



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	lbin 40.6
		max	lbin 40.6
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Tightening torque for coil terminal		min	Nm 1
		max	Nm 1
		min	lbin 0.74
		max	lbin 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

Fixing	allowable		±30°
Weight		g	Screw 2120
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 mechanical load	cycles cycles
			700000 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		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
<b>DC coil operating</b>			
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

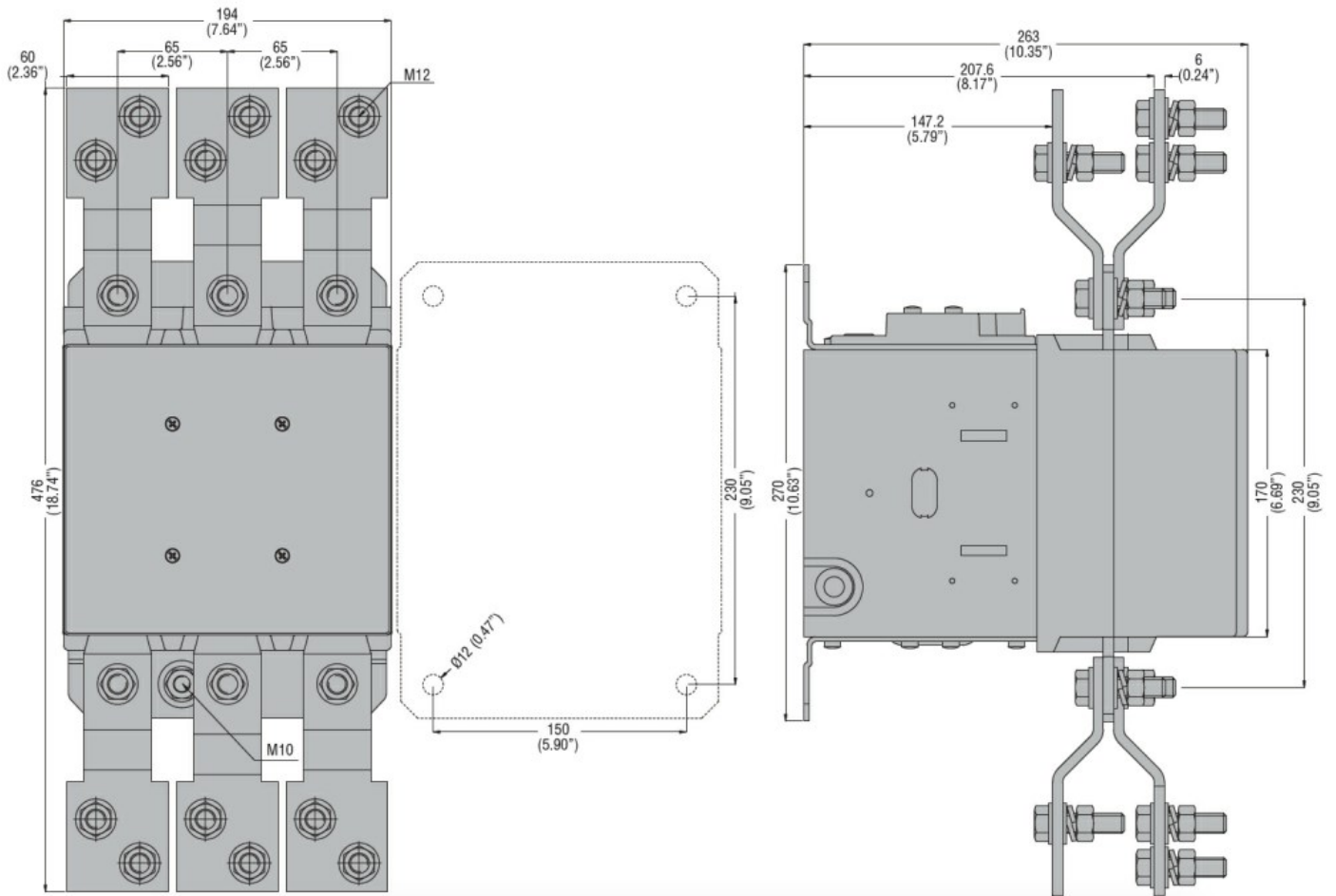
m 3000

**Resistance & Protection**

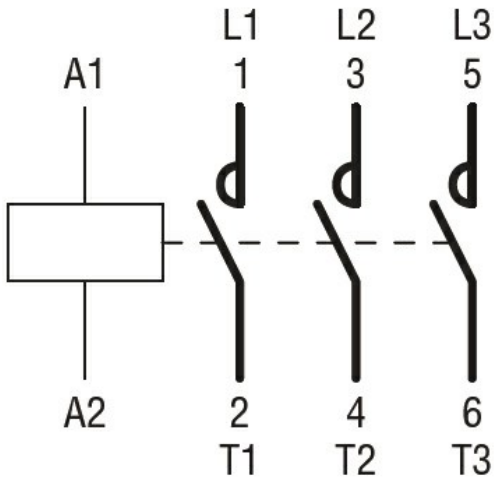
Pollution degree

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