

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 250A, AC/DC COIL, 440...480VAC/DC



Number of poles	Product designation Product type designation			Power contactor B145
Number of poles Nr. 4 Rated insulation voltage Ui IEC/EN V 1000 Rated insulation voltage Uimp kV 8 Operational frequency min Hz 25 max Hz 400 4 IEC Conventional free air thermal current lth A 250 4 Operational current le AC-1 (\$40°C) A 250 AC-1 (\$55°C) A 235 AC-1 (\$56°C) A 190 AC-3 (\$4400 \$5°C) A 190 AC-3 (\$4400 \$5°C) A 190 AC-4 (4000) A 57 A 150 AC-4 (4000) A 57 Rated operational power AC-1 (T≤40°C) 230V kW 91 400V kW 150 Boylow kW 150 500V kW 150 500V kW 170 A 220 110V A 110 A 220 110V A 150 A 220 110V A 150 A 220				20
Rated insulation voltage Ui IEC/EN V 1000 Rated impulse withstand voltage Uimp kV 8 Operational frequency min Hz 25 imax Hz 400 400 IEC Conventional free air thermal current Ith A 250 Operational current Ie AC-1 (≤40°C) A 250 AC-1 (555°C) A 230 AC-1 (570°C) A 190 AC-3 (5400½55°C) A 190 AC-3 (5400½55°C) A 190 AC-4 (4000) A 57 A 190 AC-4 (4000) A 57 Rated operational power AC-1 (T≤40°C) 230V kW 91 400V kW 91 400V kW 150 500V kW 91 400V kW 91 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series 75V A 220 110V A 150 220V A - 460V A - 16C A 150 A			Nr.	4
Rated impulse withstand voltage Ulimp				
Operational frequency min max Hz max Hz max				
Min Hz 25 Max Hz 400 EC Conventional free air thermal current lth A 250 Operational current le AC-1 (≤40°C) A 250 AC-1 (≤55°C) A 235 AC-1 (≤70°C) A 190 AC-3 (≤440V ≤55°C) A 150 AC-3 (≤440V ≤55°C) A 150 AC-4 (400V) A 57 Rated operational power AC-1 (T≤40°C) 230V				
EC Conventional free air thermal current Ith		min	Hz	25
EC Conventional free air thermal current lth				
Operational current le AC-1 (≤40°C) A 250 AC-1 (≤55°C) A 235 AC-1 (≤70°C) A 190 AC-3 (≤440V ≤55°C) A 150 AC-4 (400V) A 57 Rated operational power AC-1 (T≤40°C) 230V kW 91 400V kW 150 500V kW 150 500V kW 270 196 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series 75V A 220 110V A 150 110V A 150 220V A 130 330V A - 460V IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 75V A 220 110V A 150 330V A 150 330V A 150 330V A 150 75V A 220 110V A 150 220V A 150 330V A 150	IEC Conventional free air thermal current Ith			
AC-1 (≤40°C)				
AC-1 (≤55°C) A 235 AC-1 (≤70°C) A 190 AC-3 (≤440V ≤55°C) A 150 AC-4 (400V) A 57 Rated operational power AC-1 (T≤40°C) 230V kW 91 400V kW 150 500V kW 196 690V kW 270 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series 75V A 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 75V A 220 110V A 150 220V A 130 330V A - 460V A - IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 75V A 220 110V A 150 220V A 130 330V A - 460V A - IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 75V A 220 110V A 150 220V A 130 330V A - 460V A - IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 75V A 220 110V A 150 220V A 130 330V A - 460V A - IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 75V A 220 110V A 150 220V A 150 330V A - 460V A - IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series		AC-1 (≤40°C)	Α	250
AC-1 (≤70°C)		,		
AC-3 (≤440V ≤55°C) A 150 AC-4 (400V) A 57 Rated operational power AC-1 (T≤40°C) 230V kW 91 400V kW 150 500V kW 196 690V kW 270 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series 75V A 220 1110V A 110 220V A - 330V A - 460V A - IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series 75V A 220 1110V A 150 220V A 130 330V A - 460V A - IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 75V A 220 110V A 150 220V A 130 330V A - 460V A - IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 75V A 220 110V A 150 220V A 150 330V A - 460V A - IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series 75V A 220 110V A 150 220V A 150 330V A - 460V A - IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series				
AC-4 (400V) A 57 Rated operational power AC-1 (T≤40°C) 230V kW 91 400V kW 150 500V kW 196 690V kW 270 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series 75V A 220 110V A 150 220V A 220V 110V A 150 220V A 130 330V A - 460V A - IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 75V A 220 110V A 150 220V A 150 330V A 150 220V A 150 330V A 20V 1EC max current le in DC1 with L/R ≤ 1ms with 4 poles in series 75V A 220 110V A 150 220V A 150 330V A 150 220V A 150 110V A 150 220V A 150 330V A 150		` ,		
Rated operational power AC-1 (T≤40°C) 230V kW 91 400V kW 150 500V kW 196 690V kW 270 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series 75V A 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 75V A 220 110V A 150 220V A 130 330V A - 460V A - IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 75V A 220 110V A 150 220V A 130 330V A - 460V A - IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 75V A 220 110V A 150 220V A 150 330V A 150 330V A 150 330V A 150 330V A 150 220V A 150 330V A 150 330V A 150 220V A 150 330V A 150 330V A 150 220V A 150 330V A 150 330V A 150 330V A 150		•		
230V kW 91	Rated operational power AC-1 (T<40°C)	710 1 (1001)	- , ,	
A00V kW 150 500V kW 196 690V kW 270	rated operational power 7.6 1 (1=40 0)	230\/	k\/\/	91
EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series 75V				
EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series 75V				
T5V				
75V	IFC may current le in DC1 with L/R < 1ms with 1 notes in series	030 V	KVV	210
	120 max current le in 201 with 2/1 = mis with 1 poles in series	75\/	Δ	220
				_
BEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series 75V				_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	IFC may current le in DC1 with L/R < 1ms with 2 notes in series	400 V		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	TEO max current le in BOT with E/N = mis with 2 poles in series	75\/	Δ	220
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				
EC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 75V A 220 110V A 150 220V A 150 330V A 130 460V A −				
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series				_
	IEC may current le in DC1 with L/R < 1ms with 3 notes in series	400 V		
	ILC max current le in DCT with L/N 3 mis with 3 poles in series	75\/	۸	220
A60V A -				
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series 75V A 220 110V A 150 220V A 150 330V A 150				
75V A 220 110V A 150 220V A 150 330V A 150	IFC may current le in DC1 with L/R < 1ms with 4 notes in series	4001		
110V A 150 220V A 150 330V A 150	TEO THAN GUITERING HIT DO I WHITE LITTS WHITE 4 POICS III SELIES	75\/	٨	220
220V A 150 330V A 150				
330V A 150				
400V A 130				
		4007	А	130



FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 250A, AC/DC COIL, 440...480VAC/DC

EC 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	Α	_
EC 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	_
EC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	+00 V	- / \	
neo max sarrent le in 200 200 with E/C = Tomo with a poles in series	75V	Α	160
	110V	A	140
	220V		
		A	120
	330V	A	90
IFO	460V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	751/		400
	75V	Α	160
	110V	Α	140
	220V	Α	140
	330V	Α	140
	460V	Α	90
Short-time allowable current for 10s (IEC/EN60947-1)		Α	1300
Protection fuse			
	gG (IEC)	Α	250
	aM (IEC)	Α	160
Making capacity (RMS value)		Α	1500
Breaking capacity at voltage			
	440V	Α	1500
	500V	Α	1400
	690V	Α	1200
Resistance per pole (average value)		mΩ	0.3
Power dissipation per pole (average value)			
and discipance pero (are age value)	Ith	W	14.5
	AC-3	W	6.8
Tightening torque for terminals	710 0	•••	0.0
rightering torque for terminate	min	Nm	18
	max	Nm	18
	Παλ		13.3
	min		10.0
	min	lbin Ibin	12 2
Tightoning torque for coil torminal	min max	Ibin	13.3
Tightening torque for coil terminal	max	lbin	
Tightening torque for coil terminal	max min	Ibin Nm	1
Tightening torque for coil terminal	max min max	Nm Nm	1
Tightening torque for coil terminal	max min max min	Nm Nm Ibin	1 1 0.74
	max min max	Nm Nm Ibin Ibin	1 1 0.74 0.74
Max number of wires simultaneously connectable	max min max min	Nm Nm Ibin	1 1 0.74
Max number of wires simultaneously connectable Conductor section	max min max min	Nm Nm Ibin Ibin	1 1 0.74 0.74
Max number of wires simultaneously connectable	max min max min	Nm Nm Ibin Ibin	1 1 0.74 0.74
Tightening torque for coil terminal Max number of wires simultaneously connectable Conductor section AWG/Kcmil	max min max min	Nm Nm Ibin Ibin	1 1 0.74 0.74



