



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	--
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IEC max current I <sub>e</sub> 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	--
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IEC max current I <sub>e</sub> 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	--
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IEC max current I <sub>e</sub> 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
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Short-time allowable current for 10s (IEC/EN60947-1)		A	5600
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Protection fuse		gG (IEC)	A 1000
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Making capacity (RMS value)		A	6300
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Breaking capacity at voltage			
	440V	A	6300
	500V	A	5600
	690V	A	5000
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Resistance per pole (average value)		mΩ	0.14
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Power dissipation per pole (average value)		I <sub>th</sub>	W 140
	AC-3	W	56
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Tightening torque for terminals			
	min	Nm	55
	max	Nm	55
	min	I <sub>bin</sub>	40.6
	max	I <sub>bin</sub>	40.6
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Tightening torque for coil terminal			
	min	Nm	1
	max	Nm	1
	min	I <sub>bin</sub>	0.74
	max	I <sub>bin</sub>	0.74
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Max number of wires simultaneously connectable		Nr.	2
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Conductor section			
	AWG/Kcmil		
	max		2x 900 kcmil
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Power terminal protection according to IEC/EN 60529			IP00
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<b>Mechanical features</b>			
Operating position		normal	Vertical plan

	allowable			±30°
Fixing				Screw
Weight		g	2140	
Conductor section	AWG/kcmil conductor section			
	max	2x 900 kcmil		
<b>Operations</b>				
Mechanical life		cycles	5000000	
Electrical life		cycles	700000	
<b>Safety related data</b>				
Performance level B10d according to EN/ISO 13489-1				
	rated load	cycles	700000	
	mechanical load	cycles	5000000	
Mirror contacts according to IEC/EN 60947-4-1				yes
EMC compatibility				yes
<b>AC coil operating</b>				
Rated AC voltage at 50/60Hz, 60Hz				
	min	V	110	
	max	V	125	
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
<b>DC coil operating</b>				
DC rated control voltage				
	min	V	110	
	max	V	125	

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
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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
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Short-circuit protection fuse, 600V

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

Ambient conditions

Temperature

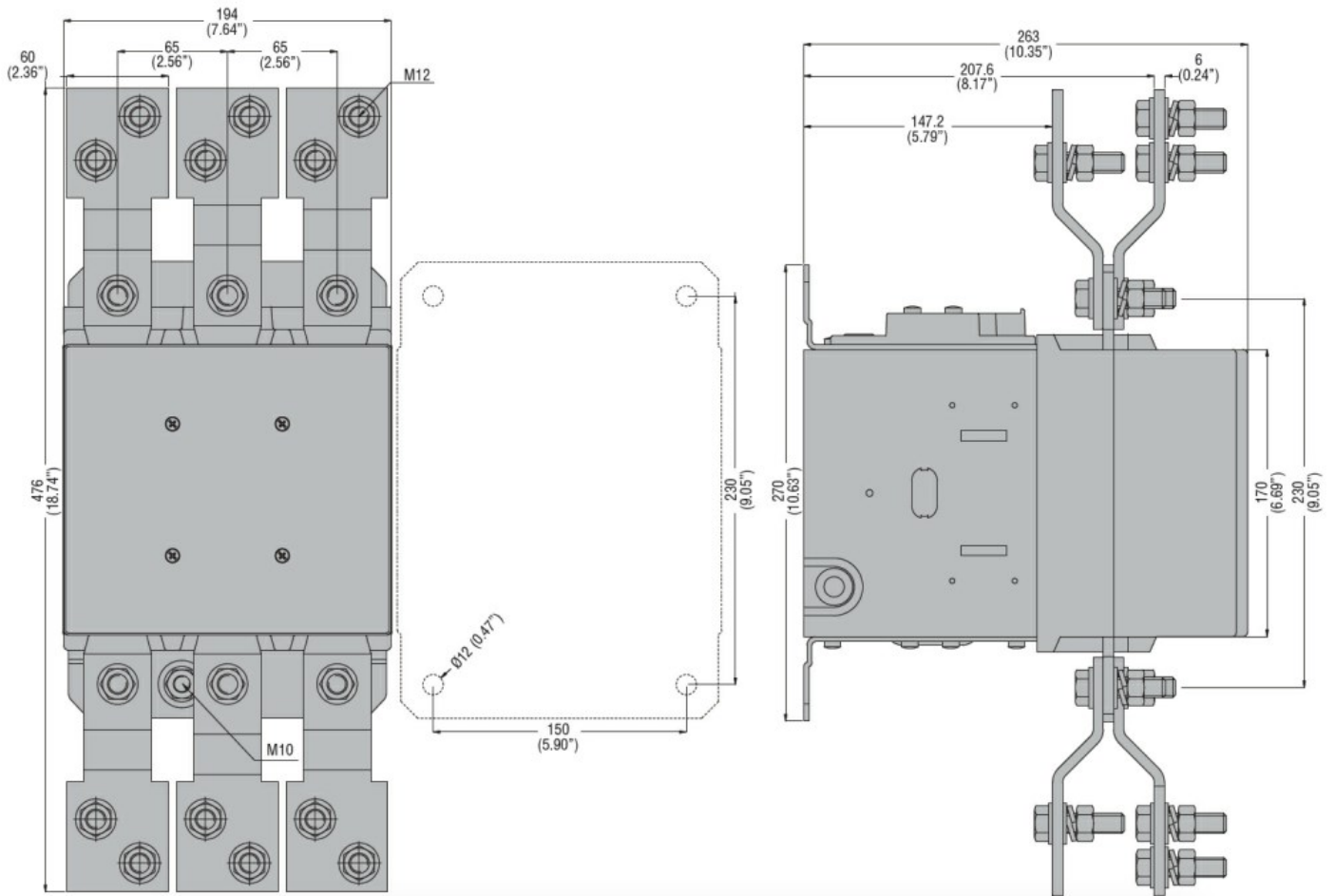
Operating temperature	min	$^{\circ}\text{C}$	-50
	max	$^{\circ}\text{C}$	70
Storage temperature	min	$^{\circ}\text{C}$	-60
	max	$^{\circ}\text{C}$	80

Max altitude	m	3000
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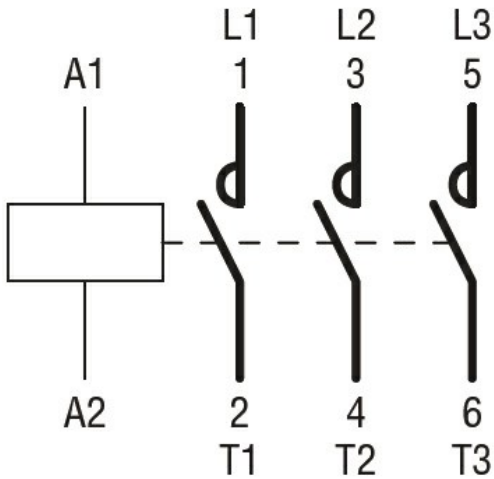
Resistance & Protection

Pollution degree	3
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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