

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL, 440...480VAC/DC



Product designation Product type designation			Power contactor B145
Contact characteristics			2110
Number of poles		Nr.	3
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		Α	250
Operational current le			
	AC-1 (≤40°C)	Α	250
	AC-1 (≤55°C)	Α	235
	AC-1 (≤70°C)	Α	190
	AC-3 (≤440V ≤55°C)	Α	150
	AC-4 (400V)	A	57
Rated operational power AC-3 (T≤55°C)			
	230V	kW	46
	400V	kW	80
	415V	kW	88
	440V	kW	93
	500V	kW	100
	690V	kW	120
D-4-1	1000V	kW	75
Rated operational power AC-1 (T≤40°C)	0001/	1-107	0.4
	230V	kW	91
	400V 500V	kW kW	150 196
	690V	kW	270
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	0907	KVV	210
TEC Max current le in DCT with E/N = This with 1 poles in series	75V	Α	220
	110V	A	110
	220V	A	_
	330V	A	_
	460V	A	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	100 V	- , ,	
	75V	Α	220
	110V	Α	150
	220V	A	130
	330V	Α	_
	460V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
•	75V	Α	220
	110V	Α	150
	220V	Α	150



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	330V	Α	130
	460V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	75V	Α	220
	110V	Α	150
	220V	Α	150
	330V	Α	150
	460V	Α	130
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	75V	Α	160
	110V	Α	80
	220V	Α	_
	330V	Α	_
	460V	A	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	75V	Α	160
	110V	Α	120
	220V	Α	90
	330V	Α	_
	460V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	75V	Α	160
	110V	Α	140
	220V	Α	120
	330V	Α	90
-	460V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series		_	
	75V	Α	160
	110V	Α	140
	220V	Α	140
	330V	Α	140
01 (1) 11 11 11 11 11 11 11 11 11 11 11 11 1	460V	A	90
Short-time allowable current for 10s (IEC/EN60947-1)		Α	1300
Protection fuse	. 0 (150)		050
	gG (IEC)	A	250
Maline and site (DMC calca)	aM (IEC)	A	160
Making capacity (RMS value)		Α	1500
Breaking capacity at voltage	440)/	۸	4500
	440V	A	1500
	500V	A	1400
Desistance per pela (average value)	690V	A	1200
Resistance per pole (average value)		mΩ	0.3
Power dissipation per pole (average value)	141-	14/	445
	Ith	W W	14.5
Tightoning torque for terminals	AC-3	٧٧	6.8
Tightening torque for terminals	min	Nim	10
	min	Nm Nm	18
	max	Nm	18
	min	lbin Ibin	13.3
Tightoning torque for coil terminal	max	lbin	13.3
Tightening torque for coil terminal	min	Nima	1
	min	Nm Nm	1
	max	Nm	1





