



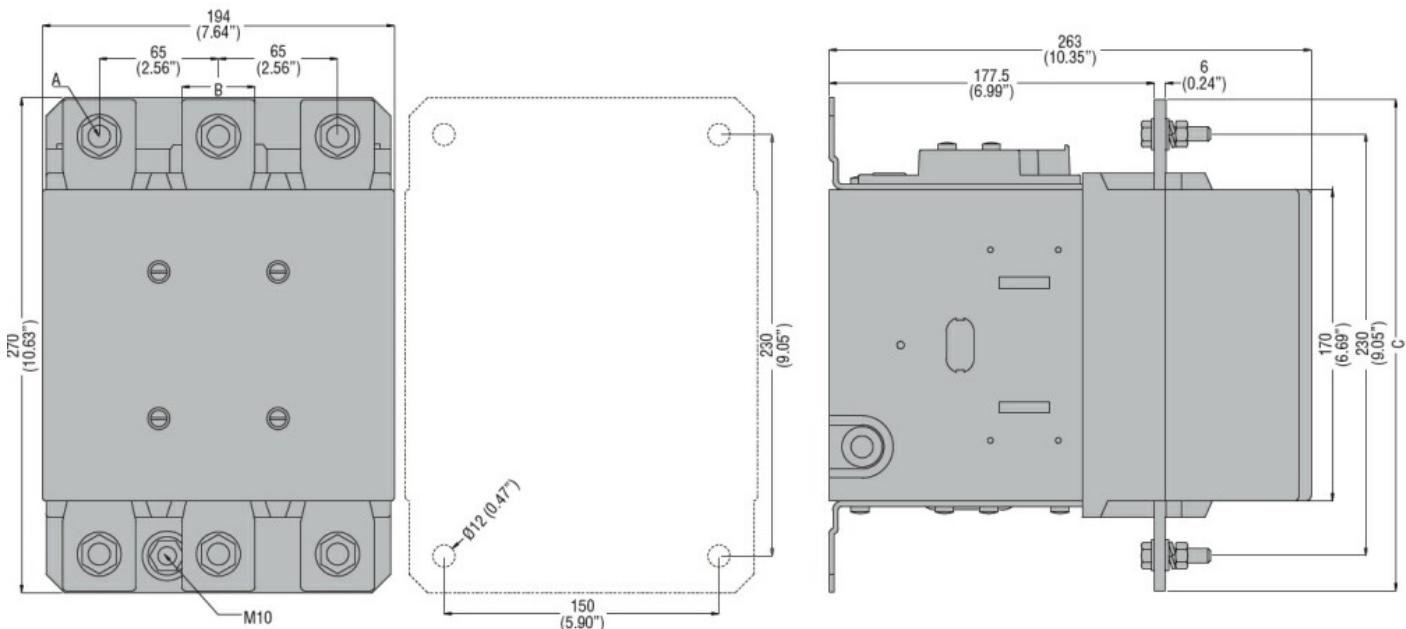
Product designation	Power contactor B630		
Product type designation			
Contact characteristics			
Number of poles	Nr. 3		
Rated insulation voltage U_i IEC/EN	V 1000		
Rated impulse withstand voltage U_{imp}	kV 8		
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current I_{th}	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 ($T \leq 55^\circ C$)	230V	kW	198
	400V	kW	355
	415V	kW	368
	440V	kW	368
	500V	kW	368
	690V	kW	440
	1000V	kW	368
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 $L/R \leq 1\text{ms}$ with 4 poles in series			
	75V	A	800
	110V	A	800
	220V	A	800
	330V	A	750
	460V	A	700
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series			
	75V	A	800
	110V	A	460
	220V	A	--
	330V	A	--
	460V	A	--
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series			
	75V	A	800
	110V	A	800
	220V	A	700
	330V	A	--
	460V	A	--
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 3 poles in series			
	75V	A	800
	110V	A	800
	220V	A	800
	330V	A	650
	460V	A	--
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ 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	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	1840	
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 mechanical load	cycles	700000 5000000
Mirror contacts according to IEC/EN 609474-4-1	yes		
EMC compatibility	yes		
AC coil operating			
Rated AC voltage at 50/60Hz	V	60	
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

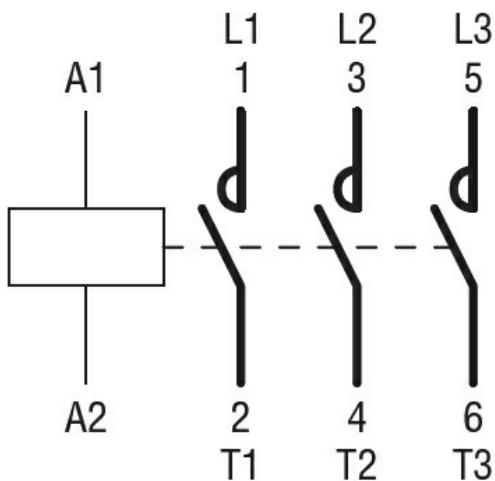
of 50/60Hz coil powered at 60Hz	in-rush	VA	400
	holding	VA	18
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz		W	18
DC coil operating			
DC rated control voltage		V	60
DC operating voltage			
pick-up	min	%Us	80
	max	%Us	110
drop-out	min	%Us	20
	max	%Us	60
Average coil consumption $\leq 20^{\circ}\text{C}$	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	$^{\circ}\text{C}$	-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