



Product designation Power contactor
Product type designation BFK18

Contact characteristics

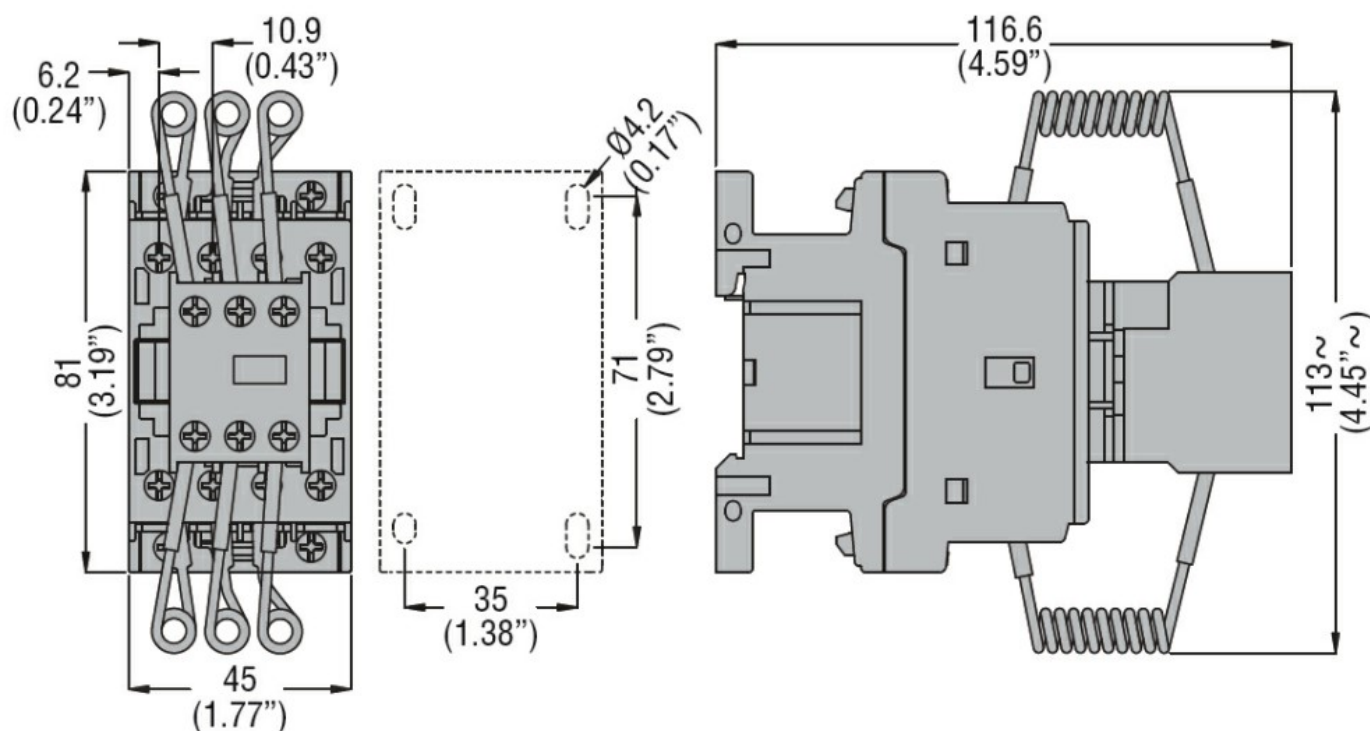
Number of poles	nr.	3
Rated insulation voltage U_i	V	690
Rated impulse withstand voltage U_{imp}	kV	6
Operating frequency		
	Operational frequency min	Hz 25
	Operational frequency max	Hz 400
Conventional free air thermal current I_{th}	A	32
Rated operational power AC6b ($T \leq 40^\circ C$)		
	230V	kvar 9
	400V	kvar 15
	500V	kvar 17
	690V	kvar 20
Short-time allowable current for 10s (IEC/EN60947-1)	A	200
Protection fuse		
	gG (IEC)	A 40
Resistance per pole (average value)	mΩ	2.5
Tightening torque for terminals		
	min	Nm 1.5
	max	Nm 1.8
	min	lbft 1.1
	max	lbft 1.5
Tightening torque for coil terminal		
	min	Nm 0.8
	max	Nm 1
	min	lbft 0.8
	max	lbft 0.74
max number of wires simultaneously connectable	nr.	2
Conductor section		
AWG		
	min	16
	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 wired

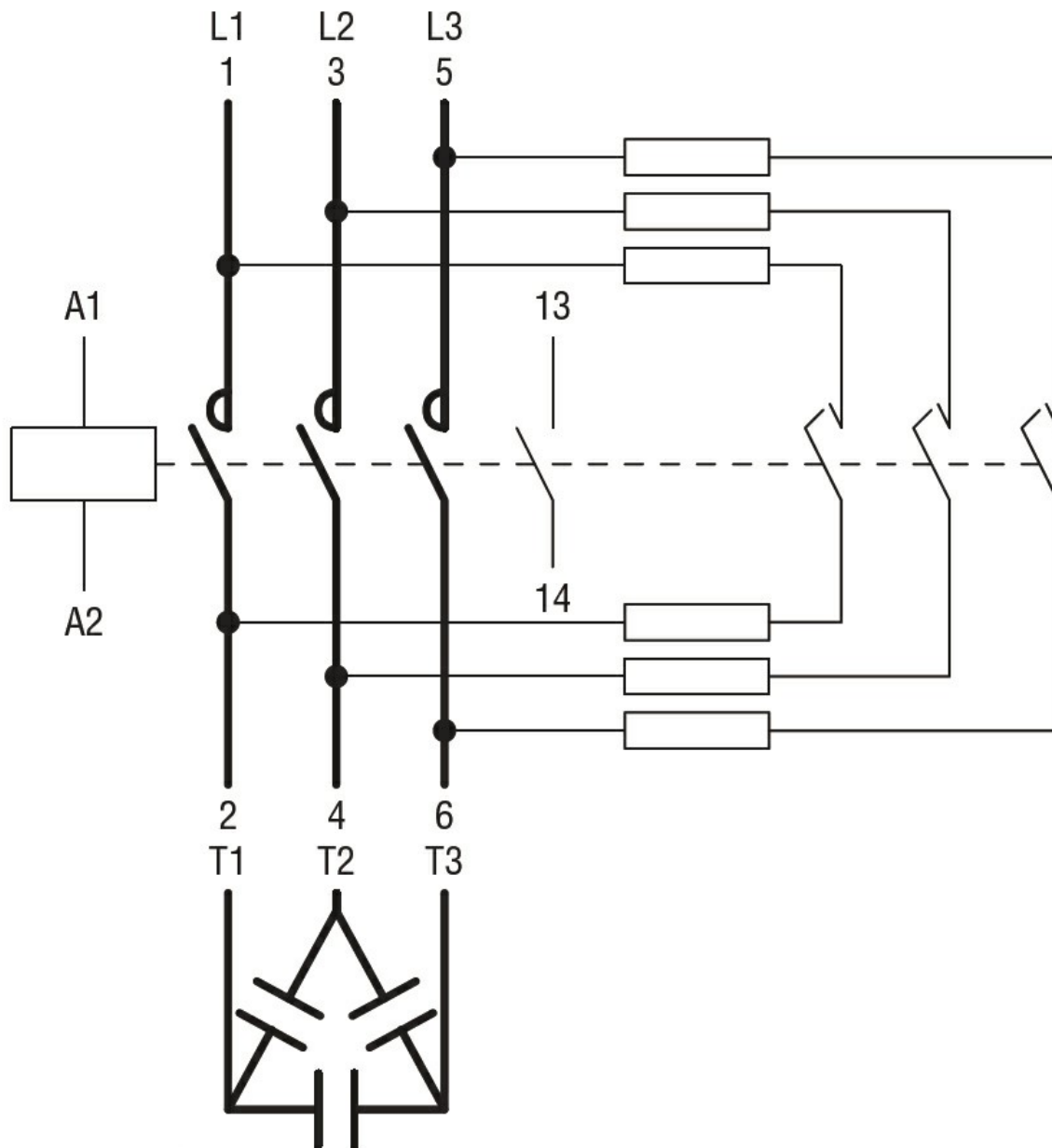
Auxiliary contact characteristics

Type of contact			1 NO
Thermal current Ith			A 10
IEC/EN 60947-5-1 designation			A600 - P600
Operating current AC15			
	230V	A	3
	400V	A	1.9
	500V	A	1.4
Operating current DC12			
	110V	A	5.7
Operating current DC13			
	24V	A	5.7
	48V	A	2.9
	60V	A	2.3
	110V	A	Screw / DIN rail 35mm
	125V	A	0.6
	220V	A	0.2
	600V	A	1.2
Ambient conditions			
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
Max altitude		m	3000
Operating position		normal allowable	Vertical plan ±30°
Mounting			Screw / DIN rail 35mm
Weight		g	0.418
Operations			
Mechanical life		Cycles	20000000
Electrical life		Cycles	400000
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	rated load	Cicli	400000
	mechanical load	Cicli	20000000
EMC compatibility			yes
AC coil operating			
AC operating voltage			
of 50/60Hz coil powered at 50Hz pick-up			
	min	%Us	0.8
	max	%Us	1.1
drop-out			
	min	%Us	0.2
	max	%Us	0.55
of 50/60Hz coil powered at 60Hz pick-up			
	min	%Us	0.85
	max	%Us	1.1

drop-out			
	min	%Us	0.2
	max	%Us	0.55
of 60Hz coil powered at 60Hz			
pick-up			
	min	%Us	0.8
	max	%Us	1.1
drop-out			
	min	%Us	0.2
	max	%Us	0.55
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
	in-rush	VA	75
	holding	VA	9
of 50/60Hz coil powered at 60Hz			
	in-rush	VA	70
	holding	VA	6.5
of 60Hz coil powered at 60Hz			
	in-rush	VA	75
	holding	VA	9
Dissipation at holding ≤20°C 50Hz		W	2.5
Max cycles frequency			
Mechanical operations		Cycles/h	3600
Operating times			
Average time for Us control			
in AC			
Closing NO			
	min	ms	8
	max	ms	24
Opening NO			
	min	ms	10
	max	ms	20
Closing NC			
	min	ms	14
	max	ms	28
Opening NC			
	min	ms	7
	max	ms	18
UL technical data			
Yielded mechanical performance			
for single-phase AC motor			
	at 110/120V	hp	1
Contact rating of auxiliary contacts according to UL			A600 - P600
Other features			
Pollution degree			3
Dimensions			



Wiring diagrams



Certifications and compliance

Certifications

CSA C22.2 n° 60947-1
CSA C22.2 n° 60947-4-1
IEC/EN 60947-1
IEC/EN 60947-4-1
UL 60947-1
UL 60947-4-1

Compliance

CCC
cULus
EAC

ETIM 6 classification

EC000066 - Power contactor, AC switching