



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	700
Operational current I_e	AC-1 ($\leq 40^\circ C$)	A 700
	AC-1 ($\leq 55^\circ C$)	A 550
	AC-1 ($\leq 70^\circ C$)	A 500
	AC-3 ($\leq 440V \leq 55^\circ C$)	A 520
	AC-4 (400V)	A 240
Rated operational power AC-3 ($T \leq 55^\circ C$)	230V	kW 156
	400V	kW 290
	415V	kW 306
	440V	kW 328
	500V	kW 367
	690V	kW 416
	1000V	kW 312
Rated operational power AC-1 ($T \leq 40^\circ C$)	230V	kW 252
	400V	kW 438
	500V	kW 575
	690V	kW 755
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 1 poles in series	75V	A 650
	110V	A 320
	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 650
	110V	A 550
	220V	A 450
	330V	A --
	460V	A --
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 3 poles in series	75V	A 650
	110V	A 600
	220V	A 600
	330V	A 450
	460V	A --

IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series

75V	A	650
110V	A	600
220V	A	600
330V	A	600
460V	A	450

IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series

75V	A	550
110V	A	320
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	550
110V	A	550
220V	A	450
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	550
110V	A	550
220V	A	550
330V	A	450
460V	A	--

IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 4 poles in series

75V	A	550
110V	A	550
220V	A	550
330V	A	450
460V	A	450

Short-time allowable current for 10s (IEC/EN60947-1)

A	4050
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Protection fuse

gG (IEC)	A	800
aM (IEC)	A	500

Making capacity (RMS value)

A	5000
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Breaking capacity at voltage

440V	A	5000
500V	A	4500
690V	A	4000

Resistance per pole (average value)

mΩ	0.14
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Power dissipation per pole (average value)

I_{th}	W	68.6
AC-3	W	35

Tightening torque for terminals

min	Nm	35
max	Nm	35
min	Ibin	25.8
max	Ibin	25.8

Tightening torque for coil terminal

min	Nm	1
max	Nm	1
min	Ibin	0.74
max	Ibin	0.74

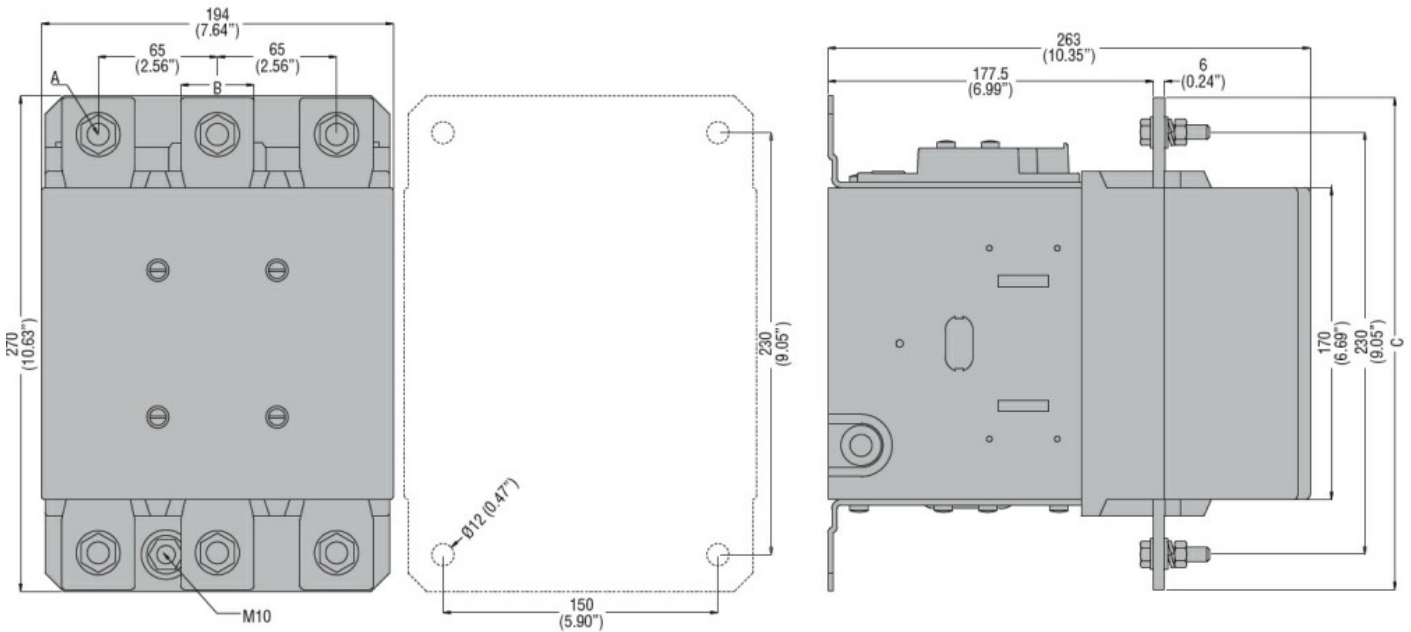
Max number of wires simultaneously connectable	Nr.	2	
Conductor section	AWG/Kcmil	max	2x 500 kcmil
Power terminal protection according to IEC/EN 60529			IP00
Mechanical features			
Operating position		normal allowable	Vertical plan ±30°
Fixing			Screw
Weight		g	1850
Operations			
Mechanical life		cycles	5000000
Electrical life		cycles	700000
Safety related data			
Performance level B10d according to EN/ISO 13489-1		rated load mechanical load	cycles cycles 700000 5000000
Mirror contacts according to IEC/EN 60947-4-1 annex F			Yes
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz		min max	V V 380 415
AC operating voltage	of 50/60Hz coil powered at 50Hz		
	pick-up	min max	%Us %Us 80 110
	drop-out	min max	%Us %Us 20 60
	of 50/60Hz coil powered at 60Hz		
	pick-up	min max	%Us %Us 80 110
	drop-out	min max	%Us %Us 20 60
	of 60Hz coil powered at 60Hz		
	pick-up	min max	%Us %Us 80 110
	drop-out	min max	%Us %Us 20 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 $\leq 20^{\circ}\text{C}$ 50Hz		W	18
DC coil operating			
DC rated control voltage		min	V 380
		max	V 415
max			V 415
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			
Rated operational voltage AC (UL)		V	600
General USE			
Contactor		AC current	A 700
Short-circuit protection fuse, 600V			
Standard fault		Short circuit current	kA 18
		Fuse rating	A 1200
		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

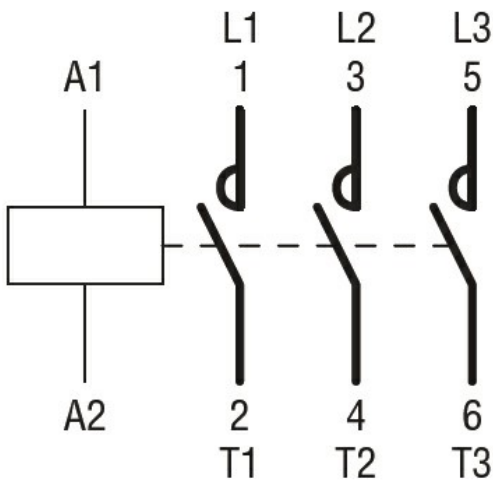
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Dimensions



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