



Product designation

Power contactor

Product type designation

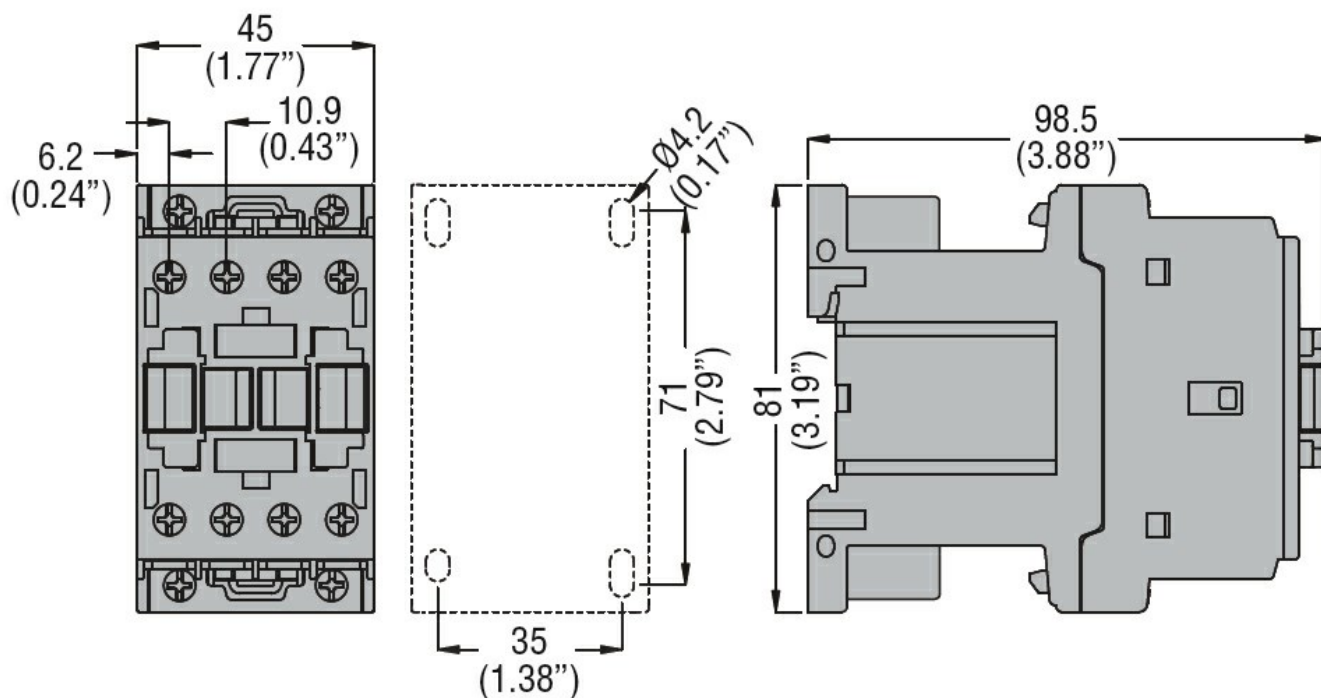
BF18

Contact characteristics

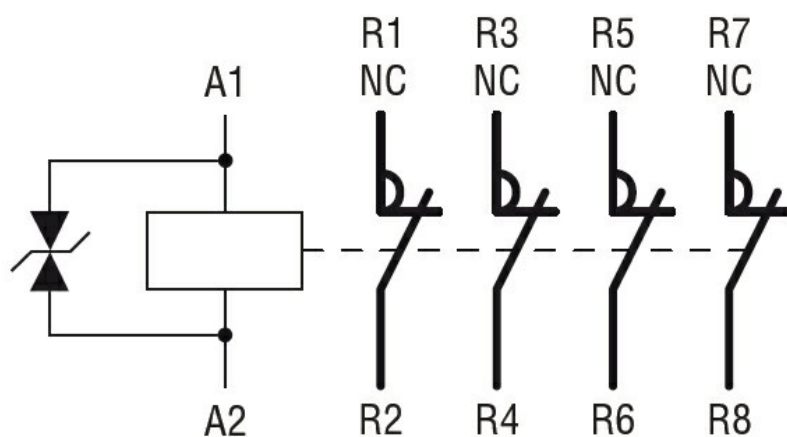
Number of poles	Nr.	4
Rated insulation voltage U _i IEC/EN	V	690
Rated impulse withstand voltage U _{imp}	kV	6
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I _{th}	A	32
Operational current I _e	AC-1 (≤40°C)	A 32
	AC-1 (≤55°C)	A 26
	AC-1 (≤70°C)	A 23
	AC-3 (≤440V ≤55°C)	A 18
	AC-4 (400V)	A 8.5
Rated operational power AC-1 (T≤40°C)	230V	kW 12
	400V	kW 21
	500V	kW 26
	690V	kW 36
Short-time allowable current for 10s (IEC/EN60947-1)	A	200
Protection fuse	gG (IEC)	A 32
	aM (IEC)	A 20
Making capacity (RMS value)	A	180
Breaking capacity at voltage	440V	A 144
	500V	A 120
	690V	A 94
Resistance per pole (average value)	mΩ	2.5
Power dissipation per pole (average value)	I _{th}	W 2.6
	AC-3	W 0.8
Tightening torque for terminals	min	Nm 1.5
	max	Nm 1.8
	min	lbin 1.1
	max	lbin 1.5
Tightening torque for coil terminal	min	Nm 0.8
	max	Nm 1
	min	lbin 0.8
	max	lbin 0.74
Max number of wires simultaneously connectable	Nr.	2

Conductor section				
AWG/Kcmil				
		max	10	
Flexible w/o lug conductor section				
		min	mm ²	1
		max	mm ²	6
Flexible c/w lug conductor section				
		min	mm ²	1
		max	mm ²	4
Flexible with insulated spade lug conductor section				
		min	mm ²	1
		max	mm ²	4
Power terminal protection according to IEC/EN 60529				IP20 when properly wired
Mechanical features				
Operating position		normal allowable	Vertical plan ±30°	
Fixing		Screw / DIN rail 35mm		
Weight			g	496
Auxiliary contact characteristics				
Thermal current I _{th}			A	32
IEC/EN 60947-5-1 designation		A600 - P600		
Operations				
Mechanical life			cycles	20000000
Electrical life			cycles	1600000
Safety related data				
Performance level B10d according to EN/ISO 13489-1		rated load mechanical load	cycles	1600000
			cycles	20000000
EMC compatibility		yes		
DC coil operating				
DC rated control voltage			V	125
DC operating voltage				
pick-up		min	%U _s	70
		max	%U _s	125
drop-out		min	%U _s	10
		max	%U _s	40
Average coil consumption ≤20°C		in-rush holding	W	5.4
			W	5.4
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for U _s control in AC		Closing NO	min	ms
			max	ms
		Opening NO	min	ms
				10

		max	ms	20
Closing NC		min	ms	14
		max	ms	28
Opening NC		min	ms	7
		max	ms	18
in DC				
Closing NC		min	ms	24
		max	ms	30
Opening NC		min	ms	47
		max	ms	57
UL technical data				
Rated operational voltage AC (UL)			V	600
Full-load current (FLA) for three-phase AC motor				
			at 480V	A 14
			at 600V	A 17
Yielded mechanical performance				
for single-phase AC motor				
			110/120V	HP 1
			230V	HP 3
for three-phase AC motor				
			200/208V	HP 5
			220/230V	HP 5
			460/480V	HP 10
			575/600V	HP 15
General USE				
Contactor				
			AC current	A 32
Auxiliary contacts				
			AC voltage	V 600
			AC current	A 10
			DC voltage	V 250
			DC current	A 1
Contact rating of auxiliary contacts according to UL				SI - A600
Ambient conditions				
Temperature				
Operating temperature				
			min	°C -50
			max	°C 70
Storage temperature				
			min	°C -60
			max	°C 80
Max altitude			m	3000
Resistance & Protection				
Pollution degree				3
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