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		min	Ibin	0.74
		min max	Ibin	0.74
Max number of wires s	simultaneously connectable	max	Nr.	2
Conductor section	Simulation of the control of the con			
	AWG/Kcmil			
	,	max		4/0
Power terminal protec	tion according to IEC/EN 60529			IP00
Mechanical features	Ü			
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Weight			g	5380
Operations				
Mechanical life			cycles	10000000
Electrical life			cycles	1100000
Safety related data				
Performance level B1	0d according to EN/ISO 13489-1			
		rated load	cycles	1100000
		mechanical load	cycles	10000000
	ng to IEC/EN 609474-4-1			Yes
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 5	0/60Hz, 60Hz			
		min	V	440
		max	V	415
AC operating voltage	1-0/001			
AC operating voltage	of 50/60Hz coil powered at 50Hz			
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up		0/11-	00
AC operating voltage	•	min	%Us	80
AC operating voltage	pick-up	min max	%Us %Us	80 110
AC operating voltage	•	max	%Us	110
AC operating voltage	pick-up	max min	%Us %Us	110 20
AC operating voltage	pick-up drop-out	max	%Us	110
AC operating voltage	pick-up drop-out of 50/60Hz coil powered at 60Hz	max min	%Us %Us	110 20
AC operating voltage	pick-up drop-out	max min max	%Us %Us %Us	110 20 60
AC operating voltage	pick-up drop-out of 50/60Hz coil powered at 60Hz	max min max min	%Us %Us %Us	110 20 60 80
AC operating voltage	of 50/60Hz coil powered at 60Hz pick-up	max min max	%Us %Us %Us	110 20 60
AC operating voltage	pick-up drop-out of 50/60Hz coil powered at 60Hz	max min max min	%Us %Us %Us	110 20 60 80
AC operating voltage	of 50/60Hz coil powered at 60Hz pick-up	max min max min max	%Us %Us %Us %Us %Us	110 20 60 80 110
AC operating voltage	of 50/60Hz coil powered at 60Hz pick-up	max min max min max min max	%Us %Us %Us %Us %Us %Us	110 20 60 80 110 20
AC operating voltage	of 50/60Hz coil powered at 60Hz pick-up drop-out	max min max min max min max	%Us %Us %Us %Us %Us %Us	110 20 60 80 110 20
AC operating voltage	of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out	max min max min max min max	%Us %Us %Us %Us %Us %Us	110 20 60 80 110 20
AC operating voltage	of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out	max min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us	110 20 60 80 110 20 60
AC operating voltage	of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out	max min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us %Us %Us	110 20 60 80 110 20 60
AC operating voltage	of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out of 60Hz coil powered at 60Hz pick-up	max min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us %Us %Us	110 20 60 80 110 20 60
	of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out of 60Hz coil powered at 60Hz pick-up drop-out	min max min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us %Us %Us	110 20 60 80 110 20 60
	of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out of 60Hz coil powered at 60Hz pick-up drop-out	max min max min max min max min max min max min max	%Us	110 20 60 80 110 20 60 80 110 20
	of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out of 60Hz coil powered at 60Hz pick-up drop-out	max min max min max min max min max min max min max	%Us	110 20 60 80 110 20 60 80 110 20 60
AC average coil consu	of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out of 60Hz coil powered at 60Hz pick-up drop-out	max min max min max min max min max min max min max	%Us	110 20 60 80 110 20 60 80 110 20



