



Product designation			Power contactor
Product type designation Contact characteristics			BF195
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 frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	THE CONTRACTOR OF THE CONTRACT	Α	275
Operational current le			
	AC-1 (≤40°C)	Α	275
	AC-1 (≤55°C)	Α	230
	AC-1 (≤70°C)	Α	200
	AC-3 (≤440V ≤55°C)	Α	195
	AC-4 (400V)	Α	95
Rated operational power AC-3 (T≤55°C)	, ,		_
. , ,	230V	kW	55
	400V	kW	90
	415V	kW	110
	440V	kW	110
	500V	kW	132
	690V	kW	160
	1000V	kW	90
Rated operational power AC-1 (T≤40°C)			
	230V	kW	104
	400V	kW	181
	500V	kW	199
	690V	kW	312
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	275
	48V	Α	275
	75V	Α	275
	110V	Α	120
	220V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	40.407		075
	≤24V	A	275
	48V	A	275
	75V	A	275
	110V	A	170 150
IEC may current le in DC1 with L/D < 1mc with 2 pales in carios	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V	Α	275
	≤24V 48V	A	275 275
	46 V 75 V	A	275 275
	130	^	210



	110V	Α	170
	220V	Α	150
	330V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	275
	48V	Α	275
	75V	A	275
	110V	A	275
150	220V	Α	275
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series		_	
	≤24V	Α	275
	48V	Α	275
	75V	Α	180
	110V	Α	90
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
·	≤24V	Α	275
	48V	Α	275
	75V	Α	180
	110V	A	140
	220V	A	100
IFO	220 V	<u> </u>	100
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series		_	
	≤24V	Α	275
	48V	Α	275
	75V	Α	180
	110V	Α	160
	220V	Α	140
	330V	Α	100
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
·	≤24V	Α	275
	48V	Α	275
	75V	Α	180
	110V	Α	160
	220V	A	160
	330V	A	160
	460V	A	100
Short-time allowable current for 10s (IEC/EN60947-1)		Α	1560
Protection fuse			
	gG (IEC)	Α	315
	aM (IEC)	Α	250
Making capacity (RMS value)		Α	1658
Breaking capacity at voltage			
	440V	Α	1658
	500V	Α	1326
	690V	Α	1377
Resistance per pole (average value)	330 v	mΩ	0.18
		11122	0.10
Power dissipation per pole (average value)	Inl-	14/	10
	Ith	W	13
-	AC3	W	6.7
Tightening torque for terminals			
	min	Nm	18
	max	Nm	18
	min	lbin	159
	max	Ibin	159



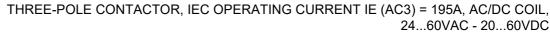
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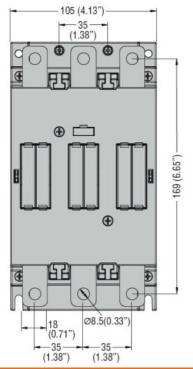
Tightening torque for c	oil torminal			
rigitiering torque for c	on terriiriai	min	Nm	0.8
		max	Nm	1
Power terminal protect	tion according to IEC/EN 60529			IP00
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Weight			g	3000
Operations			<u> </u>	
Mechanical life			cycles	10000000
Electrical life			cycles	1000000
Safety related data				
	Od according to EN/ISO 13489-1			
	ŭ	rated load	cycles	1000000
EMC compatibility			.,	yes
AC coil operating				
Rated AC voltage at 50	0/60Hz, 60Hz			
		min	V	24
		max	V	60
AC operating voltage			<u> </u>	
to operating remage	of 50/60Hz coil powered at 50Hz			
	pick-up			
	pion up	min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out	max	7000	rio do max
	arop cut	max	%Us	≤70 Us min
	of 50/60Hz coil powered at 60Hz		,,,,,	
	pick-up			
	From Sp	min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out			
	·	max	%Us	≤70 Us min
AC average coil consu	Imption at 20°C			
3	of 50/60Hz coil powered at 50Hz			
	, , , , , , , , , , , , , , , , , , , ,	in-rush	VA	160230
		holding	VA	1.53.0
	of 50/60Hz coil powered at 60Hz	<u></u>		
	r	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
OC coil operating				
OC rated control voltag	ge			
	-	min	V	20
		max	V	60
DC operating voltage				
, 3	pick-up			
	* *1	min	%Us	85 Us min
		max	%Us	110 Us max
		max		

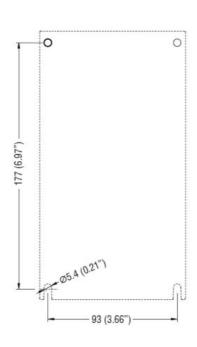


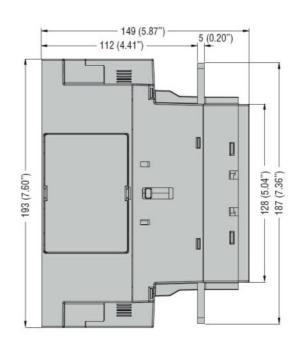


	drop-out			
		max	%Us	≤70 Us min
Average coil consump	tion ≤20°C			
		in-rush	W	160230
May avalog from an		holding	W	1.53.0
Max cycles frequency Mechanical operation			cycles/h	1000
Operating times			Cycles/II	1000
Average time for Us co	ontrol			
Avorago umo for co o	in AC			
	Closing NO			
	3	min	ms	50
		max	ms	100
	Opening NO			
		min	ms	35
		max	ms	75
UL technical data				
Yielded mechanical pe				
	for three-phase AC motor			
		200/208V	HP	60
		220/230V	HP	75
		460/480V	HP	150
General USE		575/600V	HP	150
General USE	Contactor			
	Contactor	AC current	Α	275
Short-circuit protection	rfuse 600V	AO cuitent		213
Orion official protection	High fault			
	riigiriaait	Short circuit current	kA	100
		Fuse rating	A	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
	12	max	°C	70
	Storage temperature		0.7	
		min	°C	-50
NA ICC - I		max	°C	80
Max altitude			m	3000
Resistance & Protection	on			2
Pollution degree				3
Dimensions [mm (in)]				

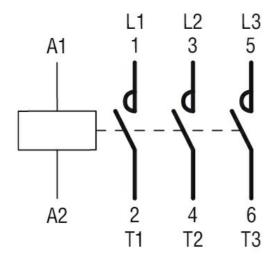








Wiring diagrams



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 BF195
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	275
Operational current le			
	AC-1 (≤40°C)	Α	275
	AC-1 (≤55°C)	Α	230
	AC-1 (≤70°C)	Α	200
	AC-3 (≤440V ≤55°C)	Α	195
	AC-4 (400V)	Α	95
Rated operational power AC-3 (T≤55°C)	0001/		
	230V	kW	55
	400V	kW	90
	415V	kW	110
	440V	kW	110
	500V	kW	132
	690V	kW kW	160
Rated operational power AC-1 (T≤40°C)	1000V	KVV	90
Nated operational power AC-1 (1540 C)	230V	kW	104
	400V	kW	181
	500V	kW	199
	690V	kW	312
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	000 V	1000	012
TEO Max carrent to in Bo 1 wait E/10 = Time wait 1 poles in conce	≤24V	Α	275
	48V	Α	275
	75V	A	275
	110V	Α	120
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
•	≤24V	Α	275
	48V	Α	275
	75V	Α	275
	110V	Α	170
	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	275
	48V	Α	275
	75V	Α	275



	110V	Α	170
	220V	Α	150
	330V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	0001	- , ,	100
120 max current le in 201 with 2/102 mis with 4 poles in series	≤24V	Α	275
	48V	A	275
	75V		
		A	275
	110V	A	275
	220V	Α	275
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series		_	
	≤24V	Α	275
	48V	Α	275
	75V	Α	180
	110V	Α	90
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
·	≤24V	Α	275
	48V	Α	275
	75V	A	180
	110V	A	140
	220V	A	100
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	ZZU V		100
TEC max current le in DC3-DC5 with L/R \(\) 15ms with 3 poles in series	2041 /	۸	075
	≤24V	A	275
	48V	Α	275
	75V	Α	180
	110V	Α	160
	220V	Α	140
	330V	Α	100
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	275
	48V	Α	275
	75V	Α	180
	110V	Α	160
	220V	Α	160
	330V	Α	160
	460V	Α	100
Short-time allowable current for 10s (IEC/EN60947-1)	700 €		1560
Protection fuse			1000
i ioleolioni iuse	~C (IFO)	۸	215
	gG (IEC)	A	315
Malian and the (DMO) at all	aM (IEC)	A	250
Making capacity (RMS value)		Α	1658
Breaking capacity at voltage			
	440V	Α	1658
	500V	Α	1326
	690V	Α	1377
Resistance per pole (average value)		mΩ	0.18
Power dissipation per pole (average value)			
,	Ith	W	13
	AC3	W	6.7
Tightening torque for terminals		<u></u>	
	min	Nm	18
	max	Nm	18
	min	Ibin	159
	max	Ibin	159

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Tightening torque for co	oil terminal			
		min	Nm	0.8
		max	Nm	1
	on 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				
•	d according to EN/ISO 13489-1			
		rated load	cycles	1000000
EMC compatibility		14.04 1044	0,0.00	yes
AC coil operating				yes
Rated AC voltage at 50	1/60Hz 60Hz			
naiou no vollage al 30	7001 12, 001 12	min	V	60
			V	
A O		max	V	130
AC operating voltage	(50/00LL			
	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 consu	mption at 20°C			
Ü	of 50/60Hz coil powered at 50Hz			
	,	in-rush	VA	160230
		holding	VA	1.53.0
	of 50/60Hz coil powered at 60Hz	9		
	01 00/00112 0011 poworod at 00112	in-rush	VA	160230
		holding	VA	1.53.0
	of 60Hz coil powered at 60Hz	Holding	VA	1.00.0
	or our iz con powered at our iz	in-rush	VA	160230
		holding	VA VA	1.53.0
Dissipation at halding	200°C 50U-	noiding		
Dissipation at holding ≤	20 C DUNZ		W	1.53.0
DC coil operating	•			
DC rated control voltag	е			22
		min	V	60
		max	V	130
DC operating voltage				
	pick-up			
		min	%Us	85 Us min
		max	%Us	110 Us max

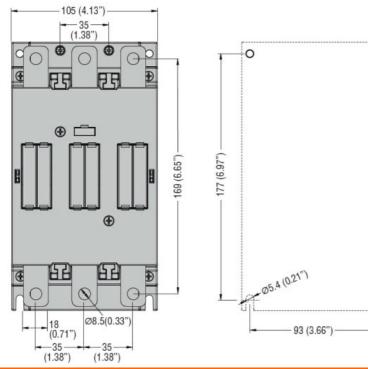


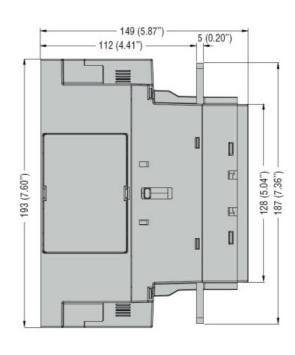


	drop-out			
	diop-out	max	%Us	≤70 Us min
Average coil consumpt	ion ≤20°C			
		in-rush	W	160230
		holding	W	1.53.0
Max cycles frequency				
Mechanical operation			cycles/h	1000
Operating times				
Average time for Us co				
	in AC			
	Closing NO			
		min	ms	50
	On aging NO	max	ms	100
	Opening NO	min	me	35
		max	ms ms	75
UL technical data		illax	1110	10
Yielded mechanical per	formance			
riolada modilamear por	for three-phase AC motor			
	Ter times prides rie meter	200/208V	HP	60
		220/230V	HP	75
		460/480V	HP	150
		575/600V	HP	150
General USE				
	Contactor			
		AC current	Α	275
Short-circuit protection	fuse, 600V			
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	400
	12	Fuse class		J
	Standard fault	01		4.0
		Short circuit current	kA ^	10
		Fuse rating Fuse class	Α	400 RK5
Ambient conditions		ruse class		KNO
Temperature				
Tomporature	Operating temperature			
	oporating temperature	min	°C	-40
		max	°C	70
	Storage temperature			
	•	min	°C	-50
		max	°C	80
Max altitude			m	3000
Resistance & Protectio	n			
Pollution degree				3
Dimensions [mm (in)]				

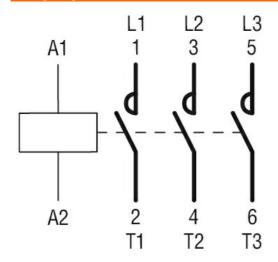
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ENERGY AND AUTOMATION





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 BF195
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	275
Operational current le			
	AC-1 (≤40°C)	Α	275
	AC-1 (≤55°C)	Α	230
	AC-1 (≤70°C)	Α	200
	AC-3 (≤440V ≤55°C)	Α	195
	AC-4 (400V)	Α	95
Rated operational power AC-3 (T≤55°C)	0001/		
	230V	kW	55
	400V	kW	90
	415V	kW	110
	440V	kW	110
	500V 690V	kW	132
	1000V	kW kW	160 90
Rated operational power AC-1 (T≤40°C)	10007	KVV	90
Nated operational power AC-1 (1540 C)	230V	kW	104
	400V	kW	181
	500V	kW	199
	690V	kW	312
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	030 V	KVV	312
TEO Max outfolk to in Bo 1 wat E/X = Title wat 1 poles in solids	≤24V	Α	275
	48V	Α	275
	75V	A	275
	110V	Α	120
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
'	≤24V	Α	275
	48V	Α	275
	75V	Α	275
	110V	Α	170
	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	275
	48V	Α	275
	75V	Α	275



	110V	Α	170
	220V	Α	150
	330V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	0001	- , ,	100
120 max current le in 201 with 2/102 mis with 4 poles in series	≤24V	Α	275
	48V	A	275
	75V		
		A	275
	110V	A	275
	220V	Α	275
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series		_	
	≤24V	Α	275
	48V	Α	275
	75V	Α	180
	110V	Α	90
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
·	≤24V	Α	275
	48V	Α	275
	75V	A	180
	110V	A	140
	220V	A	100
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	ZZU V		100
TEC max current le in DC3-DC5 with L/R \(\) 15ms with 3 poles in series	2041 /	۸	075
	≤24V	A	275
	48V	Α	275
	75V	Α	180
	110V	Α	160
	220V	Α	140
	330V	Α	100
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	275
	48V	Α	275
	75V	Α	180
	110V	Α	160
	220V	Α	160
	330V	Α	160
	460V	Α	100
Short-time allowable current for 10s (IEC/EN60947-1)	700 €		1560
Protection fuse			1000
i ioleolioni iuse	~C (IFO)	۸	215
	gG (IEC)	A	315
Malian and the (DMO) at all	aM (IEC)	A	250
Making capacity (RMS value)		Α	1658
Breaking capacity at voltage			
	440V	Α	1658
	500V	Α	1326
	690V	Α	1377
Resistance per pole (average value)		mΩ	0.18
Power dissipation per pole (average value)			
,	Ith	W	13
	AC3	W	6.7
Tightening torque for terminals		<u></u>	
	min	Nm	18
	max	Nm	18
	min	Ibin	159
	max	Ibin	159



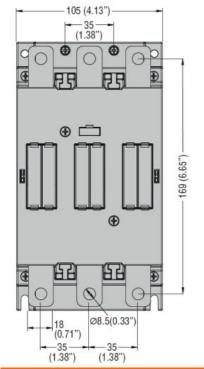
Tightening torque for coil terminal min	Tightoning torque for o	oil terminal			
Power terminal protection according to IEC/EN 60529 1000000 10000000 100000000000000	rightening torque for o	on terminal	min	Nlm	0.0
Power terminal protection according to IEC/EN 60529 Power terminal protection according to IEC/EN 60529 Power at the protection according to IEC/EN 60529 Power at the protection and allowable Power at the protection and allowable Power at the protection allowable Power at the pr					
Mechanical features Operating position normal allowable Vertical plan ±30° ±30° ±30° ±30° ±30° ±30° ±30° ±30°	Dower terminal protect	tion according to IEC/EN 60530	IIIax	INIII	
Operating position normal allowable 4 230°		lion according to IEC/EN 60329			IFUU
Normal					
Series	Operating position		normal		Vertical plan
Screw Weight g 3000 Operations g 3000 Operations Screw Growth Grow					-
Weight	Eiving		allowable		
Operations				~	
Mechanical life				g	3000
Electrical life	•			ovoloo	1000000
Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 1000000 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 max %Us \$70 Us min \$10 Us max \$10 Us max				-	
Performance level B10d according to EN/ISO 13489-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz Rated AC voltage at 50/60Hz, 60Hz Rated AC voltage at 50/60Hz coil powered at 50Hz pick-up AC operating voltage of 50/60Hz coil powered at 60Hz pick-up Pick-up AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 60Hz pick-up AC average coil consumption at 20°C of 50/60Hz coil powered at 60Hz of 50/60Hz coil powered at 60Hz of 50/60Hz coil powered at 50Hz AC average coil consumption at 20°C of 50/60Hz coil powered at 60Hz 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 C coil operating DC rated control voltage pick-up min V 100 max V 250 DC operating voltage pick-up min V 100 max V 250 DC operating voltage pick-up min V 100 max V 250				cycles	1000000
Material	•	Nd according to FN/ICO 42400 4			
EMC compatibility yes AC coll operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min	Performance level B10	od according to EN/ISO 13489-1	لمحمل المحفود	مامرم	4000000
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 max %Us 80 Us min max %Us 110 Us max drop-out max %Us 570 Us min of 50/60Hz coil powered at 60Hz pick-up min max %Us 80 Us min max drop-out max %Us 570 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 holding VA 1.53.0 of 60Hz coil powered at 60Hz in-rush holding VA 1.53.0 Dissipation at holding ≤20°C 50Hz W 1.53.0 DC coil operating min V 100 max V 250 DC operating voltage min V 250 min V 250 100 max V 250	TMO serve at la lite.		rated load	cycles	
Rated AC voltage at 50/60Hz, 60Hz min V 100 max V 250 AC operating voltage					yes
Min V 100		2/6017 6017			
AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min wx wus 80 Us min max wus 110 Us max drop-out of 50/60Hz coil powered at 60Hz pick-up min wx wus 270 Us min max wus 110 Us max drop-out min wx wus 110 Us max drop-out max wus 110 Us max wus 110 Us max drop-out max wus 110 Us max drop-out max wus 270 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 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 DC coil operating DC rated control voltage pick-up min v 100 max v 250 B5 Us min wus 85 Us min	Rated AC voltage at 50	J/0UПZ, 0UПZ	•	17	400
AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out min					
of 50/60Hz coil powered at 50Hz pick-up min Mus 80 Us min max Mus 110 Us max drop-out max Mus 570 Us min of 50/60Hz coil powered at 60Hz pick-up min Mus 80 Us min max Mus 570 Us min max Mus 110 Us max max Mus 110 Us max drop-out min max Mus 110 Us max drop-out max Mus 110 Us max max Mus 570 Us min max Mus 570 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 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 pick-up min V 100 max V 250 DC operating Va 55 Us min min Mus 85 Us min min Mus 80 Us min min max min min min min max min min min min min max min min min min min max min min min min min max min min min min min min min max min max min	A O (1)		max	V	250
Pick-up min %Us 80 Us min max %Us 110 Us max drop-out max %Us ≤70 Us min max max %Us ≤70 Us min min %Us ≤70 Us min wide min %Us ≤70 Us min min %Us ≤70 Us min wide ≤70 Us min min %Us ≤70 Us min wide ≤70 Us min min %Us ≤70 Us min wide	AC operating voltage	(50/0011 11 1 5011			
Min Mus		•			
drop-out max %Us 110 Us max max max %Us ≤70 Us min max ma		ріск-ир	•	0/11-	00.11
drop-out					
Max Mus ≤70 Us min		deser and	max	%Us	110 Us max
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 in-rush VA 160230 holding VA 1.53.0 Dissipation at holding ≤20°C 50Hz DC coil operating DC rated control voltage pick-up min V 100 max V 250 DC operating voltage pick-up		arop-out		0/11-	470 I I
Pick-up min %Us 80 Us min max %Us 110 Us max		of 50/0011= and an only	max	%US	≤/U US Min
min max min		•			
Max Mus 110 Us max		ріск-ир		0/11-	00.11
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 in-rush vA 160230 holding vA 1.53.0 of 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 of 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 of 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 of 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 of 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 of 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 of 60Hz coil powered at 60Hz in-rush vA 160230 in-rush vA 160					
Max %Us ≤70 Us min		draw acut	max	%US	110 US max
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 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 min V 100 max V 250 DC operating voltage pick-up min %Us 85 Us min		drop-out		0/116	<70 He main
of 50/60Hz coil powered at 50Hz in-rush VA 160230 holding VA 1.53.0 of 50/60Hz coil powered at 60Hz	AO		max	%US	≤/U US Min
in-rush VA 160230 holding VA 1.53.0 of 50/60Hz coil powered at 60Hz	AC average coll consu	•			
holding		of 50/60Hz coil powered at 50Hz	in made	1/4	400 000
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 min V 100 max V 250 DC operating voltage pick-up min %Us 85 Us min					
in-rush		of FO/COLLE coil powered at COLLE	noluing	VA	1.53.0
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 min V 100 max V 250 DC operating voltage pick-up min %Us 85 Us min		of 50/60Hz coil powered at 60Hz	in much	١/٨	160 220
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 min V 100 max V 250 DC operating voltage pick-up min %Us 85 Us min					
in-rush		of COLIT poil powered at COLIT	noluling	VA	1.55.0
bolding VA 1.53.0 Dissipation at holding ≤20°C 50Hz W 1.53.0 DC coil operating DC rated control voltage min V 100 max V 250 DC operating voltage pick-up min %Us 85 Us min		or ouriz coil powered at ouriz	in much	١/٨	160 220
Dissipation at holding ≤20°C 50Hz DC coil operating DC rated control voltage min V 100 max V 250 DC operating voltage pick-up min %Us 85 Us min					
DC coil operating DC rated control voltage min V 100 max V 250 DC operating voltage pick-up min %Us 85 Us min	Discipation at holding	<20°C EU∏-	Holding		
DC rated control voltage min V 100 max V 250 DC operating voltage pick-up min %Us 85 Us min		<u>-20 0 001 12</u>		V V	1.00.0
min V 100 max V 250 DC operating voltage pick-up min %Us 85 Us min		10			
DC operating voltage pick-up max V 250 max V 250 min %Us 85 Us min	Do Taled Control voltag	y ∽	min	\/	100
DC operating voltage pick-up min %Us 85 Us min					
pick-up min %Us 85 Us min	DC operating voltage		max	V	200
min %Us 85 Us min	Do operating voltage	niak un			
		ріск-ир		0/11-	OE I lo min
max %us ituus max					
			IIIdX	/0US	i iu us iliax

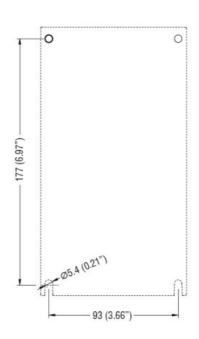


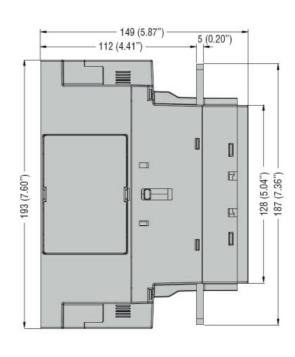


	drop-out			
		max	%Us	≤70 Us min
Average coil consump	tion ≤20°C			
		in-rush	W	160230
May avalog from an		holding	W	1.53.0
Max cycles frequency Mechanical operation			cycles/h	1000
Operating times			Cycles/II	1000
Average time for Us co	ontrol			
Avorago umo for co o	in AC			
	Closing NO			
	3	min	ms	50
		max	ms	100
	Opening NO			
		min	ms	35
		max	ms	75
UL technical data				
Yielded mechanical pe				
	for three-phase AC motor			
		200/208V	HP	60
		220/230V	HP	75
		460/480V	HP	150
General USE		575/600V	HP	150
General USE	Contactor			
	Contactor	AC current	Α	275
Short-circuit protection	rfuse 600V	AO cuitent		213
Orion official protection	High fault			
	riigiriaait	Short circuit current	kA	100
		Fuse rating	A	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
	12	max	°C	70
	Storage temperature		0.7	
		min	°C	-50
NA ICC - I		max	°C	80
Max altitude			m	3000
Resistance & Protection	on			2
Pollution degree				3
Dimensions [mm (in)]				

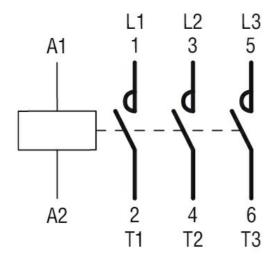
THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 195A, AC/DC COIL, 100...250VAC/DC







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

cULus

ETIM classification

ETIM 8.0

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 195A, AC/DC COIL, 250... 500VAC/DC **ENERGY AND AUTOMATION**



			ale.
Product designation			Power contactor
Product type designation			BF195
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	275
Operational current le			
	AC-1 (≤40°C)	Α	275
	AC-1 (≤55°C)	Α	230
	AC-1 (≤70°C)	Α	200
	AC-3 (≤440V ≤55°C)	Α	195
	AC-4 (400V)	Α	95
Rated operational power AC-3 (T≤55°C)			
	230V	kW	55
	400V	kW	90
	415V	kW	110
	440V	kW	110
	500V	kW	132
	690V	kW	160
	1000V	kW	90
Rated operational power AC-1 (T≤40°C)			
	230V	kW	104
	400V	kW	181
	500V	kW	199
	690V	kW	312
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	275
	48V	Α	275
	75V	Α	275
	110V	Α	120
	220V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	275
	48V	Α	275
	75V	Α	275
	110V	A	170
IEO	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		_	
	≤24V	Α	275
	48V	Α	275
	75V	Α	275



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 195A, AC/DC COIL, 250... 500VAC/DC **ENERGY AND AUTOMATION**

	110V	Α	170
	220V	Α	150
	330V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	275
	48V	Α	275
	75V	Α	275
	110V	Α	275
	220V	Α	275
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
·	≤24V	Α	275
	48V	Α	275
	75V	Α	180
	110V	Α	90
	220V	Α	-
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series		,,	-
	≤24V	Α	275
	48V	A	275
	75V	A	180
	110V	A	140
	220V	A	100
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	220 V		100
ILO max current le in DO3-DO3 with L/N = 13ms with 3 poles in series	≤24V	Α	275
	48V	A	275
	75V	A	180
	110V	A	160
	220V	A	140
IFC many asymptotic in DC2 DC5 with L/D < 45 may with 4 malas in parisa	330V	A	100
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	40 AV /	^	075
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	Α	160
	220V	Α	160
	330V	Α	160
	460V	Α	100
Short-time allowable current for 10s (IEC/EN60947-1)		A	1560
Protection fuse			
	gG (IEC)	Α	315
·	aM (IEC)	Α	250
Making capacity (RMS value)		Α	1658
Breaking capacity at voltage			
	440V	Α	1658
	500V	Α	1326
	690V	Α	1377
Resistance per pole (average value)		mΩ	0.18
Power dissipation per pole (average value)			
	Ith	W	13
	AC3	W	6.7
Tightening torque for terminals			_
	min	Nm	18
	max	Nm	18
	min	Ibin	159
	max	Ibin	159



BF19500E400

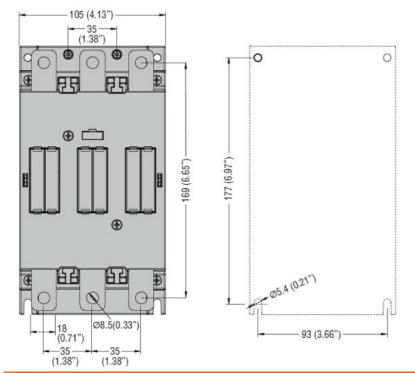
THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 195A, AC/DC COIL, 250... 500VAC/DC **ENERGY AND AUTOMATION**

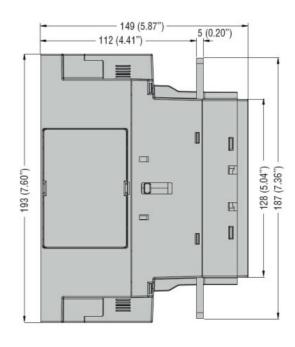
Tightening torque for c	oil torminal			
rightening torque for d	onterminal	min	Nm	0.8
		max	Nm	1
Power terminal protect	tion according to IEC/EN 60529	THOX:		IP00
Mechanical features	g toe, t ccc_c			00
Operating position				
- F		normal		Vertical plan
		allowable		±30°
Fixing		4		Screw
Weight			g	3000
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



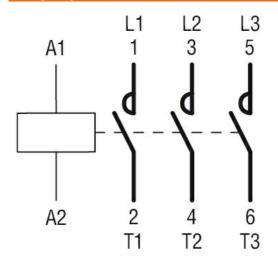
	drop-out			
		max	%Us	≤70 Us min
Average coil consump	tion ≤20°C	in-rush	W	160230
		holding	W	1.53.0
Max cycles frequency		Holding	VV	1.55.0
Mechanical operation			cycles/h	1000
Operating times			<i>cy 6.66</i> /1.	
Average time for Us co	ontrol			
•	in AC			
	Closing NO			
		min	ms	50
		max	ms	100
	Opening NO			
		min	ms	35
III to obvioul data	<u></u>	max	ms	75
UL technical data Yielded mechanical pe	rformanco			
rielded mechanical pe				
	for three-phase AC motor	200/208V	HP	60
		220/230V	HP	75
		460/480V	HP	150
		575/600V	HP	150
General USE				
	Contactor			
		AC current	Α	275
Short-circuit protection	fuse, 600V			
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	400
	0: 1.16.16	Fuse class		J
	Standard fault	Chart aire it a	I. A	10
		Short circuit current Fuse rating	kA A	10 400
		Fuse class	^	RK5
Ambient conditions		1 430 01433		1110
Temperature				
r	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
_		max	°C	80
Max altitude			m	3000
Resistance & Protection	n The state of the			•
Pollution degree				3
Dimensions [mm (in)]				

ENERGY AND AUTOMATION





Wiring diagrams



Certifications and compliance

Compliance

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