



Product designation Power contactor  
Product type designation B115

**Contact characteristics**

Number of poles	Nr.	4
Rated insulation voltage U <sub>i</sub> IEC/EN	V	1000
Rated impulse withstand voltage U <sub>imp</sub>	kV	8
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I <sub>th</sub>	A	160
Operational current I <sub>e</sub>	AC-1 (≤40°C)	A 160
	AC-1 (≤55°C)	A 150
	AC-1 (≤70°C)	A 110
	AC-3 (≤440V ≤55°C)	A 110
	AC-4 (400V)	A 47
Rated operational power AC-1 (T≤40°C)	230V	kW 57
	400V	kW 98
	500V	kW 129
	690V	kW 173
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 1 poles in series	75V	A 160
	110V	A 100
	220V	A –
	330V	A –
	460V	A –
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 2 poles in series	75V	A 160
	110V	A 130
	220V	A 100
	330V	A –
	460V	A –
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 3 poles in series	75V	A 160
	110V	A 130
	220V	A 130
	330V	A 100
	460V	A –
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms 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
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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 <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
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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 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

**DC coil operating**

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

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