



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 $L/R \leq 15\text{ms}$ 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 $L/R \leq 15\text{ms}$ 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 $L/R \leq 15\text{ms}$ 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 $L/R \leq 15\text{ms}$ 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	Ibin	7.4
max	Ibin	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 $\pm 30^\circ$
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Fixing

Screw

Weight

g	6180
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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
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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

Operating times

Average time for U_s 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

Rated operational voltage AC (UL) V 600

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

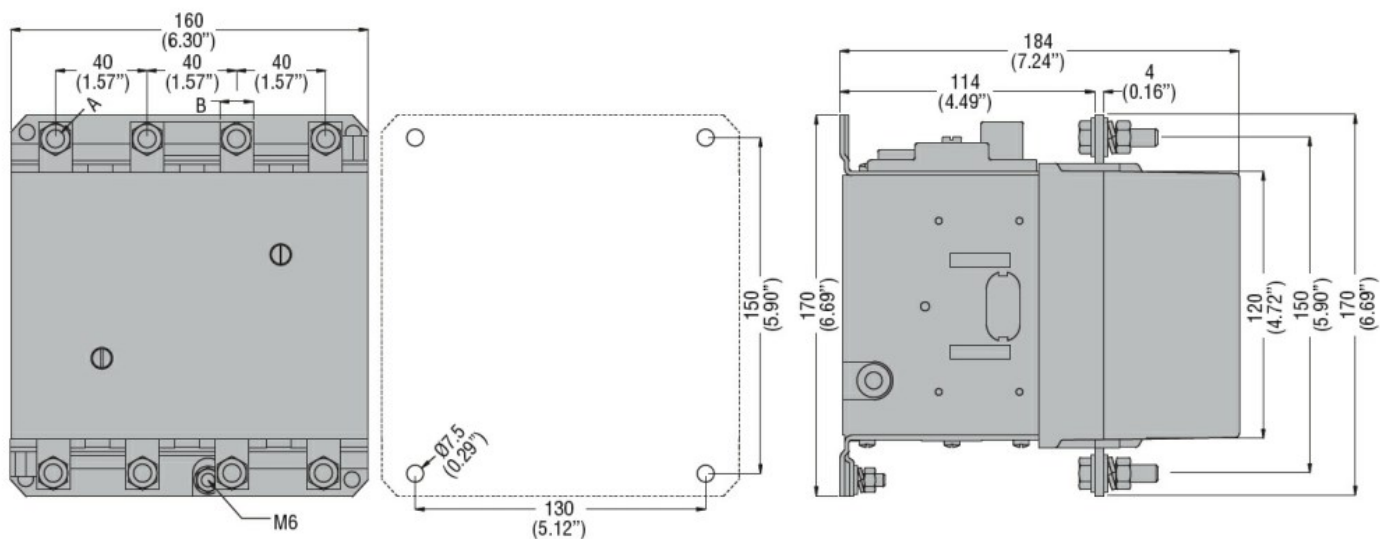
min	$^{\circ}\text{C}$	-60
max	$^{\circ}\text{C}$	80

Max altitude m 3000

Resistance & Protection

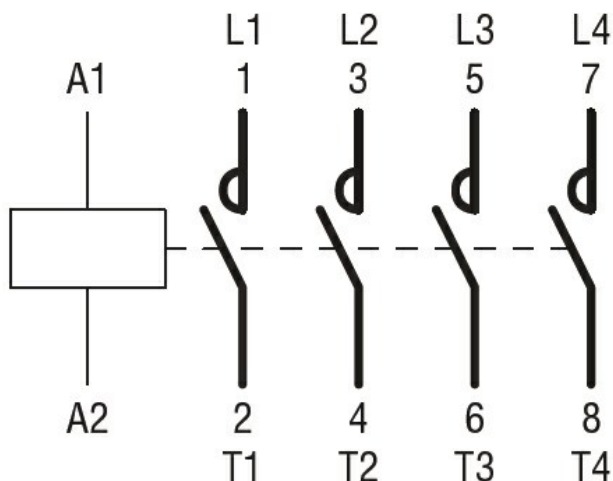
Pollution degree 3

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