



Product designation Product type designation			Power contactor BFS32
Contact characteristics			2. 002
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	56
Operational current le			
	AC-1 (≤40°C)	Α	56
	AC-1 (≤40°C) with 16mm² wire and fork end	lugA	0
	AC-1 (≤55°C)	Α	45
	AC-1 (≤55°C) with 16mm² wire and fork end	lugA	0
	AC-1 (≤70°C)	Α	40
	AC-1 (≤70°C) with 16mm² wire and fork end		0
	AC-3 (≤440V ≤55°C)	Α	32
	AC-4 (400V)	Α	13.5
Rated operational power AC-3 (T≤55°C)			
	230V	kW	8.8
	400V	kW	16
	415V	kW	17
	440V	kW	17
	500V	kW	20
Dated an arcticular away AC 4 (T<40°C)	690V	kW	22
Rated operational power AC-1 (T≤40°C)	2201/	LAAA	24
	230V 400V	kW kW	21 36
	500V	kW	45
	690V	kW	62
IEC max current le in DC1 with L/R ≤ 1ms wit		KVV	02
TEO MAX CUITER TE III DOT WITH E/IX 3 MITS WITH	≤24V	Α	30
	48V	A	26
	75V	Α	22
	110V	Α	8
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms wit			
	≥ poiso osilos ≤24V	Α	32
	48V	Α	32
	75V	Α	28
	110V	Α	25
	220V	Α	3
IEC max current le in DC1 with L/R ≤ 1ms wit			
	≤24V	Α	32



	48V	Α	32
	75V	A	32
	110V	Α	27
	220V	Α	23
EC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	220 7	- , ,	
LO max ountend in DOT with E/TC = 1mo with 4 poles in solies	≤24V	Α	_
	48V	A	_
	75V	A	_
	110V	A	_
	220V		_
IFC may surrent to in DC2 DC5 with L/D < 15mg with 1 notes in coring	220 V	A	
EC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	-04 1/	^	00
	≤24V	A	20
	48V	Α	17
	75V	Α	15
	110V	Α	2,5
	220V	A	_
EC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	25
	48V	Α	22
	75V	Α	20
	110V	Α	15
	220V	Α	3
EC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	30
	48V	Α	28
	75V	Α	28
	110V	Α	20
	220V	Α	23
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	-		-
	≤24V	Α	_
	48V	Α	_
	75V	Α	_
	110V	A	_
	220V	A	_
Short-time allowable current for 10s (IEC/EN60947-1)	220 V		320
Protection fuse		A	320
Protection ruse	. 0 (150)		00
	gG (IEC)	A	63
M. I (DMO . I)	aM (IEC)	A	32
Making capacity (RMS value)		Α	320
Breaking capacity at voltage			
	440V	Α	256
	500V	Α	240
	690V	Α	192
Resistance per pole (average value)		mΩ	2
Power dissipation per pole (average value)			
	Ith	W	6
	AC-3	W	2
Tightening torque for terminals			
	min	Nm	2.5
	max	Nm	3
	min	lbin	1.8
	max	Ibin	2.2
Tightening torque for coil terminal			



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max Nm 1 1 10 10 10 10 10 10			min	Nm	0.8
Max number of wires simultaneously connectable Name					
Max number of wires simultaneously connectable Max number of wires simultaneously conductor section Max number of max number of least number of leas					
As number of wires simultaneously connectable Nr. 2					
AWG/Kcmil	Max number of wires sir	nultaneously connectable			
Plexible w/o lug conductor section	Conductor section	,			
Flexible w/o lug conductor section		AWG/Kcmil			
Main Min Min			max		6
Please P		Flexible w/o lug conductor section			
Flexible c/w lug conductor section			min		
Min Min			max	mm²	16
Place		Flexible c/w lug conductor section		•	
Flexible with insulated spade lug conductor section min max mm² 1 max					
Max		Ele Mile 20 Con late Leve In Lance Leve		mm²	10
Page		Flexible with insulated spade lug conduct		mama ²	1
Power terminal protection according to IEC/EN 60529 Power terminal protection according to IEC/EN					
Property wired Property Property wired Property wired Property wired Property Property			max	111111	
Cable stripping lenght main circuit command circuit auxiliary circuit mm 0 Accidentical features command circuit auxiliary circuit mm 0 Operating position normal allowable Vertical plan ±30° Cixing Screw / DIN rail 35mm Screw / DIN rail 35mm Veight g 554 Auxiliary contact characteristics Screw / DIN rail 35mm Screw / DIN rail 35mm Veight A 0 Informal current Ith A 0 EC/EN 60947-5-1 designation A 0 Deparating current AC15 230V A 3 Above Auxiliary contact characteristics 230V A 3 EC/EN 60947-5-1 designation A 600 - Q600 Deparating current DC15 230V A 1.9 Spout A 1.9 500V A 1.4 Operating current DC12 24V A 0 4 Above Auxiliary contact characteristics A 0 4 0 4 0 4 0 0	Power terminal protection	on according to IEC/EN 60529			
Main circuit command circuit command circuit auxiliary circuit mm 0 auxiliary circuit mm 1 allowable 1 ±30° Screw / DIN rail 35mm Vertical plan allowable 1 ±30° Screw / DIN rail 35mm Vertical plan allowable 1 ±30° Screw / DIN rail 35mm Vertical plan allowable 1 ±30° Screw / DIN rail 35mm Vertical plan allowable 1 ±30° Screw / DIN rail 35mm Vertical plan allowable 1 ±30° Screw / DIN rail 35mm Vertical plan allowable 1 ±30° Screw / DIN rail 35mm Vertical plan allowable 1 ±30° A 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cable stripping lenght				property wired
Command circuit auxiliary circuit mm 0 0 0 0 0 0 0 0	ouble diripping longin		main circuit	mm	0
Auxiliary circuit mm 0					
Acchanical features Departing position					
Operating position normal allowable Vertical plan ±30° Fixing Screw / DIN rail 35mm Veight g 554 Veight (Weight) g 554 Veight (Weight) g 554 Veight (Weight) A 0 Veight (Weight) A 0 Veight (Weight) A 0 December (Weight) A 0 EC/EN 60947-5-1 designation A 0 EC/EN 60947-5-1 designation A 0 Deperating current AC15 230V A 3 230V A 1.9 3 400V A 1.9 3 48V A 0 4 48V A 0 4 48V A 0 0	Mechanical features				
Screw / DIN rail 35mm Scre	Operating position				
Screw / DIN rail 35mm Scre			normal		Vertical plan
Same			allowable		
Auxiliary contact characteristics Type of contact Thermal current Ith A 0 EC/EN 60947-5-1 designation Derating current AC15 230V A 1.9 500V A 1.4 Departing current DC12 24V A 0 48V A 0 48V A 0 60V A 0 125V A 0 220V A 0 60V A 0 0 125V A 0 220V A 0 60V A 0 125V A 0 0 00V A 0 00V A 0 0 0 O 0 0 O 0 O 0 O 0 O 0 O 0 O 0 O 0	Fixing				
Avxiliary contact characteristics Type of contact Thermal current Ith EC/EN 60947-5-1 designation Deerating current AC15 230V A 3 400V A 1.9 500V A 1.4 Deerating current DC12 24V A 0 48V A 0 60V A 0 125V A 0 60V A 0 125V A 0 600V A 0 Deerating current DC13	Weight			g	554
Thermal current Ith A 0 EC/EN 60947-5-1 designation A600 - Q600 Operating current AC15 230V A 3 400V A 1.9 500V A 1.4 Operating current DC12 24V A 0 48V A 0 60V A 0 125V A 0 220V A 0 600V A 0 Operating current DC13 Operating current DC13 125V A 0 600V A 0 Operating current DC13 125V A 0.55 600V A 0.1 Operations Mechanical life cycles 20000000 Electrical life cycles 1600000	Auxiliary contact charac	teristics			
EC/EN 60947-5-1 designation	Type of contact				0
Departing current AC15 230V A 3 400V A 1.9 500V A 1.4 Departing current DC12 24V A 0 48V A 0 60V A 0 125V A 0 220V A 0 600V A 0 220V A 0 600V A 0 Departing current DC13 125V A 0.55 600V A 0.1 Departing current DC13 125V A 0.55 600V A 0.1 Departions Mechanical life cycles 20000000 Electrical life cycles 1600000	Thermal current Ith			Α	0
230V A 3 400V A 1.9 500V A 1.4					A600 - Q600
A 00	Operating current AC15				
Son					
24V A 0 48V A 0 60V A 0 125V A 0 60V A 0					
24V A 0 48V A 0 60V A 0 125V A 0 600V A 0 125V A 0.55 600V A 0.1 600V A 0.1 600V A 0.1 600V Constant			500V	A	1.4
A8V A 0 60V A 0 125V A 0 220V A 0 600V A 0 0 0 0 0 0 0 0 0	Operating current DC12				
125V A 0 125V A 0 220V A 0 600V A 0.55 600V A 0.1 600					
125V A 0					
220					
Comparison of the content DC13					
125V A 0.55 600V A 0.1					
125V A 0.55	Operating oursest DC42		6007	А	U
Derations Mechanical life Cycles 20000000 Electrical life cycles 1600000 Safety related data	Operating current DC13		405\/	۸	0.55
Departions Mechanical life cycles 20000000 Electrical life cycles 1600000 Safety related data					
Mechanical life cycles 20000000 Electrical life cycles 1600000 Safety related data	Operations		6007	А	U. I
Electrical life cycles 1600000 Safety related data	· ·			cycles	20000000
Safety related data				-	
•				cycles	1000000
		d according to EN/ISO 13490 1			



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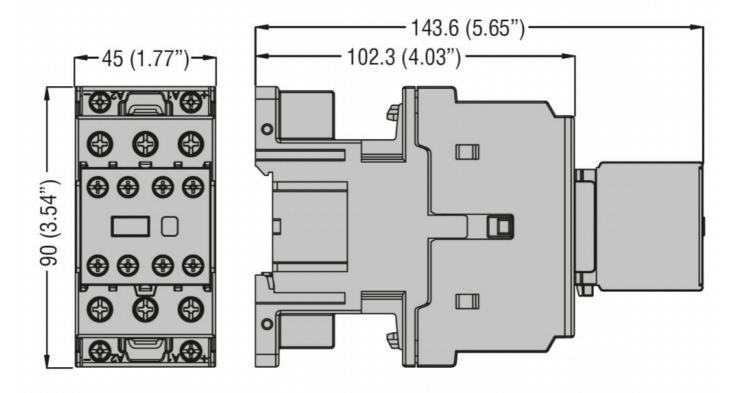
			rated load mechanical load	cycles cycles	1600000 20000000
EMC compatibility					yes
Electrical characteristic					
Operating current DC1	3		0501/		0.07
			250V 440V	A	0.27
			500V	A A	0.15 0.13
AC coil operating			300 V		0.13
AC operating voltage					
1 0 0	of 50/60Hz coil power	ered at 50Hz			
	·	drop-out			
			max	%Us	0
DC coil operating					
DC rated control voltage	ge			V	24
DC operating voltage					
	pick-up			0/11-	70
			min max	%Us %Us	70 125
	drop-out		IIIdX	/005	123
	drop out		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					
Average time for US Co					
, wordigo illino for Go of					
	in AC	Closing NO			
		Closing NO	min	ms	8
		Closing NO	min max	ms ms	8 24
		Closing NO Opening NO	min max		
		·			
		Opening NO	max	ms	24
		·	max min max	ms ms ms	24515
		Opening NO	max min max min	ms ms ms	245159
		Opening NO Closing NC	max min max	ms ms ms	24515
		Opening NO	max min max min max	ms ms ms ms	24515920
		Opening NO Closing NC	max min max min max min max	ms ms ms ms ms	24 5 15 9 20
	in AC	Opening NO Closing NC	max min max min max	ms ms ms ms	24515920
		Opening NO Closing NC	max min max min max min max	ms ms ms ms ms	24 5 15 9 20
	in AC	Opening NO Closing NC Opening NC	max min max min max min max	ms ms ms ms ms	24 5 15 9 20 9 17
	in AC	Opening NO Closing NC Opening NC Closing NO	max min max min max min max min max	ms ms ms ms ms	24 5 15 9 20 9 17
	in AC	Opening NO Closing NC Opening NC	max min max min max min max min max	ms ms ms ms ms ms ms ms	24 5 15 9 20 9 17
	in AC	Opening NO Closing NC Opening NC Closing NO	min max	ms ms ms ms ms ms ms ms ms	24 5 15 9 20 9 17 54 66 14
	in AC	Opening NO Closing NC Opening NC Closing NO Opening NO	max min max min max min max min max	ms ms ms ms ms ms ms ms	24 5 15 9 20 9 17
	in AC	Opening NO Closing NC Opening NC Closing NO	min max min max min max min max min max min max	ms	24 5 15 9 20 9 17 54 66 14 17
	in AC	Opening NO Closing NC Opening NC Closing NO Opening NO	min max	ms	24 5 15 9 20 9 17 54 66 14 17
	in AC	Opening NO Closing NC Opening NC Closing NO Opening NO	min max min max min max min max min max min max	ms	24 5 15 9 20 9 17 54 66 14 17
	in AC	Opening NO Closing NC Opening NO Closing NO Opening NO Closing NC	min max	ms	24 5 15 9 20 9 17 54 66 14 17



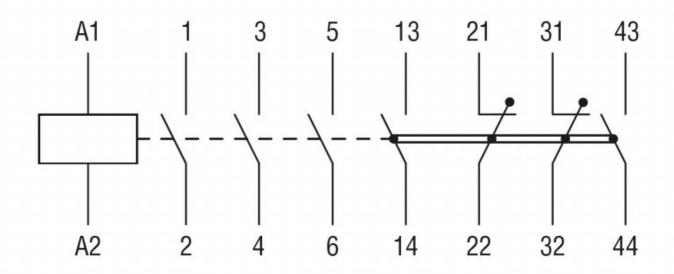
		max	ms	0
UL technical data				
Rated operational volt	age AC (UL)		V	600
Full-load current (FLA) for three-phase AC motor			_
		at 480V	Α	27
		at 600V	Α	27
Yielded mechanical pe	erformance			
	for single-phase AC motor			
		110/120V	HP	3
		230V	HP	7.5
	for three-phase AC motor			
		200/208V	HP	10
		220/230V	HP	10
		460/480V	HP	20
		575/600V	HP	25
General USE				
	Contactor			
		AC current	A	55
Short-circuit protection				
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	100
	-	Fuse class		
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	A	125
	iary contacts according to UL			A600 - Q600
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
	<u> </u>	max	°C	70
	Storage temperature		00	22
		min	°C	-60
Marratituda		max	°C	80
Max altitude Resistance & Protecti	on -		m	3000
	on			0
Impact resistance Vibration resistance				0
	nonto			
Special thermic treatm	IEIIIO			0
Pollution degree	CIMT			3
Resistance to flame (,			0
Flame retardant accor	aling to UL94			0
Dimensions				

ENERGY AND AUTOMATION

THREE-POLE SAFETY CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 32A, DC COIL, 24VDC, 2NO+2NC 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

IEC/EN/BS 60947-5-1

UL 60947-1

UL 60947-4-1

Certificates



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THREE-POLE SAFETY CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 32A, DC COIL, 24VDC, 2NO+2NC AUXILIARY CONTACT

cULus

UL listed for USA and Canada

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching