



Product designation

Power contactor

Product type designation

B630

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}	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 ($T \leq 55^\circ\text{C}$)	400V kW	355
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 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
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)		mΩ	0.14
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
Conductor section			
	AWG/Kcmil		
	max		2x 600 kcmil

Power terminal protection according to IEC/EN 60529			IP00	
Mechanical features				
Operating position			normal allowable	Vertical plan ±30°
Fixing			Screw	
Weight			g	1907
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 contats according to IEC/EN 609474-4-1			Yes	
EMC compatibility			yes	
AC coil operating				
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 ≤20°C				
		in-rush	W	400
		holding	W	18

Max cycles frequency

Mechanical operation	cycles/h	1200
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Operating times

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

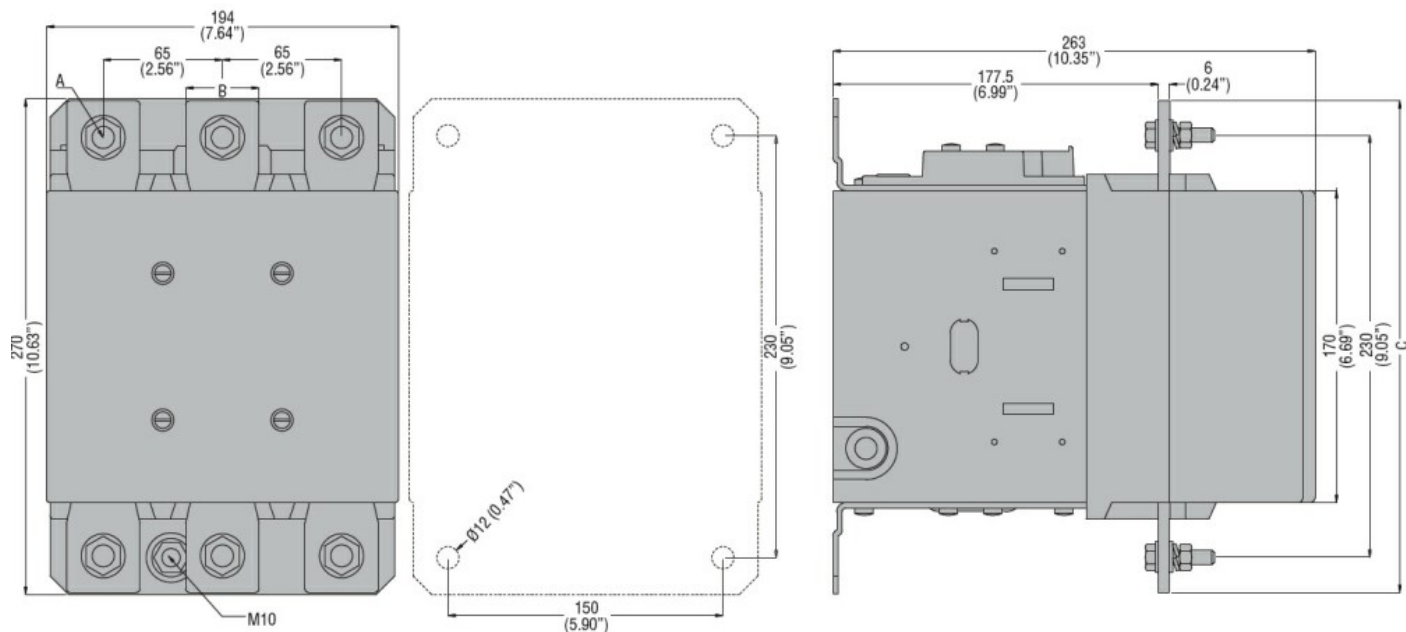
Ambient conditions

Temperature				
Operating temperature		min	°C	-50
		max	°C	70
	Storage temperature	min	°C	-60
		max	°C	80
Max altitude			m	3000

Resistance & Protection

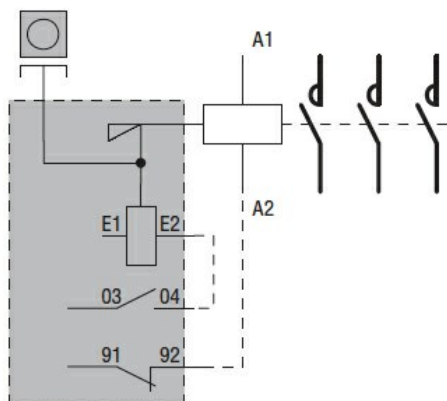
Pollution degree	3
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Dimensions



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

cULus

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching