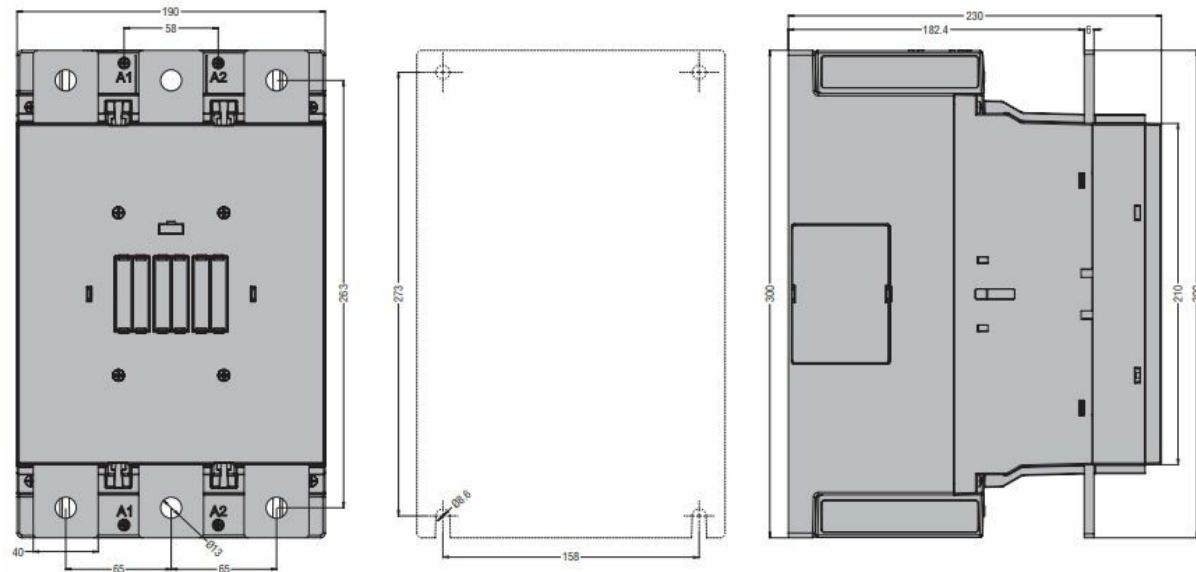




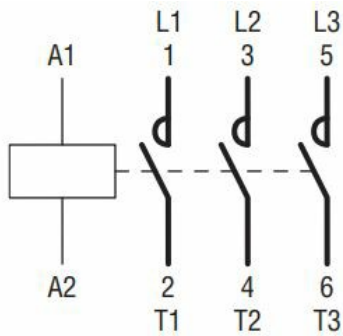
Product designation			Power contactor
Product type designation			BF420
Contact characteristics			
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		A	630
Operational current Ie			
	AC-1 (≤40°C)	A	600
	AC-1 (≤55°C)	A	530
	AC-1 (≤70°C)	A	460
	AC-3 (≤440V ≤55°C)	A	420
	AC-4 (400V)	A	200
Rated operational power AC-3 (T≤55°C)			
	230V	kW	132
	400V	kW	200
	415V	kW	250
	440V	kW	250
	500V	kW	250
	690V	kW	355
	1000V	kW	170
Rated operational current AC-3 (T≤55°C)			
	230V	A	420
	400V	A	420
	415V	A	420
	440V	A	420
	500V	A	344
	690V	A	354
	1000V	A	170
Rated operational power AC-1 (T≤40°C)			
	230V	kW	238
	400V	kW	436
	500V	kW	480
	690V	kW	753
IEC max current Ie in DC1 with L/R ≤ 1ms with 3 poles in series			
	330V	A	350
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	330V	A	280
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	330V	A	350
	460V	A	280
Short-time allowable current for 10s (IEC/EN60947-1)		A	3360

Protection fuse			
	gG (IEC)	A	800
	aM (IEC)	A	500
Making capacity (RMS value)		A	4200
Breaking capacity at voltage			
	440V	A	4200
	500V	A	2752
	690V	A	2832
Resistance per pole (average value)		mΩ	0.09
Power dissipation per pole (average value)			
	I _{th}	W	37
	AC-3	W	18
Tightening torque for terminals			
	min	Nm	55
	max	Nm	55
	min	I _{bin}	486
	max	I _{bin}	486
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	I _{bin}	7.1
	max	I _{bin}	8.8
Power terminal protection according to IEC/EN 60529			IP00
Mechanical features			
Operating position			
	normal allowable		Vertical plan ±30°
Fixing			Screw
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
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	%U _s	85 U _s min
	max	%U _s	110 U _s 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	150
		220/240V	HP	150
		460/480V	HP	350
		575/600V	HP	450
General USE				
Contactor		AC current	A	630
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