



Product designation			Power contactor
Product type designation  Contact characteristics			BF230
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency		IX V	
Operational nequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	THE C	A	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
	1000V	kW	110
Rated operational power AC-1 (T≤40°C)			
	230V	kW	132
	400V	kW	230
	500V	kW	253
IFC may current to in DC1 with L/D < 1 mg with 1 pales in series	690V	kW	397
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	<241/	۸	250
	≤24V 48V	A A	350 350
	75V	A	350
	110V	A	145
	220V	A	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤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	Α	225
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
· ·	≤24V	Α	350
	48V	Α	350
	75V	Α	350
	110V	Α	350
	220V	Α	350
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	350
	48V	Α	350
	75V	Α	250
	110V	A	135
	220V	A	- -
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	220 V		
ILC max current le in DC3-DG3 with L/N = 13ms with 2 poles in series	≤24V	Α	350
	≥24 V 48 V	A	350
	75V		
		A	250
	110V	A	225
150	220V	A	180
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	40.4V		050
	≤24V	A	350
	48V	Α	350
	75V	Α	250
	110V	Α	250
	220V	Α	225
	330V	A	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)		Α	1840
Protection fuse			
	gG (IEC)	Α	400
	aM (IEC)	Α	250
Making capacity (RMS value)		Α	2300
Breaking capacity at voltage			
	440V	Α	1840
	500V	Α	1472
	690V	Α	1296
Resistance per pole (average value)		mΩ	0.18
Power dissipation per pole (average value)			_
· · · · · · · · · · · · · · · · · · ·	Ith	W	21
	AC3	W	9.3
Tightening torque for terminals			
	min	Nm	18
	max	Nm	18
	min	lbin	159
	max	Ibin	159
	max	.~	



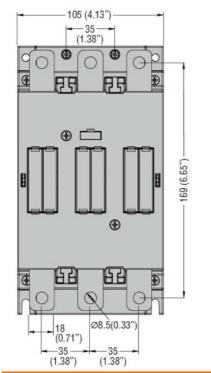
Tightoning targue for soil terminal			
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
Power terminal protection according to IEC/EN 60529	тих	14111	IP00
Mechanical features			11 00
Operating position			
operating position	normal		Vertical plan
	allowable		±30°
Fixing			Screw
Weight		g	3000
Operations			
Mechanical life		cycles	10000000
Electrical life		cycles	1000000
Safety related data		,	
Performance level B10d according to EN/ISO 13489-1			
ŭ	rated load	cycles	1000000
EMC compatibility			yes
AC coil operating			•
Rated AC voltage at 50/60Hz, 60Hz			
-	min	V	24
	max	V	60
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up			
	min	%Us	80 Us min
	max	%Us	110 Us max
drop-out			
	max	%Us	≤70 Us min
of 50/60Hz coil powered at 60Hz			
pick-up			
	min	%Us	80 Us min
	max	%Us	110 Us max
drop-out			
	max	%Us	≤70 Us min
AC average coil consumption at 20°C			
of 50/60Hz coil powered at 50Hz			
	in-rush	VA	160230
	holding	VA	1.53.0
of 50/60Hz coil powered at 60Hz			
	in-rush	VA	160230
	holding	VA	1.53.0
of 60Hz coil powered at 60Hz		1/4	400 000
	in-rush	VA	160230
Discipation at holding <20°C FOLI-	holding	VA	1.53.0
Dissipation at holding ≤20°C 50Hz		W	1.53.0
DC coil operating			
DC rated control voltage		17	20
	min	V	20
DC enerating veltage	max	V	60
DC operating voltage			
pick-up		0/11-	0E He:-
	min	%Us	85 Us min
	max	%Us	110 Us max

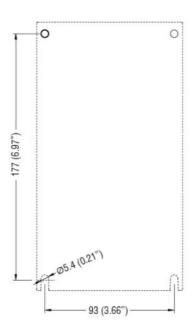


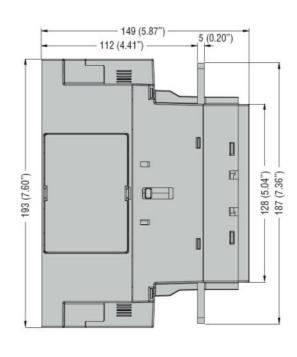


	drop-out			
	arop out	max	%Us	≤70 Us min
Average coil consump	tion ≤20°C			
		in-rush	W	160230
		holding	W	1.53.0
Max cycles frequency				
Mechanical operation			cycles/h	1000
Operating times	antro l			
Average time for Us co	in AC			
	Closing NO			
	Closing NO	min	ms	50
		max	ms	100
	Opening NO	max	1113	100
	Opening No	min	ms	30
		max	ms	75
UL technical data				
Yielded mechanical pe	erformance			
·	for three-phase AC motor			
		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			400
		Short circuit current	kA	100
		Fuse rating	Α	400
	Standard fault	Fuse class		J
	Statiuatu lauti	Short circuit current	kA	10
		Fuse rating	A	400
		Fuse class	^	RK5
Ambient conditions		1 430 01433		TUTO
Temperature				
, <del>-</del>	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
Dimensions [mm (in)]				

