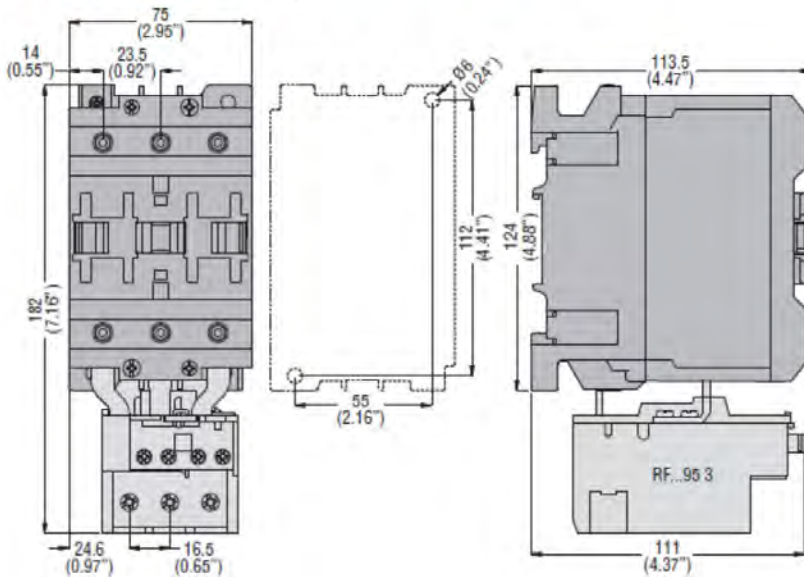


11BF50... 11BF65... 11BF80... 11BF95... Datasheet

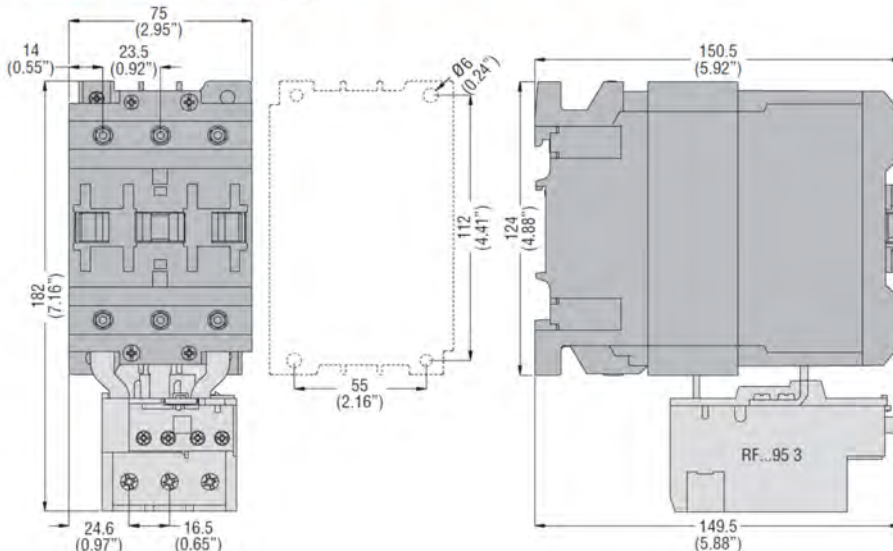
Part No. AC COIL	IEC operating current				Maximum IEC power at ≤55°C (AC3)								Maximum UL/CSA horsepower ratings					
	Ith (AC1)			Ie (AC3) ≤440V at ≤55°C	230V	400V	415V	440V	500V	690V	1000V	Single phase		Three phase				
	≤40°C	≤55°C	≤70°C									120V	240V	200V	240V	480V	600V	
[A]	[A]	[A]	[A]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[HP]	[HP]	[HP]	[HP]	[HP]	[HP]		
11 BF50 000	90	80	65	50	14.3	25	27.2	27.2	33.2	43.5	25	5	10	10	15	30	40	
11 BF65 000	110	90	70	65	18.5	33	36	36	45.3	59.7	30	—	—	20	25	50	60	
11 BF80 000	125	100	80	80	23	41	46	46	56	74	37	—	—	25	30	60	75	
11 BF95 000	125	100	80	95	27.6	50	55	55	56	74	45	—	—	30	30	60	75	

Part No. DC COIL	DC coil Low consumption	IEC operating current				Maximum IEC power at ≤55°C (AC3)								Maximum UL/CSA horsepower ratings					
		Ith (AC1)			Ie (AC3) ≤440V at ≤55°C	230V	400V	415V	440V	500V	690V	1000V	Single phase		Three phase				
		≤40°C	≤55°C	≤70°C									120V	240V	200V	240V	480V	600V	
		[A]	[A]	[A]	[A]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[HP]	[HP]	[HP]	[HP]	[HP]	[HP]	
11 BF50 C 00000	—	90	80	65	50	14.3	25	27.2	27.2	33.2	43.5	25	5	10	10	15	30	40	
11 BF65 C 00000	—	110	90	70	65	18.5	33	36	36	45.3	59.7	30	—	—	20	25	50	60	
11 BF80 C 00000	—	125	100	80	80	23	41	46	46	56	74	37	—	—	25	30	60	75	
11 BF95 C 00000	—	125	100	80	95	27.6	50	55	55	56	74	45	—	—	30	30	60	75	

BF50 00 - BF65 00 - BF80 00 - BF95 00 - BF110 00 three poles
with **RF...95 3** thermal relay



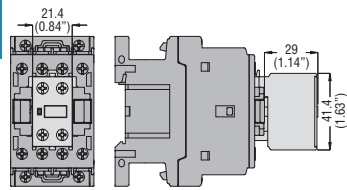
BF50C 00 - BF65C 00 - BF80C 00 - BF95C 00 - BF110C 00 three poles
with **RF...95 3** thermal relay



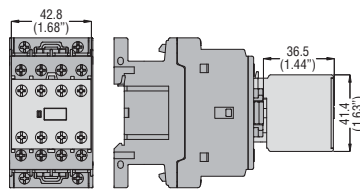
ADD-ON BLOCKS WITH BF CONTACTORS

Auxiliary contacts **BFX10...** w/2 contacts

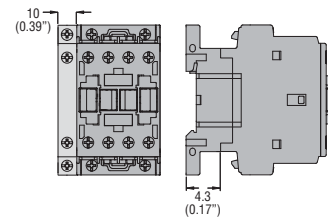
2



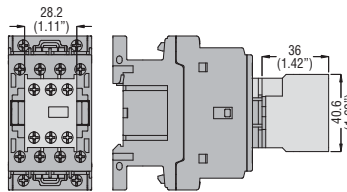
BFX10... w/4 contacts



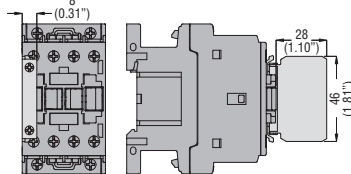
BFX12...



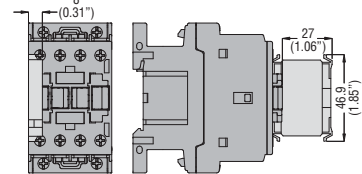
G484...



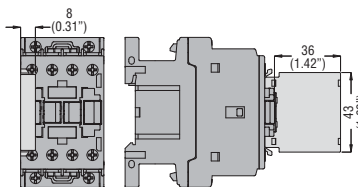
G418...



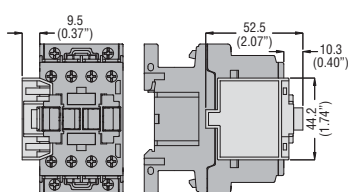
G218



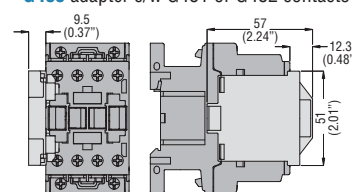
G481..., G482



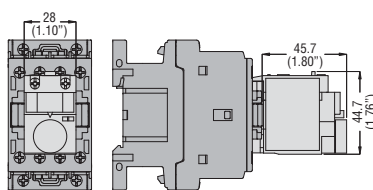
G280 adapter with G218 contact



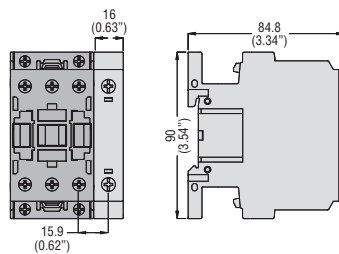
G419 adapter c/w G418 contacts, **G428** contacts
G483 adapter c/w G481 or G482 contacts



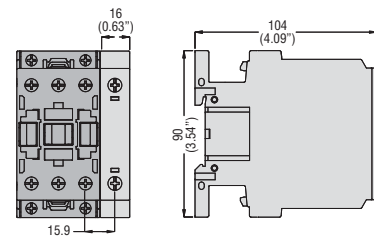
G485..., G486..., G487
delayed contacts



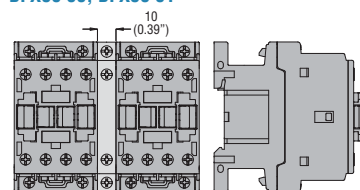
Fourth pole
BFX42



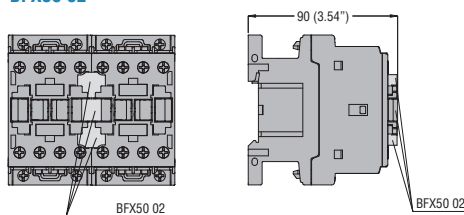
BFXD42



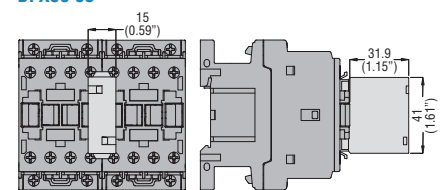
Interlocks
BFX50 00, BFX50 01



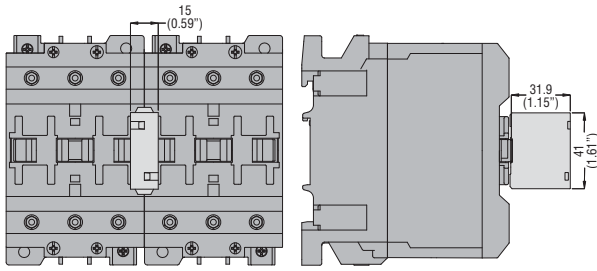
BFX50 02



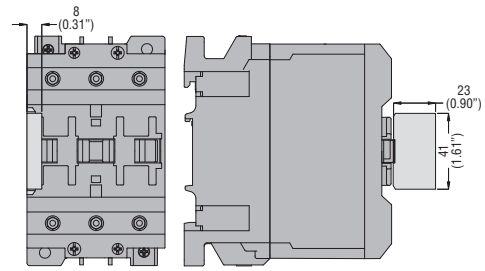
BFX50 03



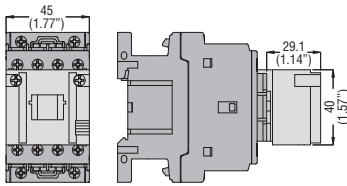
Interlock
G269 2



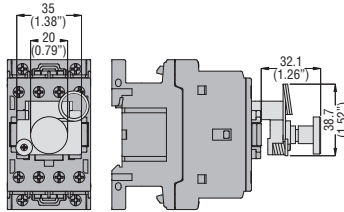
Surge suppressors
G318, G319 225, G322



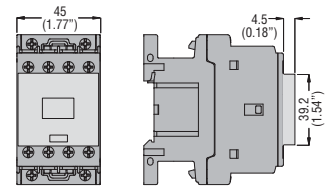