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Operating position

Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Weight			g	6340
Conductor section				
	AWG/kcmil conductor section			1/0
O		max		4/0
Operations				4000000
Mechanical life			cycles	10000000
Electrical life			cycles	1100000
Safety related data	Nd apparding to FN/ISO 12490 1			
Performance level bit	od according to EN/ISO 13489-1	roted load	ovoloo	1100000
		rated load mechanical load	cycles	1100000 10000000
Mirror contate accordin	og to IEC/EN 600474 4 1	mechanicarioau	cycles	
	ng to IEC/EN 609474-4-1			yes
EMC compatibility AC coil operating				yes
Rated AC voltage at 50	0/60Hz 60Hz			
Nateu AC Voltage at 30	0/00/12, 00/12	min	V	440
		max	V	480
AC operating voltage		Παλ	v	400
Ac operating voltage	of 50/60Hz coil powered at 50Hz			
	pick-up			
	pion 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		0	
		min	%Us	20
A O "	ti	max	%Us	60
AC average coil consu	•			
	of 50/60Hz coil powered at 50Hz		1/4	200
		in-rush	VA	300
	of EO/COLLT poil powered at COLLT	holding	VA	10
	of 50/60Hz coil powered at 60Hz	ماد س دا	\/^	200
		in-rush	VA VA	300
Discipation at halding	<20°C 50∐-7	holding	VA W	10
Dissipation at holding s DC coil operating	≥2U ∪ 0U□Z		VV	10

DC rated control voltage





11B145400440

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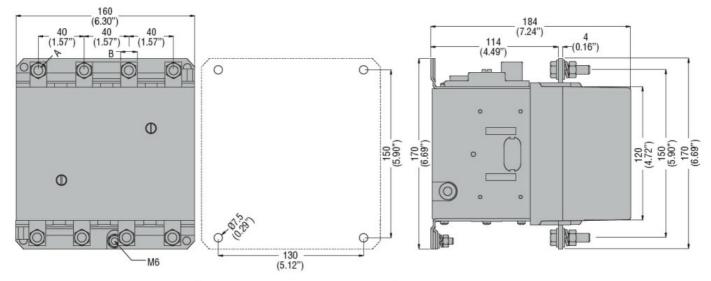
			min	V	440
			max	V	480
DC operating voltage					
	pick-up				
			min	%Us	80
			max	%Us	110
	drop-out			0/11	
			min	%Us	20
Average seil sepannen	tian <00°C		max	%Us	60
Average coil consump	tion \$20°C		امري ما	14/	200
			in-rush holding	W W	300 10
Max cycles frequency			Holding	VV	10
Mechanical operation				cycles/h	2400
Operating times				Cycles/11	2400
Average time for Us co	ontrol				
	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 mo	otor	-1.400\/		404
			at 480V	A	124
Violded machanical na	arformana.		at 600V	Α	125
Yielded mechanical pe		otor			
	for three-phase AC m	Olo	200/208V	HP	50
			220/230V	HP	50
General USE			220/200 V	111	
	Contactor				
			AC current	Α	250
Short-circuit protection	r fuse, 600V		2 233		
,	Standard fault				
			Short circuit current	kA	5
			Fuse rating	Α	500
			Fuse class		RK5
Ambient conditions					
Temperature					
	Operating temperature	e			
			min	°C	-50
			max	°C	70
	Storage temperature				
			min	°C	-60
			max	°C	80

ENERGY AND AUTOMATION

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 250A, AC/DC COIL, 440...480VAC/DC

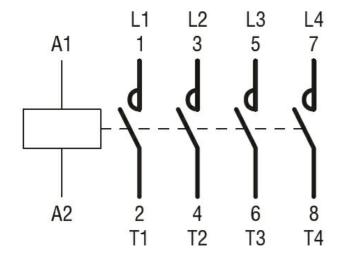


Dimensions



CONTACTOR TYPE	Α	В
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





FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 250A, AC/DC COIL, 440...480VAC/DC

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching