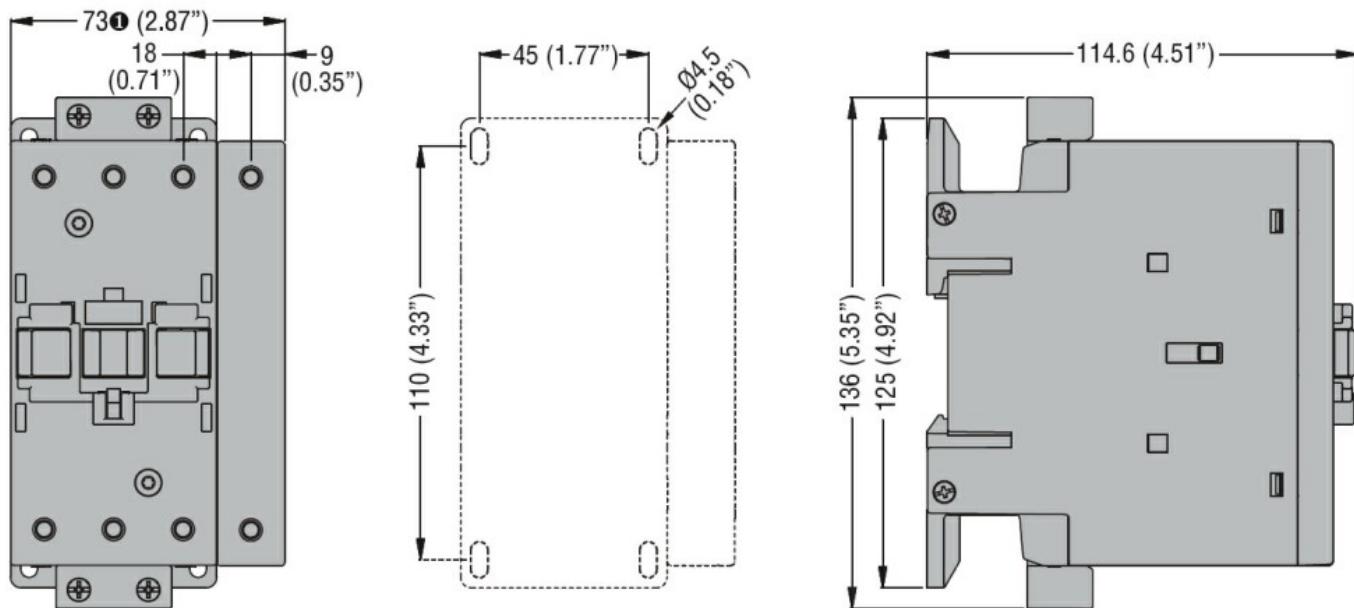




Product designation	Power contactor		
Product type designation	BF80		
Contact characteristics			
Number of poles	Nr.	4	
Rated insulation voltage U_i IEC/EN	V	1000	
Rated impulse withstand voltage U_{imp}	kV	8	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current I_{th}	A	115	
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$) A 115 AC-1 ($\leq 55^\circ\text{C}$) A 95 AC-1 ($\leq 70^\circ\text{C}$) A 80 AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$) A 80 AC-4 (400V) A 38		
Rated operational current AC-3 ($T \leq 55^\circ\text{C}$)	230V	A	80
	400V	A	80
	415V	A	80
	440V	A	80
	500V	A	78
	690V	A	57
	1000V	A	28
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW	43
	400V	kW	76
	500V	kW	95
	690V	kW	120
Short-time allowable current for 10s (IEC/EN60947-1)	A	640	
Protection fuse	gG (IEC)	A	125
	aM (IEC)	A	80
Making capacity (RMS value)	A	800	
Breaking capacity at voltage	440V	A	640
	500V	A	625
	690V	A	456
Resistance per pole (average value)	mΩ	0.6	
Power dissipation per pole (average value)	I _{th}	W	7.9
	AC-3	W	3.8
Tightening torque for terminals	min	Nm	4
	max	Nm	5

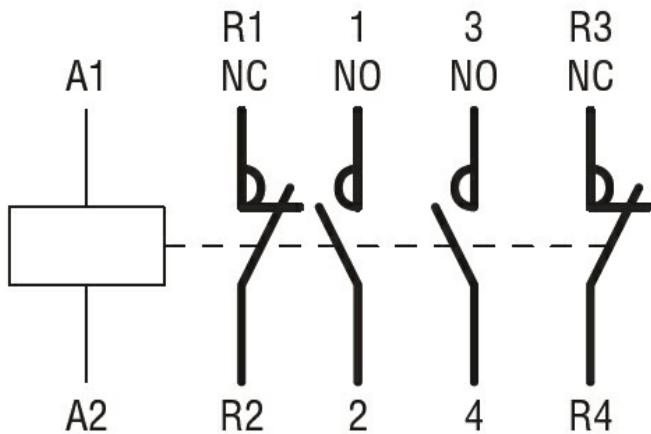
	min	Ibin	2.95
	max	Ibin	3.69
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.8
	max	Ibin	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil	max		2
Flexible w/o lug conductor section	min	mm ²	1.5
	max	mm ²	35
Flexible c/w lug conductor section	min	mm ²	1.5
	max	mm ²	35
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	1360	
Operations			
Mechanical life	cycles	15000000	
Electrical life	cycles	1300000	
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	cycles	1300000 15000000
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 60Hz	V	230	
AC operating voltage			
of 60Hz coil powered at 60Hz			
pick-up	min	%Us	80
	max	%Us	110
drop-out	min	%Us	20
	max	%Us	55
AC average coil consumption at 20°C			
of 60Hz coil powered at 60Hz	in-rush holding	VA	210 15
Dissipation at holding ≤20°C 50Hz	W	5	
Max cycles frequency			
Mechanical operation	cycles/h	3600	
Operating times			
Average time for Us control			
in AC			

Closing NO	min	ms	12
	max	ms	28
Opening NO	min	ms	8
	max	ms	22
Closing NC	min	ms	11
	max	ms	29
Opening NC	min	ms	6
	max	ms	14
<hr/>			
in DC			
Closing NO	min	ms	40
	max	ms	85
Opening NO	min	ms	20
	max	ms	55
<hr/>			
UL technical data			
Rated operational voltage AC (UL)			
	V	600	
Full-load current (FLA) for three-phase AC motor			
	at 480V	A	77
	at 600V	A	77
<hr/>			
Yielded mechanical performance			
for three-phase AC motor			
	200/208V	HP	25
	220/230V	HP	30
	460/480V	HP	60
	575/600V	HP	75
<hr/>			
General USE			
Contactor			
	AC current	A	115
<hr/>			
Ambient conditions			
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
<hr/>			
Storage temperature			
	min	°C	-60
	max	°C	80
<hr/>			
Max altitude			
	m	3000	
<hr/>			
Resistance & Protection			
Pollution degree			
	3		
<hr/>			
Dimensions			



① BF80T2 82mm/3.23"

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](#)

ETIM classification

ETIM 8.0

[EC000066 -
Power contactor,
AC switching](#)