



Product designation

Power contactor

Product type designation

B145

**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	250
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A 250
	AC-1 ( $\leq 55^\circ\text{C}$ )	A 235
	AC-1 ( $\leq 70^\circ\text{C}$ )	A 190
	AC-3 ( $\leq 440\text{V } \leq 55^\circ\text{C}$ )	A 150
	AC-4 (400V)	A 57
Rated operational power AC-3 ( $T \leq 55^\circ\text{C}$ )	400V	kW 80
Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )	230V	kW 91
	400V	kW 150
	500V	kW 196
	690V	kW 270
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	75V	A 220
	110V	A 110
	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 220
	110V	A 150
	220V	A 130
	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 220
	110V	A 150
	220V	A 150
	330V	A 130
	460V	A –
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series	75V	A 220
	110V	A 150
	220V	A 150

	330V	A	150
	460V	A	130
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	75V	A	160
	110V	A	80
	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	160
	110V	A	120
	220V	A	90
	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	160
	110V	A	140
	220V	A	120
	330V	A	90
	460V	A	–
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	75V	A	160
	110V	A	140
	220V	A	140
	330V	A	140
	460V	A	90
Short-time allowable current for 10s (IEC/EN60947-1)		A	1300
Protection fuse			
	gG (IEC)	A	250
	aM (IEC)	A	160
Making capacity (RMS value)		A	1500
Breaking capacity at voltage			
	440V	A	1500
	500V	A	1400
	690V	A	1200
Resistance per pole (average value)		mΩ	0.3
Power dissipation per pole (average value)			
	I <sub>th</sub>	W	14.5
	AC-3	W	6.8
Tightening torque for terminals			
	min	Nm	18
	max	Nm	18
	min	lbin	13.3
	max	lbin	13.3
Tightening torque for coil terminal			
	min	Nm	1
	max	Nm	1
	min	lbin	0.74
	max	lbin	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
	AWG/Kcmil		
	max		4/0

Power terminal protection according to IEC/EN 60529			IP00	
Mechanical features				
Operating position		normal allowable	Vertical plan ±30°	
Fixing		Screw		
Weight		g	6060	
Operations				
Mechanical life		cycles	10000000	
Electrical life		cycles	1100000	
Safety related data				
Performance level B10d according to EN/ISO 13489-1		rated load mechanical load	cycles	1100000
			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

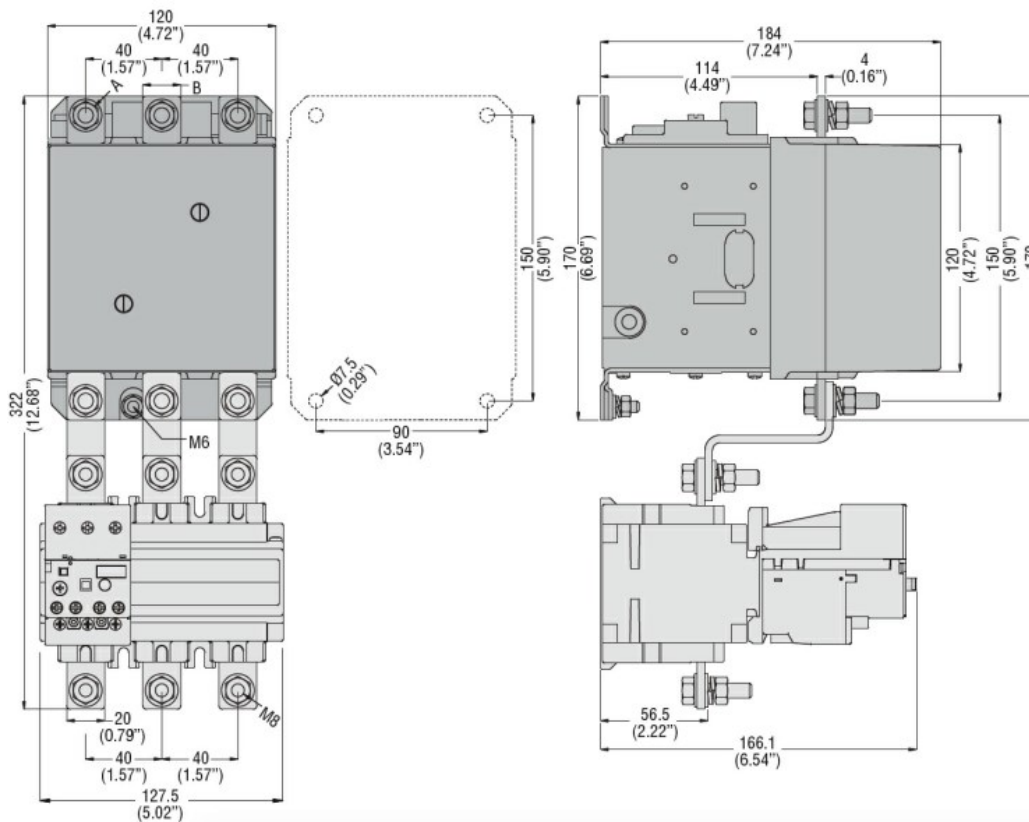
		max	V	125
DC operating voltage				
pick-up		min	%Us	80
		max	%Us	110
drop-out				
		min	%Us	20
		max	%Us	60
Average coil consumption ≤20°C				
		in-rush	W	300
		holding	W	10
Max cycles frequency				
Mechanical operation			cycles/h	2400
Operating times				
Average time for Us control				
in AC	Closing 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	124
		at 600V	A	125
Yielded mechanical performance				
for three-phase AC motor				
		200/208V	HP	50
		220/230V	HP	50
General USE				
Contactor		AC current	A	250
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	°C	-50
		max	°C	70
Storage temperature				
		min	°C	-60
		max	°C	80

Max altitude m 3000

## Resistance & Protection

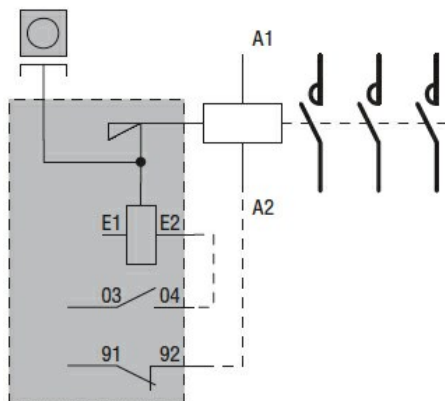
Pollution degree 3

## 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

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EAC

ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching