



Product designation Product type designation			Power contactor BF25
Contact characteristics			
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	32
Operational current le			
	AC-1 (≤40°C)	Α	32
	AC-1 (≤55°C)	Α	26
	AC-1 (≤70°C)	Α	23
	AC-3 (≤440V ≤55°C)	Α	25
	AC-4 (400V)	Α	10
Rated operational power AC-3 (T≤55°C)			_
	230V	kW	7
	400V	kW	12.5
	415V	kW	13.4
	440V	kW	13.4
	500V	kW	15
	690V	kW	11
Rated operational power AC-1 (T≤40°C)			
	230V	kW	12
	400V	kW	21
	500V	kW	26
	690V	kW	36
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	20
	48V	Α	18
	75V	Α	18
	110V	Α	6
	220V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	23
	48V	Α	23
	75V	Α	23
	110V	Α	16
	220V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	23
	48V	Α	23
	75V	Α	23
	110V	Α	18



	220V	Α	12
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
·	≤24V	Α	_
	48V	Α	_
	75V	Α	_
	110V	Α	_
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
The max carron to in Boo Boo with Ent = Tome with 1 poles in conce	≤24V	Α	15
	48V	A	13
	75V	A	13
	110V	A	2
150	220V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	.0.0.4		4.0
	≤24V	Α	18
	48V	Α	18
	75V	Α	16
	110V	Α	10
	220V	Α	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	22
	48V	Α	22
	75V	Α	18
	110V	Α	15
	220V	Α	8
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
The max carrent to in 200 200 mai 2/(= 10me mai) poise in come	≤24V	Α	_
	48V	A	_
	75V	A	_
	110V	A	_
	220V		_
Chart time allowable assurant for 40a (IEC/ENCO047.4)	220 V	A	200
Short-time allowable current for 10s (IEC/EN60947-1)		Α	200
Protection fuse	0 (150)		
	gG (IEC)	Α	50
	aM (IEC)	Α	25
Making capacity (RMS value)		Α	250
Breaking capacity at voltage			
	440V	Α	200
	500V	Α	184
	690V	Α	102
Resistance per pole (average value)		mΩ	2.5
Power dissipation per pole (average value)			
· · · · · · · · · · · · · · · · · · ·	Ith	W	2.6
	AC-3	W	1.6
Tightening torque for terminals			
G G I I I I I I I I I I I I I I I I I I	min	Nm	1.5
	max	Nm	1.8
	min	Ibin	1.1
		Ibin	1.5
Tightoning torque for coil terminal	max	וווטו	1.0
Tightening torque for coil terminal	t. ·	N I	0.0
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8



		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section	A1410 (16 11			
	AWG/Kcmil			40
	Flevible w/e lug conductor coetion	max		10
	Flexible w/o lug conductor section	min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section	IIIax	111111	0
	Tiexible of wind conductor section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			•
	r toxible with inculated opade tag conductor coolien	min	mm²	1
		max	mm²	4
				IP20 when
Power terminal prote	ction according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	496
Conductor section				
	AWG/kcmil conductor section			
		max		10
Auxiliary contact char	acteristics			
Thermal current Ith			A	10
Thermal current Ith IEC/EN 60947-5-1 de	esignation		Α	10 A600 - P600
Thermal current Ith	esignation			A600 - P600
Thermal current Ith IEC/EN 60947-5-1 de	esignation	230V	A	A600 - P600 3
Thermal current Ith IEC/EN 60947-5-1 de	esignation	400V	A A	A600 - P600 3 1.9
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	esignation :15		A	A600 - P600 3
Thermal current Ith IEC/EN 60947-5-1 de	esignation :15	400V 500V	A A A	3 1.9 1.4
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation :15	400V	A A	A600 - P600 3 1.9
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	esignation :15	400V 500V 110V	A A A	3 1.9 1.4 5.7
Thermal current lth IEC/EN 60947-5-1 do Operating current AC Operating current DC	esignation :15	400V 500V 110V 24V	A A A	A600 - P600 3 1.9 1.4 5.7
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation :15	400V 500V 110V 24V 48V	A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation :15	400V 500V 110V 24V 48V 60V	A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3
Thermal current lth IEC/EN 60947-5-1 do Operating current AC Operating current DC	esignation :15	400V 500V 110V 24V 48V 60V 110V	A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25
Thermal current lth IEC/EN 60947-5-1 do Operating current AC Operating current DC	esignation :15	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1
Thermal current lth IEC/EN 60947-5-1 do Operating current AC Operating current DC	esignation :15	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC	esignation :15	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1
Thermal current lth IEC/EN 60947-5-1 do Operating current AC Operating current DC	esignation :15	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation :15	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC	esignation :15	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Electrical life Safety related data	esignation 212 213	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Electrical life Safety related data	esignation :15	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 12000000
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Electrical life Safety related data	esignation 212 213 210 according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Electrical life Electrical life Safety related data Performance level B	esignation 212 213 10d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 12000000 12000000
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Electrical life Electrical life Safety related data Performance level B	esignation 212 213 210 according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 12000000



DC rated control voltage	ne			V	48
DC operating voltage	, -			<u> </u>	
	pick-up				
			min	%Us	70
			max	%Us	125
	drop-out				
			min	%Us	10
_			max	%Us	40
Average coil consumpt	tion ≤20°C				
			in-rush	W	5.4
			holding	W	5.4
Max cycles frequency				//	0000
Mechanical operation				cycles/h	3600
Operating times	antero l				
Average time for Us co					
	in AC	Closing NO			
		Ciosing NO	min	ms	8
			max	ms	24
		Opening NO	max	1113	_ '
		- Forming 110	min	ms	10
			max	ms	20
		Closing NC			
		-	min	ms	14
			max	ms	28
		Opening NC			
			min	ms	7
			max	ms	18
	in DC	01 1 110			
		Closing NO			F.4
			min	ms	54
		Opening NO	max	ms	66
		Opening NO	min	ms	14
			max	ms	17
		Closing NC	max	1113	• •
		2.55mig 110	min	ms	24
			max	ms	30
		Opening NC			
			min	ms	47
			max	ms	57
UL technical data					
Full-load current (FLA)	for three-phase	AC motor			
			at 480V	Α	21
			at 600V	A	17
Yielded mechanical pe					
	for single-phas	e AC motor			
			110/120V	HP	2
	for the contract		230V	HP	3
	for three-phase	e AC motor	000/0001	1.10	7 -
			200/208V	HP	7.5
			220/230V	HP up	7.5 15
			460/480V 575/600V	HP HP	15 15
			3/3/0007	ПГ	

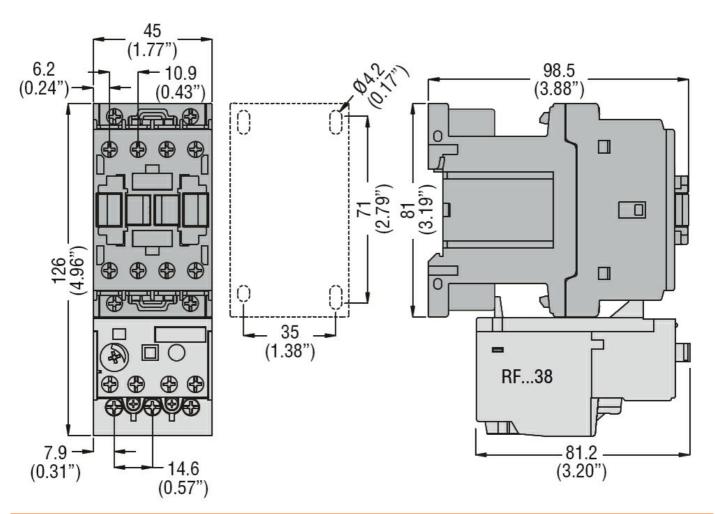




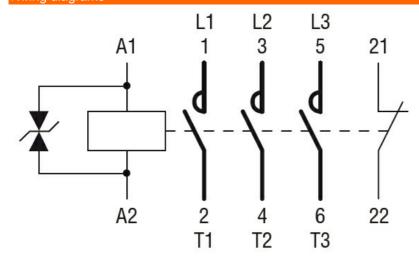
General USE				
	Contactor			
		AC current	Α	32
	Auxiliary contacts			
		AC voltage	V	600
		AC current	Α	10
		DC voltage	V	250
		DC current	Α	1
Short-circuit protect				
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	60
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	100
	xiliary contacts according to UL			A600 - P600
Ambient conditions				
Temperature	_			
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature		00	00
		min	°C	-60
B. 8. 10% 1		max	°C	80
Max altitude	-41		m	3000
Resistance & Protect	ction			
Pollution degree	<u> </u>			3
Dimensions				

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 25A, DC COIL, 48VDC, 1NC AUXILIARY CONTACT



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



BF2501D048

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 25A, DC COIL, 48VDC, 1NC AUXILIARY CONTACT

CCC			
cULus			
EAC			

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching