



Product designation				Power contactor
Product type designation				B115
Contact characteristics				
Number of poles	Nr.			4
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-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
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Protection fuse

gG (IEC)	A	200
aM (IEC)	A	125

Making capacity (RMS value)

A	1300
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Breaking capacity at voltage

440V	A	1300
500V	A	1100
690V	A	880

Resistance per pole (average value)

mΩ	0.3
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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	I _{bin}	7.4
max	I _{bin}	7.4

Max number of wires simultaneously connectable

Nr.	2
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Conductor section

AWG/Kcmil

max	2/0
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Power terminal protection according to IEC/EN 60529

IP00

Mechanical features

Operating position

normal allowable	Vertical plan ±30°
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Fixing

Screw

Weight

g	6180
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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

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

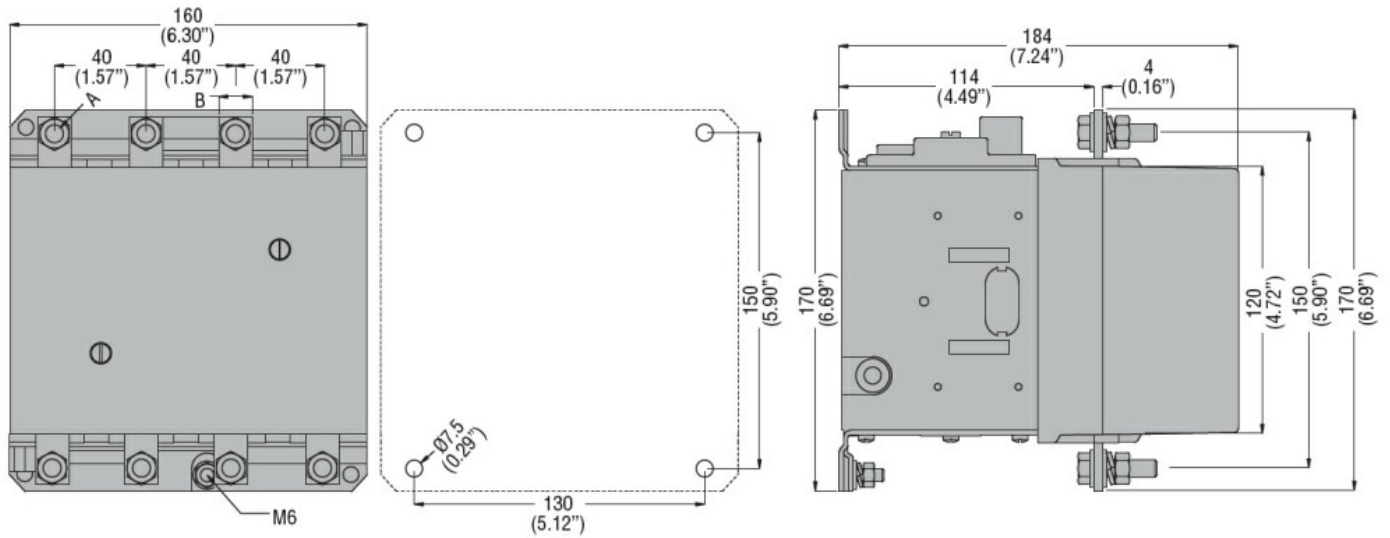
Storage temperature			
	min	$^{\circ}\text{C}$	-60
	max	$^{\circ}\text{C}$	80

Max altitude	m	3000
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Resistance & Protection

Pollution degree	3
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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