



Product designation Power contactor
Product type designation B630

Contact characteristics

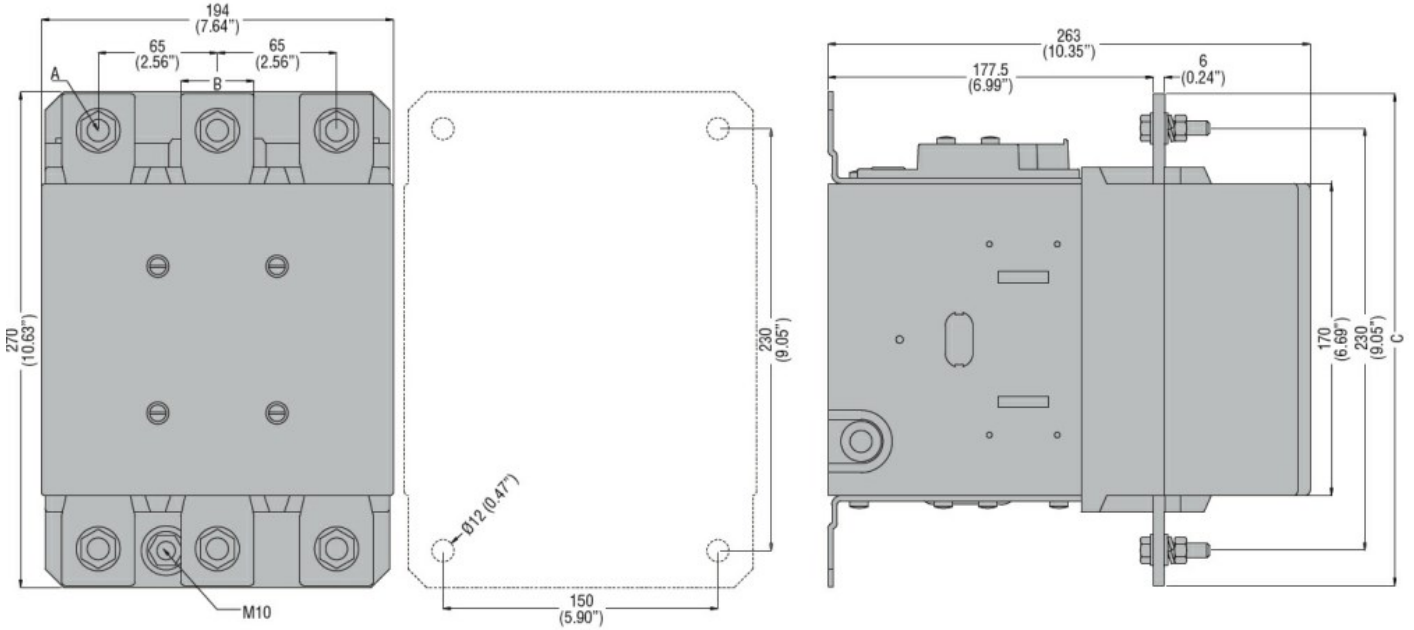
Number of poles	Nr.	3
Rated insulation voltage U_i IEC/EN	V	1000
Rated impulse withstand voltage U_{imp}	kV	8
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I_{th}	A	800
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A 800
	AC-1 ($\leq 55^\circ\text{C}$)	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 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
	AC-3	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

	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	1862
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 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 110
		max	V 125
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	

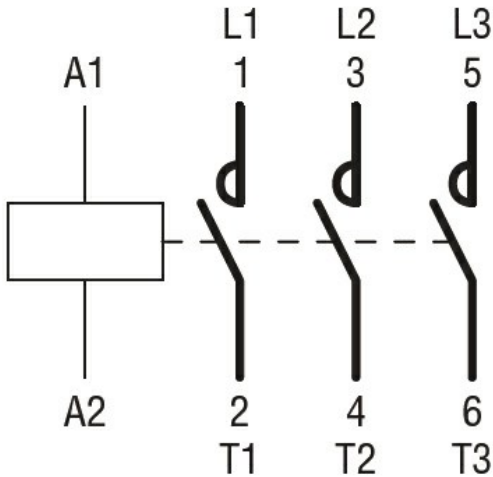
	in-rush	VA	400
	holding	VA	18
of 50/60Hz coil powered at 60Hz			
	in-rush	VA	400
	holding	VA	18
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz		W	18
DC coil operating			
DC rated control voltage			
	min	V	110
	max	V	125
DC operating voltage			
pick-up	min	%Us	80
	max	%Us	110
drop-out	min	%Us	20
	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	°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