



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	210	
Rated operational power AC-3 ($T \leq 55^\circ\text{C}$)	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 ($T \leq 40^\circ\text{C}$)	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 ≤ 1ms 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 ≤ 15ms 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 ≤ 15ms 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 ≤ 15ms 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 ≤ 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)			
	I _{th}	W	90
	AC3	W	56
Tightening torque for terminals			
	min	Nm	55
	max	Nm	55
	min	I _{bin}	40.6
	max	I _{bin}	40.6
Tightening torque for coil terminal			
	min	Nm	1
	max	Nm	1

Max number of wires simultaneously connectable	Nr.	2
Power terminal protection according to IEC/EN 60529		IP00
Mechanical features		
Operating position	normal allowable	Vertical plan ±30°
Fixing		Screw
Weight	g	1836
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 cycles 5000000
Mirror contacts according to IEC/EN 60947-4-1		Yes
EMC compatibility		Yes
AC coil operating		
Rated AC voltage at 50/60Hz, 60Hz	min	V 220
	max	V 240
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	VA 400
	holding	VA 18
of 50/60Hz coil powered at 60Hz	in-rush	VA 400
	holding	VA 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

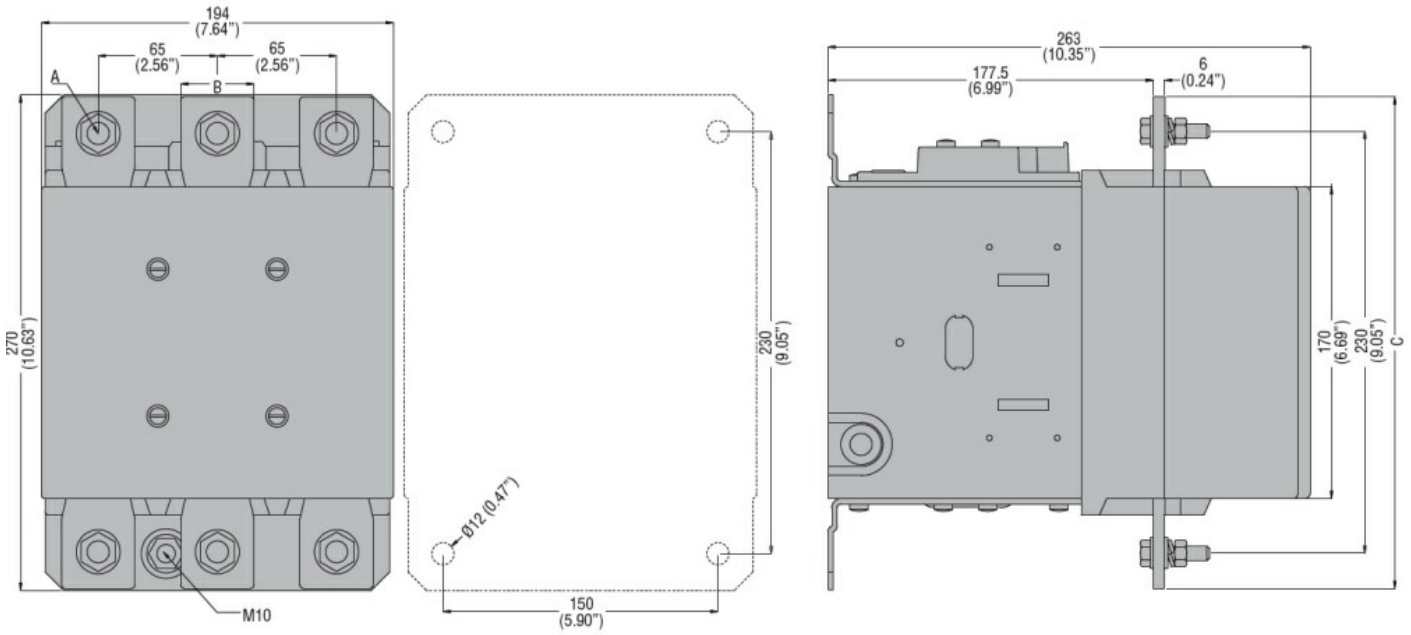
Operating times				
Average time for U_s control				
	in AC			
		Closing NO		
			min	ms
			max	ms
		Opening NO		
			min	ms
			max	ms
	in DC			
		Closing NO		
			min	ms
			max	ms
		Opening NO		
			min	ms
			max	ms

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

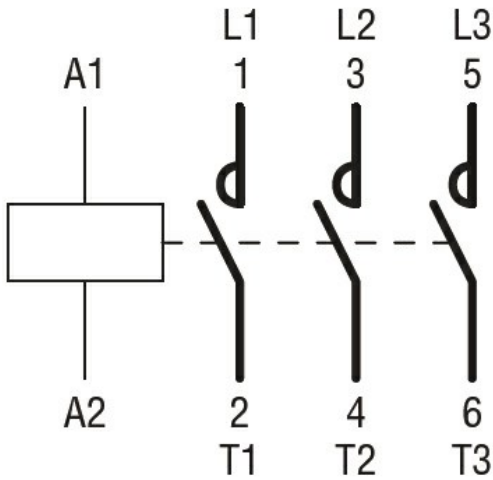
Resistance & Protection				
Pollution degree				3

Dimensions				
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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