



Product designation Product type designation			Power contactor BF230
Contact characteristics			D1 200
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		Α	350
Operational current le			
	AC-1 (≤40°C)	Α	350
	AC-1 (≤55°C)	Α	290
	AC-1 (≤70°C)	Α	250
	AC-3 (≤440V ≤55°C)	Α	230
	AC-4 (400V)	Α	110
Rated operational power AC-3 (T≤55°C)			
	230V	kW	55
	400V	kW	110
	415V	kW	110
	440V	kW	132
	500V	kW	132
	690V	kW	160
D. ()	1000V	kW	110
Rated operational current AC-3 (T≤55°C)	0001/	Δ.	000
	230V	A	230
	400V	A	230
	415V	A	230
	440V	A	230
	500V	A	184
	690V 1000V	A	165
Poted energtional newer AC 1 (Tc/10°C)	10007	A	100
Rated operational power AC-1 (T≤40°C)	230V	kW	132
	400V	kW	230
	500V	kW	250 253
	690V	kW	397
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	030 V	KVV	391
120 max canonicio in 201 with 21x 2 mile with 1 polos in series	≤24V	Α	350
	48V	A	350
	75V	A	350
	110V	Α	145
	220V	A	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series		<u> </u>	
, , , , , , , , , , , , , , , , , , , ,	≤24V	Α	350



	48V	Α	350
	75V	Α	350
	110V	Α	270
	220V	Α	225
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
·	≤24V	Α	350
	48V	Α	350
	75V	Α	350
	110V	Α	270
	220V	Α	270
	330V	A	225
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
120 max current to in 201 was 2,112 mile was 1 percent conce	≤24V	Α	350
	48V	A	350
	75V	A	350
	110V	A	350
	220V	A	
IFC may current to in DC2 DC5 with L/D < 15mg with 1 notes in coring	220 V	A	350
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	20 AV	^	250
	≤24V	A	350
	48V	A	350
	75V	A	250
	110V	Α	135
	220V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	350
	48V	Α	350
	75V	Α	250
	110V	Α	225
	220V	Α	180
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	350
	48V	Α	350
	75V	Α	250
	110V	Α	250
	220V	Α	225
	330V	Α	180
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
·	≤24V	Α	350
	48V	Α	350
	75V	Α	250
	110V	Α	250
	220V	Α	225
	330V	Α	210
	460V	Α	180
Short-time allowable current for 10s (IEC/EN60947-1)		A	1840
Protection fuse			
	gG (IEC)	Α	400
	aM (IEC)	A	250
Making capacity (RMS value)	aivi (ILO)		2300
Breaking capacity (Kivis value)			2300
Dieaning capacity at voltage	440V	٨	1940
		A	1840
	500V	A	1472
Desigtance normale (every resulting)	690V	Α	1296
Resistance per pole (average value)		mΩ	0.18



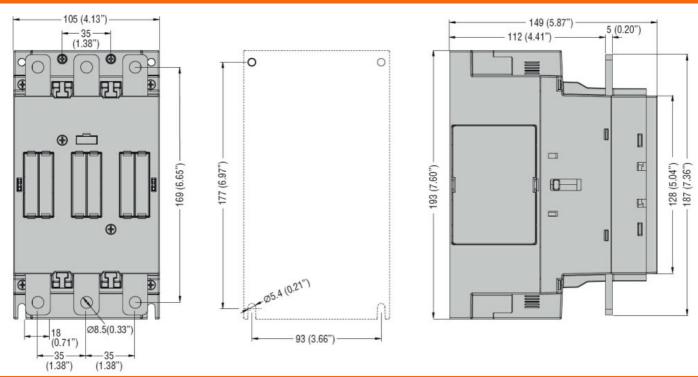
Power dissipation per pole (average value)				
		Ith	W	21
		AC-3	W	9.3
Tightening torque for terminals				
		min	Nm	18
		max	Nm	18
		min	Ibin	159
		max	Ibin	159
Tightening torque for coil terminal				
		min	Nm	0.8
		max	Nm	1
Power terminal protection according to IEC/	EN 60529			IP00
Mechanical features				••
Operating position				
Sperating position		normal		Vertical plan
		allowable		±30°
Eiving		ailUwable		
Fixing				Screw
Weight			g	3000
Operations			,	40000000
Mechanical life			cycles	10000000
Electrical life			cycles	1000000
Safety related data				
Performance level B10d according to EN/IS	SO 13489-1			
		rated load	cycles	1000000
EMC compatibility				yes
AC coil operating				
Datad AC valtage at EO/GOLLT COLLT				
Rated AC voltage at 50/60Hz, 60Hz				
Rated AC Voltage at 50/60Hz, 60Hz		min	V	100
Rated AC Voltage at 50/60Hz, 60Hz		min max	V V	100 250
_				
AC operating voltage	rered at 50Hz			
-				
AC operating voltage	ered at 50Hz pick-up	max	V	250
AC operating voltage		max min	V %Us	250 80 Us min
AC operating voltage	pick-up	max	V	250
AC operating voltage		max min max	V %Us %Us	80 Us min 110 Us max
AC operating voltage of 50/60Hz coil pow	pick-up drop-out	max min	V %Us	250 80 Us min
AC operating voltage	pick-up drop-out ered at 60Hz	max min max	V %Us %Us	80 Us min 110 Us max
AC operating voltage of 50/60Hz coil pow	pick-up drop-out	max min max max	V %Us %Us %Us	250 80 Us min 110 Us max ≤70 Us min
AC operating voltage of 50/60Hz coil pow	pick-up drop-out ered at 60Hz	max min max max	V %Us %Us %Us	80 Us min 110 Us max ≤70 Us min 80 Us min
AC operating voltage of 50/60Hz coil pow	pick-up drop-out ered at 60Hz pick-up	max min max max	V %Us %Us %Us	250 80 Us min 110 Us max ≤70 Us min
AC operating voltage of 50/60Hz coil pow	pick-up drop-out ered at 60Hz	max min max max	%Us %Us %Us %Us %Us	80 Us min 110 Us max ≤70 Us min 80 Us min 110 Us max
AC operating voltage of 50/60Hz coil pow of 50/60Hz coil pow	pick-up drop-out ered at 60Hz pick-up	max min max max	V %Us %Us %Us	80 Us min 110 Us max ≤70 Us min 80 Us min
AC operating voltage of 50/60Hz coil pow of 50/60Hz coil pow	pick-up drop-out ered at 60Hz pick-up	min max min max min max	%Us %Us %Us %Us %Us	80 Us min 110 Us max ≤70 Us min 80 Us min 110 Us max
AC operating voltage of 50/60Hz coil pow of 50/60Hz coil pow	pick-up drop-out ered at 60Hz pick-up drop-out	min max min max min max	%Us %Us %Us %Us %Us	80 Us min 110 Us max ≤70 Us min 80 Us min 110 Us max
AC operating voltage of 50/60Hz coil pow of 50/60Hz coil pow AC average coil consumption at 20°C	pick-up drop-out ered at 60Hz pick-up drop-out	min max min max min max	%Us %Us %Us %Us %Us	80 Us min 110 Us max ≤70 Us min 80 Us min 110 Us max
AC operating voltage of 50/60Hz coil pow of 50/60Hz coil pow AC average coil consumption at 20°C	pick-up drop-out ered at 60Hz pick-up drop-out	min max min max max max in-rush	%Us %Us %Us %Us %Us	80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min
AC operating voltage of 50/60Hz coil pow of 50/60Hz coil pow AC average coil consumption at 20°C of 50/60Hz coil pow	pick-up drop-out ered at 60Hz pick-up drop-out ered at 50Hz	min max min max min max	%Us %Us %Us %Us %Us %Us	80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min
AC operating voltage of 50/60Hz coil pow of 50/60Hz coil pow AC average coil consumption at 20°C	pick-up drop-out ered at 60Hz pick-up drop-out ered at 50Hz	min max min max min max in-rush holding	%Us %Us %Us %Us %Us %Us	80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 160230 1.53.0
AC operating voltage of 50/60Hz coil pow of 50/60Hz coil pow AC average coil consumption at 20°C of 50/60Hz coil pow	pick-up drop-out ered at 60Hz pick-up drop-out ered at 50Hz	min max max min max max in-rush holding in-rush	%Us %Us %Us %Us %Us %Us VA	80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 160230 1.53.0
AC operating voltage of 50/60Hz coil pow of 50/60Hz coil pow AC average coil consumption at 20°C of 50/60Hz coil pow of 50/60Hz coil pow	drop-out ered at 60Hz pick-up drop-out ered at 50Hz	min max min max min max in-rush holding	%Us %Us %Us %Us %Us %Us	80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 160230 1.53.0
AC operating voltage of 50/60Hz coil pow of 50/60Hz coil pow AC average coil consumption at 20°C of 50/60Hz coil pow	drop-out ered at 60Hz pick-up drop-out ered at 50Hz	min max max min max min max in-rush holding in-rush holding	%Us %Us %Us %Us %Us %Us VA VA	80 Us min 110 Us max ≤70 Us min 80 Us min 110 Us max ≤70 Us min 160230 1.53.0 160230 1.53.0
AC operating voltage of 50/60Hz coil pow of 50/60Hz coil pow AC average coil consumption at 20°C of 50/60Hz coil pow of 50/60Hz coil pow	drop-out ered at 60Hz pick-up drop-out ered at 50Hz	min max max min max max in-rush holding in-rush	%Us %Us %Us %Us %Us %Us VA	80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 160230 1.53.0

DC soil an arcting					
DC coil operating	10				
DC rated control voltage	j e			\	400
			min	V	100
DO an anatin musika na			max	V	250
DC operating voltage					
	pick-up			0/11	0511
			min	%Us	85 Us min
			max	%Us	110 Us max
	drop-out			0/11	.=0.11
			max	%Us	≤70 Us min
Average coil consump	tion ≤20°C			147	400 000
			in-rush	W	160230
			holding	W	1.53.0
Max cycles frequency				. ,	
Mechanical operation				cycles/h	1000
Operating times					
Average time for Us co					
	in AC				
		Closing NO			
			min	ms	50
			max	ms	100
		Opening NO			
			min	ms	30
			max	ms	75
UL technical data					
Yielded mechanical pe					
	for three-phase AC mo	otor			
			200/208V	HP	75
			220/230V	HP	75
			460/480V	HP	150
			575/600V	HP	200
General USE					
	Contactor				
			AC current	Α	350
Short-circuit protection					
	High fault				
			Short circuit current	kA	100
			Fuse rating	Α	400
			Fuse class		J
	Standard fault				
			Short circuit current	kA	10
			Fuse rating	Α	400
			Fuse class		RK5
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	on				
Pollution degree					3

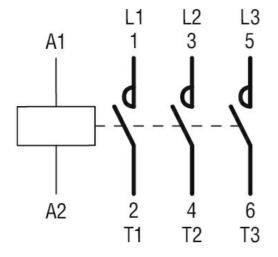
ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 230A, AC/DC COIL, 100...250VAC/DC

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