G222, G272 latch



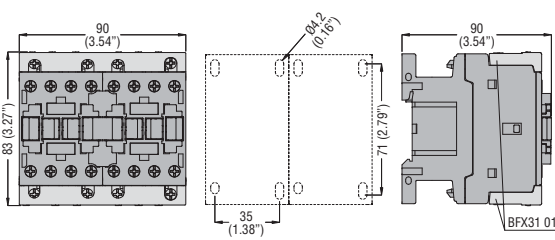
G454, G455 manual closing



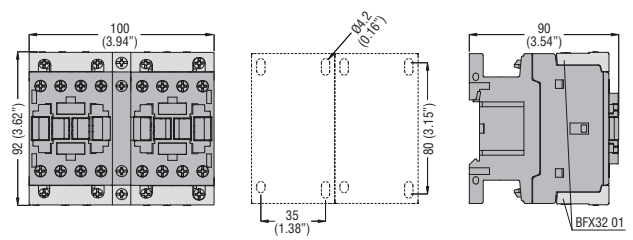
BFX80 sealing cover



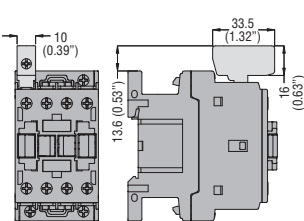
Rigid connecting kits
BFX31 01



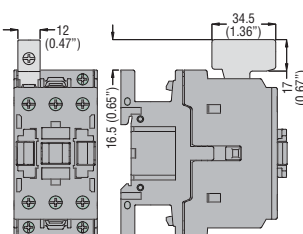
Rigid connecting kits
BFX32 01



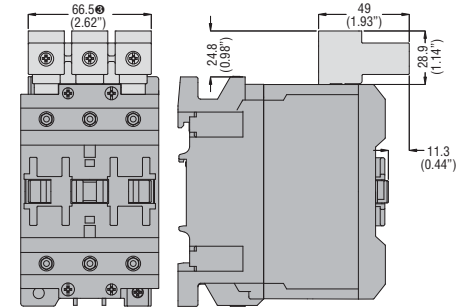
G231 terminal
1-pole



G232 terminal
1-pole

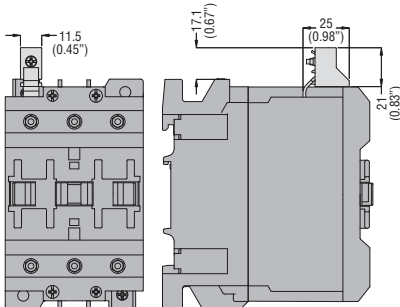


G271, G288 terminal
3 and 4-pole

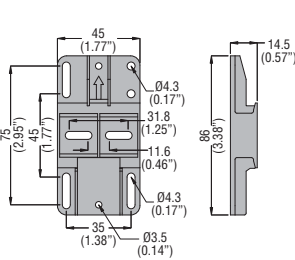


⊕ 90mm (3.54") for G288 terminal only.

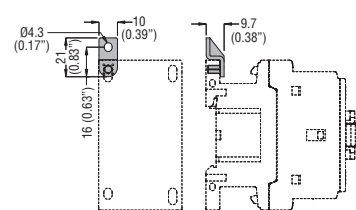
G285 auxiliary terminal



BFX89 01 fixing base



BFX89 02 fixing bracket



IEC OPERATIONAL CHARACTERISTICS BF50-BF110

TYPE		BF50	BF65 ^①	BF80	BF95	BF110	
POLE CHARACTERISTICS							
Power poles	n°	3-4	3-4	3-4	3	3	
Rated insulation voltage U _i	V	1000					
Rated impulse withstand voltage U _{imp}	kV	8					
Operational frequency	Hz	25-400 ^②					
Operational current	Conventional free air thermal I _{th} (≤40°C)	A	90	110	125	125	125
	AC3 (≤440V ≤55°C)	A	50	65	80	95	110
	AC4 (400V) ^③	A	28	31	38	43	43
Short-time allowable current for 10s (IEC/EN 60947-1)	A	390	390	480	760	880	
Maximum fuse size	gG	A	100	125	160	160	160
	aM	A	50	80	80	100	125
Making capacity (RMS value)	A	800	1090	1200	1200	1200	
Breaking capacity at voltage	≤440V	A	800	1090	1200	1200	1200
	500V	A	660	830	1050	1050	1050
	690V	A	500	630	800	800	800
Consumption and resistance per pole (average values)		mΩ	0.8	0.8	0.6	0.6	0.6
	I _{th}	W	6.5	9.7	9.4	9.4	9.4
	AC3	W	2.0	3.4	3.8	5.4	7.3
Terminals	Type	Lug clamp ^④					
	A	12.3	12.3	12.3	12.3	12.3	
	B	12	12	12	12	12	
	Screw	M6	M6	M6	M6	M6	
	Metric Allen	4	4	4	4	4	
Tightening torque for pole terminal min-max	Nm	4...5					
	lbf ⁵	2.95...3.69					
Tightening torque for coil terminals min-max	Nm	0.8...1					
	lbf ⁵	0.59...0.74					
	Phillips	1					
Conductor section connectable with 1 or 2 wires min...max	AWG	N°					
	Flexible w/o lug	mm ²	4...50	4...50	6...50	6...50	6...50
	Flexible c/w lug	mm ²	4...50	4...50	6...50	6...50	6...50
Power terminal protection according to IEC/EN 60529		IP20 ^⑤					
AMBIENT CONDITIONS							
Operating temperature	°C	-50...+70					
Storage temperature	°C	-60...+80					
Maximum altitude	m	3000					
Operating position	Normal	On vertical plane					
	Allowable	± 30°					
Fixing		Screw or DIN rail 35mm ^⑥ and 75mm (IEC/EN 60715)					

^② Derating for use at 61-400 Hz. Consult Customer Service for information; see contact details on inside front cover.

^③ Current values guarantee an electrical life of about 200,000 cycles.

^④ IEC/EN 60947-1 designation: Pillar terminal.

In addition to the main terminal which has dimensions as mentioned above, there is a second terminal entry 12.3x3.8mm (0.5x0.15in) for flexible busbars.

^⑤ IP20 protection warranted to three-pole contactors only by mounting the G265 protection.

^⑥ Only three-pole versions can be mounted on 35mm DIN rail.

^① ELEVATOR EQUIPMENT - Magnetic Motor Controllers per CSA certification File 54332 - Class 2411-03, to requirements of B44.1-04/SME A17.5-2004. Contactors, three or four poles, open type, operating coil 600VAC or less, 380VDC or less.

Type	Maximum horsepower ratings						CSA General use [A]
	Single phase		Three phase				
	120V	240V	200-208V	240V	480V	600V	
BF65	[HP]	[HP]	[HP]	[HP]	[HP]	[HP]	[A]
	3	10	15	15	40	50	110

TYPE			BF50	BF65	BF80	BF95	BF110
AC CONTROL							
Rated voltage at 50/60Hz, 60Hz		V	12-600				
Operating voltage limits							
50/60Hz coil powered at	50Hz	pick-up	% Us	80-110			
		drop-out	% Us	20-55			
	60Hz	pick-up	% Us	85-110			
		drop-out	% Us	40-55			
60Hz coil powered at	60Hz	pick-up	% Us	80-110			
		drop-out	% Us	20-55			
Average coil consumption at $\leq 20^{\circ}\text{C}$							
50/60Hz coil powered at	50Hz	in-rush	VA	220			
		holding	VA	18			
	60Hz	in-rush	VA	200			
		holding	VA	15			
60Hz coil powered at	60Hz	in-rush	VA	220			
		holding	VA	18			
Dissipation at $\leq 20^{\circ}\text{C}$	50Hz	W	6				
DC CONTROL							
Rated voltage		V	12-600				
Operating voltage limits	pick-up	% Us	80-110				
	drop-up	% Us	10-25				
Average consumption $\leq 20^{\circ}\text{C}$ (in rush-holding)		W	15				
OPERATING TIMES							
Average time for Us control in	AC	closing NO	ms	13-28			
		opening NO	ms	6-19			
	DC	closing NO	ms	60-90			
		opening NO	ms	7-12			
LIFE							
Mechanical (million)	AC control	cycles	15	15	15	15	15
	DC control	cycles	15	15	15	15	15
Electrical (Ie at 400V in AC3) (million)		cycles	1.5	1.4	1.3	1.2	0.8
MAXIMUM OPERATING RATE							
Mechanical operations		cy/h	3600				