



Product designation

Power contactor

Product type designation

BFK50

Contact characteristics

Number of poles	Nr.	3	
Rated insulation voltage Ui IEC/EN	V	690	
Rated impulse withstand voltage Uimp	kV	8	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	A	90	
Rated operational power AC-6b (T≤40°C)	230V	kvar	22
	400V	kvar	40
	440...480V	kvar	41
	690V	kvar	46
Short-time allowable current for 10s (IEC/EN60947-1)	A	400	
Protection fuse	gG (IEC)	A	80
Making capacity (RMS value)	A	500	
Breaking capacity at voltage	440V	A	400
	500V	A	352
	690V	A	312
Resistance per pole (average value)	mΩ	0.8	
Power dissipation per pole (average value)	Ith	W	6.5
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	mm²	1.5
	max	mm²	35
Flexible c/w lug conductor section	min	mm²	1.5

CONTACTEUR POUR LA CORRECTION DU FACTEUR DE PUISSANCE AVEC CIRCUIT DE
COMMANDE AC., TYPE BFK (RÉSISTANCES DE LIMITATION INCLUSES), PUISSANCE
OPÉRATIONNELLE MAXIMALE IEC 400V = 40KVAR, BOBINE 400VAC 50/60HZ

	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	1090
Operations			
Mechanical life		cycles	15000000
Electrical life		cycles	400000
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	rated load mechanical load	cycles	400000
		cycles	15000000
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 50/60Hz		V	400
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up	min	%Us	80
	max	%Us	110
drop-out	min	%Us	20
	max	%Us	55
of 50/60Hz coil powered at 60Hz			
pick-up	min	%Us	85
	max	%Us	110
drop-out	min	%Us	20
	max	%Us	55
AC average coil consumption at 20°C			
of 50/60Hz coil powered at 50Hz	in-rush holding	VA VA	210 15
of 50/60Hz coil powered at 60Hz	in-rush holding	VA VA	195 13
of 60Hz coil powered at 60Hz	in-rush holding	VA 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			

CONTACTEUR POUR LA CORRECTION DU FACTEUR DE PUISSANCE AVEC CIRCUIT DE COMMANDE AC., TYPE BFK (RÉSISTANCES DE LIMITATION INCLUSES), PUISSANCE OPÉRATIONNELLE MAXIMALE IEC 400V = 40KVAR, BOBINE 400VAC 50/60HZ

in DC		min	ms	8
		max	ms	22
Closing NO		min	ms	40
		max	ms	85
Opening NO		min	ms	20
		max	ms	55

UL technical data

Rated operational voltage AC (UL)	V	600
General USE		

Contactor

AC current A 90

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

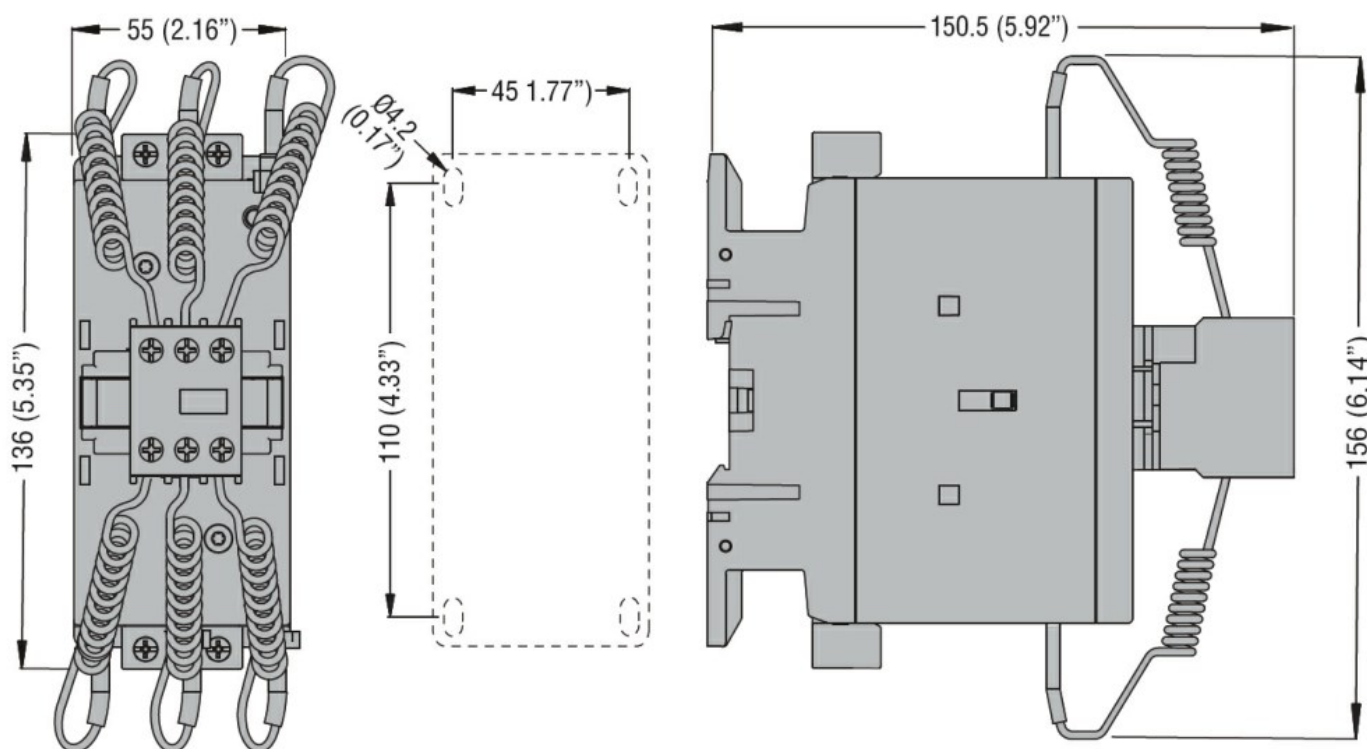
min	°C	-60
max	°C	80

Max altitude	m	3000
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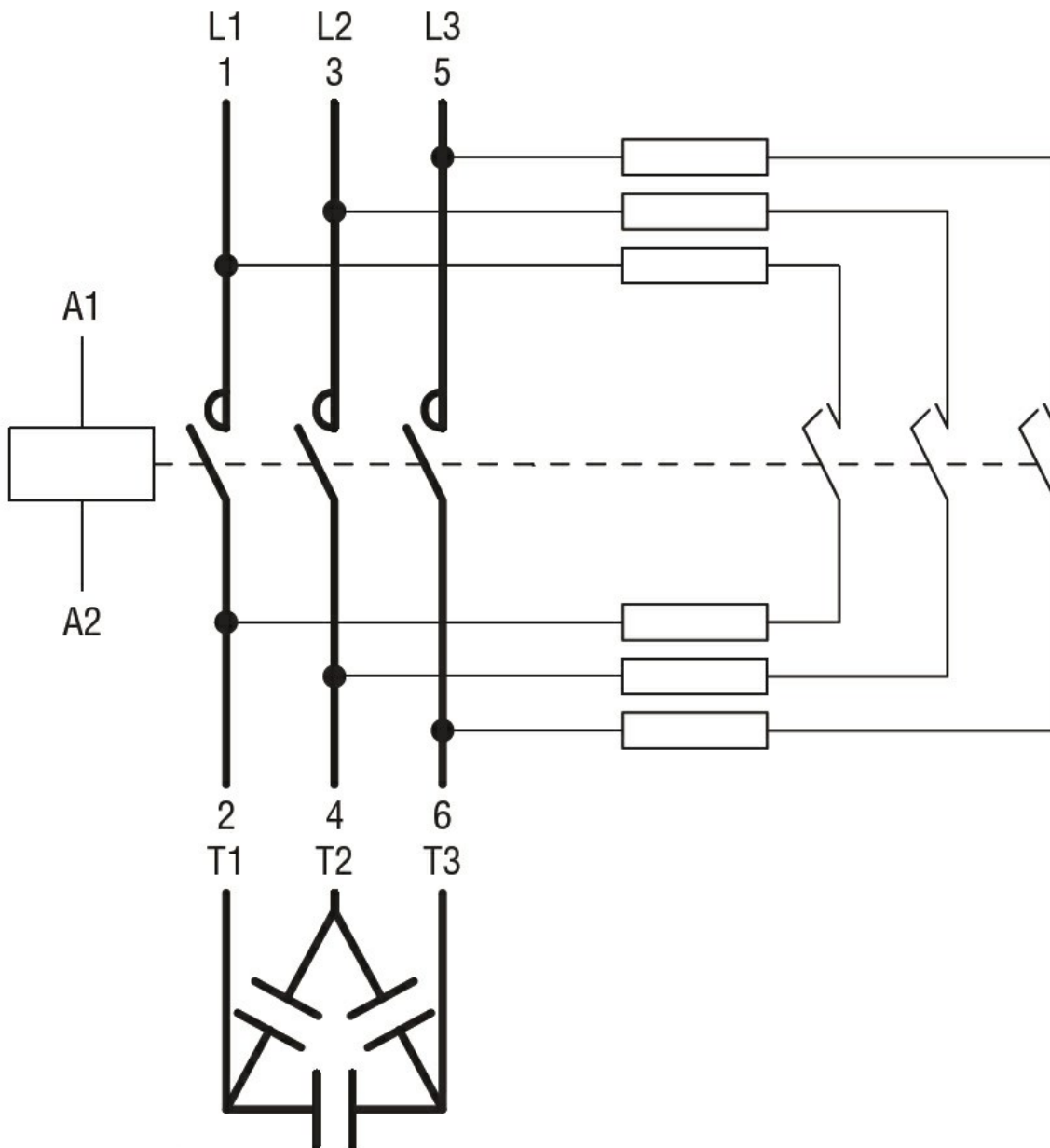
Resistance & Protection

Pollution degree	3
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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

ETIM classification

ETIM 8.0

EC001079 -
Capacitor
contactor