



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 ($\leq 40^\circ C$)	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 _{th}	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					
Mechanical features						
Operating position						
	normal allowable		Vertical plan ±30°			
Fixing			Screw			
Weight		g	1907			
Conductor section						
AWG/kcmil conductor section		max	2x 600 kcmil			
Operations						
Mechanical life		cycles	5000000			
Electrical life		cycles	700000			
Safety related data						
Performance level B10d according to EN/ISO 13489-1						
	rated load	cycles	700000			
	mechanical load	cycles	5000000			
Mirror contacts according to IEC/EN 609474-4-1			yes			
EMC compatibility			yes			
AC coil operating						
Rated AC voltage at 50/60Hz, 60Hz		min	V			
		max	V			
			220			
			240			
AC operating voltage						
of 50/60Hz coil powered at 50Hz						
pick-up		min	%Us			
		max	%Us			
			80			
			110			
drop-out						
		min	%Us			
		max	%Us			
			20			
			60			
of 50/60Hz coil powered at 60Hz						
pick-up		min	%Us			
		max	%Us			
			80			
			110			
drop-out						
		min	%Us			
		max	%Us			
			20			
			60			
of 60Hz coil powered at 60Hz						
pick-up		min	%Us			
		max	%Us			
			80			
			110			
drop-out						
		min	%Us			
		max	%Us			
			20			
			60			
AC average coil consumption at 20°C						
of 50/60Hz coil powered at 50Hz		in-rush	VA			
		holding	VA			
			400			
			18			
of 50/60Hz coil powered at 60Hz		in-rush	VA			
		holding	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

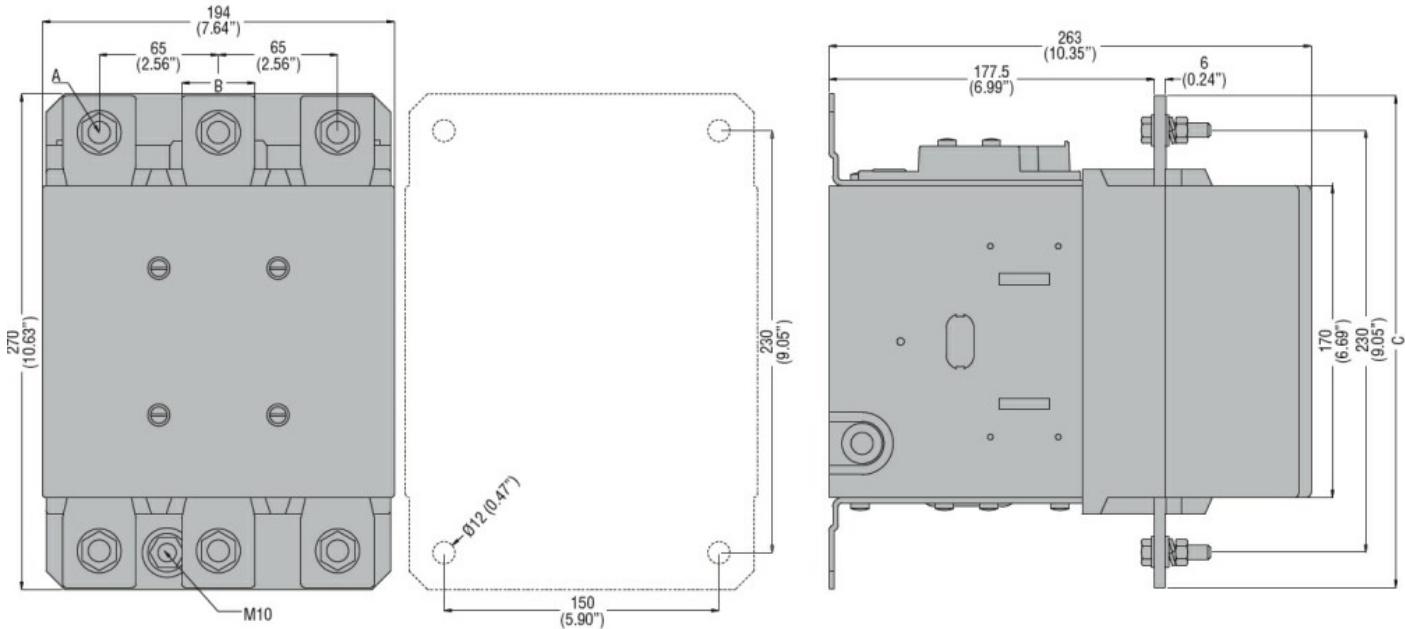
m 3000

Resistance & Protection

Pollution degree

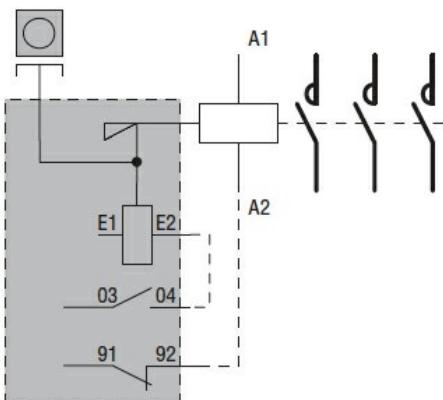
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Dimensions



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