



Number of poles Nr. 3 Rated insulation voltage Ui IEC/EN V 690	Product designation Product type designation			Power contactor BF25
Rated insulation voltage Ui IEC/EN V 690 Rated impulse withstand voltage Uimp kV 6 Operational frequency min Hz 25 IEC Conventional free air thermal current lth A 32 AC-0 AC-1 (≤40°C) A 32 Operational current le AC-1 (≤40°C) A 26 AC-1 (≤55°C) A 26 AC-1 (≤70°C) A 23 AC-3 (≤440V ≤55°C) A 25 AC-4 (400V) A 10 A 10 AC-4 (400V) A 10 A 10 AC-4 (400V) A 10 A 10 AC-4 (400V) A 13 AC-4 (400V) A 10 AC-4 (400V) A 10 AC-4 (400V) AC-	Contact characteristics			
Rated impulse withstand voltage Uimp	Number of poles		Nr.	3
Department Frequency Min Hz 25 max Hz 400 EC Conventional free air thermal current lth	Rated insulation voltage Ui IEC/EN		V	690
Min Hz 25 max Hz 400 EC Conventional free air thermal current lth	Rated impulse withstand voltage Uimp		kV	6
EC Conventional free air thermal current Ith	Operational frequency			_
ECC Conventional free air thermal current Ith		min	Hz	25
Operational current le AC-1 (≤40°C) A 32 AC-1 (≤50°C) A 26 AC-1 (≤70°C) A 23 AC-3 (≤4400 ∨ 55°C) A 25 AC-4 (400V) A 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 12 400V kW 21 500V kW 21 500V kW 26 690V kW 36 IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 23 75V A 23 110V A 16 220V A 1 LEC max current le in DC1 with L/R ≤ 1ms		max	Hz	400
AC-1 (≤40°C) A 32 AC-1 (≤55°C) A 26 AC-1 (≤55°C) A 26 AC-1 (≤70°C) A 23 AC-3 (≤440V ≤55°C) A 25 AC-4 (400V) A 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 21 500V kW 21 500V kW 26 690V kW 36 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 20 48V A 18 110V A 6 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 23 48V A 23 75V A 23 110V A 16 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 23 48V A 23 75V A 23 110V A 16 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	IEC Conventional free air thermal current Ith		Α	32
AC-1 (≤55°C) A 26 AC-1 (1570°C) A 23 AC-3 (≤440V ≤55°C) A 25 AC-4 (400V) A 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 36 EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 20 48V A 18 75V A 18 110V A 6 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 23 48V A 23 75V A 18 110V A 16 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 23 48V A 23 110V A 16 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 23 48V A 23 110V A 16 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	Operational current le			
AC-1 (≤70°C) A 23 AC-3 (≤440V ≤55°C) A 25 AC-4 (400V) A 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 15 690V kW 15 690V kW 21 500V kW 21 500V kW 26 690V kW 36 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 20 48V A 18 75V A 18 110V A 6 220V A 23 48V A 23 75V A 23 110V A 16 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 23 48V A 23 75V A 23 110V A 16 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		AC-1 (≤40°C)	Α	32
AC-3 (≤440V ≤55°C) A 25 AC-4 (400V) A 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 A 20 48V A 18 75V A 18 110V A 6 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 23 48V A 23 75V A 23 110V A 16 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		AC-1 (≤55°C)	Α	26
AC-4 (400V)		AC-1 (≤70°C)	Α	23
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 15 690V kW 11 Rated operational power AC-1 (T≤40°C) 230V kW 12 400V kW 21 500V kW 21 500V kW 26 690V kW 36 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 20 48V A 18 75V A 18 110V A 6 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 23 48V A 23 48V A 23 75V A 23 110V A 16 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		AC-3 (≤440V ≤55°C)	Α	25
230V kW 7 400V kW 12.5 415V kW 13.4 440V kW 13.4 500V kW 15 690V kW 15 690V kW 11 11 11 12 12 13 14 14 14 15 15 15 15 15		AC-4 (400V)	Α	10
A00V 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 EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	Rated operational power AC-3 (T≤55°C)			_
A15V kW 13.4 440V kW 13.4 440V kW 13.4 500V kW 15 690V kW 15 690V kW 11 11 11 11 11 11 11		230V	kW	7
A440V 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		400V	kW	12.5
Soov kW 15 690V kW 11		415V	kW	13.4
Rated operational power AC-1 (T≤40°C) 230V kW 12 400V kW 21 500V kW 26 690V kW 36		440V	kW	13.4
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 A 20 48V A 18 75V A 18 110V A 6 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 23 48V A 23 75V A 23 110V A 16 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 23 75V A 23 110V A 16 220V A 1		500V	kW	15
		690V	kW	11
	Rated operational power AC-1 (T≤40°C)			
S00V kW 26 690V kW 36		230V	kW	12
EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V				
EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V				
		690V	kW	36
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
Total Contract Tot			Α	
110V A 6 220V A -			Α	
EC max current le in DC1 with L/R \leq 1ms with 2 poles in series \leq 24V A 23 48V A 23 75V A 23 110V A 16 220V A 1				
EC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V				6
	·	220V	Α	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 23 48V A 23 75V A 23				
≤24V A 23 48V A 23 75V A 23	· 	220V	A	
48V A 23 75V A 23	IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		_	
75V A 23				
110V A 18				
		110V	А	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)	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



NA	- Control of the cont	max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section	AWG/Kcmil			
	AVVG/RCIIII	max		10
	Flexible w/o lug conductor section	max		10
		min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section			
		min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			
		min	mm²	1
		max	mm²	4
Power terminal protec	ction according to IEC/EN 60529			IP20 when
Mechanical features	•			properly wired
Operating position				
oporating position		normal		Vertical plan
		allowable		±30°
				Screw / DIN rail
Fixing				35mm
Neight			g	490
Auxiliary contact char	acteristics			
Thermal current Ith			Α	10
EC/EN 60947-5-1 de				A600 - P600
Operating current AC	15			
		230V	Α	3
		400V	A	1.9
Operating current DC	40	500V	A	1.4
Operating current DC	012	110V	Α	5.7
Operating current DC	*12	1100	A	5.7
operating current bo	,13	24V	Α	5.7
		48V	A	2.9
		60V	A	2.3
		110V	A	1.25
		125V	Α	1.1
		220V	Α	0.55
		600V	Α	0.2
Operations				
Mechanical life			cycles	20000000
Electrical life			cycles	1200000
Safety related data	40ddia n to EN//00 40400 4			
~errormance level B1	10d according to EN/ISO 13489-1	الحالج مدوس	0.401	1200000
	m	rated load echanical load	cycles	1200000 20000000
		echanical load	cycles	Yes
Mirror contate accerd				169
	ling to IEC/EN 609474-4-1			VAS
EMC compatibility	ling to IEC/EN 609474-4-1			yes
Mirror contats accord EMC compatibility DC coil operating DC rated control volta			V	
EMC compatibility	age		V	12



LIVERGY AND AUTOMATION					
			min	%Us	70
			max	%Us	125
	drop-out		max	7000	120
	а. ор оа.		min	%Us	10
			max	%Us	40
Average coil consump	tion ≤20°C				
			in-rush	W	5.4
			holding	W	5.4
Max cycles frequency					
Mechanical operation				cycles/h	3600
Operating times					
Average time for Us co	ontrol				
	in AC				
		Closing NO			
			min	ms	8
			max	ms	24
		Opening NO			
			min	ms	10
		01. 1. 110	max	ms	20
		Closing NC		-	4.4
			min	ms ms	14
		Opening NC	max	ms	28
		Opening NC	min	me	7
			max	ms ms	18
	in DC		IIIdX	1110	10
	111111111111111111111111111111111111111	Closing NO			
		Closing IVC	min	ms	54
			max	ms	66
		Opening NO			
		. 0	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					
Rated operational volta				V	600
Full-load current (FLA)	for three-phase A	C motor		_	
			at 480V	A	21
\ <u>\</u>	,		at 600V	Α	17
Yielded mechanical pe		A.O			
	for single-phase	AC motor	440/4007	ш	0
			110/120V	HP	2
	for three mbase	AC motor	230V	HP	3
	for three-phase	AC IIIOIOI	200/2001	ЦD	7.5
			200/208V 220/230V	HP HP	7.5 7.5
			460/480V	HP	7.5 15
			575/600V	HP	15
General USE			010100V		
23.10.0. 002	Contactor				
	55.1.40101				

BF2501D012

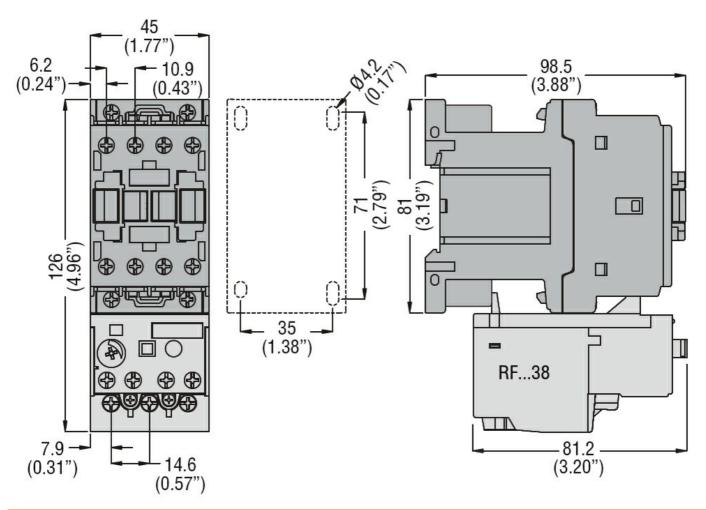




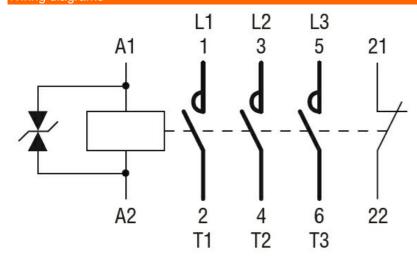
		AC current	Α	32
	Auxiliary contacts			
		AC voltage	V	600
		AC current	Α	10
		DC voltage	V	250
		DC current	Α	1
Short-circuit protection	n fuse, 600V			
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	60
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	100
Contact rating of auxiliary 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 & Protecti	on			
Pollution degree				3
Dimensions				

ENERGY AND AUTOMATION

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

BF2501D012



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