



Product designation	Power contactor		
Product type designation	B145		
Contact characteristics			
Number of poles	Nr.	4	
Rated insulation voltage Ui IEC/EN	V	1000	
Rated impulse withstand voltage Uimp	kV	8	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		A	250
Operational current Ie			
	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-1 ($T \leq 40^{\circ}\text{C}$)			
	230V	kW	91
	400V	kW	150
	500V	kW	196
	690V	kW	270
IEC max current Ie 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 Ie 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 Ie 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 Ie 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_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series

75V	A	160
110V	A	80
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	160
110V	A	120
220V	A	90
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	160
110V	A	140
220V	A	120
330V	A	90
460V	A	—

IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ 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) m? 0.3

Power dissipation per pole (average value)

I _{th}	W	14.5
AC3	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	6330

Conductor section

AWG/kcmil conductor section	max	4/0
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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 609474-4-1

EMC compatibility	yes
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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	

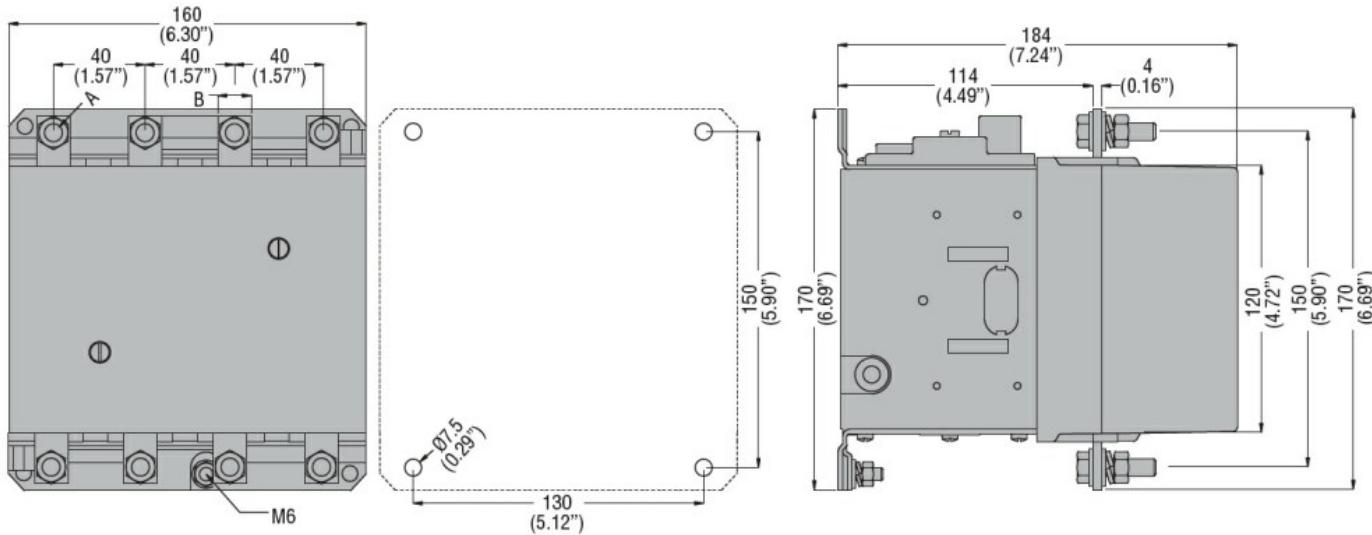
Dissipation at holding ≤20°C 50Hz

DC coil operating	W	10
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DC rated control voltage

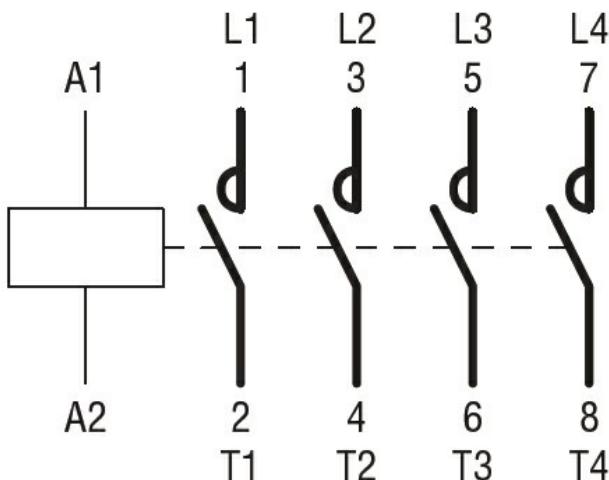
		min	V	380
		max	V	415
DC operating voltage				
pick-up		min	%Us	80
		max	%Us	110
drop-out		min	%Us	20
		max	%Us	60
Average coil consumption $\leq 20^{\circ}\text{C}$				
	in-rush	W	300	
	holding	W	10	
Max cycles frequency				
Mechanical operation				cycles/h 2400
Operating times				
Average time for 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				
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	
	460/480V	HP	100	
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 altitude	max	°C	80
Resistance & Protection	m		3000
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