



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
	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	I _{bin}	0.74
	max	I _{bin}	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 cycles	700000 5000000
Mirror contacts according to IEC/EN 60947-4-1			yes
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 50/60Hz		V	48
AC operating voltage			
	of 50/60Hz coil powered at 50Hz		
	pick-up		
	min	%U _s	80
	max	%U _s	110
	drop-out		
	min	%U _s	20
	max	%U _s	60
	of 50/60Hz coil powered at 60Hz		
	pick-up		
	min	%U _s	80
	max	%U _s	110
	drop-out		
	min	%U _s	20
	max	%U _s	60
	of 60Hz coil powered at 60Hz		
	pick-up		
	min	%U _s	80
	max	%U _s	110
	drop-out		
	min	%U _s	20
	max	%U _s	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 $\leq 20^{\circ}\text{C}$ 50Hz			W	18
DC coil operating				
DC rated control voltage			V	48
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

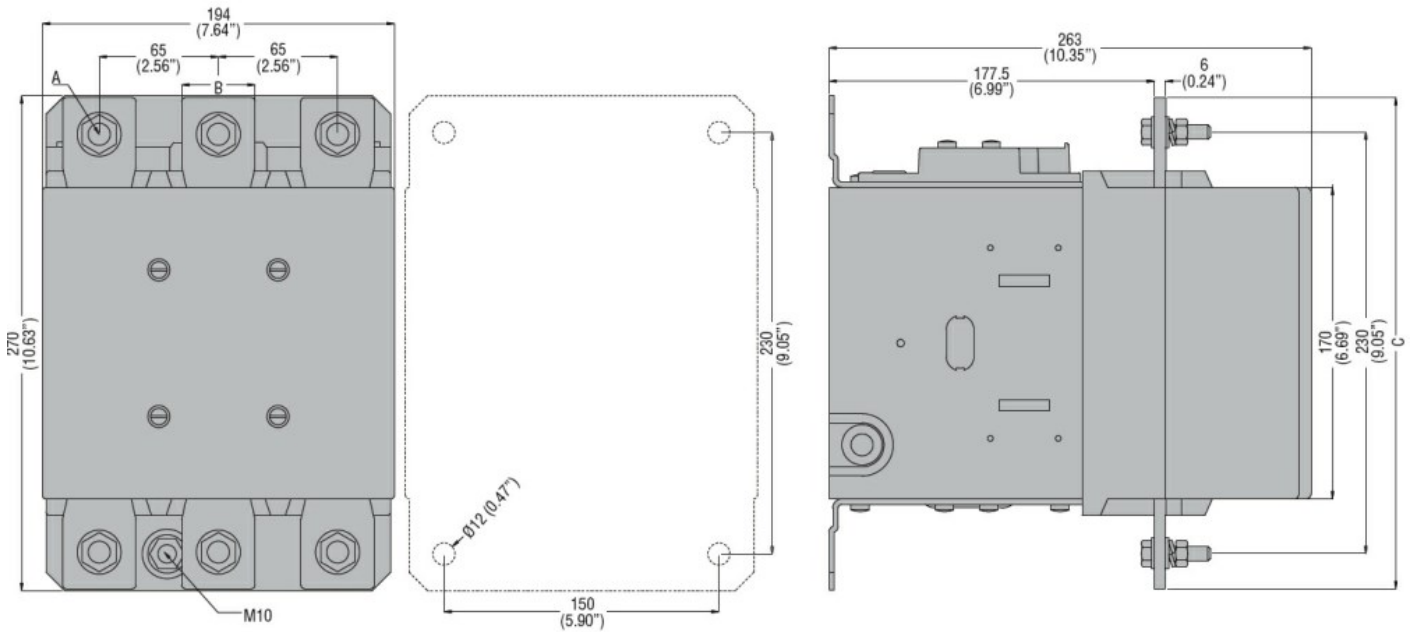
m 3000

Resistance & Protection

Pollution degree

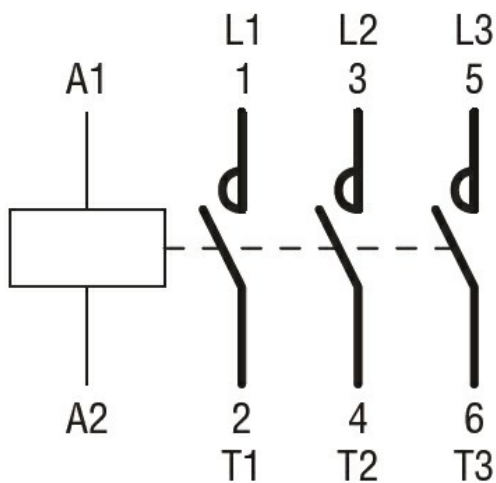
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Dimensions



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

CCC
cULus
EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching