



### 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 $I_{th} \leq 40^\circ\text{C}$	A	800
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A 800
	AC-1 ( $\leq 55^\circ\text{C}$ )	A 640
	AC-1 ( $\leq 70^\circ\text{C}$ )	A 540
	AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ )	A 630
	AC-4 (400V)	A 260
Rated operational power AC-3 ( $T \leq 55^\circ\text{C}$ )	230V	kW 198
	400V	kW 355
	415V	kW 368
	440V	kW 368
	500V	kW 368
	690V	kW 440
	1000V	kW 368
Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )	230V	kW 288
	400V	kW 500
	500V	kW 655
	690V	kW 860
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  $I_e$  in DC3-DC5 with  $L/R \leq 15\text{ms}$  with 2 poles in series

75V	A	800
110V	A	800
220V	A	700
330V	A	--
460V	A	--

IEC max current  $I_e$  in DC3-DC5 with  $L/R \leq 15\text{ms}$  with 3 poles in series

75V	A	800
110V	A	800
220V	A	800
330V	A	650
460V	A	--

IEC max current  $I_e$  in DC3-DC5 with  $L/R \leq 15\text{ms}$  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	5040
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Protection fuse

gG (IEC)	A	1000
aM (IEC)	A	630

Making capacity (RMS value)

A	6300
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Breaking capacity at voltage

440V	A	6300
500V	A	5600
690V	A	5000

Resistance per pole (average value)

mΩ	0.14
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Power dissipation per pole (average value)

$I_{th}$	W	90
AC-3	W	56

Tightening torque for terminals

min	Nm	55
max	Nm	55
min	Ibin	40.6
max	Ibin	40.6

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 600 kcmil
Power terminal protection according to IEC/EN 60529		IP00
<b>Mechanical features</b>		
Operating position	normal allowable	Vertical plan ±30°
Fixing		Screw
Weight	g	1840
<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 annex F		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 holding	VA VA 400 18
of 50/60Hz coil powered at 60Hz	in-rush holding	VA VA 400 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
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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**

Rated operational voltage AC (UL)		V	600
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**General USE**

Contactor			
		AC current	A 800
Short-circuit protection fuse, 600V			
	Standard fault		
		Short circuit current	kA 18
		Fuse rating	A 1500
		Fuse class	L

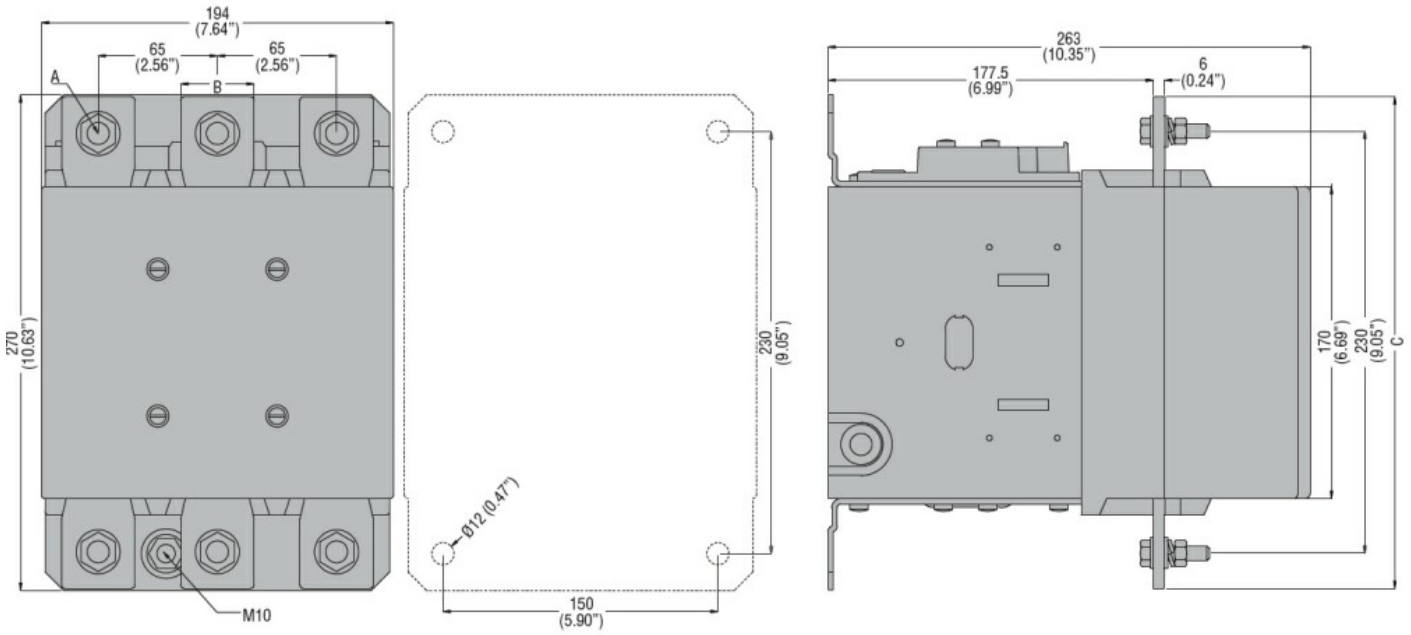
**Ambient conditions**

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**

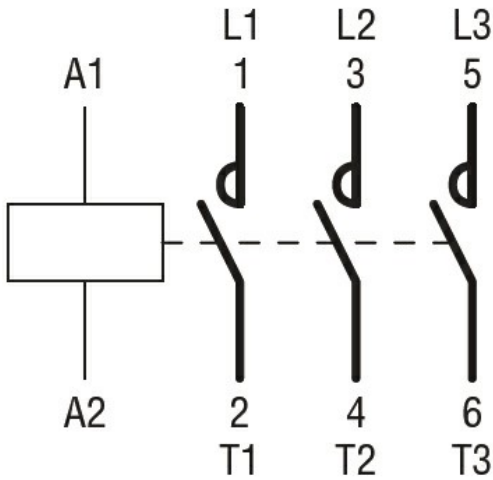
Pollution degree			3
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**Dimensions**



CONTACTOR TYPE	A	B	C
B500	M10	35 (1.38")	265 (10.43")
B630	M12	40 (1.57")	270 (10.63")

### 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