



Product designation				Power contactor
Product type designation				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 _e 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 _e 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 _e 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 _e 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 _{th}	W	7.7
	AC-3	W	4
Tightening torque for terminals			
	min	Nm	10
	max	Nm	10
	min	lbin	7.4
	max	lbin	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
Mechanical features			
Operating position			
	normal allowable		Vertical plan ±30°

Fixing				Screw
Weight		g	6	
Conductor section	AWG/kcmil conductor section	max	2/0	
Operations				
Mechanical life		cycles	10000000	
Electrical life		cycles	1100000	
Safety related data				
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
AC coil operating				
Rated AC voltage at 50/60Hz, 60Hz				
		min	V	380
		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
DC coil operating				
DC rated control voltage				
		min	V	380
		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

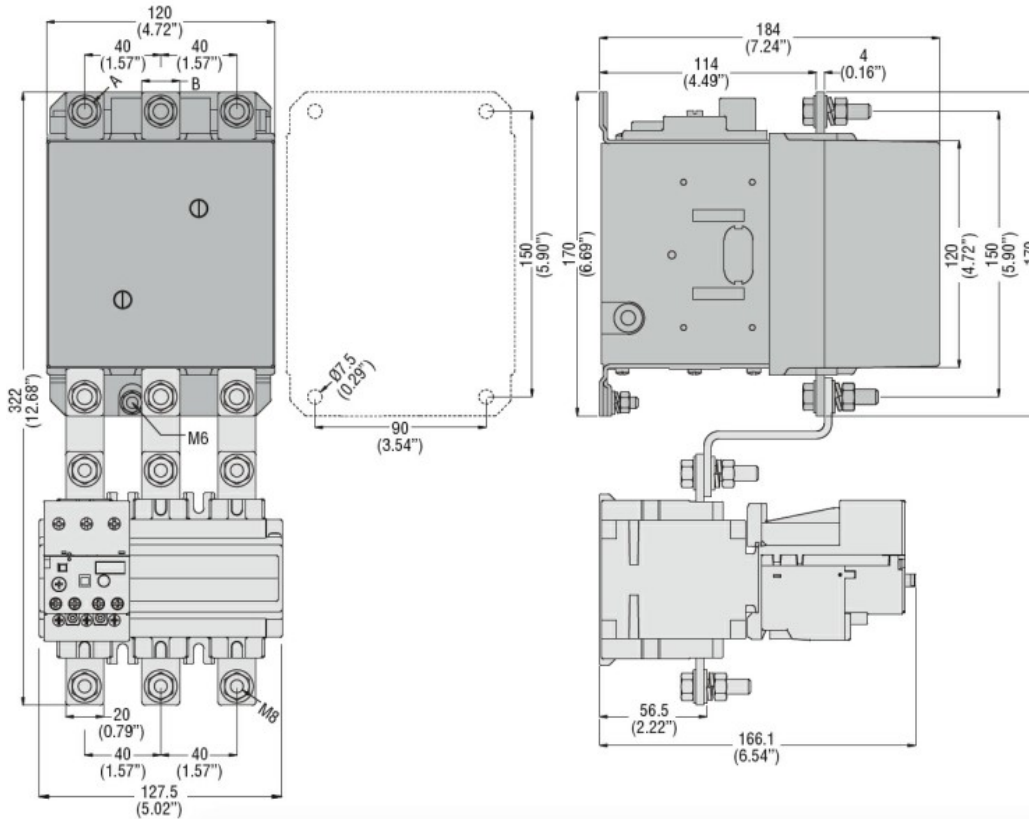
m	3000
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Resistance & Protection

Pollution degree

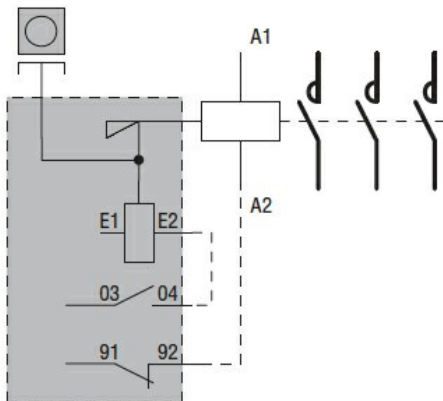
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Dimensions



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
- EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching