



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 carrent 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 surround in 200 200 mai 2/10 - 10 me mai 1 perse in comes	≤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)	A	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 II			
	AWG/Kcmil			4.0
	Florible w/o lug conductor costice	max		10
	Flexible w/o lug conductor section	min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section	IIIax	111111	0
	Tiexible 6/W lug conductor section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			•
	r textele mar mediated space rag conductor section	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	490
Conductor section				
	AWG/kcmil conductor section			
				10
		max		10
Auxiliary contact char	racteristics	max		
Thermal current Ith		max	А	10
Thermal current Ith IEC/EN 60947-5-1 de	esignation	max	A	
Thermal current Ith	esignation			10 A600 - P600
Thermal current Ith IEC/EN 60947-5-1 de	esignation	230V	A	10 A600 - P600
Thermal current Ith IEC/EN 60947-5-1 de	esignation	230V 400V	A A	10 A600 - P600 3 1.9
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	esignation :15	230V	A	10 A600 - P600
Thermal current Ith IEC/EN 60947-5-1 de	esignation :15	230V 400V 500V	A A A	10 A600 - P600 3 1.9 1.4
Thermal current lth IEC/EN 60947-5-1 do Operating current AC Operating current DC	esignation :15	230V 400V	A A	10 A600 - P600 3 1.9
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	esignation :15	230V 400V 500V	A A A	10 A600 - P600 3 1.9 1.4
Thermal current lth IEC/EN 60947-5-1 do Operating current AC Operating current DC	esignation :15	230V 400V 500V 110V	A A A	10 A600 - P600 3 1.9 1.4 5.7
Thermal current lth IEC/EN 60947-5-1 do Operating current AC Operating current DC	esignation :15	230V 400V 500V 110V 24V 48V	A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation :15	230V 400V 500V 110V 24V 48V 60V	A A A A A	10 A600 - P600 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	230V 400V 500V 110V 24V 48V 60V 110V	A A A A A	10 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	230V 400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A	10 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	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A	10 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	230V 400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A	10 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	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	10 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	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles	10 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  Operations Mechanical life Electrical life	esignation :15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	10 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	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles	10 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	esignation :15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	10 A600 - P600  3 1.9 1.4  5.7  5.7 2.9 2.3 1.25 1.1 0.55 0.2  20000000 1200000
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	esignation 212 213 210 according to EN/ISO 13489-1	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles cycles	10 A600 - P600  3 1.9 1.4  5.7  5.7 2.9 2.3 1.25 1.1 0.55 0.2  20000000 1200000
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	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	10 A600 - P600  3 1.9 1.4  5.7  5.7 2.9 2.3 1.25 1.1 0.55 0.2  20000000 1200000 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	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	10 A600 - P600  3 1.9 1.4  5.7  5.7 2.9 2.3 1.25 1.1 0.55 0.2  20000000 1200000



DC operating voltage    pick-up	5
min   %Us   70   max   %Us   125	5
max %Us 12st	5
drop-out  min %Us 10 max %Us 40  Average coil consumption ≤20°C  in-rush W 5.4 holding W 5.4 holding W 5.4  Max cycles frequency  Mechanical operation cycles/h 360  Operating times  Average time for Us control in AC  Closing NO	ı
min %Us 10 max %Us 40  Average coil consumption ≤20°C  in-rush W 5.4 holding W 5.4  Max cycles frequency  Mechanical operation cycles/h 360  Operating times  Average time for Us control in AC  Closing NO	<u> </u>
Average coil consumption ≤20°C   in-rush holding W 5.4 holding   Max cycles frequency   Mechanical operation cycles/h 360   Operating times   Average time for Us control in AC   Closing NO	<u> </u>
Average coil consumption ≤20°C  in-rush W 5.4 holding W 5.4 Max cycles frequency  Mechanical operation cycles/h 360  Operating times  Average time for Us control in AC  Closing NO	[
in-rush W 5.4 holding W 5.4 holding W 5.4 Max cycles frequency  Mechanical operation cycles/h 360  Operating times  Average time for Us control in AC  Closing NO	
Max cycles frequency  Mechanical operation cycles/h 360  Operating times  Average time for Us control in AC  Closing NO	
Max cycles frequency  Mechanical operation cycles/h 360  Operating times  Average time for Us control in AC  Closing NO	
Operating times Average time for Us control in AC Closing NO	
Average time for Us control in AC Closing NO	00
in AC Closing NO	
Closing NO	
min ms 8	
max ms 24 Opening NO	
min ms 10	
max ms 20	
Closing NC	
min ms 14	
max ms 28	
Opening NC	
min ms 7	
max ms 18	
in DC	
Closing NO min ms 54	
min ms 54 max ms 66	
Opening NO	
min ms 14	
max ms 17	
Closing NC	
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 A 21	
at 400V A 21 at 600V A 17	
Yielded mechanical performance	
for single-phase AC motor	
110/120V HP 2	
230V HP 3	
for three-phase AC motor	
200/208V HP 7.5	
000/000/	
220/230V HP 7.5	
220/230V HP 7.5 460/480V HP 15 575/600V HP 15	

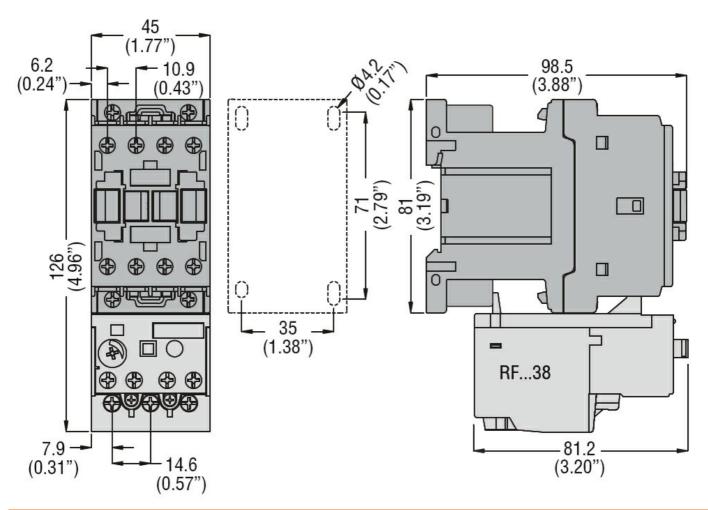




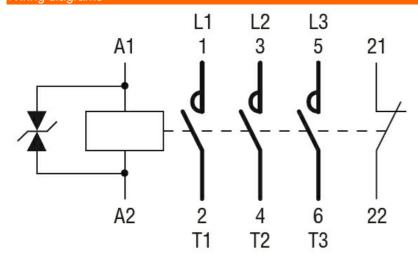
General USE				
	Contactor			
		AC current	Α	32
	Auxiliary contacts			
		AC voltage	V	600
		AC current	Α	10
		DC voltage	V	250
		DC current	Α	1
Short-circuit protection	on fuse, 600V			
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	60
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	100
Contact rating of aux	iliary contacts according to UL			A600 - P600
Ambient conditions				
Temperature				
•	Operating temperature			
	, , ,	min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Protec	tion			
Pollution degree				3
Dimensions				



**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



### BF2501D012

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 25A, DC COIL, 12VDC, 1NC AUXILIARY CONTACT

CCC				
cULus	_	_	_	
EAC				

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching