



Product designation	Power contactor		
Product type designation	B310		
<b>Contact characteristics</b>			
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 ( $\leq 40^\circ C$ )	A	450
	AC-1 ( $\leq 55^\circ C$ )	A	370
	AC-1 ( $\leq 70^\circ C$ )	A	300
	AC-3 ( $\leq 440V \leq 55^\circ C$ )	A	320
	AC-4 (400V)	A	150
Rated operational power AC-3 ( $T \leq 55^\circ C$ )	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 ( $T \leq 40^\circ C$ )	230V	kW	158
	400V	kW	270
	500V	kW	350
	690V	kW	488
IEC max current $I_e$ in DC1 with $L/R \leq 1ms$ with 1 poles in series	75V	A	375
	110V	A	195
	220V	A	--
	330V	A	--
	460V	A	--
IEC max current $I_e$ in DC1 with $L/R \leq 1ms$ with 2 poles in series	75V	A	375
	110V	A	350
	220V	A	300
	330V	A	--
	460V	A	--
IEC max current $I_e$ in DC1 with $L/R \leq 1ms$ with 3 poles in series	75V	A	375
	110V	A	350
	220V	A	350

	330V	A	300
	460V	A	--
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series			
	75V	A	375
	110V	A	350
	220V	A	350
	330V	A	350
	460V	A	300
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series			
	75V	A	310
	110V	A	170
	220V	A	--
	330V	A	--
	460V	A	--
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series			
	75V	A	310
	110V	A	290
	220V	A	230
	330V	A	--
	460V	A	--
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 3 poles in series			
	75V	A	310
	110V	A	310
	220V	A	290
	330V	A	230
	460V	A	--
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 4 poles in series			
	75V	A	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			
	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? 0.2
Power dissipation per pole (average value)			
	I <sub>th</sub>	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	Ibin	0.74		
	max	Ibin	0.74		
Max number of wires simultaneously connectable	Nr. 2				
Conductor section	AWG/Kcmil				
	max	2x 3/0			
Power terminal protection according to IEC/EN 60529	IP00				
<b>Mechanical features</b>					
Operating position	normal allowable	Vertical plan ±30°			
Fixing	Screw				
Weight	g	9520			
Conductor section	AWG/kcmil conductor section				
	max	2x 3/0			
<b>Operations</b>					
Mechanical life	cycles	10000000			
Electrical life	cycles	700000			
<b>Safety related data</b>					
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	cycles	700000 10000000		
Mirror contacts according to IEC/EN 609474-4-1	yes				
EMC compatibility	yes				
<b>AC coil operating</b>					
Rated AC voltage at 50/60Hz, 60Hz	min max	V V	220 240		
AC operating voltage					
of 50/60Hz coil powered at 50Hz					
pick-up	min max	%Us %Us	80 110		
drop-out	min max	%Us %Us	20 60		
of 50/60Hz coil powered at 60Hz					
pick-up	min max	%Us %Us	80 110		
drop-out	min max	%Us %Us	20 60		
of 60Hz coil powered at 60Hz					
pick-up	min max	%Us %Us	80 110		
drop-out	min max	%Us %Us	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 powered at 60Hz			
	in-rush	VA	300
	holding	VA	10
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz		W	10
<b>DC coil operating</b>			
DC rated control voltage			
	min	V	220
	max	V	240
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
<b>Max cycles frequency</b>			
Mechanical operation		cycles/h	2400
<b>Operating times</b>			
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
<b>UL technical data</b>			
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
Short-circuit protection fuse, 600V			
Standard fault			
	Short circuit current	kA	18

