



**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 $I_{th} \leq 40^\circ C$	A	800
Operational current $I_e$	AC-1 ( $\leq 40^\circ C$ )	A 800
	AC-1 ( $\leq 55^\circ C$ )	A 640
	AC-1 ( $\leq 70^\circ C$ )	A 540
	AC-3 ( $\leq 440V \leq 55^\circ C$ )	A 630
	AC-4 (400V)	A 260
Rated operational power AC-3 ( $T \leq 55^\circ C$ )	400V	kW 355
Rated operational power AC-1 ( $T \leq 40^\circ C$ )	230V	kW 288
	400V	kW 500
	500V	kW 655
	690V	kW 860
IEC max current $I_e$ in DC1 with $L/R \leq 1ms$ 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 $L/R \leq 1ms$ 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 $L/R \leq 1ms$ 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 $L/R \leq 1ms$ with 4 poles in series	75V	A 800
	110V	A 800
	220V	A 800
	330V	A 750
	460V	A 700

IEC max current Ie in DC3-DC5 with L/R ≤ 15ms 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	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)

Ith	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
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Conductor section

AWG/Kcmil

max	2x 600 kcmil
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Power terminal protection according to IEC/EN 60529

IP00

**Mechanical features**

Operating position

	normal allowable	Vertical plan ±30°
Fixing		Screw
Weight	g	1882

Operations

Mechanical life	cycles	5000000
Electrical life	cycles	700000

Safety related data

Performance level B10d according to EN/ISO 13489-1

	rated load mechanical load	cycles	700000
		cycles	5000000

Mirror contacts according to IEC/EN 60947-4-1 annex F

EMC compatibility	yes
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AC coil operating

Rated AC voltage at 50/60Hz, 60Hz

	min	V	220
	max	V	240

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
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DC coil operating

DC rated control voltage

min	V	220
max	V	240

max

V	240
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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**

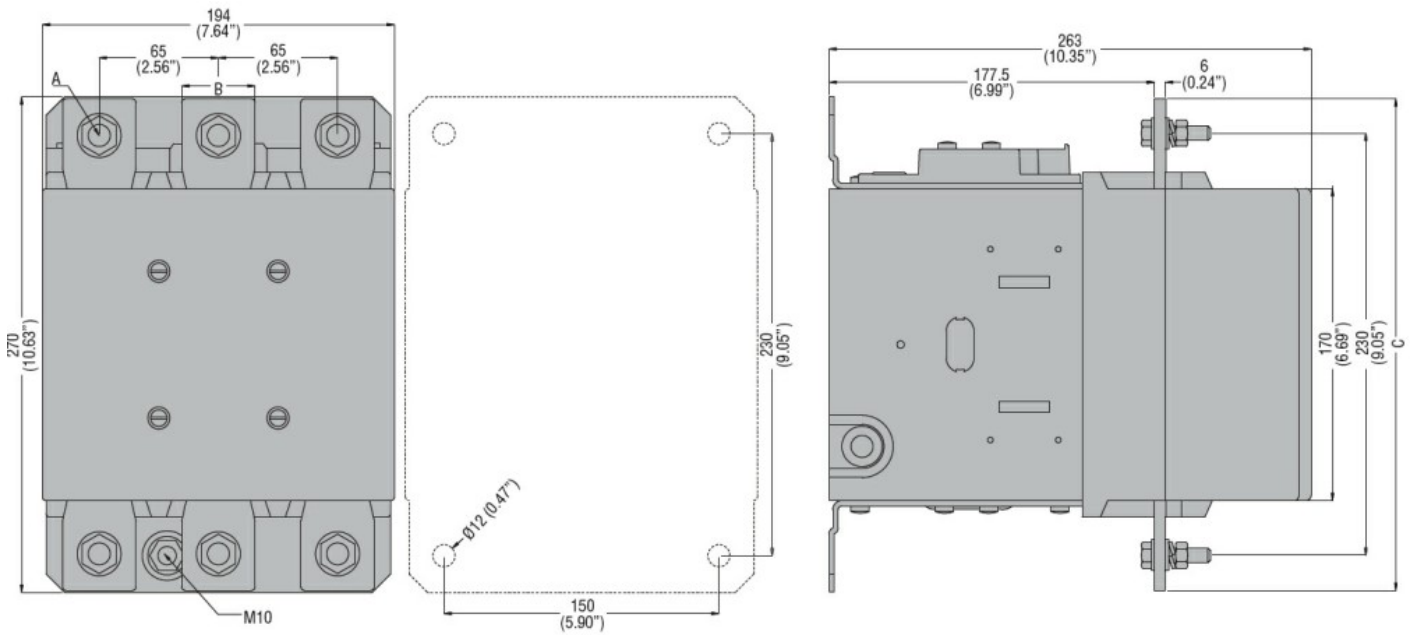
Temperature			
Operating temperature			
min	$^{\circ}\text{C}$	-50	
max	$^{\circ}\text{C}$	70	
Storage temperature			
min	$^{\circ}\text{C}$	-60	
max	$^{\circ}\text{C}$	80	

Max altitude	m	3000
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**Resistance & Protection**

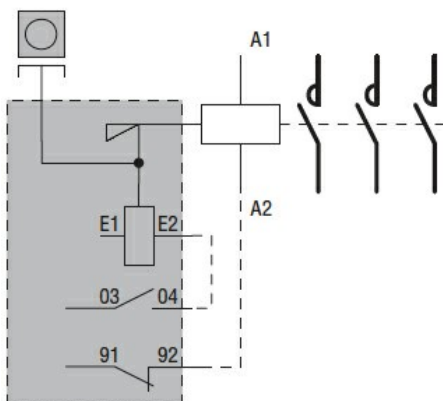
Pollution degree	3
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**Dimensions**



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**

cULus

**ETIM classification**

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching