



Product designation			Power contactor
Product type designation			BF25
Contact characteristics			2. 20
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 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



		max	Ibin	0.74
Max number of wires	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			4.0
	Florible w/s have sometimes	max		10
	Flexible w/o lug conductor section	min	mama ²	4
		min	mm² mm²	1 6
	Flexible c/w lug conductor section	max	1111111	0
	r lexible 6/w rag conductor section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			<u> </u>
		min	mm²	1
		max	mm²	4
Dower terminal protect	tion according to IFC/FN 60520			IP20 when
	tion according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
			~	35mm 360
Weight Conductor section			g	300
Conductor Section	AWG/kcmil conductor section			
	AVVG/KCITIII COTIQUETOT Section	max		10
Auxiliary contact chara	acteristics	max		10
Thermal current Ith			Α	10
IEC/EN 00047 E 4 do	oignation			A600 - P600
1EC/EN 60947-5-1 de	Signation			, 1000
IEC/EN 60947-5-1 de Operating current AC				7.000 1.000
-		230V	A	3
-		230V 400V	A A	
Operating current AC	15			3
	15	400V 500V	Α	3 1.9 1.4
Operating current AC	12	400V	Α	3 1.9
Operating current AC	12	400V 500V 110V	A A	3 1.9 1.4 5.7
Operating current AC	12	400V 500V 110V 24V	A A A	3 1.9 1.4 5.7
Operating current AC	12	400V 500V 110V 24V 48V	A A A	3 1.9 1.4 5.7 5.7 2.9
Operating current AC	12	400V 500V 110V 24V 48V 60V	A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3
Operating current AC	12	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
Operating current AC	12	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1
Operating current AC	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	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
Operating current ACCOPERATION OPERATION CURRENT DCCOPERATION CURRENT CURRE	12	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1
Operating current ACCO Operating current DCCO Operating current DCCO Operations	12	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
Operating current ACCO Operating current DCCO Operating current DCCO Operations Operations Mechanical life	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current ACCOOPERATION OPERATIONS Mechanical life Electrical life	12	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
Operating current ACCOOPERATING CURRENT DCCOOPERATING CURRENT DCCOOPERATIONS Operations Mechanical life Electrical life Safety related data	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current ACCOOPERATING CURRENT DCCOOPERATING CURRENT DCCOOPERATIONS Operations Mechanical life Electrical life Safety related data	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current ACCO Operating current DCCO Operating current DCCO Operations Mechanical life Electrical life Safety related data	12 13 0d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	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
Operating current ACCOOPERATION COPERATION CURRENT DCCOOPERATION COPERATION C	12 13 0d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	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
Operating current ACCOOPERATION OPERATIONS Operations Mechanical life Electrical life Safety related data Performance level B1	12 13 0d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	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
Operating current ACCO Operating current DCCO Operating current DCCO Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi	12 13 0d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	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 200000000 yes



Rated AC voltage at 5	0/60Hz		V	42
C operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up	min	%Us	80
		max	%Us	110
	drop-out		,,,,,	
		min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	85
	drop out	max	%Us	110
	drop-out	min	%Us	20
		max	%Us	55
AC average coil cons	umption at 20°C			
Č	of 50/60Hz coil powered at 50Hz			
	•	in-rush	VA	75
		holding	VA	9
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	70
	of COLLE and required at COLLE	holding	VA	6.5
	of 60Hz coil powered at 60Hz	in-rush	VA	75
		III-IUSII		
		holding	\/A	9
Dissipation at holding	≤20°C 50Hz	holding	VA W	2.5
Dissipation at holding Max cycles frequency	≤20°C 50Hz	holding	VA W	2.5
Dissipation at holding Max cycles frequency Mechanical operation	≤20°C 50Hz	holding		2.5
Max cycles frequency Mechanical operation Operating times		holding	W	2.5
Max cycles frequency Mechanical operation Operating times	ontrol	holding	W	2.5
Max cycles frequency Mechanical operation Operating times	ontrol in AC		W	2.5
Max cycles frequency Mechanical operation Operating times	ontrol	0	W cycles/h	2.5 3600
Max cycles frequency Mechanical operation Operating times	ontrol in AC	O min	W cycles/h	2.5 3600 8
Max cycles frequency Mechanical operation Operating times	ontrol in AC Closing N	O min max	W cycles/h	2.5 3600
Max cycles frequency Mechanical operation Operating times	ontrol in AC	O min max	W cycles/h ms ms	2.5 3600 8 24
Max cycles frequency Mechanical operation Operating times	ontrol in AC Closing N	O min max	W cycles/h ms ms	2.5 3600 8 24 10
Max cycles frequency Mechanical operation Operating times	ontrol in AC Closing N	O min max	W cycles/h ms ms	2.5 3600 8 24
Max cycles frequency Mechanical operation Operating times	ontrol in AC Closing N Opening N	O min max	W cycles/h ms ms	2.5 3600 8 24 10
Max cycles frequency Mechanical operation Operating times	ontrol in AC Closing N Opening N Closing N	O min max NO min max C min max	w cycles/h ms ms ms	2.5 3600 8 24 10 20
Max cycles frequency Mechanical operation Operating times	ontrol in AC Closing N Opening N	O min max NO min max C min max NC	w cycles/h	2.5 3600 8 24 10 20 14 28
Max cycles frequency Mechanical operation Operating times	ontrol in AC Closing N Opening N Closing N	O min max NO min max C min max NC min max	w cycles/h	2.5 3600 8 24 10 20 14 28
Max cycles frequency Mechanical operation Operating times Average time for Us c	ontrol in AC Closing N Opening N Closing N	O min max NO min max C min max NC	w cycles/h	2.5 3600 8 24 10 20 14 28
Max cycles frequency Mechanical operation Operating times Average time for Us c	ontrol in AC Closing N Opening N Closing N Opening N	O min max NO min max C min max NC min max	w cycles/h	2.5 3600 8 24 10 20 14 28
Max cycles frequency Mechanical operation Operating times Average time for Us c	ontrol in AC Closing N Opening N Closing N	O min max NO min max C min max NC min max	w cycles/h	2.5 3600 8 24 10 20 14 28 7 18
Max cycles frequency Mechanical operation Derating times Average time for Us c	ontrol in AC Closing N Opening N Closing N Opening N	O min max NO min max C min max NC min max NC at 480V	w cycles/h	2.5 3600 8 24 10 20 14 28 7 18
Max cycles frequency Mechanical operation Operating times Average time for Us of	ontrol in AC Closing N Opening N Closing N Opening N Opening N	O min max NO min max C min max NC min max	w cycles/h	2.5 3600 8 24 10 20 14 28 7 18
Max cycles frequency Mechanical operation Operating times Average time for Us of	ontrol in AC Closing N Opening N Closing N Opening N Opening N	O min max NO min max C min max NC min max NC at 480V	w cycles/h	2.5 3600 8 24 10 20 14 28 7 18
Max cycles frequency Mechanical operation Operating times Average time for Us of	ontrol in AC Closing N Opening N Closing N Opening N Opening N	O min max NO min max C min max NC min max NC at 480V	w cycles/h	2.5 3600 8 24 10 20 14 28 7 18
Max cycles frequency Mechanical operation Operating times Average time for Us c	ontrol in AC Closing N Opening N Closing N Opening N Opening N	O min max NO min max C min max NC min max A 480V at 600V	w cycles/h	2.5 3600 8 24 10 20 14 28 7 18
Max cycles frequency Mechanical operation Operating times Average time for Us of	ontrol in AC Closing N Opening N Closing N Opening N Opening N	O min max NO min max C min max NC min max A 480V at 600V	w cycles/h	2.5 3600 8 24 10 20 14 28 7 18





		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	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 & Protection	on			
Pollution degree				3