



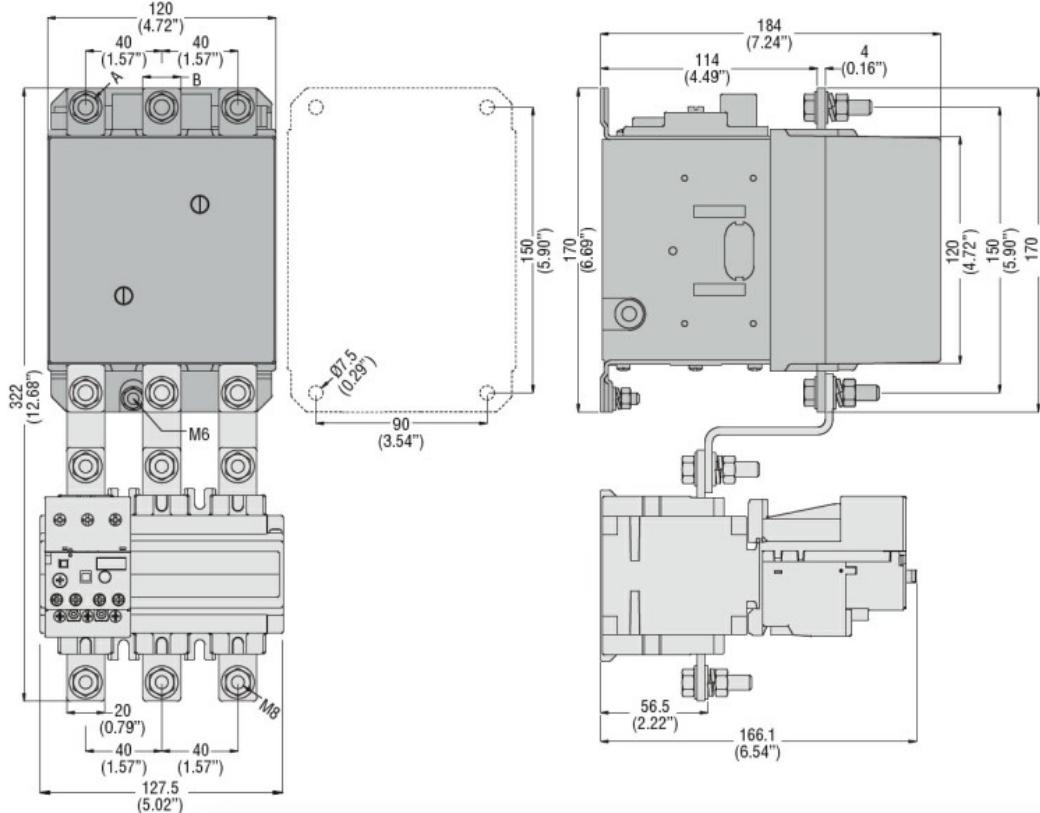
Product designation	Power contactor		
Product type designation	B145		
Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage U_i IEC/EN	V	1000	
Rated impulse withstand voltage U_{imp}	kV	8	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current I_{th}		A	250
Operational current I_e			
AC-1 ($\leq 40^\circ C$)	A	250	
AC-1 ($\leq 55^\circ C$)	A	235	
AC-1 ($\leq 70^\circ C$)	A	190	
AC-3 ($\leq 440V \leq 55^\circ C$)	A	150	
AC-4 (400V)	A	57	
Rated operational power AC-3 ($T \leq 55^\circ C$)	400V	kW	80
Rated operational power AC-1 ($T \leq 40^\circ C$)	230V	kW	91
	400V	kW	150
	500V	kW	196
	690V	kW	270
IEC max current I_e in DC1 with $L/R \leq 1ms$ 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 $L/R \leq 1ms$ 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 $L/R \leq 1ms$ 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 $L/R \leq 1ms$ with 4 poles in series	75V	A	220
	110V	A	150
	220V	A	150

	330V	A	150
	460V	A	130
IEC max current le 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 le 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 le 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 le 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 _{th}	W	14.5
	AC-3	W	6.8
Tightening torque for terminals			
	min	Nm	18
	max	Nm	18
	min	Ibin	13.3
	max	Ibin	13.3
Tightening torque for coil terminal			
	min	Nm	1
	max	Nm	1
	min	Ibin	0.74
	max	Ibin	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						
Fixing	normal allowable	Vertical plan ±30°				
Weight	g	6080				
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 10000000			
Mirror contacts according to IEC/EN 609474-4-1		Yes				
EMC compatibility		yes				
AC coil operating						
Rated AC voltage at 50/60Hz, 60Hz	min max	V V	220 240			
AC operating voltage						
of 50/60Hz coil powered at 50Hz						
pick-up	min max	%Us %Us	80 110			
drop-out	min max	%Us %Us	20 60			
of 50/60Hz coil powered at 60Hz						
pick-up	min max	%Us %Us	80 110			
drop-out	min max	%Us %Us	20 60			
of 60Hz coil powered at 60Hz						
pick-up	min max	%Us %Us	80 110			
drop-out	min max	%Us %Us	20 60			
AC average coil consumption at 20°C						
of 50/60Hz coil powered at 50Hz	in-rush holding	VA VA	300 10			
of 50/60Hz coil powered at 60Hz	in-rush holding	VA VA	300 10			
Dissipation at holding ≤20°C 50Hz		W	10			
DC coil operating						
DC rated control voltage	min	V	220			

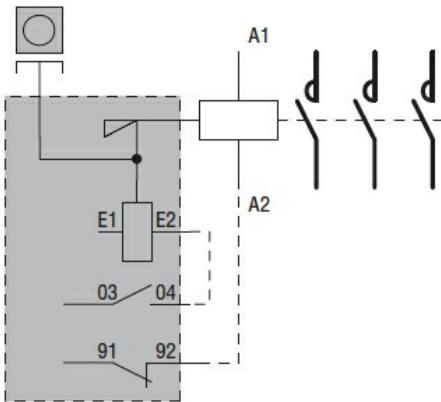
		max	V	240
DC operating voltage				
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	60
Average coil consumption $\leq 20^\circ\text{C}$				
		in-rush	W	300
		holding	W	10
Max cycles frequency				
Mechanical operation			cycles/h	2400
Operating times				
Average time for Us control				
	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	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

clu us

EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching