



Product designation

Power contactor

Product type designation

BF630

Contact characteristics

Number of poles	Nr.	4
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 660
	AC-1 ($\leq 70^\circ\text{C}$)	A 570
	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 200
	400V	kW 355
	415V	kW 355
	440V	kW 400
	500V	kW 400
	690V	kW 500
	1000V	kW 250
Rated operational current AC-3 ($T \leq 55^\circ\text{C}$)	230V	A 630
	400V	A 630
	415V	A 630
	440V	A 630
	500V	A 552
	690V	A 493
	1000V	A 250
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW 303
	400V	kW 527
	500V	kW 579
	690V	kW 908
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
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
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
IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series			
	75V	A	800
	110V	A	800
	220V	A	800
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	75V	A	800
	110V	A	460
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
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
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	700
	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	4416
	690V	A	3944
Resistance per pole (average value)		mΩ	0.09
Power dissipation per pole (average value)			
	Ith	W	64
	AC-3	W	40
Tightening torque for terminals			
	min	Nm	55
	max	Nm	55
	min	Ibin	486
	max	Ibin	486
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	7.1
	max	Ibin	8.8
Power terminal protection according to IEC/EN 60529			IP00

Mechanical features

Operating position

normal

Vertical plan

		allowable	±30°		
Fixing			Screw		
Operations					
Mechanical life		cycles	5000000		
Electrical life		cycles	600000		
Safety related data					
Performance level B10d according to EN/ISO 13489-1					
		rated load	cycles	600000	
		mechanical load	cycles	5000000	
EMC compatibility		yes			
AC coil operating					
AC average coil consumption at 20°C					
of 50/60Hz coil powered at 50Hz		in-rush	VA	390	
		holding	VA	12	
of 50/60Hz coil powered at 60Hz		in-rush	VA	390	
		holding	VA	12	
Dissipation at holding ≤20°C 50Hz		W	4		
DC coil operating					
DC rated control voltage					
		min	V	24	
		max	V	48	
DC operating voltage					
pick-up		min	%Us	85 Us min	
		max	%Us	110 Us max	
drop-out		max	%Us	≤70 Us min	
Average coil consumption ≤20°C					
		in-rush	W	390	
		holding	W	4	
Max cycles frequency					
Mechanical operation		cycles/h	1000		
Operating times					
Average time for Us control					
in AC		Closing NO	min	ms	95
			max	ms	135
		Opening NO	min	ms	40
			max	ms	53
UL technical data					
Rated operational voltage AC (UL)		V	600		
Yielded mechanical performance					
for three-phase AC motor		200/208V	HP	200	
		220/240V	HP	250	
		460/480V	HP	500	
		575/600V	HP	600	
General USE					
Contactor					

	AC current	A	800
Short-circuit protection fuse, 600V			
High fault			
	Short circuit current	kA	100
	Fuse rating	A	800
	Fuse class		L

Standard fault

Short circuit current	kA	30
Fuse rating	A	1000
Fuse class		L

Ambient conditions

Temperature

Operating temperature

min	°C	-40
max	°C	70

Storage temperature

min	°C	-50
max	°C	80

Max altitude

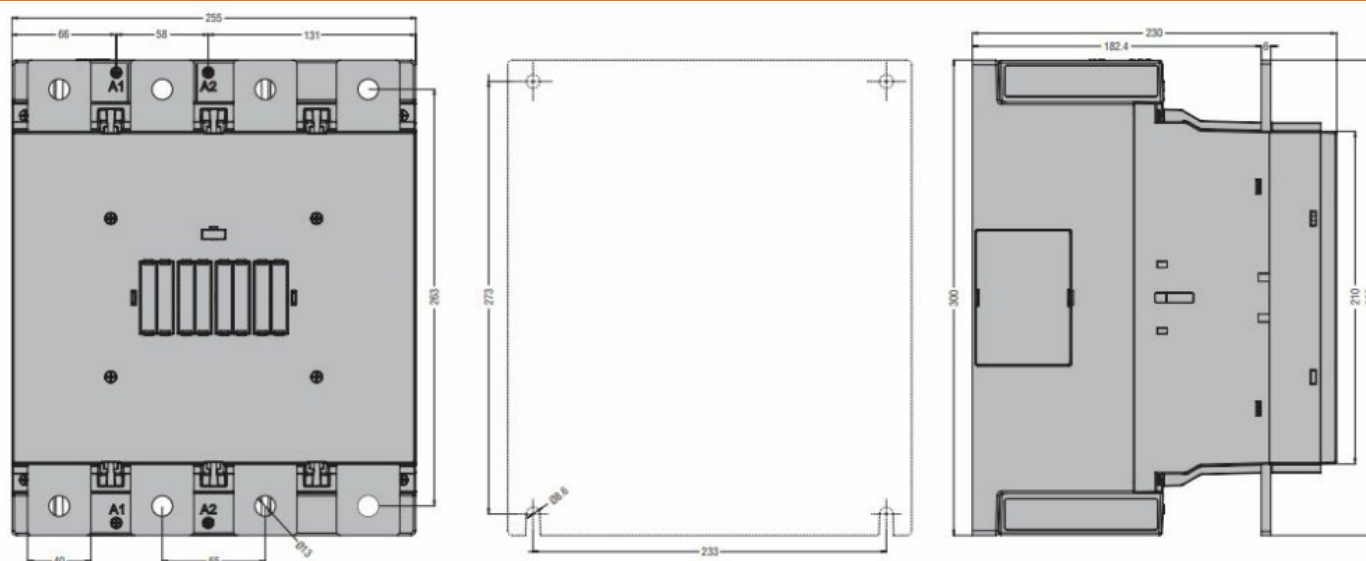
m	3000
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Resistance & Protection

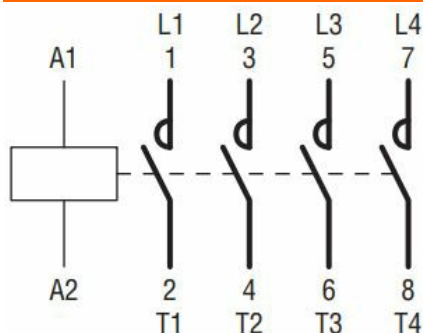
Pollution degree

3

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

cULus

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching