



Product designation

Power contactor

Product type designation

B630

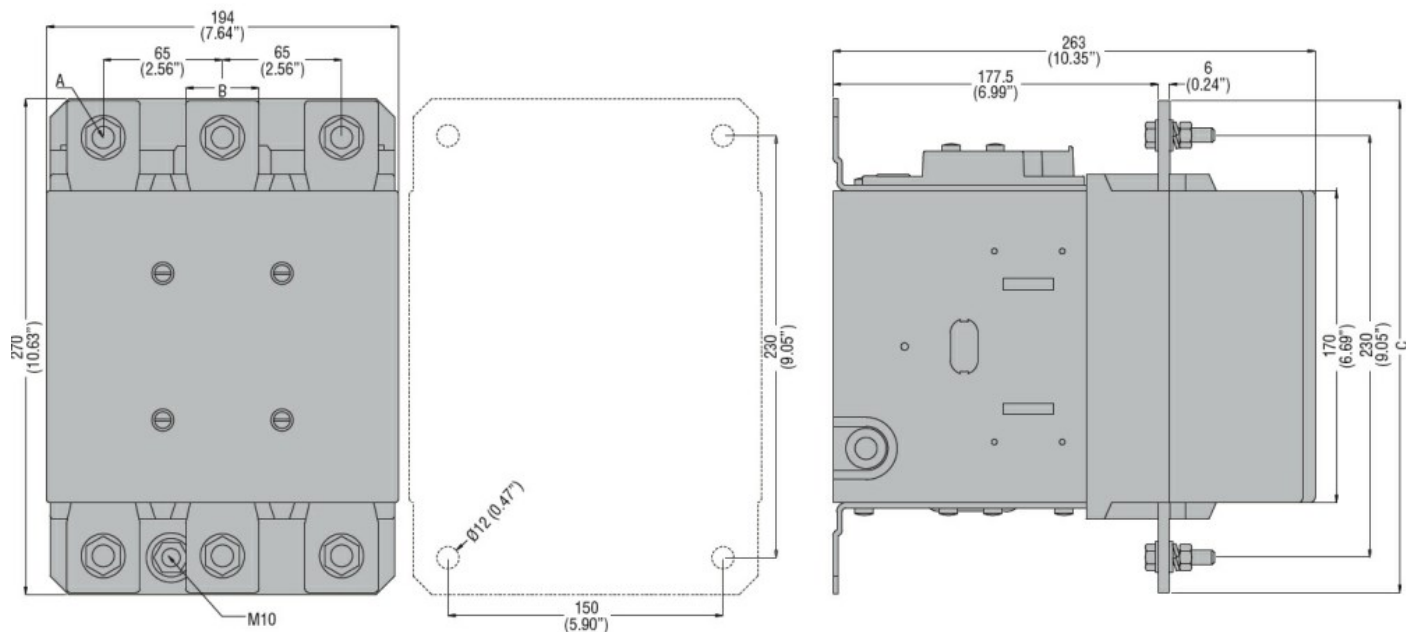
**Contact characteristics**

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 ( $T \leq 55^\circ\text{C}$ )	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 Ie 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 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

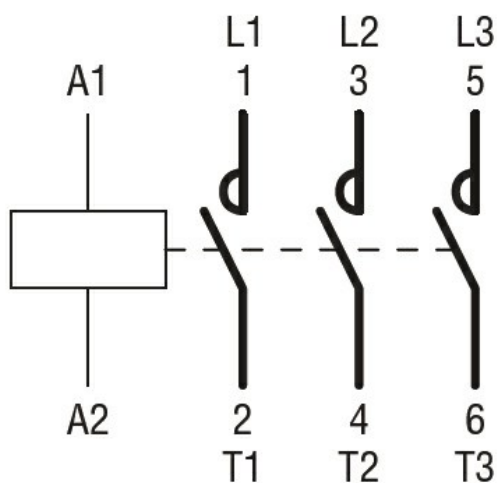
	min	I <sub>bin</sub>	0.74
	max	I <sub>bin</sub>	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
	AWG/Kcmil		
	max		2x 600 kcmil
Power terminal protection according to IEC/EN 60529			IP00
<b>Mechanical features</b>			
Operating position			
	normal allowable		Vertical plan ±30°
Fixing			Screw
Weight		g	1840
<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	cycles	700000
	mechanical load	cycles	5000000
Mirror contacts according to IEC/EN 60947-4-1			Yes
EMC compatibility			yes
<b>AC coil operating</b>			
Rated AC voltage at 50/60Hz		V	60
AC operating voltage			
	of 50/60Hz coil powered at 50Hz		
	pick-up		
	min	%U <sub>s</sub>	80
	max	%U <sub>s</sub>	110
	drop-out		
	min	%U <sub>s</sub>	20
	max	%U <sub>s</sub>	60
	of 50/60Hz coil powered at 60Hz		
	pick-up		
	min	%U <sub>s</sub>	80
	max	%U <sub>s</sub>	110
	drop-out		
	min	%U <sub>s</sub>	20
	max	%U <sub>s</sub>	60
	of 60Hz coil powered at 60Hz		
	pick-up		
	min	%U <sub>s</sub>	80
	max	%U <sub>s</sub>	110
	drop-out		
	min	%U <sub>s</sub>	20
	max	%U <sub>s</sub>	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			V	60	
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	
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	
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° 60947-1  
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