



Product designation

Power contactor

Product type designation

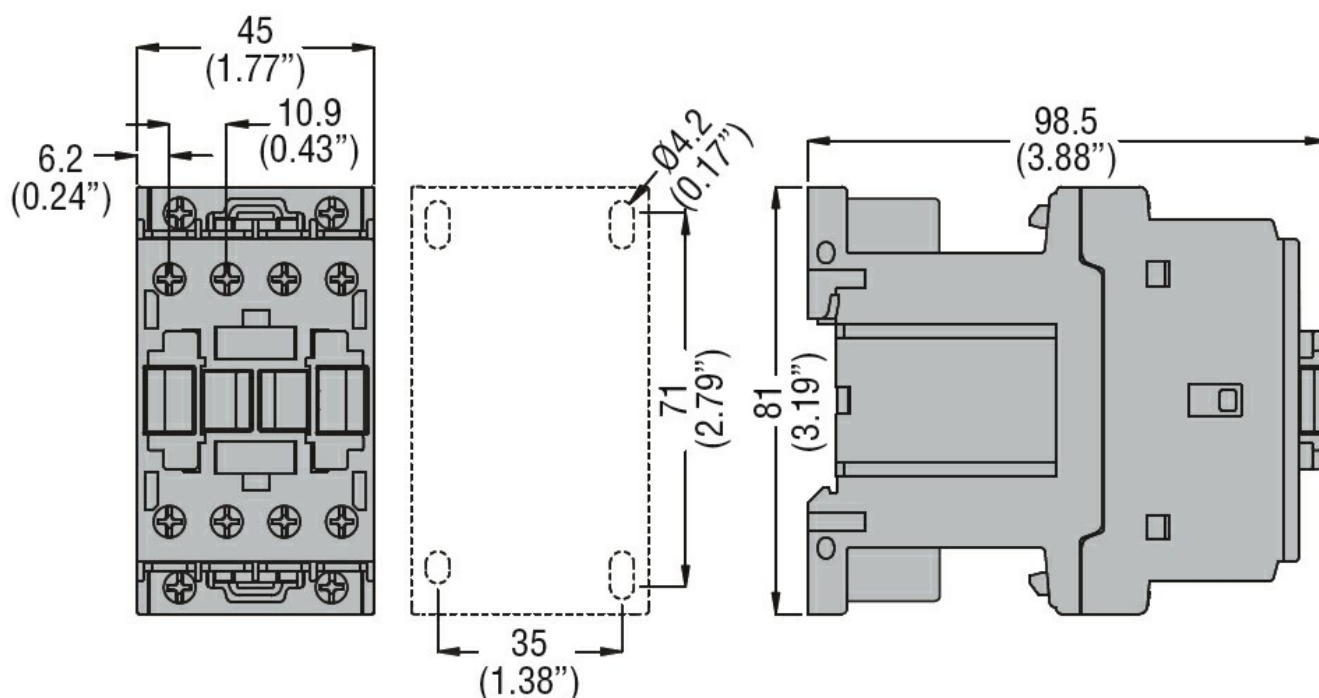
BF18

Contact characteristics

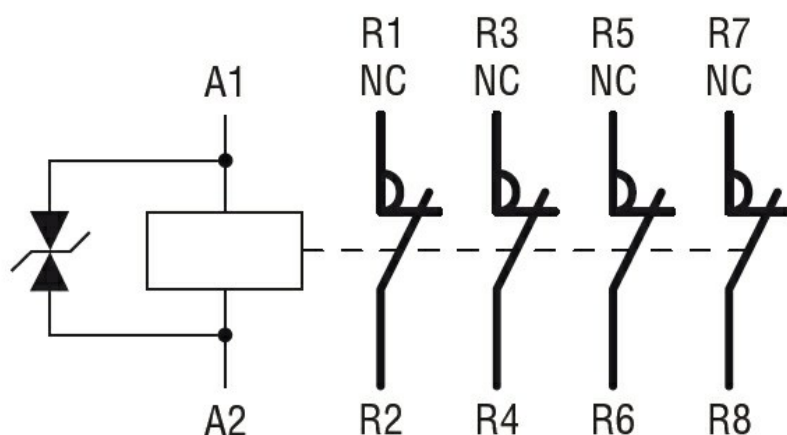
Number of poles	Nr.	4
Rated insulation voltage U _i IEC/EN	V	690
Rated impulse withstand voltage U _{imp}	kV	6
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I _{th}	A	32
Operational current I _e	AC-1 (≤40°C)	A 32
	AC-1 (≤55°C)	A 26
	AC-1 (≤70°C)	A 23
	AC-3 (≤440V ≤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	500
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	220
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	8
		max	ms	24
Opening NO		min	ms	10

in DC	Closing NC	max	ms	20
		min	ms	14
	Opening NC	max	ms	28
		min	ms	7
		max	ms	18
		Closing NC	min	ms
	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