



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 I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series			
	75V	A	800
	110V	A	800
	220V	A	800
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
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
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
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	700
	460V	A	700
Short-time allowable current for 10s (IEC/EN60947-1)			
Protection fuse		A	5040
	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)		$\text{m}\Omega$	0.09
Power dissipation per pole (average value)			
	I _{th}	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		
Rated AC voltage at 50/60Hz, 60Hz	min V	100
	max V	250
AC operating voltage		
of 50/60Hz coil powered at 50Hz		
pick-up	min %Us	80 Us min
drop-out	max %Us	110 Us max
of 50/60Hz coil powered at 60Hz	max %Us	≤70 Us min
pick-up	min %Us	80 Us min
drop-out	max %Us	110 Us max
	max %Us	≤70 Us min
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	100
	max V	250
DC operating voltage		
pick-up	min %Us	85 Us min
drop-out	max %Us	110 Us max
	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

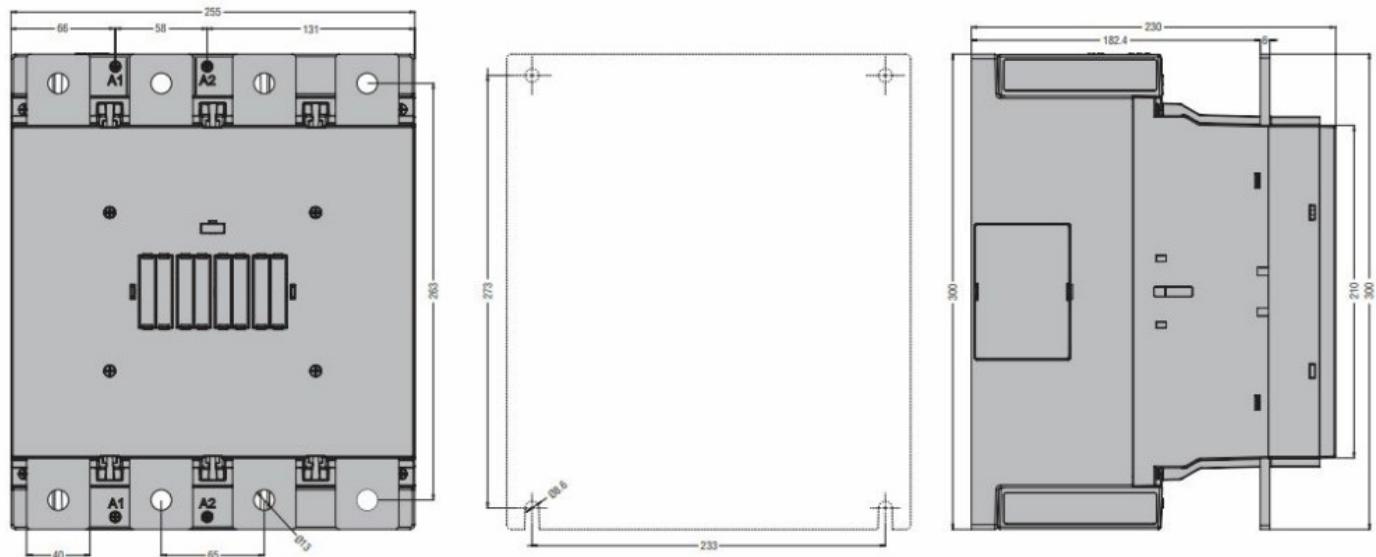
m	3000
---	------

Resistance & Protection

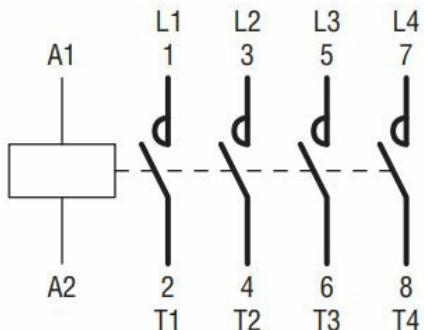
Pollution degree

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