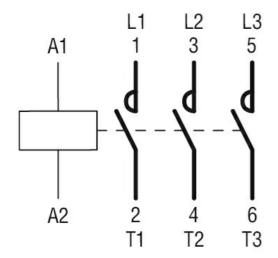
### THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 230A, AC/DC COIL, 24...60VAC - 20...60VDC







#### 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** 





Product designation			Power contactor
Product type designation			BF230
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		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
	1000V	kW	110
Rated operational power AC-1 (T≤40°C)			
	230V	kW	132
	400V	kW	230
	500V	kW	253
	690V	kW	397
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	350
	48V	Α	350
	75V	Α	350
	110V	Α	145
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤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	Α	225
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
· ·	≤24V	Α	350
	48V	Α	350
	75V	Α	350
	110V	Α	350
	220V	Α	350
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	350
	48V	Α	350
	75V	Α	250
	110V	A	135
	220V	A	- -
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	220 V		
ILC max current le in DC3-DG3 with L/N = 13ms with 2 poles in series	≤24V	Α	350
	≥24 V 48 V	A	350
	75V		
		A	250
	110V	A	225
150	220V	A	180
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	40.4V		050
	≤24V	A	350
	48V	Α	350
	75V	Α	250
	110V	Α	250
	220V	Α	225
	330V	A	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)		Α	1840
Protection fuse			
	gG (IEC)	Α	400
	aM (IEC)	Α	250
Making capacity (RMS value)		Α	2300
Breaking capacity at voltage			
	440V	Α	1840
	500V	Α	1472
	690V	Α	1296
Resistance per pole (average value)		mΩ	0.18
Power dissipation per pole (average value)			_
· · · · · · · · · · · · · · · · · · ·	Ith	W	21
	AC3	W	9.3
Tightening torque for terminals			
	min	Nm	18
	max	Nm	18
	min	lbin	159
	max	Ibin	159
	max	.~	

Tightening torque for c	coil terminal			
		min	Nm	0.8
		max	Nm	
	tion according to IEC/EN 60529			IP00
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Weight			g	3000
Operations				
Mechanical life			cycles	10000000
Electrical life			cycles	1000000
Safety related data				
	Od according to EN/ISO 13489-1			
	, and the second	rated load	cycles	1000000
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 5	0/60Hz, 60Hz			
· · · · · · · · · · · · · · · · · · ·	-,	min	V	60
		max	V	130
AC operating voltage		тих	•	100
7.0 operating voltage	of 50/60Hz coil powered at 50Hz			
	pick-up			
	ріск-ир	min	%Us	80 Us min
			%Us	110 Us max
	drap out	max	%US	110 05 max
	drop-out	may	0/110	∠70 Ha min
	of FO/COLLE and recovered at COLLE	max	%Us	≤70 Us min
	of 50/60Hz coil powered at 60Hz			
	pick-up		0/11-	00 11
		min	%Us	80 Us min
	In a second	max	%Us	110 Us max
	drop-out		0/11	
		max	%Us	≤70 Us min
AC average coil consu	•			
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	160230
		holding	VA	1.53.0
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	160230
		holding	VA	1.53.0
	of 60Hz coil powered at 60Hz			
		in-rush	VA	160230
		holding	VA	1.53.0
Dissipation at holding:	≤20°C 50Hz		W	1.53.0
DC coil operating				
DC rated control voltage	ge			
`		min	V	60
		max	V	130
DC operating voltage				
	pick-up			
	k.~ ∧k	min	%Us	85 Us min
		max	%Us	110 Us max
		IIIAX	/003	110 03 max

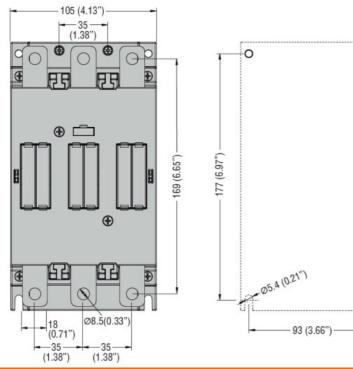


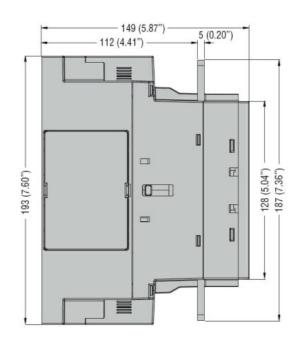


drop-out
max %Us ≤70 Us min
Average coil consumption ≤20°C
in-rush W 160230
holding W 1.53.0
Max cycles frequency
Mechanical operation cycles/h 1000
Operating times
Average time for Us control
in AC
Closing NO
min ms 50
max ms 100
Opening NO
min ms 30 max ms 75
UL technical data
Yielded mechanical performance
for three-phase AC motor
200/208V HP 75
220/230V HP 75
460/480V HP 150
575/600V HP 200
General USE
Contactor
AC current A 350
Short-circuit protection fuse, 600V
High fault
Short circuit current kA 100
Fuse rating A 400
Fuse class J
Standard fault
Short circuit current kA 10
Fuse rating A 400
Fuse class RK5
Ambient conditions Temperature
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 [mm (in)]

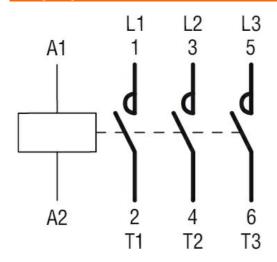
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ENERGY AND AUTOMATION





#### 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** 





Product designation Product type designation			Power contactor BF230
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		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
	1000V	kW	110
Rated operational power AC-1 (T≤40°C)			
	230V	kW	132
	400V	kW	230
	500V	kW	253
150 11 : BO4 : 11 1 /B 44 : 11 4 1 : : :	690V	kW	397
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	.0.43.4		
	≤24V	A	350
	48V	A	350
	75V	A	350
	110V	A	145
IFO to in DOA with L/D < 4 with 0 in a single	220V	A	<del>_</del>
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	2011	Λ	250
	≤24V	A	350
	48V	A	350
	75V	A	350
	110V	A	270
IEC may current to in DC1 with 1/D < 1 mg with 2 notes in series	220V	A	225
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	~2A\I	٨	250
	≤24V 48V	A	350 350
	48 V 75 V	A A	350 350
	130	^	330



	110V	Α	270
	220V	Α	270
	330V	Α	225
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	350
	48V	Α	350
	75V	A	350
	110V	A	350
	220V	A	350
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	350
	48V	Α	350
	75V	Α	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	A	250
	110V	A	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	A	350
	75V	A	250
	110V	Α	250
	220V	Α	225
	330V	Α	210
	460V	Α	180
Short-time allowable current for 10s (IEC/EN60947-1)		Α	1840
Protection fuse			
	gG (IEC)	Α	400
	aM (IEC)	Α	250
Making capacity (RMS value)	()	A	2300
Breaking capacity at voltage		,,	
breaking capacity at voltage	440\/	٨	1940
	440V	A	1840
	500V	A	1472
	690V	Α	1296
Resistance per pole (average value)		mΩ	0.18
Power dissipation per pole (average value)			
	Ith	W	21
	AC3	W	9.3
Tightening torque for terminals			-
	min	Nm	18
	max	Nm	18
	min	Ibin	159
	max	Ibin	159

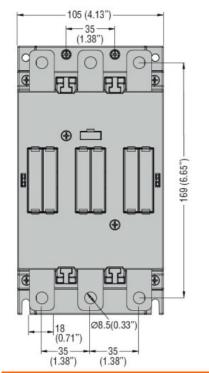


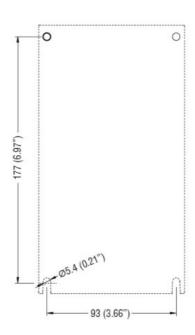
Tightening torque for coil terminal				
		min	Nm	0.8
D	1,00500	max	Nm	1
Power terminal protection according to IEC/EI	N 60529			IP00
Mechanical features				
Operating position				Mantiaal alaa
		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Weight			g	3000
Operations			a alaa	40000000
Mechanical life			cycles	10000000
Electrical life			cycles	1000000
Safety related data	10100.1			
Performance level B10d according to EN/ISO	13489-1			1000000
TMO 21.99		rated load	cycles	1000000
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 50/60Hz, 60Hz		•	17	100
		min	V	100
AC operating voltage		max	V	250
AC operating voltage	and at COLL			
of 50/60Hz coil power				
	pick-up	min	%Us	80 Us min
		min	%Us %Us	110 Us max
	drop-out	max	70US	110 US IIIAX
	arop-out	max	%Us	≤70 Us min
of 50/60Hz coil power	rod at 60Hz	IIIax	/003	270 05 111111
01 30/00112 con power	pick-up			
	pion up	min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out	max	7000	TTO GO THAK
	arop out	max	%Us	≤70 Us min
AC average coil consumption at 20°C		THOX	7000	
of 50/60Hz coil power	ed at 50Hz			
0. 00, 00. 1 <u>2</u> 00.1 po. 10.		in-rush	VA	160230
		holding	VA	1.53.0
of 50/60Hz coil power	red at 60Hz			
		in-rush	VA	160230
		holding	VA	1.53.0
of 60Hz coil powered	at 60Hz			
, , , , , , , , , , , , , , , , , , ,		in-rush	VA	160230
		holding	VA	1.53.0
Dissipation at holding ≤20°C 50Hz		<u> </u>	W	1.53.0
DC coil operating				
OC rated control voltage				
ŭ		min	V	100
		max	V	250
DC operating voltage				
pick-up				
, ,		min	%Us	85 Us min
		max	%Us	110 Us max

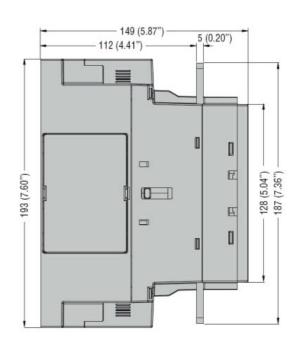


	drop-out			
		max	%Us	≤70 Us min
Average coil consump	otion ≤20°C			
		in-rush	W	160230
May avalog from anova		holding	W	1.53.0
Max cycles frequency Mechanical operation			cycles/h	1000
Operating times			Cycles/11	1000
Average time for Us of	control			
, wordgo umo for co o	in AC			
	Closing NO			
	· ·	min	ms	50
		max	ms	100
	Opening NO			
		min	ms	30
		max	ms	75
UL technical data				
Yielded mechanical p				
	for three-phase AC motor	000/000/	LID	75
		200/208V	HP	75 75
		220/230V 460/480V	HP HP	75 150
		575/600V	HP	200
General USE		313/000V	111	200
Concrar COL	Contactor			
		AC current	Α	350
Short-circuit protectio	n fuse, 600V			
	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
A mala i a mata a a malistic ma		Fuse class		RK5
Ambient conditions				
Temperature	Operating temperature			
	Operating temperature	min	°C	-40
		max	°C	70
	Storage temperature	Παλ		
	2.3.ago tomporataro	min	°C	-50
		max	°C	80
Max altitude			m	3000
Resistance & Protecti	on			
Pollution degree				3
Dimensions [mm (in)]				

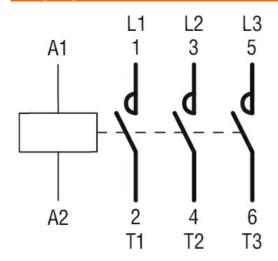
### THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 230A, AC/DC COIL, 100...250VAC/DC







#### 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

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### ETIM classification

**ETIM 8.0** 

#### THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 230A, AC/DC COIL, 250... 500VAC/DC **ENERGY AND AUTOMATION**



			GC.
Product designation			Power contactor
Product type designation			BF230
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		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
	1000V	kW	110
Rated operational power AC-1 (T≤40°C)			
	230V	kW	132
	400V	kW	230
	500V	kW	253
	690V	kW	397
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	350
	48V	Α	350
	75V	Α	350
	110V	Α	145
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤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 75V	A A	350 350



#### THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 230A, AC/DC COIL, 250... 500VAC/DC **ENERGY AND AUTOMATION**

	110V	Α	270
	220V	Α	270
	330V	Α	225
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	350
	48V	Α	350
	75V	Α	350
	110V	Α	350
	220V	A	350
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	220 V		330
TEC max current le in DC3-DC3 with L/K = 13ms with 1 poles in series	<241/	۸	250
	≤24V 48V	A	350
		A	350
	75V	A	250
	110V	A	135
	220V	Α	<del>-</del>
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)	→00 V		1840
Protection fuse			1070
1 TOTOGROTT TUGO	gG (IEC)	Α	400
			250
Making capacity (PMS value)	aM (IEC)	A A	2300
Making capacity (RMS value)		A	2300
Breaking capacity at voltage	4.4017	۸	1010
	440V	A	1840
	500V	A	1472
	690V	Α	1296
Resistance per pole (average value)		mΩ	0.18
Power dissipation per pole (average value)			
	Ith	W	21
<del></del>	AC3	W	9.3
Tightening torque for terminals	_		4.0
	min	Nm	18
	max	Nm	18
	min	lbin	159
	max	Ibin	159



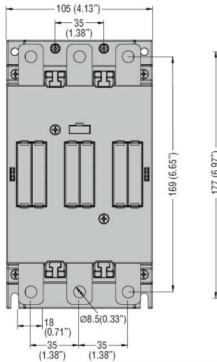
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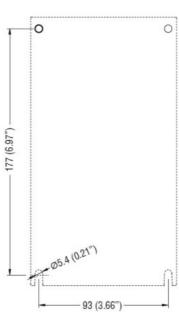
Tightening torque for c	oil torminal			
rightening torque for d	onterminal	min	Nm	0.8
		max	Nm	1
Power terminal protect	tion according to IEC/EN 60529	THOX:		IP00
Mechanical features	g toe, cce_c			00
Operating position				
- F		normal		Vertical plan
		allowable		±30°
Fixing		4		Screw
Weight			g	3000
Operations			9	
Mechanical life			cycles	10000000
Electrical life			cycles	1000000
Safety related data			0,0.00	
	Od according to EN/ISO 13489-1			
		rated load	cycles	1000000
EMC compatibility			-,	yes
AC coil operating				,
Rated AC voltage at 5	0/60Hz, 60Hz			
	•	min	V	250
		max	V	500
AC operating voltage			<u> </u>	
3 1 1 3 3	of 50/60Hz coil powered at 50Hz			
	pick-up			
	r · · · · · r	min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out		,,,,,	
	·	max	%Us	≤70 Us min
	of 50/60Hz coil powered at 60Hz			
	pick-up			
	·	min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out			
	·	max	%Us	≤70 Us min
AC average coil consu	ımption at 20°C			
Ū	of 50/60Hz coil powered at 50Hz			
	·	in-rush	VA	160230
		holding	VA	1.53.0
	of 50/60Hz coil powered at 60Hz			
	·	in-rush	VA	160230
		holding	VA	1.53.0
	of 60Hz coil powered at 60Hz			
	•	in-rush	VA	160230
		holding	VA	1.53.0
Dissipation at holding :	≤20°C 50Hz	<u> </u>	W	1.53.0
DC coil operating				
DC rated control voltag	ge			
		min	V	250
		max	V	500
DC operating voltage				
- 3	pick-up			
		min	%Us	85 Us min
		max	%Us	110 Us max

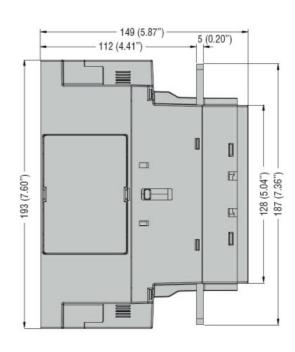


	drop-out			
	•	max	%Us	≤70 Us min
Average coil consumpt	ion ≤20°C			
		in-rush	W	160230
		holding	W	1.53.0
Max cycles frequency				
Mechanical operation			cycles/h	1000
Operating times				
Average time for Us co				
	in AC			
	Closing NO			50
		min	ms	50
	Onening NO	max	ms	100
	Opening NO	min	me	30
		max	ms ms	75
UL technical data		ıılax	1115	13
Yielded mechanical per	formance			
riciaca mediameai pei	for three-phase AC motor			
	ioi tiliee-pilase Ao motoi	200/208V	HP	75
		220/230V	HP	75
		460/480V	HP	150
		575/600V	HP	200
General USE		0.0,000		
	Contactor			
		AC current	Α	350
Short-circuit protection	fuse, 600V			•
	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		o <del>-</del>	
		min	°C	-50
- ICC 1		max	°C	80
Max altitude			m	3000
Resistance & Protectio	n			2
Pollution degree				3
Dimensions [mm (in)]				

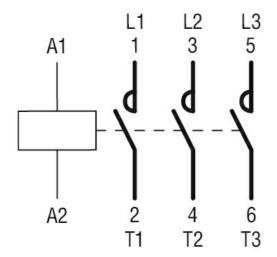
**ENERGY AND AUTOMATION** 







#### Wiring diagrams



#### Certifications and compliance

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