

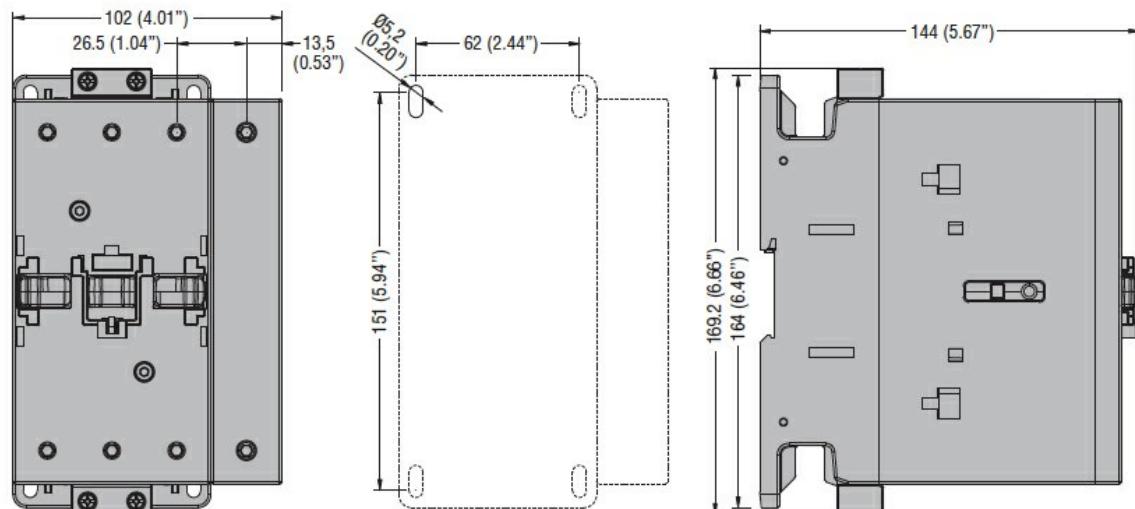


Product designation	Power contactor		
Product type designation	BF95		
Contact characteristics			
Number of poles	Nr.	4	
Rated insulation voltage Ui IEC/EN	V	1000	
Rated impulse withstand voltage Uimp	kV	8	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		A	140
Operational current Ie			
	AC-1 ($\leq 40^{\circ}\text{C}$)	A	140
	AC-1 ($\leq 55^{\circ}\text{C}$)	A	115
	AC-1 ($\leq 70^{\circ}\text{C}$)	A	100
	AC-3 ($\leq 440\text{V} \leq 55^{\circ}\text{C}$)	A	95
	AC-4 (400V)	A	45
Rated operational current AC-3 ($T \leq 55^{\circ}\text{C}$)			
	230V	A	95
	400V	A	95
	415V	A	95
	440V	A	95
	500V	A	95
	690V	A	93
	1000V	A	33
IEC max current Ie in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series			
	$\leq 24\text{V}$	A	140
	48V	A	140
	75V	A	100
	110V	A	10
	220V	A	—
IEC max current Ie in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series			
	$\leq 24\text{V}$	A	140
	48V	A	140
	75V	A	140
	110V	A	110
	220V	A	12
IEC max current Ie in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series			
	$\leq 24\text{V}$	A	140
	48V	A	140
	75V	A	155
	110V	A	120
	220V	A	125
IEC max current Ie in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series			
	$\leq 24\text{V}$	A	140
	48V	A	140

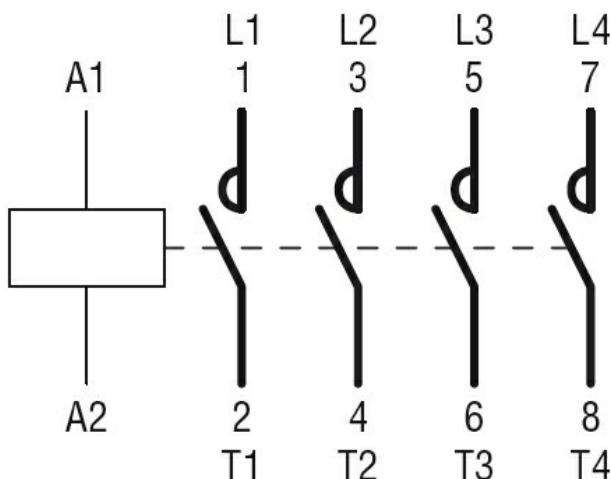
	75V	A	155
	110V	A	140
	220V	A	140
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series			
	$\leq 24\text{V}$	A	140
	48V	A	44
	75V	A	36
	110V	A	6
	220V	A	—
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series			
	$\leq 24\text{V}$	A	140
	48V	A	63
	75V	A	60
	110V	A	55
	220V	A	7
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 3 poles in series			
	$\leq 24\text{V}$	A	140
	48V	A	115
	75V	A	90
	110V	A	85
	220V	A	76
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 4 poles in series			
	$\leq 24\text{V}$	A	140
	48V	A	110
	75V	A	110
	110V	A	105
	220V	A	95
Short-time allowable current for 10s (IEC/EN60947-1)			A 760
Protection fuse			
	gG (IEC)	A	160
	aM (IEC)	A	100
Making capacity (RMS value)			A 1200
Breaking capacity at voltage			
	440V	A	1100
	500V	A	775
	690V	A	745
Resistance per pole (average value)			$\text{m}\Omega$ 0.45
Power dissipation per pole (average value)			
	I _{th}	W	8.8
	AC-3	W	4.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	I _{bin}	4.4
	max	I _{bin}	5.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	I _{bin}	0.59
	max	I _{bin}	0.74
Conductor section			
	AWG/Kcmil		
		max	2/0

Flexible w/o lug conductor section	min	mm ²	1.5
	max	mm ²	70
Flexible c/w lug conductor section	min	mm ²	1.5
	max	mm ²	70
Power terminal protection according to IEC/EN 60529	IP20 front		
Mechanical features			
Operating position	normal allowable	Vertical plan ±30°	
Fixing	Screw / DIN rail 35mm		
Weight	g	2460	
Auxiliary contact characteristics			
Thermal current I _{th}	A	140	
Operations			
Mechanical life	cycles	15000000	
Electrical life	cycles	1400000	
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	cycles	1400000 15000000
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz	min max	V	20 48
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up	min max	%Us %Us	85 Us min 110 Us max
drop-out	max	%Us	≤70 Us min
of 50/60Hz coil powered at 60Hz			
pick-up	min max	%Us %Us	85 Us min 110 Us max
drop-out	max	%Us	≤70 Us min
AC average coil consumption at 20°C			
of 50/60Hz coil powered at 50Hz	in-rush holding	VA	70...175 1.7...3.5
of 50/60Hz coil powered at 60Hz	in-rush holding	VA	70...175 1.7...3.5
of 60Hz coil powered at 60Hz	in-rush holding	VA	70...175 1.7...3.5
Dissipation at holding ≤20°C 50Hz	W	1.3...1,5	
DC coil operating			
DC rated control voltage	min	V	20

DC operating voltage		max	V	48
	pick-up			
		min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out			
		max	%Us	≤70 Us min
Average coil consumption ≤20°C				
		in-rush	W	70...80
		holding	W	1.3...1.5
Max cycles frequency				
Mechanical operation			cycles/h	1500
Operating times				
Average time for Us control				
in AC				
	Closing NO			
		min	ms	45
		max	ms	90
	Opening NO			
		min	ms	24
		max	ms	60
in DC				
	Closing NO			
		min	ms	45
		max	ms	85
	Opening NO			
		min	ms	24
		max	ms	60
UL technical data				
Rated operational voltage AC (UL)			V	600
General USE				
Contactor		AC current	A	150
Short-circuit protection fuse, 600V				
High fault		Short circuit current	kA	100
		Fuse rating	A	200
		Fuse class	J	
Standard fault		Short circuit current	kA	10
		Fuse rating	A	250
		Fuse class	RK5	
Ambient conditions				
Temperature				
Operating temperature				
		min	°C	-50
		max	°C	70
Storage temperature				
		min	°C	-60
		max	°C	+80
Max altitude			m	3000
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
UL 60947-1
UL 60947-4-1

Certificates

CCC
cULus
EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching