



Product designation			Power contactor
Product type designation			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			-
operational mequancy	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	max	A	32
Operational current le			<u> </u>
Operational current le	AC 1 (<10°C)	۸	22
	AC-1 (≤40°C)	A	32
	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	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			
The max surrent to in Bot man 2/11 - This man 2 person in control	≤24V	Α	23
	48V	A	23
	75V	A	23
	110V	A	16
	220V		
IEC may current to in DC1 with 1/D < 1mg with 2 notes in period	ZZUV	A	1
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	40.07	Α.	00
	≤24V	A	23
	48V	A	23
	75V	A	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			
	≤24V	Α	15
	48V	Α	13
	75V	Α	13
	110V	Α	2
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
·	≤24V	Α	18
	48V	Α	18
	75V	Α	16
	110V	Α	10
	220V	A	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			_
	≤24V	Α	22
	48V	Α	22
	75V	A	18
	110V	A	15
	220V	Α	8
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	220 V		
120 max out one to in 200 200 with 2/10 = 10mb with 4 poles in series	≤24V	Α	_
	48V	A	_
	75V	A	_
	110V	A	_
	220V	A	_
Short-time allowable current for 10s (IEC/EN60947-1)	220 V		200
Protection fuse			200
1 100000011 1000	gG (IEC)	Α	50
	aM (IEC)	A	25
Making capacity (RMS value)	aw (IZO)	A	250
Breaking capacity at voltage			200
	440V	Α	200
	500V	A	184
	690V	Α	102
Resistance per pole (average value)	300 v	mΩ	2.5
Power dissipation per pole (average value)		11122	2.0
1 oner alsoipation per pole (average value)	Ith	W	2.6
	AC-3	W	1.6
Tightening torque for terminals	70-3	V V	1.0
rightening torque for terminals	min	Nm	1.5
	max	Nm	1.8
	min	lbin	1.0
		lbin	1.5
Tightening torque for coil terminal	max	וווטו	1.0
rightening torque for contentinal	min	Nlm	Λ 8
	min	Nm Nm	0.8
	max	Nm Ibin	1
	min	lbin	0.8



Managed and a few interest and the second and the s	max	Ibin	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 0/W rag defiadator desti-	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 12000000 12000000
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



Rated AC voltage at 50/60Hz		V	24
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up			
	min	%Us	80
Lance of	max	%Us	110
drop-out		0/11-	00
	min	%Us	20
of FO/COLLE and provided of COLLE	max	%Us	55
of 50/60Hz coil powered at 60Hz			
pick-up	min	%Us	85
	max	%Us	110
drop-out	Παλ	/003	110
diop-out	min	%Us	20
	max	%Us	55
AC average coil consumption at 20°C	max	7003	
of 50/60Hz coil powered at 50Hz			
of 50/50112 coll powered at 50112	in-rush	VA	75
	holding	VA	9
of 50/60Hz coil powered at 60Hz	Holding	*/ \	
31 00/001 12 0011 poworod at 001 12	in-rush	VA	70
	holding	VA	6.5
of 60Hz coil powered at 60Hz	<u> </u>		
	in-rush	VA	75
	holding	VA	9
Dissipation at holding ≤20°C 50Hz		W	2.5
Max cycles frequency			
Mechanical operation			
noonamour operation		cycles/h	3600
		cycles/h	3600
Operating times Average time for Us control		cycles/h	3600
Operating times		cycles/h	3600
Operating times Average time for Us control			
Operating times Average time for Us control in AC	min	ms	8
Operating times Average time for Us control in AC Closing NO	min max		
Operating times Average time for Us control in AC	max	ms ms	8 24
Operating times Average time for Us control in AC Closing NO	max min	ms ms	8 24 10
Operating times Average time for Us control in AC Closing NO Opening NO	max	ms ms	8 24
Operating times Average time for Us control in AC Closing NO	max min max	ms ms ms	8 24 10 20
Operating times Average time for Us control in AC Closing NO Opening NO	max min max min	ms ms ms ms	8 24 10 20
Operating times Average time for Us control in AC Closing NO Opening NO Closing NC	max min max	ms ms ms	8 24 10 20
Operating times Average time for Us control in AC Closing NO Opening NO	max min max min max	ms ms ms ms	8 24 10 20 14 28
Operating times Average time for Us control in AC Closing NO Opening NO Closing NC	max min max min max min max	ms ms ms ms ms	8 24 10 20 14 28
Operating times Exverage time for Us control in AC Closing NO Opening NO Closing NC Opening NC	max min max min max	ms ms ms ms	8 24 10 20 14 28
Operating times Average time for Us control in AC Closing NO Opening NO Closing NC Opening NC Opening NC	max min max min max min max	ms ms ms ms ms	8 24 10 20 14 28
Operating times Average time for Us control in AC Closing NO Opening NO Closing NC Opening NC Opening NC	max min max min max min max	ms ms ms ms ms	8 24 10 20 14 28 7 18
Average time for Us control in AC Closing NO Opening NO Closing NC 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
Average time for Us control in AC Closing NO Opening NO Closing NC Closing NC Opening NC Opening NC Opening NC	max min max min max min max	ms ms ms ms ms	8 24 10 20 14 28 7 18
Average time for Us control in AC Closing NO Opening NO Closing NC 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
Average time for Us control in AC Closing NO Opening NO Closing NC Closing NC Opening NC Opening NC Opening NC	min 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
Average time for Us control in AC Closing NO Opening NO Closing NC Closing NC Opening NC Opening NC Opening NC Opening NC Opening NC Opening NC It technical data Full-load current (FLA) for three-phase AC motor Vielded mechanical performance	min max min max min max min max at 480V at 600V	ms ms ms ms ms ms A	8 24 10 20 14 28 7 18 21 17
Average time for Us control in AC Closing NO Opening NO Closing NC Closing NC Opening NC Opening NC Opening NC Vielded mechanical performance for single-phase AC motor	min 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
Average time for Us control in AC Closing NO Opening NO Closing NC Closing NC Opening NC	min max min max min max min max at 480V at 600V	ms ms ms ms ms ms A	8 24 10 20 14 28 7 18 21 17

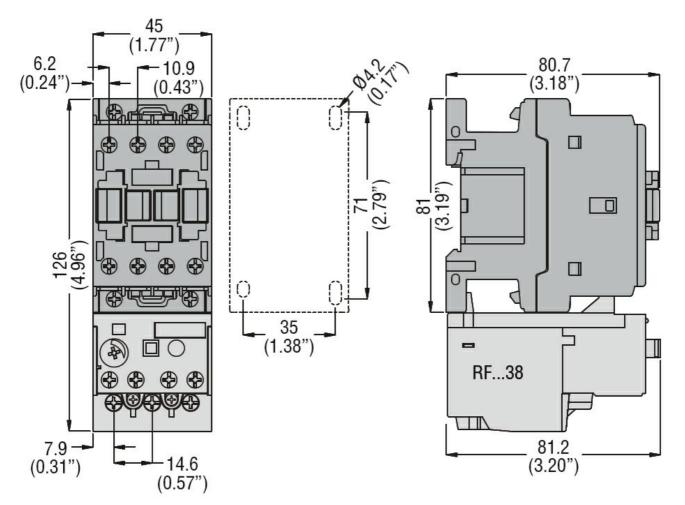




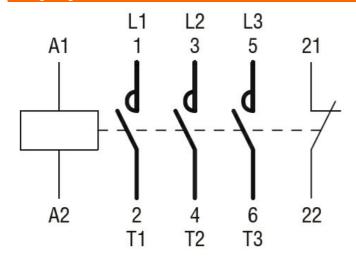
220/230V					
S75/600V			220/230V	HP	7.5
Contactor			460/480V	HP	15
Contactor			575/600V	HP	15
AC current	General USE				
Auxiliary contacts AC voltage		Contactor			
AC voltage			AC current	Α	32
AC current A 10 DC voltage V 250 DC current A 1 DC voltage DC current A 1 Short-circuit current KA 100 Fuse 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, 24VAC, 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

BF2501A024



BF2501A024

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 25A, AC COIL 50/60HZ, 24VAC, 1NC AUXILIARY CONTACT

CCC		
cULus		
EAC		

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching