



Product designation Product type designation			Power contactor BFS32
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	56
Operational current le			
	AC-1 (≤40°C)	Α	56
	AC-1 (≤40°C) with 16mm² wire and fork end	-	0
	AC-1 (≤55°C)	Α	45
	AC-1 (≤55°C) with 16mm² wire and fork end	-	0
	AC-1 (≤70°C)	Α	40
	AC-1 (\leq 70°C) with 16mm ² wire and fork end AC-3 (\leq 440V \leq 55°C)	•	0 32
	AC-3 (\$440V \$55 C) AC-4 (400V)	A A	32 13.5
Rated operational power AC-3 (T≤55°C)	AC-4 (400V)		13.5
Nated operational power AO-3 (1200 O)	230V	kW	8.8
	400V	kW	16
	415V	kW	17
	440V	kW	17
	500V	kW	20
	690V	kW	22
Rated operational power AC-1 (T≤40°C)			
	230V	kW	21
	400V	kW	36
	500V	kW	45
	690V	kW	62
IEC max current le in DC1 with L/R ≤ 1ms with	1 poles in series		
	≤24V	Α	30
	48V	Α	26
	75V	Α	22
	110V	Α	8
150	220V	A	
IEC max current le in DC1 with L/R ≤ 1ms with			00
	≤24V	A	32
	48V	A	32
	75V 110V	A	28
	220V	A A	25 3
IEC max current le in DC1 with L/R ≤ 1ms with			J
TEO MAX GUITERITE III DOT WILL E/IX 3 TIIIS WILL	≤24V	Α	32



min Nm 2.5 max Nm 3 min Ibin 1.8 max Ibin 2.2				
TSV A 32 110V A 27 220V A 23 23 23 23 23 23 23		48V	Α	32
110V				
EC max current le in DC1 with L/R ≤ 1ms with 4 poles in series \$24V				
S24V A -				
\$24V	IFC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	2201	- , ,	
48V	TEO HILL OUT OUT DOT WILL ET ? THIS WILL 4 POICE IT SOILES	<24\/	Δ	_
T5V				_
110V				_
EC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series \$24V				_
Section Se				_
\$24V	IEC may current to in DC3 DC5 with L/P < 15ms with 1 poles in series	220 V		
48V	TEC max current le in DC3-DC3 with L/K \(\) 13ms with 1 poles in series	<24\/	۸	20
75				
110V A 2,5 220V A				
EC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series \$24V				
Section Se				
\$24V		220V	А	
48V	IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
75V A 20 110V A 15 15 120V A 3 15 120V A 28 175V A 28 110V A 20 120V A 23 110V A 23 110V A 23 120V A 23 120V A 23 120V A 2 220V A 2 2 220V A 2 2 2 2 2 2 2 2 2				
110V A 15 220V A 3 3 3 3 3 3 3 3 3				
EC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series \$24V				
Section Se				
\$24V		220V	Α	3
A 8 V	IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
75		≤24V	Α	30
110V		48V	Α	28
EC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series ≤24V		75V	Α	28
Section Se		110V	Α	20
Section Se		220V	Α	23
\$\frac{\frac{\cong}{24V}}{48V}	IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
ABV A -	'	≤24V	Α	_
75V				_
110V				_
220V				_
Short-time allowable current for 10s (IEC/EN60947-1)			_	_
Protection fuse gG (IEC) A 63 aM (IEC) A 32 Making capacity (RMS value) A 320 Breaking capacity at voltage 440	Short-time allowable current for 10s (IEC/EN60947-1)	2201		
GG (IEC)				320
A 32 Making capacity (RMS value)	Flotection ruse	aC (IEC)	۸	62
Making capacity (RMS value) A 320 Breaking capacity at voltage 440V A 256 500V A 240 690V A 192 Resistance per pole (average value) mΩ 2 Power dissipation per pole (average value) lth W 6 AC-3 W 2 Tightening torque for terminals min Nm 2.5 max Nm 3 min Ibin 1.8 max Ibin 2.2		• , ,		
Breaking capacity at voltage	Making conscity (DMC value)	aivi (IEC)		
440V A 256 500V A 240 690V A 192			A	320
Soov A 240 690V A 192	ыеакіну сарасіту ат voitage	4.401.4	Δ.	050
Resistance per pole (average value) mΩ 2				
Resistance per pole (average value) 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 Ibin 1.8 max Ibin 2.2				
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 Ibin 1.8 max Ibin 2.2		690V		
Ith W 6 AC-3 W 2			mΩ	2
AC-3 W 2 Tightening torque for terminals min Nm 2.5 max Nm 3 min Ibin 1.8 max Ibin 2.2	Power dissipation per pole (average value)			
Tightening torque for terminals min Nm 2.5 max Nm 3 min Ibin 1.8 max Ibin 2.2				
min Nm 2.5 max Nm 3 min Ibin 1.8 max Ibin 2.2		AC-3	W	2
max Nm 3 min Ibin 1.8 max Ibin 2.2	Tightening torque for terminals			
min Ibin 1.8 max Ibin 2.2		min	Nm	2.5
max Ibin 2.2		max	Nm	3
		min	lbin	1.8
Tightening torque for coil terminal		max	lbin	2.2
	Tightening torque for coil terminal			



		min	Nm	0.8
		max	Nm	1
		min	lbin	0.8
		max	Ibin	0.74
Max number of wires s	simultaneously connectable		Nr.	2
Conductor section	, , , , , , , , , , , , , , , , , , , ,			
	AWG/Kcmil			
		max		6
	Flexible w/o lug conductor section			
	-	min	mm²	2.5
		max	mm²	16
	Flexible c/w lug conductor section			
		min	mm²	1
		max	mm²	10
	Flexible with insulated spade lug conduct	or section		
		min	mm²	1
		max	mm²	10
Power terminal protec	tion according to IEC/EN 60529			IP20 when
				properly wired
Cable stripping lenght				
		main circuit	mm	0
		command circuit	mm	0
		auxiliary circuit	mm	0
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	432
Auxiliary contact chara	acteristics			
Type of contact				0
Thermal current Ith			Α	0
IEC/EN 60947-5-1 des	signation			A600 - Q600
Operating current AC1	5			
		230V	Α	3
		400V	Α	1.9
		500V	Α	1.4
Operating current DC1	12			
		24V	Α	0
		48V	Α	0
		60V	Α	0
		125V	Α	0
		220V	Α	0
		600V	Α	0
Operating current DC1	13			
		125V	Α	0.55
		600V	Α	0.1
Operations				
Mechanical life			cycles	20000000
Electrical life			cycles	1600000
Safety related data	0d according to EN/ISO 13489-1			



	rated load	cycles	1600000
	mechanical load	cycles	20000000
EMC compatibility		-	yes
Electrical characteristics			
Operating current DC13			
	250V	A	0.27
	440V	A	0.15
AC coil operating	500V	Α	0.13
Rated AC voltage at 50/60Hz		V	24
AC operating voltage		<u> </u>	
of 50/60Hz coil powered at 50Hz			
pick-up			
	min	%Us	80
	max	%Us	110
drop-out			
	min	%Us	20
of 50/0011= ==1 == = = 1 = 1 0011	max	%Us	55
of 50/60Hz coil powered at 60Hz			
pick-up	min	%Us	85
	max	%Us	110
drop-out	max	7000	110
3.50	min	%Us	20
	max	%Us	55
AC average coil consumption at 20°C			
of 50/60Hz coil powered at 50Hz			
	in-rush	VA	75
	holding	VA	9
of 50/60Hz coil powered at 60Hz			70
	in-rush	VA	70
of 60Hz coil powered at 60Hz	holding	VA	6.5
or our iz con powered at our iz	in-rush	VA	75
	holding	VA	9
Dissipation at holding ≤20°C 50Hz		W	2.5
DC coil operating			
DC operating voltage			
pick-up			
	min	%Us	0
	max	%Us	0
drop-out			
	min	%Us	0
Average coil consumption <20°C	max	%Us	0
Average coil consumption ≤20°C	in-rush	W	0
	holding	W	0
Max cycles frequency	Tiolulity	v v	
Mechanical operation		cycles/h	3600
Operating times		.,	
Average time for Us control			
in AC			
Closing NO			
	min	ms	8

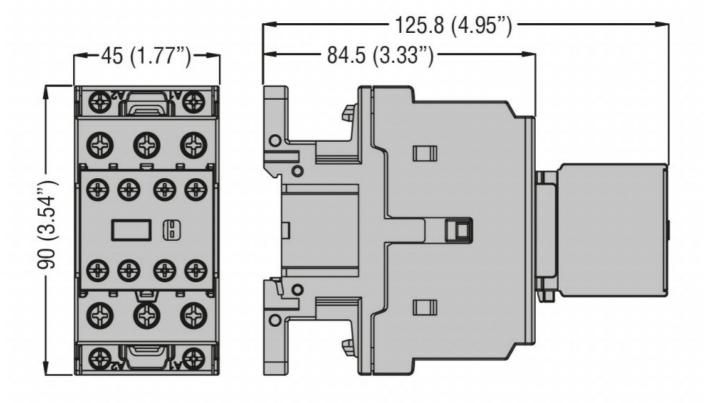




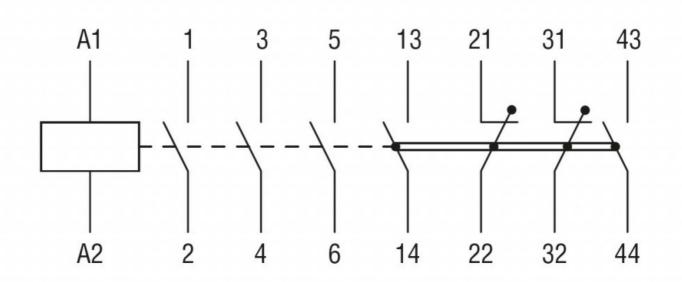
			max	ms	24
		Opening NO	max	1110	- 1
		Opening NO	min	m 0	E
			min	ms	5
		01 1 110	max	ms	15
		Closing NC	_		_
			min	ms	9
			max	ms	20
		Opening NC			
			min	ms	9
			max	ms	17
	in DC				
		Closing NO			
			min	ms	0
			max	ms	0
		Opening NO			
		1 3	min	ms	0
			max	ms	0
		Closing NC	max	1110	O
		Closing NO	min	mc	0
				ms ms	
		On anin a NC	max	ms	0
		Opening NC			^
			min	ms	0
			max	ms	0
UL technical data					
Rated operational volta				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 A0	C motor			
	0 1		110/120V	HP	3
			230V	HP	7.5
	for three-phase AC	motor			
	ioi unee phase ne	motor	200/208V	HP	10
			220/230V	HP	10
			460/480V	HP	20
0 11105			575/600V	HP	25
General USE					
	Contactor		- -	_	
			AC current	A	55
Short-circuit protection	ı fuse, 600V				
	High fault				
			Short circuit current	kA	100
			Fuse rating	Α	100
			Fuse class		J
	Standard fault				-
			Short circuit current	kA	5
			Fuse rating	Α	125
Contact rating of auxilia	ary contacts accordin	a to UL		<u> </u>	A600 - Q600
Ambient conditions	ary cornacte according	ig to CE			71000 0000
Temperature					
remperature	Operating towns	turo			
	Operating tempera	ıure		۰.	50
			min	°C	-50 -70
			max	°C	70



Storage temperature			
	min	°C	-60
	max	°C	80
Max altitude		m	3000
Resistance & Protection			
Impact resistance			0
Vibration resistance			0
Special thermic treatments			0
Pollution degree			3
Resistance to flame (GWT)		•	0
Flame retardant according to UL94			0
Dimensions			



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

cULus

UL listed for USA and Canada

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching