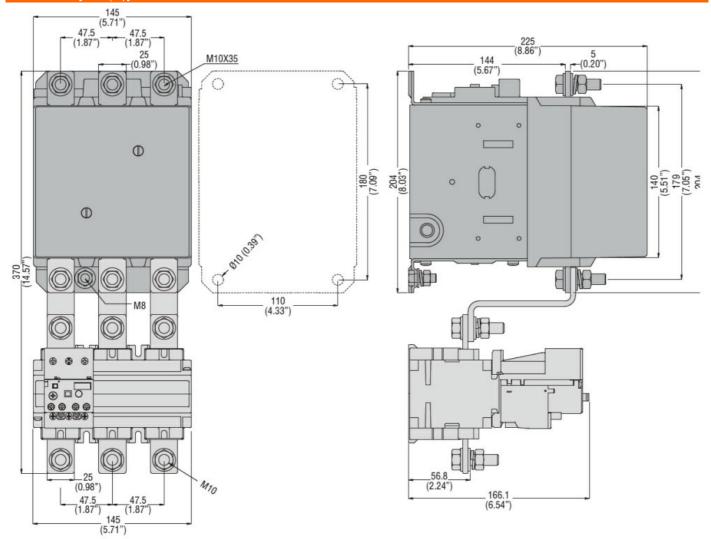
of 50/60Hz coil powered at 50Hz



			in-rush	VA	300
			holding	VA	10
	of 50/60Hz coil power	ered at 60Hz			
			in-rush	VA	300
			holding	VA	10
Dissipation at holding	<20°C 50H -		rioiding	W	10
DC coil operating	320 C 30HZ			VV	10
_					
DC rated control voltage	ge				
			min	V	380
			max	V	415
DC operating voltage					
	pick-up				
			min	%Us	80
			max	%Us	110
	drop-out				
	a. op 0 a.		min	%Us	20
			max	%Us	60
Average cell concurre	tion <20°C		IIIdX	/008	00
Average coil consump	00011 ≥20 C			147	200
			in-rush	W	300
			holding	W	10
Max cycles frequency					
Mechanical operation				cycles/h	2400
Operating times					
Average time for Us co	ontrol				
ŭ	in AC				
		Closing NO			
		Clocking 110	min	ms	80
					120
		Onanina NO	max	ms	120
		Opening NO	•		00
			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			THOM:	5	
) for three-phase AC m	otor			
i un load culterit (i LA)	, ioi unice-phase AO III	Otol	at 480V	٨	301
				A	301
V:11: 1 1 1 1			at 600V	A	289
Yielded mechanical pe					
	for three-phase AC r	notor			
			200/208V	HP	100
			220/230V	HP	125
			460/480V	HP	250
			575/600V	HP	300
General USE					·
	Contactor				
	3030.01		AC current	Α	450
Short-circuit protection	tugo 600\/		AO GUITEIR		100
Short-directly protection					
	Standard fault		Ol and the second		40
			Short circuit current	kA	18

		Fuse rating	Α	800
		Fuse class		L
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			_
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Protect	ion			
Pollution degree				3

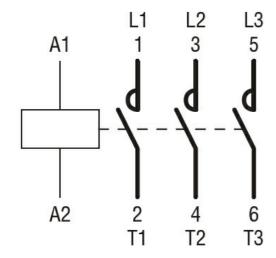
Dimensions [mm (in)]



Wiring diagrams

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 320A, AC/DC COIL, 380...415VAC/DC



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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





Product designation		Power contactor
Product type designation		B310
Contact characteristics		
Number of poles	Nr.	3
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	150
Rated operational power AC-3 (T≤55°C)		
230V	kW	100
400V	kW	170
415V	kW	188
440V	kW	200
500V	kW	213
690V	kW	256
1000V	kW	180
Rated operational power AC-1 (T≤40°C)		4-0
230V	kW	158
400V	kW	270
500V	kW	350
690V	kW	488
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series		075
75V	A	375
110V	A	195
220V	A	
330V	A	
460V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series		075
75V	A	375
110V	A	350
220V	A	300
330V	A	
460V	A	
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	Λ	275
75V	A	375
110V	A	350
220V	Α	350



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THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 320A, AC/DC COIL, 440...480VAC/DC

	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
IEC 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	
IEC 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	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	75V	Α	310
	110V	Α	310
	220V	Α	290
	330V	Α	230
	460V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	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)			
	Ith	W	40.5
	AC3	W	20
Tightening torque for terminals			
	min	Nm	35
	max	Nm	35
	min	lbin	25.8
	max	Ibin	25.8
Tightening torque for coil terminal			
	min	Nm	1
	max	Nm	1