Fuse rating	A	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

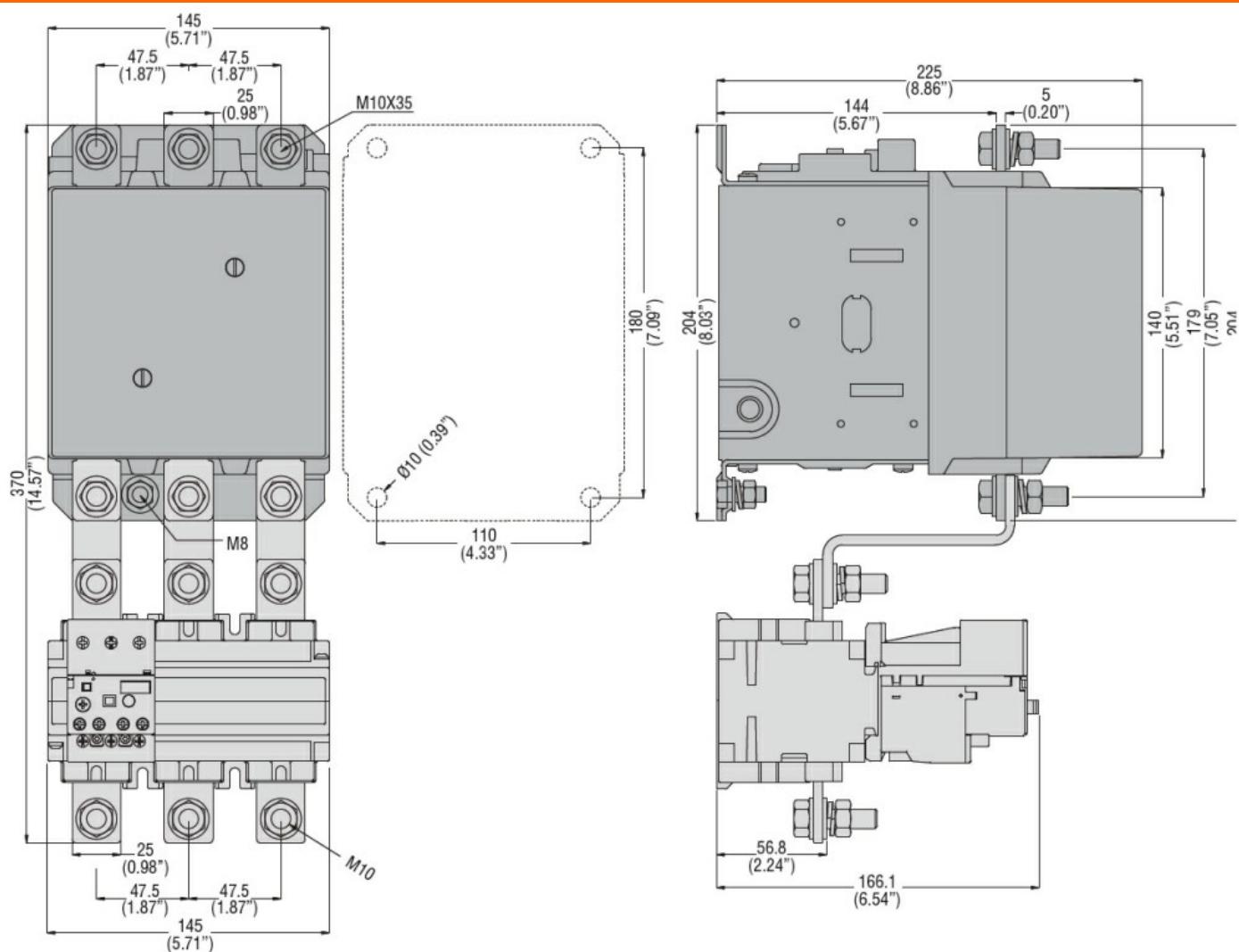
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Resistance & Protection

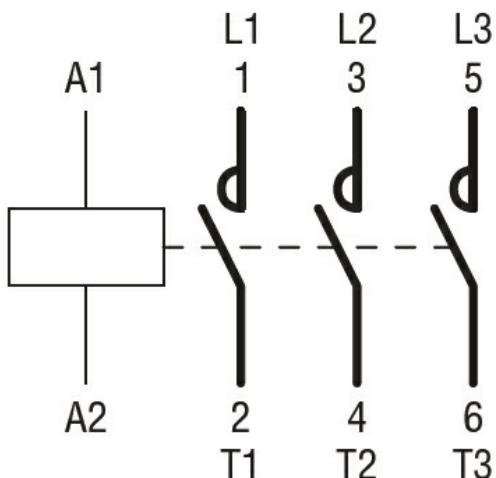
Pollution degree

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 classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching