



Product designation	Power contactor		
Product type designation	B310		
<b>Contact characteristics</b>			
Number of poles	nr.	3	
Rated insulation voltage $U_i$	V	1000	
Rated impulse withstand voltage $U_{imp}$	kV	8	
Operating frequency	Operational frequency min	Hz	25
	Operational frequency max	Hz	400
Conventional free air thermal current $I_{th}$	A	450	
Operating current	Operational current AC1 ( $\leq 40^\circ\text{C}$ )	A	450
	Operational current AC3 ( $\leq 440\text{V}$ $\leq 55^\circ\text{C}$ )	A	320
	Operational current AC4 (400V)	A	110
Rated operational power AC1 ( $T \leq 40^\circ\text{C}$ )	230V	kW	158
	400V	kW	270
	500V	kW	350
	690V	kW	488
Rated operational power AC3 ( $T \leq 55^\circ\text{C}$ )	230V	kW	100
	400V	kW	170
	415V	kW	188
	440V	kW	200
	500V	kW	213
	690V	kW	256
1000V	kW	180	
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	Breaking capacity 440V	A	3000
	Breaking capacity 500V	A	2700
	Breaking capacity 690V	A	2520
Resistance per pole (average value)	m $\Omega$	0.2	
Power dissipation per pole (average value)	Power dissipation pole (average value) $I_{th}$	W	40.5
	AC3	W	20
Tightening torque for terminals	min	Nm	35
	max	Nm	35
	min	lbft	25.8
	max	lbft	25.8

max number of wires simultaneously connectable		nr.	2
Conductor section	AWG	max	2x 3/0
Power terminal protection according to IEC/EN 60529			IP00
<b>Auxiliary contact characteristics</b>			
Operational current AC1 ( $\leq 40^{\circ}\text{C}$ )		A	450
Operating current DC13		110V A	Screw
<b>Ambient conditions</b>			
Temperature	Operating temperature	min	$^{\circ}\text{C}$ -50
		max	$^{\circ}\text{C}$ 70
	Storage temperature	min	$^{\circ}\text{C}$ -60
		max	$^{\circ}\text{C}$ 80
Max altitude		m	3000
Operating position		normal allowable	Vertical plan $\pm 30^{\circ}$
Mounting			Screw
Weight		g	9.69
<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	Cicli 700000 Cicli 10000000
Mirror contacts according to IEC/EN 60947-4-1			yes
EMC compatibility			yes
<b>AC coil operating</b>			
AC operating voltage	of 50/60Hz coil powered at 50Hz		
	pick-up	min	%Us 0.8
		max	%Us 1.1
	drop-out	min	%Us 0.2
		max	%Us 0.6
	of 50/60Hz coil powered at 60Hz		
	pick-up	min	%Us 0.8
		max	%Us 1.1
	drop-out	min	%Us 0.2
		max	%Us 0.6
AC operating voltage	of 50/60Hz coil powered at 50Hz	in-rush holding	VA 300 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
--------------------------	-----	---	----

**DC operating voltage**

pick-up	min	%Us	0.8
	max	%Us	1.10

drop-out	min	%Us	0.2
	max	%Us	0.60

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

in-rush	W	300
holding	W	10

**Max cycles frequency**

Mechanical operations	Cycles/h	2400
-----------------------	----------	------

**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**

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

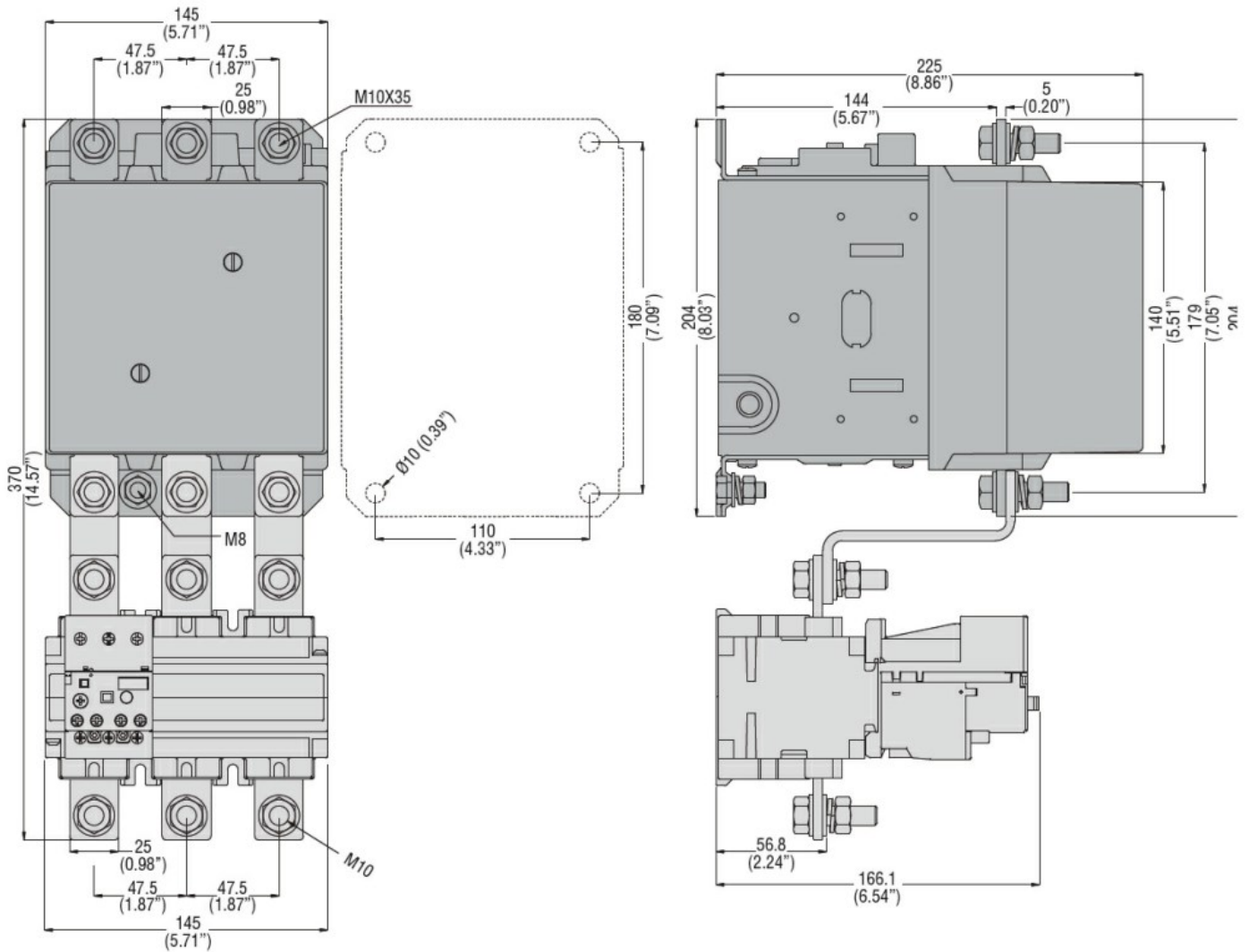
**General USE**

Contactor	AC current	A	450
-----------	------------	---	-----

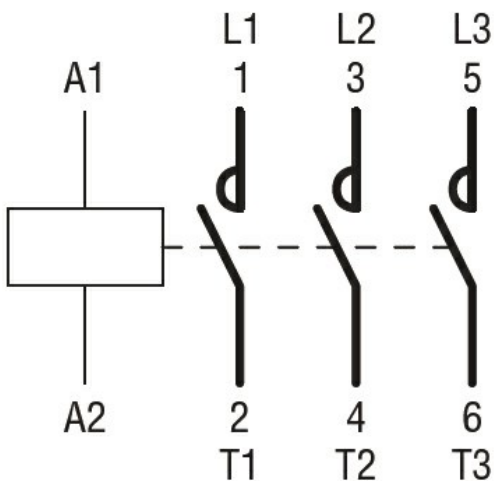
**Other features**

Pollution degree	3
------------------	---

**Dimensions**



### Wiring diagrams



### Certifications and compliance

#### Certifications

- 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

---

Compliance

CCC

---

cULus

---

EAC

---

ETIM 6 classification

EC000066 - Power contactor, AC switching