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL, 440...480VAC/DC

Mechanical operation cycles/h 2400 Operating times Average time for Us control min ms 60 Average time for Us control min AC ms 60 60 Opening NO min ms 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60						
Dissipation at holding ≤20°C 50Hz DC rated control voltage DC rated control voltage				in-rush	VA	300
Dissipation at holding ≤20°C 50Hz DC rated control voltage DC rated control voltage				holdina	VA	10
DC coll operating DC rated control voltage	Dissination at holding					
DC rated control voltage		320 C 30112			VV	10
Max V 440 Max V 4415						
DC operating voltage pick-up	DC rated control voltage	ge				
DC operating voltage pick-up min max %Us 80 max %Us 110 min max %Us 20 max %Us 60 max %Us 60 max min ms 60 max min ms 60 max ms 100 max ms 60 max ms				min	V	440
Pick-up				max	V	415
Pick-up	DC operating voltage					
Mini	20 operating vertage	nick un				
Max Mus		pick-up			0/116	00
Average coil consumption ≤20°C max wus 60						
Max				max	%Us	110
Average coil consumption ≤20°C In-rush W 300 holding W 10 Max cycles frequency Mechanical operation Operating times Average time for Us control In AC		drop-out				
Average coil consumption ≤20°C In-rush W 300 holding W 10 Max cycles frequency Mechanical operation Operating times Average time for Us control In AC				min	%Us	20
Average coil consumption ≤20°C in-rush W 300 holding W 10 Max cycles frequency Mechanical operation Coperating times Average time for Us control in AC				max		
In-rush holding	Average coil consumn	tion <20°C		max	7000	
Max cycles frequency Mechanical operation 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 50 Max ms 100 Opening NO Min ms 60 Max ms 100 Opening NO Min ms 60 Max ms 100 Opening NO Min ms 50 Max ms 100 Opening NO Min ms 60 Max ms 100 Opening NO Min ms 50 Max ms 100 Opening NO Min ms 60 Max ms 100 Opening NO Min ms 60 Max ms 100 Opening NO Max ms 100 Opening NO Max ms 100 Max ms 1	Average con consump	70011 =20 C			144	200
Max cycles frequency Mechanical operation cycles/h 2400 Operating times Average time for Us control in AC min ms 60 max Closing NO min ms 25 max max ms 60 in DC min ms 60 Closing NO min ms 60 Max ms 100 Opening NO min ms 60 UL technical data max ms 60 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 at 600 at 600V 50 at						
Mechanical operation cycles/h 2400 Operating times Average time for Us control min ms 60 Average time for Us control min AC ms 60 60 Opening NO min ms 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60				holding	W	10
Mechanical operation cycles/h 2400 Operating times Average time for Us control min ms 60 Average time for Us control min AC ms 60 60 Opening NO min ms 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60	Max cycles frequency					
Closing NO					cycles/h	2400
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 60 max ms 100 Opening NO min ms 60 max ms 100 Opening NO min ms 25 max ms 60 UL technical data Rated operational voltage AC (UL) Rated operational voltage AC (UL) 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					,	
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 60 max ms 100 Opening NO min ms 60 max ms 100 Opening NO min ms 25 max ms 60 max ms 100 Opening NO Min ms 25 max ms 60 DL 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 Fuse rating A 500 Fuse class RK5 Ambient conditions		ontrol				
Closing NO	Average time for US Co					
Min		in AC				
Opening NO			Closing NO			
Opening NO				min	ms	60
Opening NO				max	ms	100
Min			Opening NO			
Max			Opening NO	min	mc	25
In DC						
Closing NO				max	ms	60
Min		in DC				
Opening NO min ms 25 max ms 60			Closing NO			
Opening NO min ms 25 max ms 60				min	ms	60
Opening NO min ms 25 max ms 60					ms	
Min ms 25 max ms 60			Opening NO	max	1110	100
Max			Opening NO			0.5
Short-circuit protection fuse, 600V Standard fault Short circuit current (FA) for three-goals (FA) Short-circuit current (FA) Short-circuit curren				min	ms	
Rated operational voltage AC (UL)				max	ms	60
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	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 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	Rated operational volta	age AC (UL)			V	600
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 Short circuit current kA 5 Fuse rating A 500 Fuse class RK5			motor		<u> </u>	
At 600V A 125	i an ioud ourient (i LA)	, ioi unoc phase AO i		at 400V	۸	104
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						
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				at 600V	Α	125
200/208V	Yielded mechanical pe	erformance				
200/208V	·	for three-phase AC	motor			
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		,		200/208\/	HP	50
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						
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	0			220/230V	LIF	30
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	General USE					
Short-circuit protection fuse, 600V Standard fault Short circuit current kA 5 Fuse rating A 500 Fuse class RK5 Ambient conditions		Contactor				
Standard fault Short circuit current kA 5 Fuse rating A 500 Fuse class RK5 Ambient conditions				AC current	Α	250
Standard fault Short circuit current kA 5 Fuse rating A 500 Fuse class RK5 Ambient conditions	Short-circuit protection	า fuse. 600V				
Short circuit current kA 5 Fuse rating A 500 Fuse class RK5 Ambient conditions	z s sant protostion					
Fuse rating A 500 Fuse class RK5 Ambient conditions		Statiuatu iduli		Object to the state of	ι Λ	_
Fuse class RK5 Ambient conditions						
Ambient conditions				_	Α	
				Fuse class		RK5
	Ambient conditions					
DATEMATERIAL.	Temperature					

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THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL, 440...480VAC/DC

Operating temperature

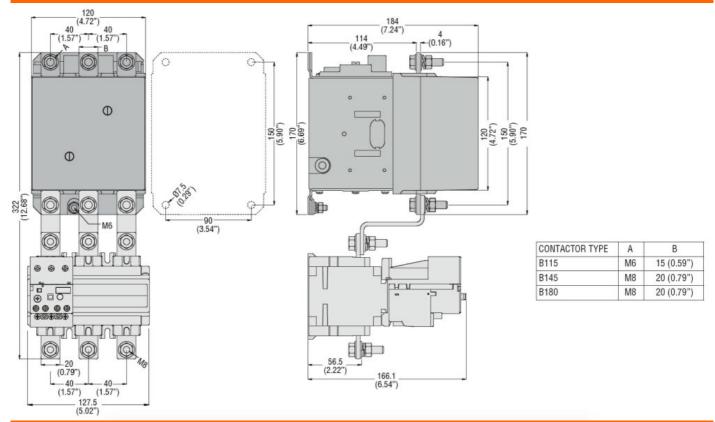
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
		m	3000

Resistance & Protection

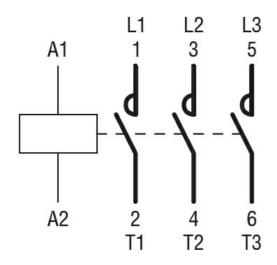
Pollution degree

Dimensions

Max altitude



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1



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	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