



Contact characteristics

Number of poles	Nr.	3
Rated insulation voltage U _i IEC/EN	V	1000
Rated impulse withstand voltage U _{imp}	kV	8
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I _{th} ≤ 40°C	A	160
Operational current I _e	AC-1 (≤40°C)	A 160
	AC-1 (≤55°C)	A 130
	AC-1 (≤70°C)	A 115
	AC-3 (≤440V ≤55°C)	A 115
	AC-4 (400V)	A 54
Rated operational power AC-3 (T≤55°C)	230V	kW 37
	400V	kW 55
	415V	kW 55
	440V	kW 55
	500V	kW 75
	690V	kW 110
	1000V	kW 55
Rated operational current AC-3 (T≤55°C)	230V	A 115
	400V	A 115
	415V	A 115
	440V	A 115
	500V	A 106
	690V	A 106
	1000V	A 39
IEC max current I _e in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A 160
	48V	A 160
	75V	A 120
	110V	A 10
	220V	A –
IEC max current I _e in DC1 with L/R ≤ 1ms with 2 poles in series	≤24V	A 160
	48V	A 160
	75V	A 160
	110V	A 130
	220V	A 14
IEC max current I _e in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V	A 160
	48V	A 160

	75V	A	160
	110V	A	140
	220V	A	145
IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	160
	48V	A	160
	75V	A	160
	110V	A	160
	220V	A	160
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	160
	48V	A	50
	75V	A	40
	110V	A	6
	220V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	160
	48V	A	72
	75V	A	65
	110V	A	65
	220V	A	7
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	160
	48V	A	150
	75V	A	100
	110V	A	100
	220V	A	92
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	160
	48V	A	120
	75V	A	120
	110V	A	125
	220V	A	115
Short-time allowable current for 10s (IEC/EN60947-1)		A	920
Protection fuse			
	gG (IEC)	A	200
	aM (IEC)	A	125
Making capacity (RMS value)		A	1500
Breaking capacity at voltage			
	440V	A	1200
	500V	A	850
	690V	A	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	I _{th}	W	11.5
	AC-3	W	6.0
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	I _{bin}	4.4
	max	I _{bin}	5.2
Tightening torque for coil terminal			
	min	Nm	0.8

		max	Nm	1
		min	Ibin	0.59
		max	Ibin	0.74
Conductor section				
	AWG/Kcmil			
		max		2/0
Flexible w/o lug conductor section				
		min	mm ²	1.5
		max	mm ²	70
Flexible c/w lug conductor section				
		min	mm ²	1.5
		max	mm ²	70
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	2020
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	1200000
Safety related data				
Performance level B10d according to EN/ISO 13489-1				
		rated load	cycles	1200000
		mechanical load	cycles	15000000
AC coil operating				
Rated AC voltage at 50/60Hz			V	230
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	40
		max	%Us	55
AC average coil consumption at 20°C				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	300
		holding	VA	20
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	275
		holding	VA	17
	of 60Hz coil powered at 60Hz			
		in-rush	VA	300
		holding	VA	20

Max cycles frequency

Mechanical operation cycles/h 1500

Operating times

Average time for Us control

in AC

Closing NO

min ms 16

max ms 32

Opening NO

min ms 9

max ms 24

UL technical data

Rated operational voltage AC (UL) V 600

Yielded mechanical performance

for three-phase AC motor

200/208V HP 40

220/240V HP 40

460/480V HP 75

575/600V HP 100

General USE

Contactor

AC current A 165

Short-circuit protection fuse, 600V

High fault

Short circuit current kA 100

Fuse rating A 200

Fuse class J

Standard fault

Short circuit current kA 10

Fuse rating A 250

Fuse class RK5

Ambient conditions

Temperature

Operating temperature

min °C -50

max °C 70

Storage temperature

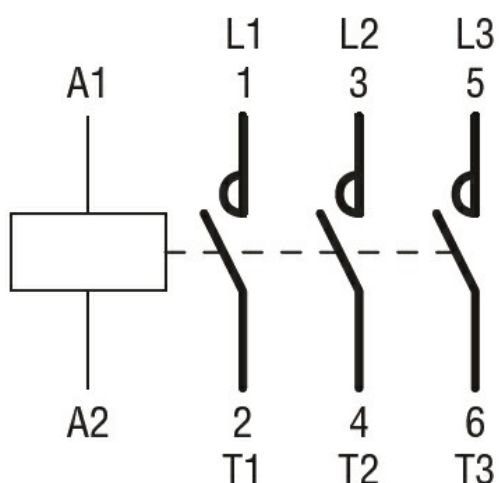
min °C -60

max °C +80

Max altitude

m 3000

Dimensions



Compliance

UL 60947-4-1

UL 60335-2-89 LZGH A2L

BF11500A230

The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding.

ETIM 8.0

EC000066 -
Power contactor,
AC switching