



Product designation  
Product type designation

Power contactor  
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 ( $T \leq 55^\circ\text{C}$ )	230V	kW 46
	400V	kW 80
	415V	kW 88
	440V	kW 93
	500V	kW 100
	690V	kW 120
	1000V	kW 75
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 <sub>e</sub> in DC1 with L/R ≤ 1ms 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	I <sub>bin</sub>	0.74
	max	I <sub>bin</sub>	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
<b>Mechanical features</b>			
Operating position		normal allowable	Vertical plan ±30°
Fixing			Screw
Weight		g	5420
Conductor section			
		AWG/kcmil conductor section	
	max		4/0
<b>Operations</b>			
Mechanical life		cycles	10000000
Electrical life		cycles	1100000
<b>Safety related data</b>			
Performance level B10d according to EN/ISO 13489-1		rated load mechanical load	cycles 1100000 cycles 10000000
Mirror contacts according to IEC/EN 60947-4-1			yes
EMC compatibility			yes
<b>AC coil operating</b>			
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 $\leq 20^{\circ}\text{C}$ 50Hz		W	10
<b>DC coil operating</b>			
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
<b>Max cycles frequency</b>			
Mechanical operation		cycles/h	2400
<b>Operating times</b>			
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
<b>UL technical data</b>			
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
	575/600V	HP	125
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

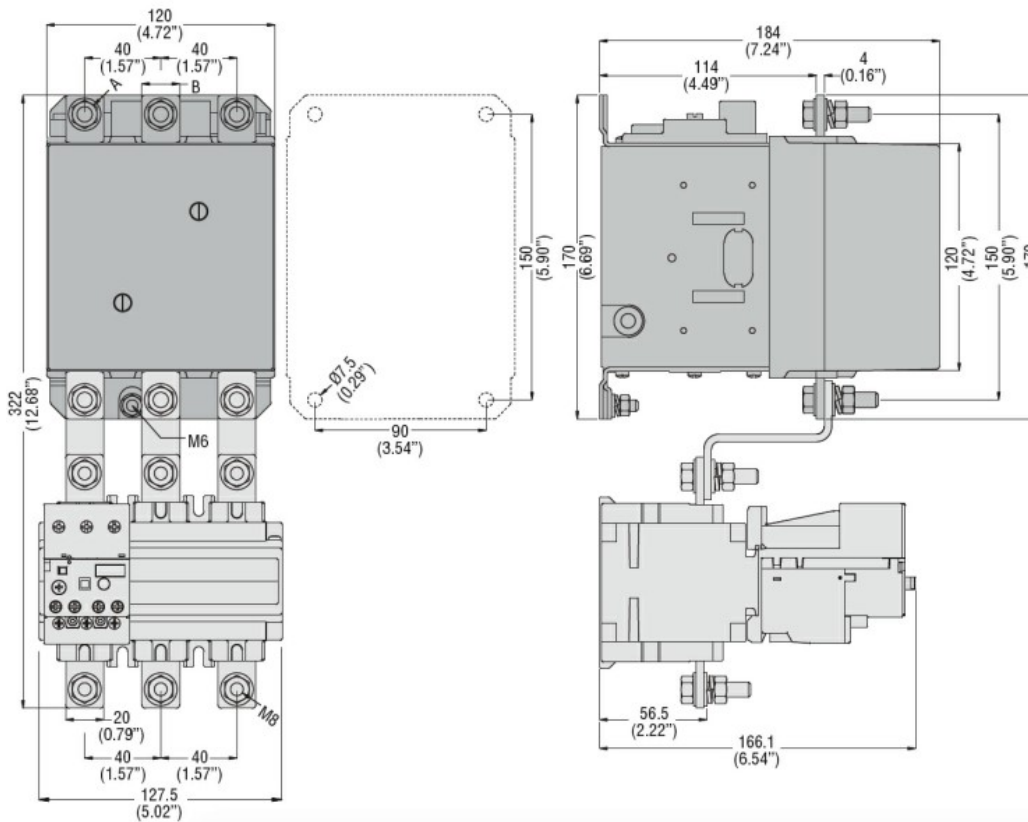
m 3000

**Resistance & Protection**

Pollution degree

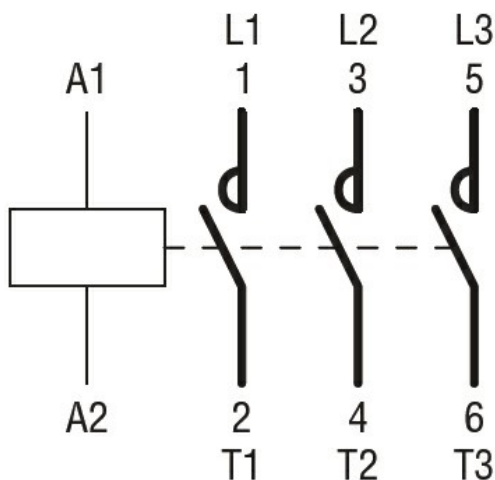
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**Dimensions**



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