



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 Ie 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 Ie 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 Ie 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 Ie 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)			
	Ith	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
Conductor section			
	AWG/Kcmil		
	max		2/0
Power terminal protection according to IEC/EN 60529			IP00
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°

Fixing	Screw		
Weight	g	5950	
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 contats according to IEC/EN 609474-4-1	Yes		
EMC compatibility	yes		
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz			
	min	V	110
	max	V	125
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	110
	max	V	125
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 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

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

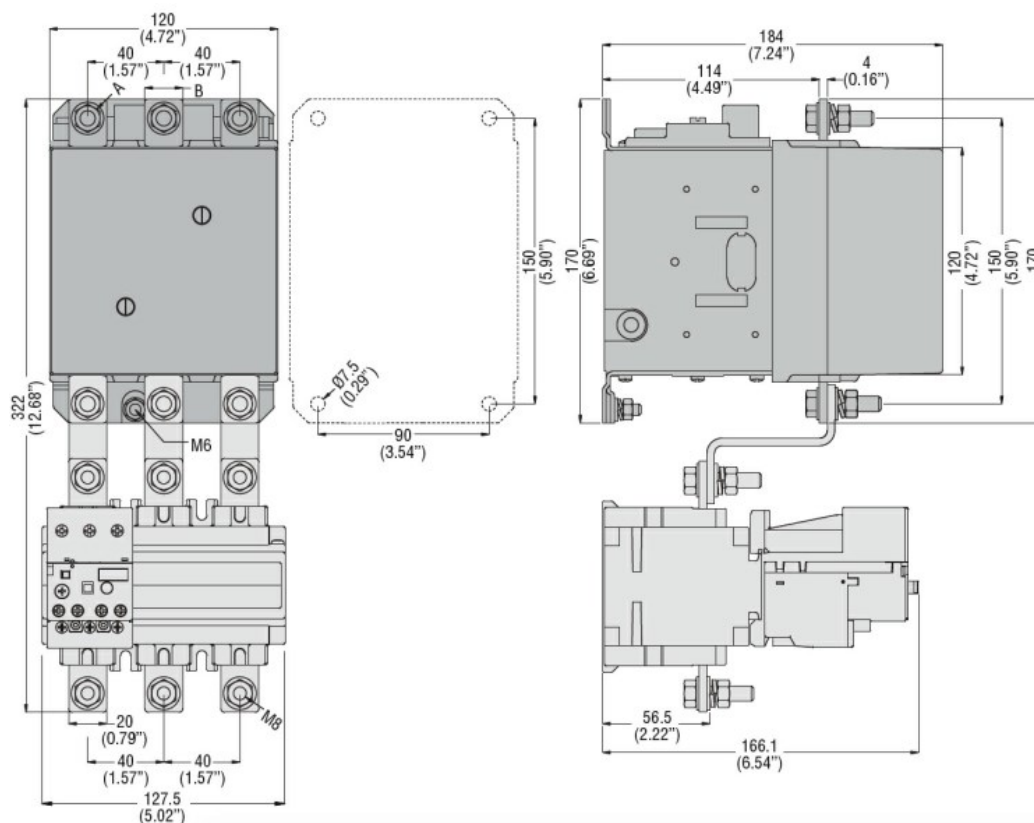
min	$^{\circ}\text{C}$	-60
max	$^{\circ}\text{C}$	80

Max altitude m 3000

Resistance & Protection

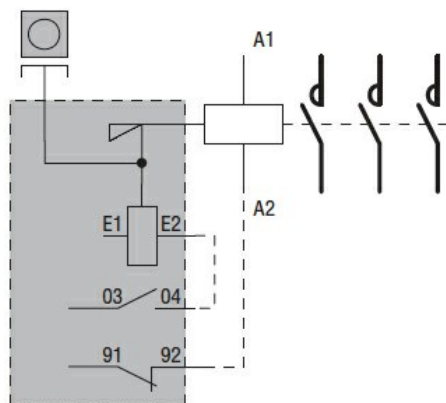
Pollution degree 3

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