		min	lbin	0.74
		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2x 3/0
	ction according to IEC/EN 60529			IP00
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Weight			g	9400
Conductor section	AMO /Leveller and level			
	AWG/kcmil conductor section			0.00
Oneroliene		max		2x 3/0
Operations Mechanical life			a	10000000
			cycles	10000000
Electrical life			cycles	700000
Safety related data	Od coording to FN/ICO 42400 4			
Performance level B1	0d according to EN/ISO 13489-1	ادعا ادعاء		700000
		rated load	cycles	700000
		mechanical load	cycles	10000000
Mirror contato cocardi	ina to IEC/EN 600.474.4.4			
Mirror contats accordi	ing to IEC/EN 609474-4-1			yes
EMC compatibility	ing to IEC/EN 609474-4-1			yes
EMC compatibility AC coil operating				
EMC compatibility		min	V	yes
EMC compatibility AC coil operating		min	V	yes 440
EMC compatibility AC coil operating Rated AC voltage at 5		min max	V V	yes
EMC compatibility AC coil operating Rated AC voltage at 5	50/60Hz, 60Hz			yes 440
EMC compatibility AC coil operating	of 50/60Hz coil powered at 50Hz			yes 440
EMC compatibility AC coil operating Rated AC voltage at 5	50/60Hz, 60Hz	max	V	yes 440 415
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz	max min	V %Us	yes 440 415
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	max	V	yes 440 415
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz	max min max	V %Us %Us	yes 440 415 80 110
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	max min max min	V %Us %Us %Us	yes 440 415 80 110 20
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	max min max	V %Us %Us	yes 440 415 80 110
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	max min max min	V %Us %Us %Us	yes 440 415 80 110 20
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	min max min max	V %Us %Us %Us %Us	yes 440 415 80 110 20
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	min max min max	V %Us %Us %Us %Us %Us	yes 440 415 80 110 20 60
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up	min max min max	V %Us %Us %Us %Us	yes 440 415 80 110 20 60
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	min max min max	%Us %Us %Us %Us %Us	yes 440 415 80 110 20 60 80 110
EMC compatibility AC coil operating Rated AC voltage at 5	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	V %Us %Us %Us %Us %Us	yes 440 415 80 110 20 60
EMC compatibility AC coil operating Rated AC voltage at 5	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 min min max	%Us %Us %Us %Us %Us %Us	yes 440 415 80 110 20 60 80 110 20
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out	min max min max min max min max min min max	%Us %Us %Us %Us %Us %Us	yes 440 415 80 110 20 60 80 110 20
EMC compatibility AC coil operating Rated AC voltage at 5	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 min min max	%Us %Us %Us %Us %Us %Us	yes 440 415 80 110 20 60 80 110 20
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out	min max min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us	yes 440 415 80 110 20 60 80 110 20 60
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out of 60Hz coil powered at 60Hz pick-up	min max min max min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us	yes 440 415 80 110 20 60 80 110 20 60 80
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out	min max min max min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us	yes 440 415 80 110 20 60 80 110 20 60 80

AC average coil consumption at 20°C

of 50/60Hz coil powered at 50Hz

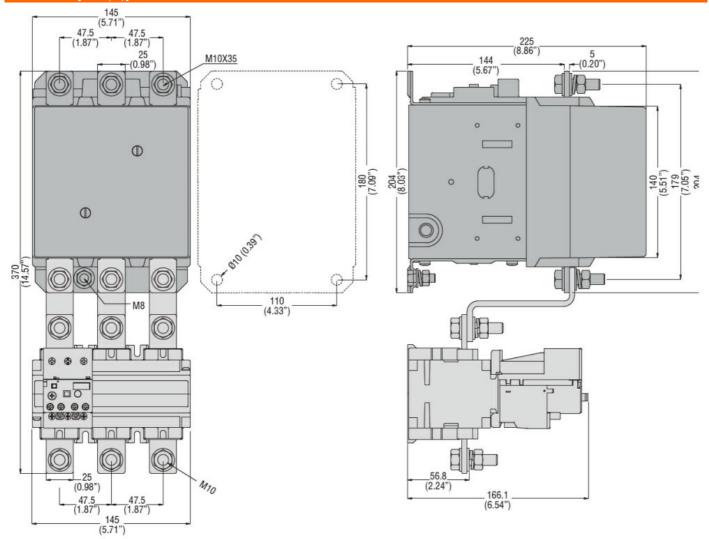


			in-rush	VA	300
			holding	VA	10
	of 50/60Hz coil pov	wered at 60Hz			
			in-rush	VA	300
			holding	VA	10
Dissipation at holding	≤20°C 50Hz			W	10
DC coil operating					
DC rated control voltage	ne				
DO Tatoa control volta,	90		min	V	440
			max	V	415
DC an areting valtage			IIIAX	V	413
DC operating voltage					
	pick-up			0/11	
			min	%Us	80
			max	%Us	110
	drop-out				
			min	%Us	20
			max	%Us	60
Average coil consump	tion ≤20°C				
·			in-rush	W	300
			holding	W	10
Max cycles frequency					
Mechanical operation				cycles/h	2400
Operating times				0 y 0100/11	2 100
Average time for Us co	ontrol				
Average time for 05 co					
	in AC	Ola alia a NO			
		Closing NO			22
			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			
. an idaa danidht (i LA)	, .3. a 30 pridoo / 10		at 480V	Α	301
			at 600V	A	289
Violded machanical re	orformance		ai 000 V		203
Yielded mechanical pe		2 manta #			
	for three-phase AC	TOTOTI	000/0001		100
			200/208V	HP	100
			220/230V	HP	125
			460/480V	HP	250
			575/600V	HP	300
General USE					
	Contactor				
			AC current	Α	450
Short-circuit protection	n fuse, 600V				
,	Standard fault				
			Short circuit current	kA	18
			Chort choult current	10.1	. •



	Fuse rating	Α	800
	Fuse class		L
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			
Pollution degree			3

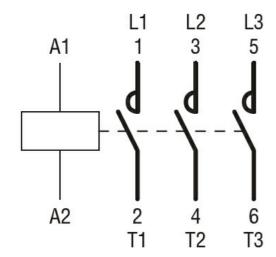
Dimensions [mm (in)]



Wiring diagrams

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 320A, AC/DC COIL, 440...480VAC/DC



O 1100 1			
Certificat	ione and	comr	MIGNES
Cennicai	טונס מונטו		шансе

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