



SP25 Contact characteristics	Product designation			Power contactor
Number of poles nr. 3 Rated insulation voltage Ui IEC/EN V 690 Rated insulation voltage Uimp kV 6 Operational frequency min Hz 25 max Hz 400 1 IEC Conventional free air thermal current lth A 32 Operational current le AC-1 (≤40°C) A 32 AC-1 (≤70°C) A 26 AC-1 (≤70°C) A 26 AC-1 (≤70°C) A 25 AC-3 (≤4400°V) A 10 Rated operational power AC-3 (T≤55°C) 230V kW 7 400V kW 12 400V kW 12.5 415V kW 13.4 440V kW 13.4 440V kW 13.4 440V kW 11 12 400V kW 12 400V kW 21 500V kW 22 690V kW 26 690V kW 23 48V A 23	Product type designation			BF25
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 lth A 32 Operational current le AC-1 (≤40°C) A 22 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 440V kW 13.4 500V kW 15 690V kW 15 690V kW 15 690V kW 15 690V kW 21 500V kW 22 EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series \$24V A 20 48V A 18 110V				2
Rated impulse withstand voltage Ulimp	·			
Operational frequency min max by Hz max Hz max Hz hz Hz Hz 400 IEC Conventional free air thermal current lith A 32 Operational current le AC-1 (\$40°C)				
Min Hz 25 Max Hz 400 EC Conventional free air thermal current lth A 32 Operational current le AC-1 (≤40°C) A 32 AC-1 (≤55°C) A 26 AC-1 (≤55°C) A 25 AC-3 (≤440V ≤55°C) A 25 AC-4 (400V) A 10 Rated operational power AC-3 (T≤55°C) Rated operational power AC-3 (T≤55°C) A 230V kW 7 400V kW 12.5 415V kW 13.4 440V kW 13.4 500V kW 11 Rated operational power AC-1 (T≤40°C) 230V kW 11 Rated operational power AC-1 (T≤40°C) 230V kW 21 500V kW 26 690V kW 36 EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series 524V A 20 48V A 18 75V A 18 110V A 6 220V A - EC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 524V A 23 48V A 23	- · · · · · · · · · · · · · · · · · · ·		KV	Ь
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IEC Conventional free air thermal current lth				
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400V kW 12.5 415V kW 13.4 440V kW 13.4 440V kW 13.4 500V kW 15 690V kW 11	Rated operational power AC-3 (1≤55°C)			
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A40V 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 524V 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 524V 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 524V 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 524V A 23 48V A 23 75V A 23 48V A				
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Rated operational power AC-1 (T≤40°C) 230V kW 12 400V kW 21 500V kW 26 690V kW 36				
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		690V	kW	11
A00V kW 21 500V kW 26 690V kW 36	Rated operational power AC-1 (T≤40°C)			
Soov kW 26 690V kW 36				
EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series				
Section Sec				
		690V	kW	36
	IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
T5V A 18 110V A 6 220V A -				
110V A 6 220V A −				
EC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V				
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 48V A 23 75V A 23				6
≤24V		220V	A	_
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 75V A 23	IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
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				
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	Α	1
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	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 deficit to in 200 200 with 210 2 Tome with 1 polos in conce	≤24V	Α	15
	48V	A	13
	75V	A	13
	110V	A	2
	220V	A	_
IEC may current to in DC2 DC5 with L/D < 15mg with 2 notes in corios	220 V	Α	_ -
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	~241 /	۸	4.0
	≤24V	A	18
	48V	Α	18
	75V	A	16
	110V	A	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			
	≤24V	Α	_
	48V	Α	_
	75V	Α	_
	110V	Α	_
	220V	Α	_
Short-time allowable current for 10s (IEC/EN60947-1)		Α	200
Protection fuse			
	gG (IEC)	Α	50
	aM (IEC)	Α	25
Making capacity (RMS value)	a (120)	A	250
Breaking capacity at voltage		- / \	200
Disaming supusity at voltage	440V	Α	200
	500V	A	184
	690V	A	102
Posistance per pole (average value)	0907		
Resistance per pole (average value)		mΩ	2.5
Power dissipation per pole (average value)	1.1	147	0.0
	Ith	W	2.6
	AC3	W	1.6
Tightening torque for terminals	_		
	min	Nm	1.5
	max	Nm	1.8
	min	lbin	1.1
	max	Ibin	1.5
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbft	0.8



BF2510D024

		max	lbft	0.74
	simultaneously connectable		nr.	2
Conductor section	Fig. 31. 6. Leaves Later and Green			
	Flexible w/o lug conductor section	min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section	IIIdx	111111	0
	Tionible of Wing contractor couldn't	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			
	, ,	min	mm²	1
		max	mm²	4
	ction according to IEC/EN 60529			IP20 when wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	500
Auxiliary contact chara	acteristics			
Type of contact				1 NO
Thermal current Ith			Α	10
IEC/EN 60947-5-1 de				A600 - P600
Operating current AC	15	0001/	Δ.	0
		230V 400V	A	3
		500V	A A	1.9 1.4
Operating current DC	12	300 V	A	1.4
Operating current bo	12	110V	Α	5.7
Operating current DC	13	1101		0.7
operating current 20		24V	Α	5.7
		48V	Α	2.9
		60V	Α	2.3
		110V	Α	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	10 Leaves Per 42 FN/100 40400 4			
renormance level B1	0d according to EN/ISO 13489-1	الحالجمهم	0.451	1200000
	m	rated load echanical load	cycles cycles	1200000 20000000
Mirror contate accordi	ing to IEC/EN 609474-4-1	zoriariicai 10au	cycles	
EMC compatibility	ing to 120/214 000-7/ 4-4-1			yes yes
DC coil operating				, 55
DC rated control volta	age		V	24
DC operating voltage			-	
: -	pick-up			
	1 T	min	%Us	70
		max	%Us	125

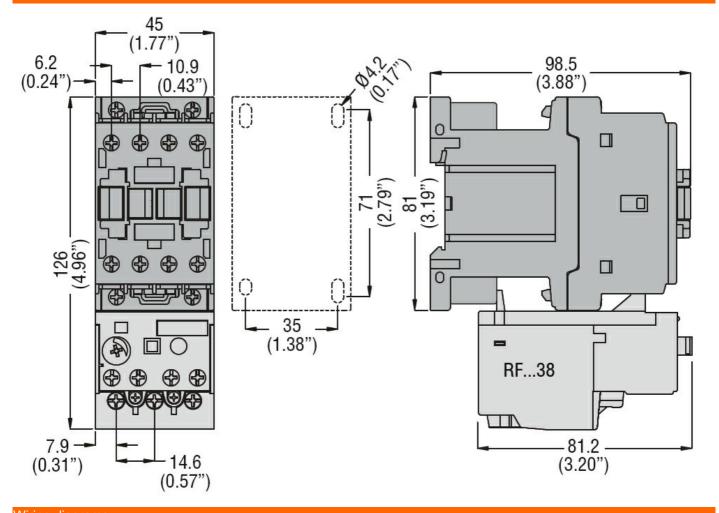




	drop-out				
			min	%Us	10
A	1: 40000		max	%Us	40
Average coil consump	otion ≤20°C		المديد ما	10/	T 4
			in-rush	W	5.4 5.4
Max cycles frequency			holding	VV	5.4
Mechanical operation				cycles/h	3600
Operating times				Cyclc3/11	3000
Average time for Us co	ontrol				
	in AC				
		Closing NO			
		· ·	min	ms	8
			max	ms	24
		Opening NO			
			min	ms	10
			max	ms	20
		Closing NC			
			min	ms	14
		0	max	ms	28
		Opening NC	. • • سند		7
			min	ms	7 18
	in DC		max	ms	10
	III DC	Closing NO			
		Closing NO	min	ms	54
			max	ms	66
		Opening NO			
		1 0	min	ms	14
			max	ms	17
UL technical data					
Full-load current (FLA)) for three-phase	AC motor			
			at 480V	Α	21
			at 600V	Α	17
Yielded mechanical pe					
	for single-phase	e AC motor			
			110/120V	HP	2
	for these selections	AC motor	230V	HP	3
	for three-phase	AC MOIO	200/208V	HP	7.5
			200/208V 220/230V	HP	7.5 7.5
			460/480V	HP	15
			575/600V	HP	15
General USE			2.0,000		
	Contactor				
			AC current	Α	32
	Auxiliary contact	ets			
	•		AC voltage	V	600
			AC current	Α	10
			DC voltage	V	250
			DC current	Α	1
Short-circuit protection					
	High fault				
			Short circuit current	kA	100



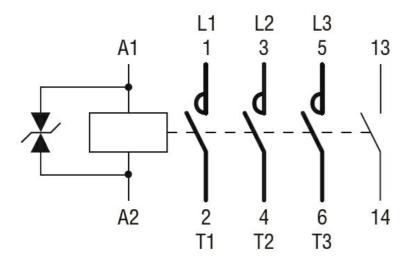
		Fuse rating	Α	60
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	100
Contact rating of aux	iliary contacts according to UL			A600 - P600
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Protec	tion			
Pollution degree				3
Dimensions				



Wiring diagrams

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 25A, DC COIL, 24VDC, 1NO AUXILIARY CONTACT



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN 60947-1

IEC/EN 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

EAC

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching