



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	1
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)	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



Managed and a few interest and the second and the s	max	lbin	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil	may		10
Elevible w/e lug conductor costi	max		10
Flexible w/o lug conductor secti	min	mm²	1
	max	mm²	6
Flexible c/w lug conductor section		111111	0
Tioxible 6/W rag defiadater seeth	min	mm²	1
	max	mm²	4
Flexible with insulated spade lug			•
	min	mm²	1
	max	mm²	4
D			IP20 when
Power terminal protection according to IEC/EN 60529			properly wired
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°
Fixing			Screw / DIN rail
			35mm
Weight		g	366
Conductor section			
AWG/kcmil conductor section			
	max		10
•			
Thermal current Ith		A	10
Thermal current Ith EC/EN 60947-5-1 designation		A	10 A600 - P600
Thermal current Ith IEC/EN 60947-5-1 designation			A600 - P600
Thermal current Ith IEC/EN 60947-5-1 designation	230V	A	A600 - P600
Thermal current Ith IEC/EN 60947-5-1 designation	400V	A A	A600 - P600 3 1.9
Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15		A	A600 - P600
Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15	400V 500V	A A A	3 1.9 1.4
Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 Operating current DC12	400V	A A	A600 - P600 3 1.9
Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 Operating current DC12	400V 500V	A A A	3 1.9 1.4 5.7
Thermal current Ith EC/EN 60947-5-1 designation Operating current AC15 Operating current DC12	400V 500V 110V 24V	A A A	3 1.9 1.4 5.7
Thermal current Ith EC/EN 60947-5-1 designation Operating current AC15 Operating current DC12	400V 500V 110V 24V 48V	A A A A	3 1.9 1.4 5.7 5.7
Thermal current Ith EC/EN 60947-5-1 designation Operating current AC15 Operating current DC12	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 Ith IEC/EN 60947-5-1 designation Operating current AC15 Operating current DC12	400V 500V 110V 24V 48V 60V 110V	A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25
Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 Operating current DC12	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1
Thermal current Ith EC/EN 60947-5-1 designation Operating current AC15 Operating current DC12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	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 designation Operating current AC15 Operating current DC12 Operating current DC13	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1
Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 Operating current DC12 Operating current DC13 Operations	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	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 designation Operating current AC15 Operating current DC12 Operating current DC13 Operations Mechanical life	400V 500V 110V 24V 48V 60V 110V 125V 220V	A 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 designation Operating current AC15 Operating current DC12 Operating current DC13 Operations Mechanical life Electrical life	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	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 designation Operating current AC15 Operating current DC12 Operating current DC13 Operations Mechanical life Electrical life Safety related data	400V 500V 110V 24V 48V 60V 110V 125V 220V	A 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 designation Operating current AC15 Operating current DC12 Operating current DC13 Operations Mechanical life Electrical life Safety related data	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A Cycles cycles	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 Operating current DC12 Operating current DC13 Operations Mechanical life Electrical life Safety related data	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A Cycles cycles	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 designation Operating current AC15 Operating current DC12 Operating current DC13 Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A Cycles cycles	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1200000 1200000 20000000
Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 Operating current DC12 Operating current DC13 Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 Mirror contats according to IEC/EN 609474-4-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A 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 1200000 1200000 20000000 yes
Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 Operating current DC12 Operating current DC13 Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A 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 1200000 1200000



	at 50/60Hz		V	48
AC operating voltag	-			
	of 50/60Hz coil powered at 50Hz			
	pick-up		0/11	
		min	%Us	80
	drap out	max	%Us	110
	drop-out	min	%Us	20
		min	%Us	20 55
	of 50/60Hz coil powered at 60Hz	max	/005	55
	pick-up			
	ρισκ-αρ	min	%Us	85
		max	%Us	110
	drop-out	max	7003	110
	arop out	min	%Us	20
		max	%Us	55
C average coil co	nsumption at 20°C		-	
J	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	75
		holding	VA	9
	of 50/60Hz coil powered at 60Hz	<u> </u>		
	·	in-rush	VA	70
		holding	VA	6.5
	of 60Hz coil powered at 60Hz			
		in-rush	VA	75
		holding	VA	9
Dissipation at holdi	ng ≤20°C 50Hz		W	2.5
Mechanical operati			cycles/h	3600
Mechanical operation operation operation operating times	on			3600
Mechanical operation Derating times	on s control			3600
Mechanical operation Derating times	on s control in AC			3600
Mechanical operation Derating times	on s control		cycles/h	
Mechanical operation Derating times	on s control in AC	min	cycles/h	8
Mechanical operation Derating times	s control in AC Closing NO	min max	cycles/h	
Mechanical operation Derating times	on s control in AC	max	cycles/h ms ms	8 24
Mechanical operation Derating times	s control in AC Closing NO	max min	cycles/h ms ms ms	8 24 10
Mechanical operation Derating times	s control in AC Closing NO Opening NO	max	cycles/h ms ms	8 24
Mechanical operation operation operation operating times	s control in AC Closing NO	max min max	ms ms ms ms	8 24 10 20
Mechanical operation operation operation operating times	s control in AC Closing NO Opening NO	max min max min	cycles/h ms ms ms ms ms	8 24 10 20
Mechanical operation Derating times	s control in AC Closing NO Opening NO Closing NC	max min max	ms ms ms ms	8 24 10 20
Mechanical operation Derating times	s control in AC Closing NO Opening NO	max min max min max	ms ms ms ms ms	8 24 10 20 14 28
Mechanical operation Derating times	s control in AC Closing NO Opening NO Closing NC	max min max min max min	ms ms ms ms ms	8 24 10 20 14 28
Mechanical operation Derating times Everage time for U	s control in AC Closing NO Opening NO Closing NC	max min max min max	ms ms ms ms ms	8 24 10 20 14 28
Mechanical operation Derating times Average time for U JL technical data	s control in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms ms	8 24 10 20 14 28
Mechanical operation Derating times Average time for U JL technical data	s control in AC Closing NO Opening NO Closing NC	max min max min max min	ms ms ms ms ms	8 24 10 20 14 28
Mechanical operation Derating times Average time for U JL technical data	s control in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max at 480V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Mechanical operation Decrating times Average time for U JL technical data Full-load current (F	s control in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Max cycles frequer Mechanical operation Departing times Average time for U JL technical data Full-load current (F	s control in AC Closing NO Opening NO Closing NC Opening NC Opening NC	max min max min max min max at 480V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Mechanical operation Degrating times Average time for U JL technical data Full-load current (F	s control in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Mechanical operation Degrating times Average time for U JL technical data Full-load current (F	s control in AC Closing NO Opening NO Closing NC Opening NC Opening NC	max min max min max min max at 480V	ms ms ms ms ms A	8 24 10 20 14 28 7 18
Mechanical operation Degrating times Average time for U JL technical data Full-load current (F	s control in AC Closing NO Opening NO Closing NC Opening NC Opening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms A A	8 24 10 20 14 28 7 18

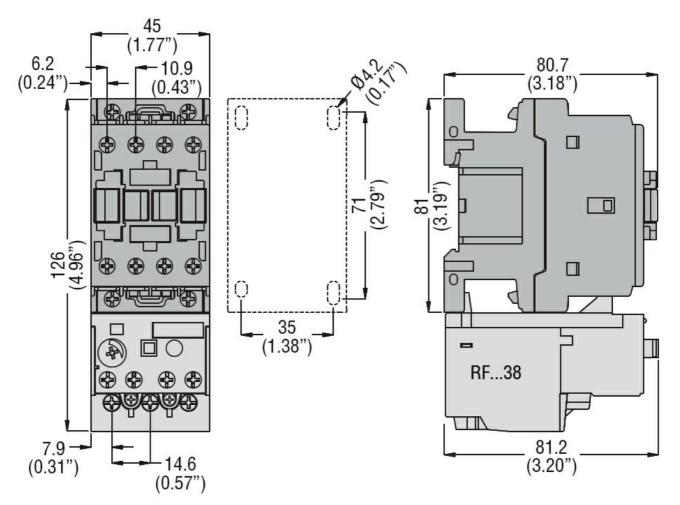




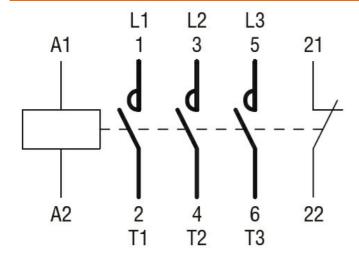
220/230V					
S75/600V			220/230V	HP	7.5
Contactor			460/480V	HP	15
Contactor			575/600V	HP	15
AC current	General USE				
Auxiliary contacts AC voltage		Contactor			
AC voltage			AC current	Α	32
AC current A 10 DC voltage V 250 DC current A 1 DC voltage DC current A 1 Short-circuit current KA 100 Fuse rating A 60 Fuse class J Standard fault Short circuit current KA 5 Fuse rating A 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 & Protection		Auxiliary contacts			
DC voltage V 250 DC current		•	AC voltage	V	600
DC current			AC current	Α	10
Short-circuit protection fuse, 600V High fault Short circuit current Fuse rating A 60 Fuse class J Standard fault Short circuit current Fuse rating A 100 Fuse class J Standard fault Short circuit current Fuse rating A 100 A			DC voltage	V	250
High fault			DC current	Α	1
High fault	Short-circuit protect	tion fuse, 600V			
Fuse rating Fuse class					
Standard fault Short circuit current KA 5 Fuse rating A 100		· ·	Short circuit current	kA	100
Standard fault Short circuit current KA 5 Fuse rating A 100			Fuse rating	Α	60
Short circuit current Fuse rating Fuse rating A 100			Fuse class		J
Fuse rating		Standard fault			
Contact rating of auxiliary contacts according to UL A600 - P600 Ambient conditions Temperature Min °C -50 max °C 70 Storage temperature min °C -60 max °C 80 Max altitude Resistance & Protection Pollution degree			Short circuit current	kA	5
Ambient conditions Temperature Operating temperature min °C -50 max °C 70 Storage temperature min °C -60 max °C 80 Max altitude m 3000 Resistance & Protection Pollution degree			Fuse rating	Α	100
Temperature	Contact rating of au	ixiliary contacts according to UL			A600 - P600
Operating temperature min °C -50 max °C 70 Storage temperature min °C -60 max °C 80 Max altitude m 3000 Resistance & Protection Pollution degree 3	Ambient conditions				
min min max °C -50 max -50 max °C 70 Storage temperature min °C -60 max °C 80 Max altitude m 3000 Resistance & Protection Pollution degree 3	Temperature				
min min max °C -50 max -50 max °C 70 Storage temperature min °C -60 max °C 80 Max altitude m 3000 Resistance & Protection Pollution degree 3	·	Operating temperature			
Storage temperature min %C -60 max %C 80 Max altitude m 3000 Resistance & Protection Storage temperature Pollution degree 3			min	°C	-50
min %C -60 max %C 80 Max altitude m 3000 Resistance & Protection 3 Pollution degree 3			max	°C	70
min %C -60 max %C 80 Max altitude m 3000 Resistance & Protection 3 Pollution degree 3		Storage temperature			
Max altitude m 3000 Resistance & Protection Pollution degree 3			min	°C	-60
Resistance & Protection Pollution degree 3			max	°C	80
Pollution degree 3	Max altitude			m	3000
	Resistance & Prote	ection			
	Pollution degree				3

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 25A, AC COIL 50/60HZ, 48VAC, 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

BF2501A048



BF2501A048

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 25A, AC COIL 50/60HZ, 48VAC, 1NC AUXILIARY CONTACT

CCC		
cULus		
EAC		

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching