



Product designation  
Product type designation

Power contactor  
B115

**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 $I_{th}$	A	160
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A 160
	AC-1 ( $\leq 55^\circ\text{C}$ )	A 150
	AC-1 ( $\leq 70^\circ\text{C}$ )	A 110
	AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ )	A 110
	AC-4 (400V)	A 47
Rated operational power AC-3 ( $T \leq 55^\circ\text{C}$ )	400V	kW 61
Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )	230V	kW 57
	400V	kW 98
	500V	kW 129
	690V	kW 173
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	75V	A 160
	110V	A 100
	220V	A –
	330V	A –
	460V	A –
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series	75V	A 160
	110V	A 130
	220V	A 100
	330V	A –
	460V	A –
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	75V	A 160
	110V	A 130
	220V	A 130
	330V	A 100
	460V	A –
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series	75V	A 160
	110V	A 130
	220V	A 130

	330V	A	130
	460V	A	100
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	75V	A	140
	110V	A	70
	220V	A	–
	330V	A	–
	460V	A	–
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	75V	A	140
	110V	A	100
	220V	A	80
	330V	A	–
	460V	A	–
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	75V	A	140
	110V	A	120
	220V	A	100
	330V	A	80
	460V	A	–
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	75V	A	140
	110V	A	120
	220V	A	120
	330V	A	120
	460V	A	80
Short-time allowable current for 10s (IEC/EN60947-1)		A	1100
Protection fuse			
	gG (IEC)	A	200
	aM (IEC)	A	125
Making capacity (RMS value)		A	1300
Breaking capacity at voltage			
	440V	A	1300
	500V	A	1100
	690V	A	880
Resistance per pole (average value)		mΩ	0.3
Power dissipation per pole (average value)			
	I <sub>th</sub>	W	7.7
	AC-3	W	4
Tightening torque for terminals			
	min	Nm	10
	max	Nm	10
	min	I <sub>bin</sub>	7.4
	max	I <sub>bin</sub>	7.4
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
	AWG/Kcmil		
	max		2/0
Power terminal protection according to IEC/EN 60529			IP00
<b>Mechanical features</b>			
Operating position			
	normal allowable		Vertical plan ±30°

Fixing				Screw
Weight		g		5195
Conductor section	AWG/kcmil conductor section			
		max		2/0
<b>Operations</b>				
Mechanical life			cycles	10000000
Electrical life			cycles	1100000
<b>Safety related data</b>				
Performance level B10d according to EN/ISO 13489-1				
		rated load	cycles	1100000
		mechanical load	cycles	10000000
Mirror contacts according to IEC/EN 60947-4-1				yes
EMC compatibility				yes
<b>AC coil operating</b>				
Rated AC voltage at 50/60Hz, 60Hz				
		min	V	440
		max	V	415
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	60
	of 50/60Hz coil powered at 60Hz			
	pick-up	min	%Us	80
		max	%Us	110
	drop-out	min	%Us	20
		max	%Us	60
	of 60Hz coil powered at 60Hz			
	pick-up	min	%Us	80
		max	%Us	110
	drop-out	min	%Us	20
		max	%Us	60
AC average coil consumption at 20°C				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	300
		holding	VA	10
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	300
		holding	VA	10
Dissipation at holding ≤20°C 50Hz			W	10
<b>DC coil operating</b>				
DC rated control voltage				
		min	V	440
		max	V	415
DC operating voltage				

pick-up	min	%Us	80
	max	%Us	110
drop-out	min	%Us	20
	max	%Us	60

Average coil consumption  $\leq 20^{\circ}\text{C}$

in-rush	W	300
holding	W	10

**Max cycles frequency**

Mechanical operation	cycles/h	2400
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**Operating times**

Average time for Us control

in AC

Closing NO

min	ms	60
max	ms	100

Opening NO

min	ms	25
max	ms	60

in DC

Closing NO

min	ms	60
max	ms	100

Opening NO

min	ms	25
max	ms	60

**UL technical data**

Full-load current (FLA) for three-phase AC motor

at 480V	A	96
at 600V	A	99

Yielded mechanical performance

for three-phase AC motor

200/208V	HP	30
220/230V	HP	40
575/600V	HP	100

General USE

Contactor

AC current	A	160
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Short-circuit protection fuse, 600V

Standard fault

Short circuit current	kA	5
Fuse rating	A	500
Fuse class		RK5

**Ambient conditions**

Temperature

Operating temperature

min	$^{\circ}\text{C}$	-50
max	$^{\circ}\text{C}$	70

Storage temperature

min	$^{\circ}\text{C}$	-60
max	$^{\circ}\text{C}$	80

Max altitude

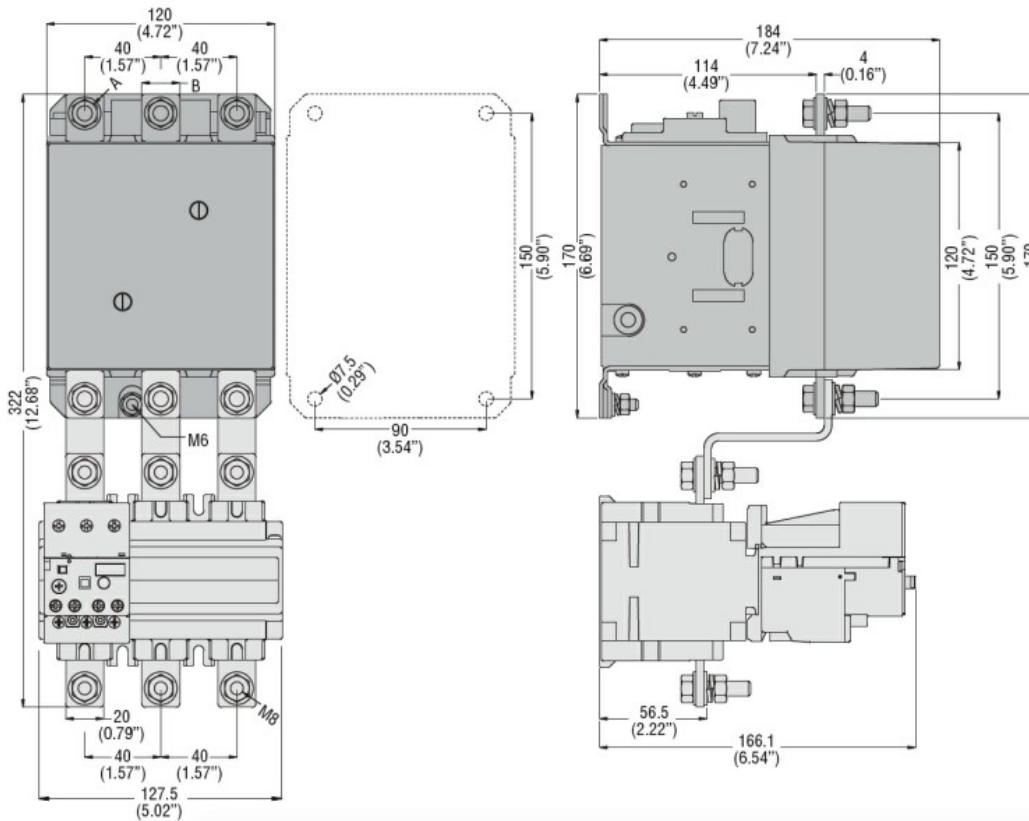
m	3000
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**Resistance & Protection**

Pollution degree

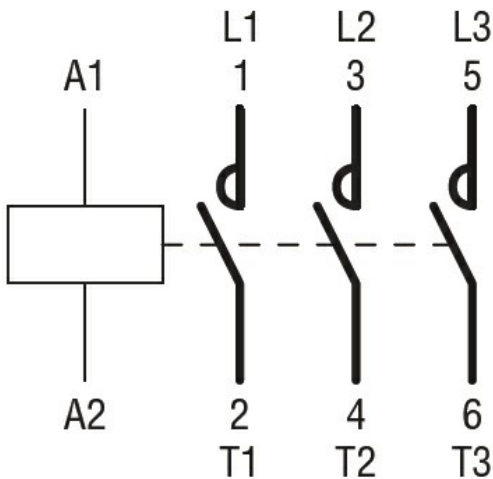
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**Dimensions**



CONTACTOR TYPE	A	B
B115	M6	15 (0.59")
B145	M8	20 (0.79")
B180	M8	20 (0.79")

**Wiring diagrams**



**Certifications and compliance**

Compliance

- 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

Certificates

- CCC
- cULus

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EAC

ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching