



Product designation	Power contactor		
Product type designation	B310		
Contact characteristics			
Number of poles	nr.	3	
Rated insulation voltage U_i IEC/EN	V	1000	
Rated impulse withstand voltage U_{imp}	kV	8	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current I_{th}	A	450	
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A	450
	AC-1 ($\leq 55^\circ\text{C}$)	A	130
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A	320
	AC-4 (400V)	A	110
Rated operational power AC-3 ($T \leq 55^\circ\text{C}$)	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 ($T \leq 40^\circ\text{C}$)	230V	kW	158
	400V	kW	270
	500V	kW	350
	690V	kW	488
Short-time allowable current for 10s (IEC/EN60947-1)	A	2900	
Protection fuse	gG (IEC)	A	500
	aM (IEC)	A	400
Making capacity (RMS value)	A	3150	
Breaking capacity at voltage	440V	A	3000
	500V	A	2700
	690V	A	2520
Resistance per pole (average value)	m Ω	0.2	
Power dissipation per pole (average value)	I_{th}	W	40.5
	AC3	W	20
Tightening torque for terminals	min	Nm	35
	max	Nm	35
	min	lbin	25.8

	max	lbin	25.8
Tightening torque for coil terminal	min	Nm	1
	max	Nm	1
	min	lbft	0.74
	max	lbft	0.74
Max number of wires simultaneously connectable	nr.		2
Power terminal protection according to IEC/EN 60529			IP00
Mechanical features			
Operating position	normal allowable	vertical plan	±30°
Fixing			Screw
Weight		g	9520
Operations			
Mechanical life		cycles	10000000
Electrical life		cycles	700000
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load	cycles	700000
	mechanical load	cycles	10000000
Mirror contacts according to IEC/EN 60947-4-1			yes
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz	min	V	24
	max	V	480
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	20
	max	%Us	60
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	VA	300
	holding	VA	10

of 50/60Hz coil powered at 60Hz

	in-rush	VA	300
	holding	VA	10
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz		W	10

DC coil operating

DC rated control voltage	min	V	24
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DC operating voltage

pick-up	min	%Us	80
	max	%Us	110

drop-out	min	%Us	20
	max	%Us	60

Average coil consumption $\leq 20^{\circ}\text{C}$

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

200/208V	hp	100
220/230V	hp	125
460/480V	hp	250
575/600V	hp	300

General USE

Contactor	AC current	A	450
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Ambient conditions

Temperature

Operating temperature	min	$^{\circ}\text{C}$	-50
	max	$^{\circ}\text{C}$	70

Storage temperature

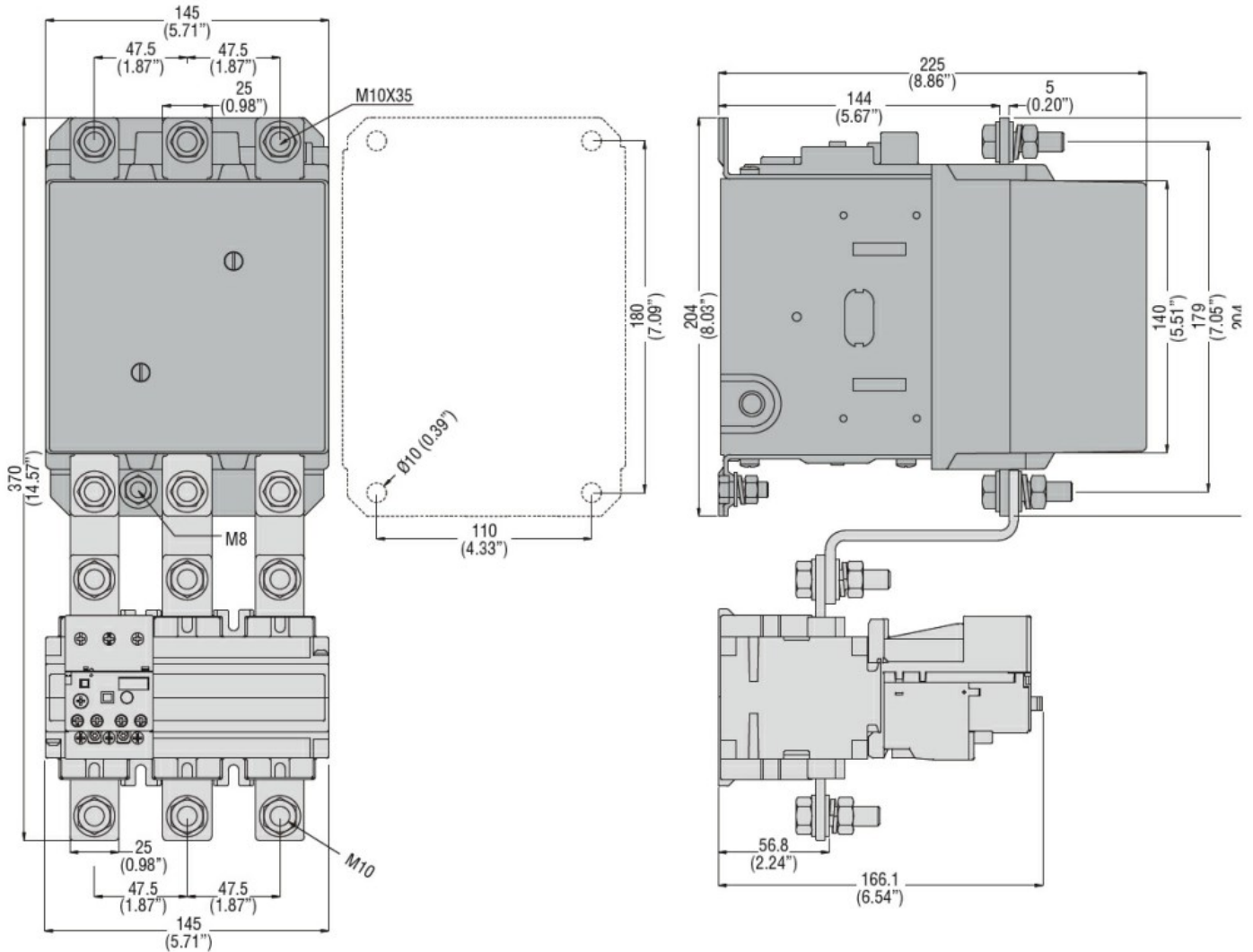
min	°C	-60
max	°C	80
Max altitude	m	3000

Resistance & Protection

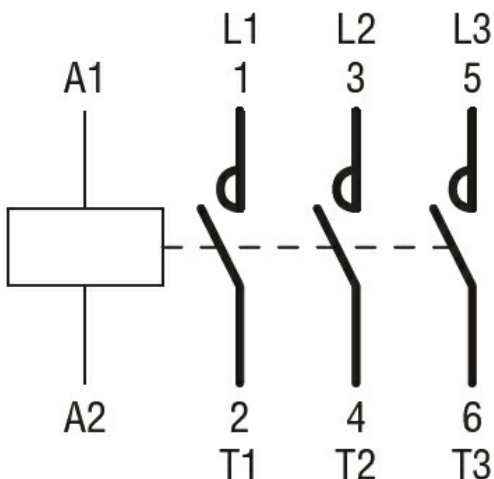
Pollution degree

3

Dimensions



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 6 classification

EC000066 - Power contactor, AC switching