



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 ($T \leq 55^\circ C$)			
	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 ($T \leq 40^\circ C$)			
	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 $L/R \leq 1\text{ms}$ 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	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			normal allowable
			Vertical plan ±30°
Fixing			Screw
Weight			g 5390
Conductor section			
AWG/kcmil conductor section			
	max		4/0
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			yes
EMC compatibility			yes
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 holding	VA VA	300 10
of 50/60Hz coil powered at 60Hz			
	in-rush holding	VA VA	300 10
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz		W	10
DC coil operating			
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 holding	W W
			300 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 at 600V	A A
			124 125
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
		Fuse rating	A
			5 500

Fuse class RK5

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

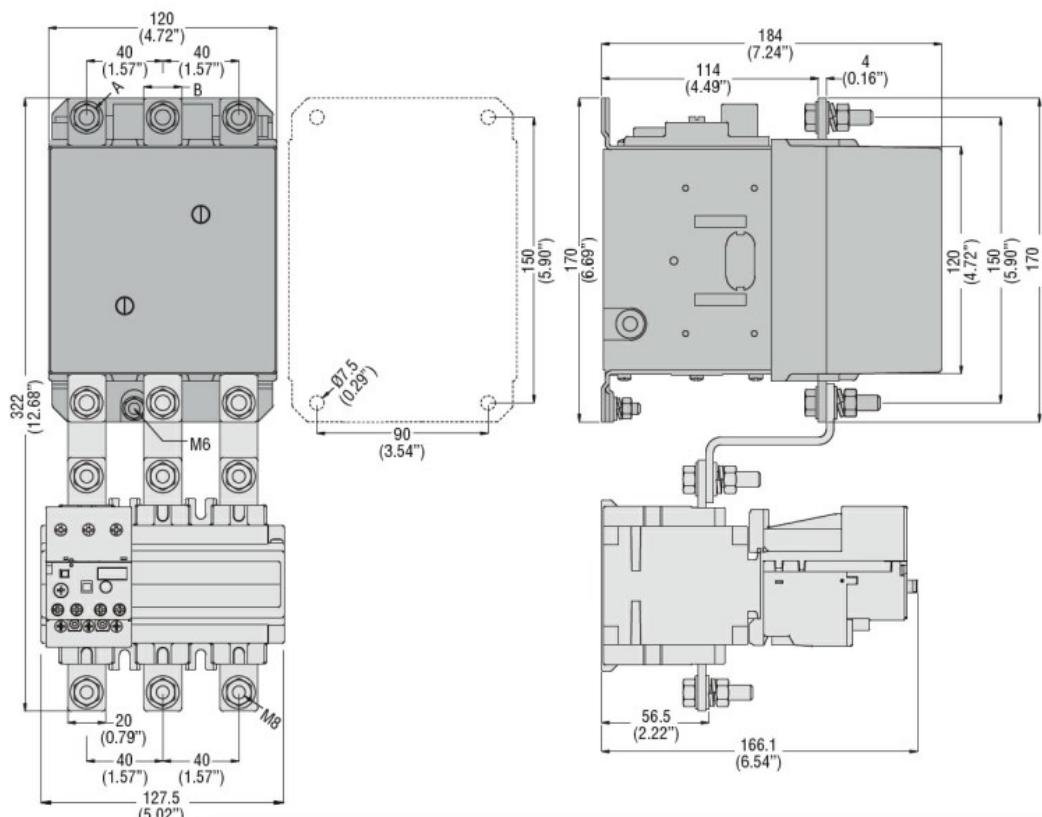
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Resistance & Protection

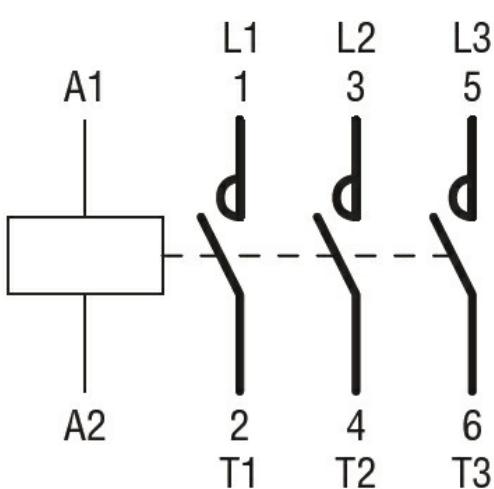
Pollution degree

3

Dimensions



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