



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

IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series

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

IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series

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

IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series

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

IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series

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

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

Ith	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 $\pm 30^\circ$
Fixing		Screw
Weight	g	1798
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	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 $\leq 20^\circ\text{C}$ 50Hz	W	18
DC coil operating		

DC rated control voltage	V	48
DC operating voltage		
pick-up	min max	%Us %Us 80 110
drop-out	min max	%Us %Us 20 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 U_s 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

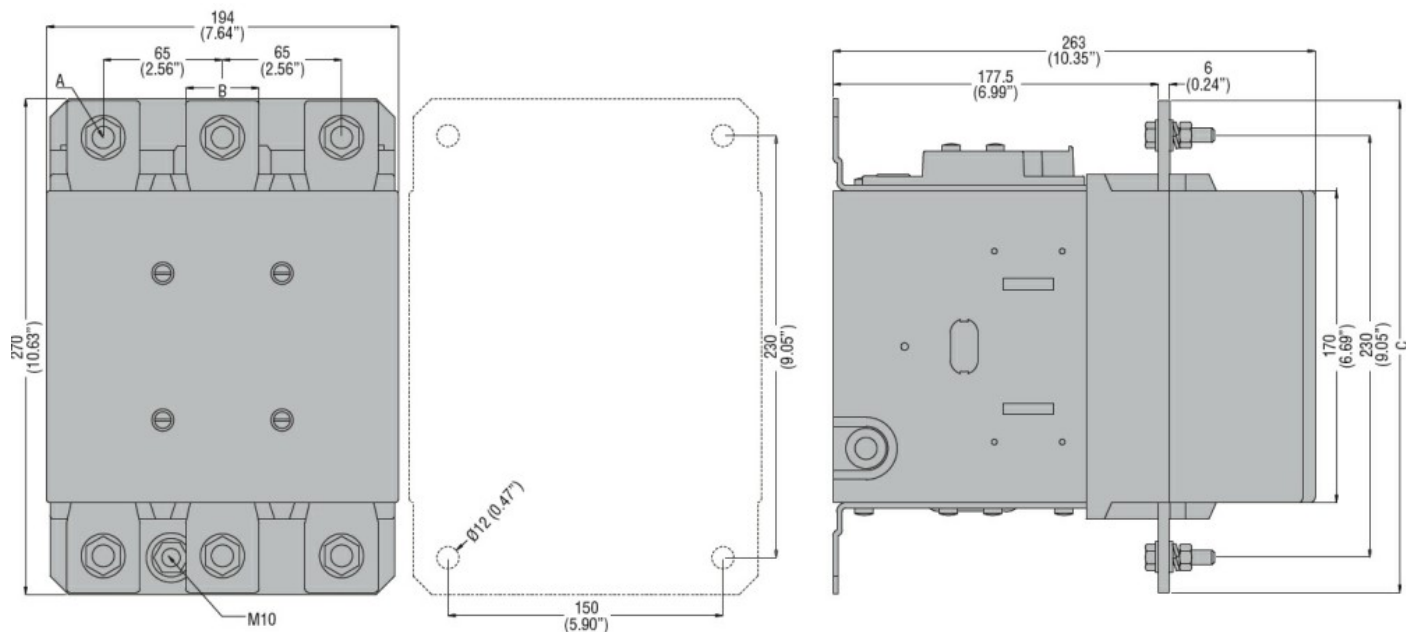
min	$^{\circ}\text{C}$	-60
max	$^{\circ}\text{C}$	80

Max altitude m 3000

Resistance & Protection

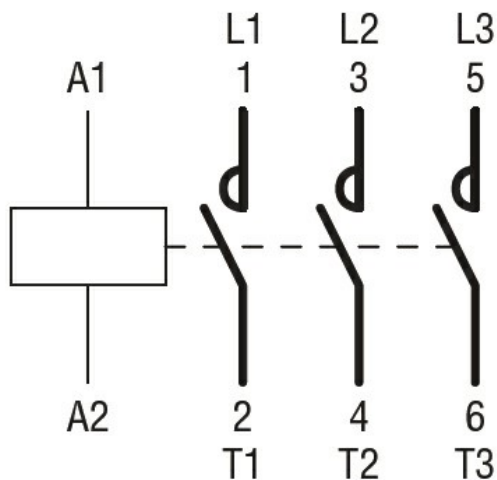
Pollution degree 3

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