



Product designation	Power contactor		
Product type designation	B630		
<b>Contact characteristics</b>			
Number of poles	Nr.	4	
Rated insulation voltage Ui IEC/EN	V	1000	
Rated impulse withstand voltage Uimp	kV	8	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		A	800
Operational current Ie			
	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-1 ( $T \leq 40^{\circ}\text{C}$ )			
	230V	kW	288
	400V	kW	500
	500V	kW	655
	690V	kW	860
IEC max current Ie 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 Ie 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 Ie 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 $L/R \leq 1\text{ms}$ 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 <sub>th</sub>	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	2192

## 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

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	%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

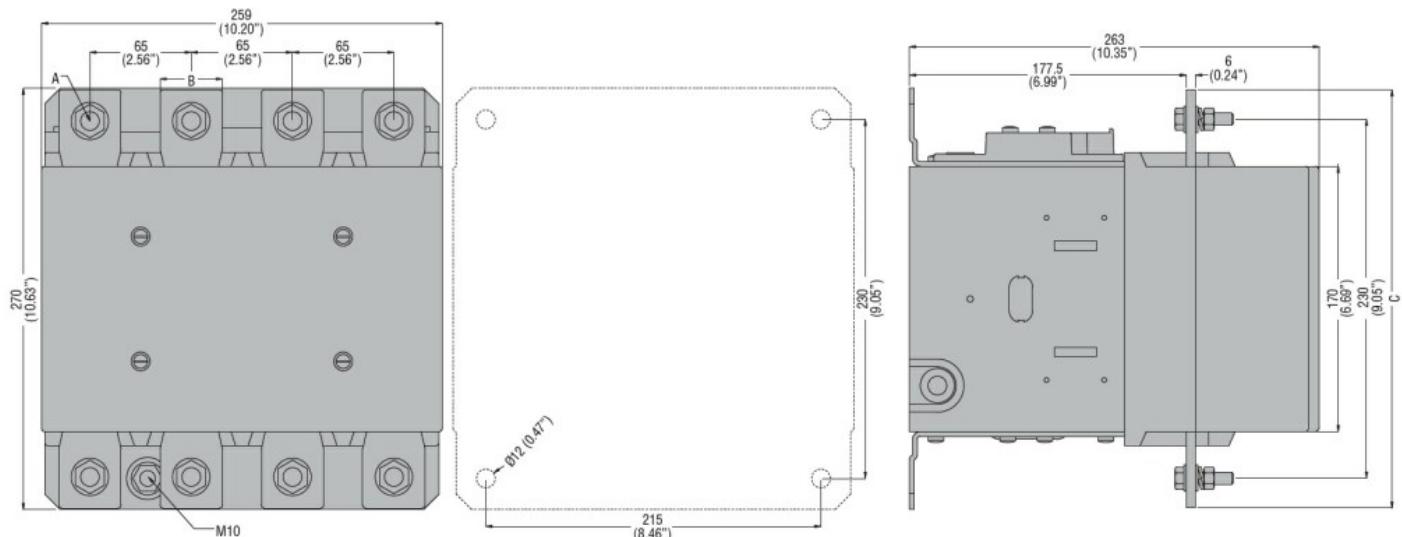
Dissipation at holding ≤20°C 50Hz	W	18
-----------------------------------	---	----

DC coil operating		
-------------------	--	--

DC rated control voltage	V	60
--------------------------	---	----

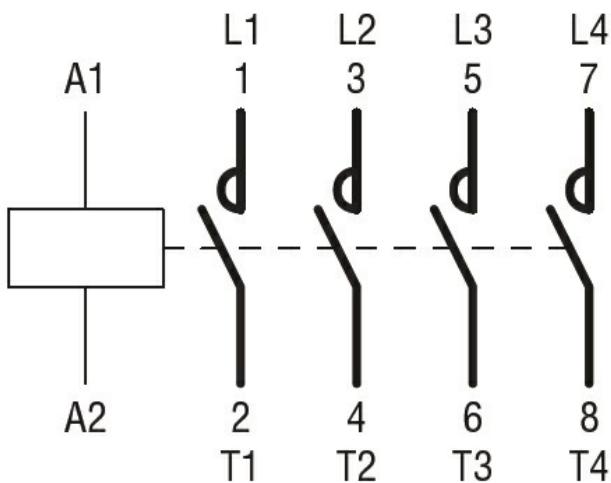
DC operating voltage	pick-up		
----------------------	---------	--	--

	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
<b>Max cycles frequency</b>			
Mechanical operation		cycles/h	1200
<b>Operating times</b>			
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
<b>UL technical data</b>			
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	
<b>Ambient conditions</b>			
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
<b>Resistance &amp; Protection</b>			
Pollution degree			3
<b>Dimensions</b>			



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