



Power contactor  
B6301000

Product designation

Product type designation

**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	1000
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A 1000
	AC-1 ( $\leq 55^\circ\text{C}$ )	A 850
	AC-1 ( $\leq 70^\circ\text{C}$ )	A 700
	AC-4 (400V)	A 260
Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )	230V	kW 350
	400V	kW 600
	500V	kW 750
	690V	kW 1000
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	75V	A 800
	110V	A 460
	220V	A --
	330V	A --
	460V	A --
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series	75V	A 800
	110V	A 800
	220V	A 700
	330V	A --
	460V	A --
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	75V	A 800
	110V	A 800
	220V	A 800
	330V	A 700
	460V	A --
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series	75V	A 800
	110V	A 800
	220V	A 800
	330V	A 750
	460V	A 700
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series		

	75V	A	800
	110V	A	460
	220V	A	--
	330V	A	--
	460V	A	--
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	75V	A	800
	110V	A	800
	220V	A	700
	330V	A	--
	460V	A	--
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	75V	A	800
	110V	A	800
	220V	A	800
	330V	A	650
	460V	A	--
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	75V	A	800
	110V	A	800
	220V	A	800
	330V	A	650
	460V	A	700
Short-time allowable current for 10s (IEC/EN60947-1)		A	5600
Protection fuse			
	gG (IEC)	A	1000
Making capacity (RMS value)		A	6300
Breaking capacity at voltage			
	440V	A	6300
	500V	A	5600
	690V	A	5000
Resistance per pole (average value)		mΩ	0.14
Power dissipation per pole (average value)			
	Ith	W	140
	AC3	W	56
Tightening torque for terminals			
	min	Nm	55
	max	Nm	55
	min	lbin	40.6
	max	lbin	40.6
Tightening torque for coil terminal			
	min	Nm	1
	max	Nm	1
	min	lbin	0.74
	max	lbin	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil			
	max		2x 900 kcmil
Power terminal protection according to IEC/EN 60529			IP00
<b>Mechanical features</b>			
Operating position			
	normal		Vertical plan

	allowable			±30°
Fixing				Screw
Weight		g	2120	
Conductor section	AWG/kcmil conductor section			
	max	2x 900 kcmil		
Operations				
Mechanical life		cycles	5000000	
Electrical life		cycles	700000	
Safety related data				
Performance level B10d according to EN/ISO 13489-1				
	rated load	cycles	700000	
	mechanical load	cycles	5000000	
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	
	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 average coil consumption at 20°C				
	of 50/60Hz coil powered at 50Hz			
	in-rush	VA	400	
	holding	VA	18	
	of 50/60Hz coil powered at 60Hz			
	in-rush	VA	400	
	holding	VA	18	
Dissipation at holding ≤20°C 50Hz		W	18	
DC coil operating				
DC rated control voltage		V	48	
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	400
holding	W	18

#### Max cycles frequency

Mechanical operation cycles/h 1200

#### Operating times

Average time for Us control

in AC

Closing NO

min	ms	110
max	ms	180

Opening NO

min	ms	60
max	ms	100

in DC

Closing NO

min	ms	110
max	ms	180

Opening NO

min	ms	60
max	ms	100

#### UL technical data

General USE

Contactor

AC current A 1000

Short-circuit protection fuse, 600V

Standard fault

Short circuit current	kA	18
Fuse rating	A	1500
Fuse class		L

#### Ambient conditions

Temperature

Operating temperature

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

Storage temperature

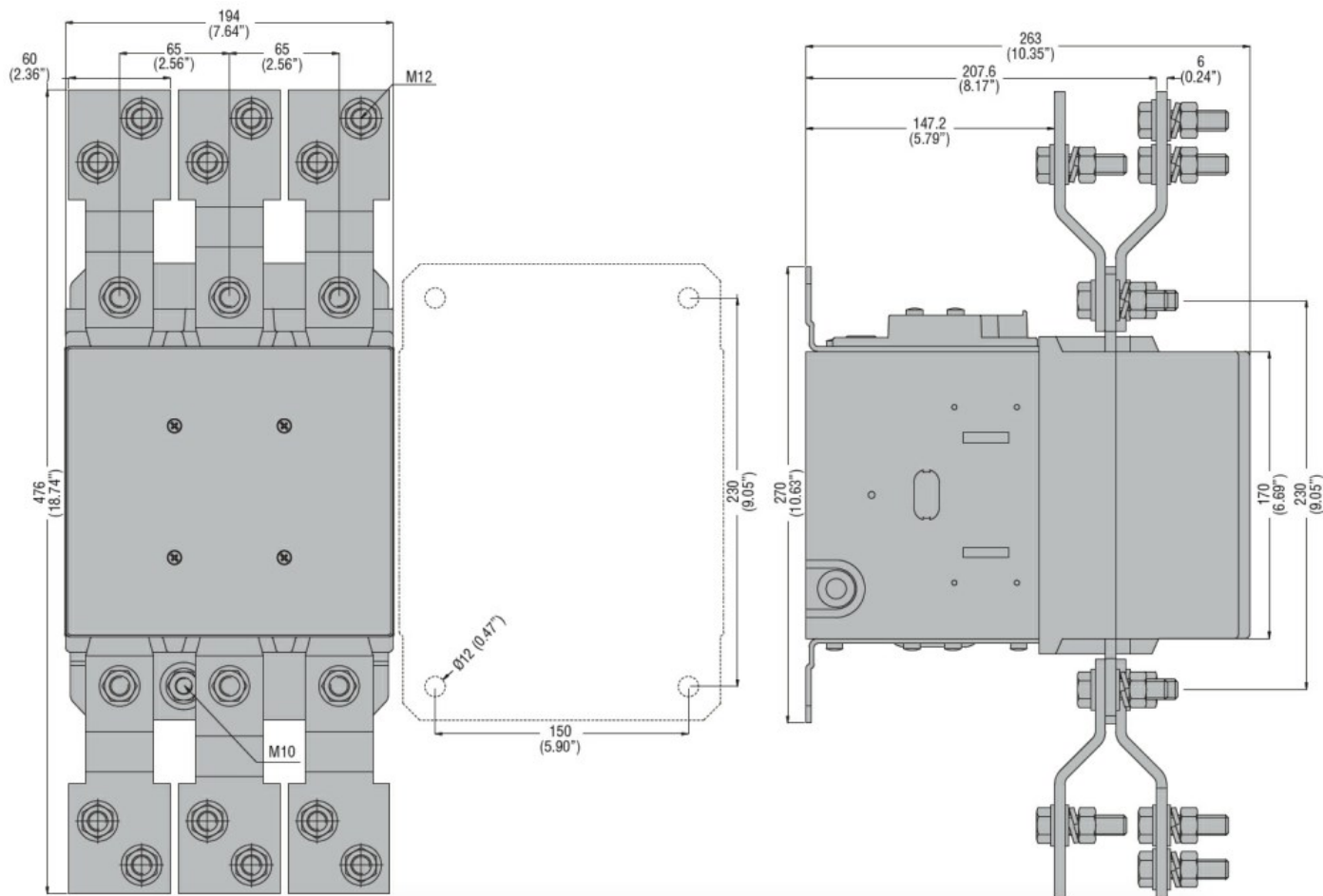
min	$^{\circ}\text{C}$	-60
max	$^{\circ}\text{C}$	80

Max altitude m 3000

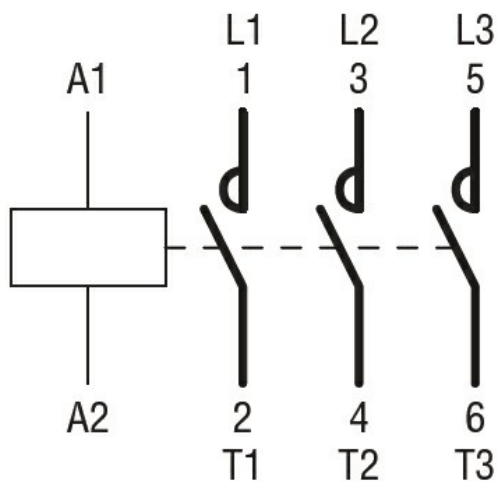
#### Resistance & Protection

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

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cULus

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EAC

ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching