



Product designation	Power contactor		
Product type designation	11BF65		
Contact characteristics			
Number of poles	nr.	3	
Rated insulation voltage U_i	V	1000	
Rated impulse withstand voltage U_{imp}	kV	8	
Operating frequency	Operational frequency min	Hz	25
	Operational frequency max	Hz	400
Conventional free air thermal current I_{th}	A	110	
Operating current	Operational current AC1 ($\leq 40^\circ\text{C}$)	A	110
	Operational current AC3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A	65
	Operational current AC4 (400V)	A	31
Rated operational power AC1 ($T \leq 40^\circ\text{C}$)	230V	kW	41
	400V	kW	72
	500V	kW	95
	690V	kW	112
Rated operational power AC3A ($T \leq 55^\circ\text{C}$)	Rated operational power AC3 ($T \leq 55^\circ\text{C}$) 230V	kW	18.5
	Rated operational power AC3 ($T \leq 55^\circ\text{C}$) 400V	kW	33
	Rated operational power AC3 ($T \leq 55^\circ\text{C}$) 415V	kW	36
	Rated operational power AC3 ($T \leq 55^\circ\text{C}$) 440V	kW	36
	Rated operational power AC3 ($T \leq 55^\circ\text{C}$) 500V	kW	45.3
	Rated operational power AC3 ($T \leq 55^\circ\text{C}$) 690V	kW	59.7
	Rated operational power AC3 ($T \leq 55^\circ\text{C}$) 1000V	kW	30
Short-time allowable current for 10s (IEC/EN60947-1)	A	390	
Protection fuse	gG (IEC)	A	125
	aM (IEC)	A	80
Making capacity (RMS value)	A	1090	
Breaking capacity at voltage	Breaking capacity 440V	A	1090
	Breaking capacity 500V	A	830
	Breaking capacity 690V	A	630
Resistance per pole (average value)	m Ω	0.8	
Power dissipation per pole (average value)	Power dissipation pole (average value) I_{th}	W	9.7
	AC3	W	3.4
Tightening torque for terminals	min	Nm	4
	max	Nm	5
	min	lbft	2.95
	max	lbft	3.7

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.	1
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Conductor section

AWG

min	14
max	2/0

Flexible w/o lug conductor section

min	mm ²	6
max	mm ²	50

Flexible c/w lug conductor section

min	mm ²	6
max	mm ²	50

Power terminal protection according to IEC/EN 60529

IP20 front

Auxiliary contact characteristics

Operational current AC1 (≤40°C)

A	110
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Operating current DC13

110V	A	Screw / DIN rail 35mm
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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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Operating position

normal allowable	Vertical plan ±30°
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Mounting

Screw / DIN rail
35mm

Weight

g	1.36
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Operations

Mechanical life

Cycles	15000000
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Electrical life

Cycles	1400000
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Safety related data

Performance level B10d according to EN/ISO 13489-1

rated load	Cicli	1400000
mechanical load	Cicli	15000000

Mirror contacts according to IEC/EN 60947-4-1

yes

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	0.4
		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	200
		holding	VA	18
of 50/60Hz coil powered at 60Hz				
		in-rush	VA	200
		holding	VA	15
of 60Hz coil powered at 60Hz				
		in-rush	VA	220
		holding	VA	18
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz				
			W	6
DC coil operating				
DC operating voltage				
Average coil consumption $\leq 20^{\circ}\text{C}$				
		in-rush	W	45
		holding	W	75
Max cycles frequency				
Mechanical operations				Cycles/h 3600
Operating times				
Average time for Us control				
in AC				
	Closing NO	min	ms	13
		max	ms	28
	Opening NO	min	ms	6
		max	ms	19
in DC				
	Closing NO	min	ms	40
		max	ms	85
	Opening NO	min	ms	20
		max	ms	55
UL technical data				
Full-load current (FLA) for three-phase AC motor				
		at 480V	A	65
		at 600V	A	62

Yielded mechanical performance

for three-phase AC motor

at 200/208V	hp	20
at 220/230V	hp	25
at 460/480V	hp	50
at 575/600V	hp	60

General USE

Contactor

AC current A 110

Other features

Pollution degree

3

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

CSA

cULus

EAC

ETIM 6 classification

EC000066 - Power contactor, AC switching