



Product designation	Power contactor		
Product type designation	B630		
<b>Contact characteristics</b>			
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	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 le 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 le 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 le 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 le 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
Protection fuse			
	gG (IEC)	A	1000
	aM (IEC)	A	630
Making capacity (RMS value)			A 6300
Breaking capacity at voltage			
	440V	A	6300
	500V	A	5600
	690V	A	5000
Resistance per pole (average value)			m? 0.14
Power dissipation per pole (average value)			
	I <sub>th</sub>	W	90
	AC3	W	56
Tightening torque for terminals			
	min	Nm	55
	max	Nm	55
	min	lbin	40.6
	max	lbin	40.6
Tightening torque for coil terminal			
	min	Nm	1
	max	Nm	1
	min	lbin	0.74
	max	lbin	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						
Fixing	normal allowable	Vertical plan ±30°				
Weight		Screw	g 1902			
Conductor section						
AWG/kcmil conductor section	max	2x 600 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	700000 5000000			
Mirror contacts according to IEC/EN 609474-4-1		yes				
EMC compatibility		yes				
<b>AC coil operating</b>						
Rated AC voltage at 50/60Hz, 60Hz	min max	V V	220 240			
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 ≤20°C 50Hz		W	18			

**DC coil operating**
**DC rated control voltage**

min	V	220
max	V	240

**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 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**

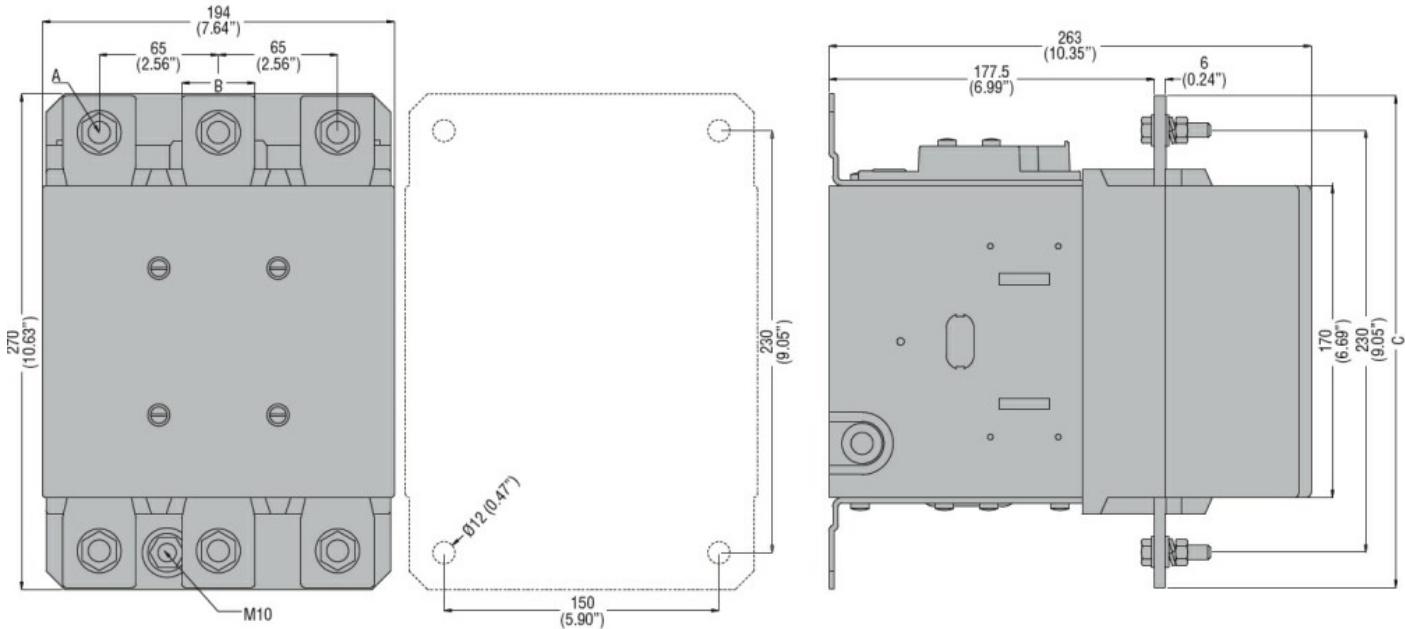
min	°C	-50
max	°C	70

**Storage temperature**

min	°C	-60
max	°C	80

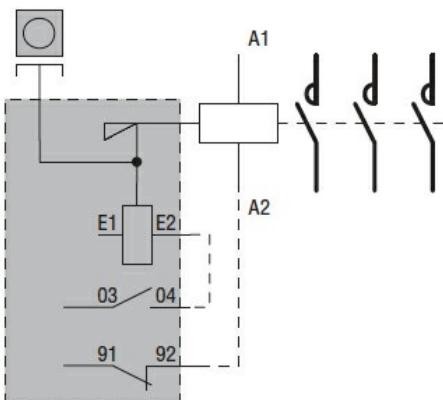
**Max altitude**
**m** 3000

**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-

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CSA C22.2 n° 60947-4-1

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IEC/EN 60947-1

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IEC/EN 60947-4-1

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UL 60947-1

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UI 60947-4-1

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## Certificates

cliffs

## ETIM classification

FTIM 8.0

EC000066 -  
Power contactor,  
AC switching