



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 Book vive 100 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 150 150 150 150 150 150 150				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 220 150			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 kW 91 400V kW 150 500V kW 196 690V kW 270 EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series T5V A 220 110V A 110 220V A - 330V A - 460V A - 460V A 50 EC max current le in DC1 with L/R ≤ 1ms with 2 poles in series T5V A 220 110V A 150 220V A - 330V A - 460V A - 460V A - 460V A 50 A				
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 130 460V A - 460V 150 IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series 75V A 220 110V A 150 330V A 150 220V A 150 330V A 150 220V 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 - 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	090 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				
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 OUTTERN TO IT DO I WHITE LIN > THIS WHITE 4 POICS IT SELLES	75\/	٨	220
220V A 150 330V A 150				
330V A 150				
400V A 130				
		4007	А	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	Α	_
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			
120 max carrent to in 200 200 mai 2/11 Tomo mai o poloc in conce	75V	Α	160
	110V	A	140
	220V	A	120
	330V	A	90
	460V	A	
IEC may current to in DC2 DC5 with L/D < 15 mg with 4 notes in series	4007	A	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	75\/	۸	400
	75V	A	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)			
, , ,	Ith	W	14.5
	AC-3	W	6.8
Tightening torque for terminals			
9 9 1	min	Nm	18
	(1111)		18
	min max	Nm	. •
	max	Nm Ibin	13.3
	max min	Ibin	13.3 13.3
Tightening torque for coil terminal	max		13.3 13.3
Tightening torque for coil terminal	max min max	lbin Ibin	13.3
Tightening torque for coil terminal	max min max min	Ibin Ibin Nm	13.3
Tightening torque for coil terminal	max min max min max	Ibin Ibin Nm Nm	13.3 1 1
Tightening torque for coil terminal	max min max min max min	Ibin Ibin Nm Nm Ibin	13.3 1 1 0.74
	max min max min max	Ibin Ibin Nm Nm Ibin Ibin	13.3 1 1 0.74 0.74
Max number of wires simultaneously connectable	max min max min max min	Ibin Ibin Nm Nm Ibin	13.3 1 1 0.74
Max number of wires simultaneously connectable Conductor section	max min max min max min	Ibin Ibin Nm Nm Ibin Ibin	13.3 1 1 0.74 0.74
Max number of wires simultaneously connectable	max min max min max min	Ibin Ibin Nm Nm Ibin Ibin	13.3 1 1 0.74 0.74 2
Tightening torque for coil terminal Max number of wires simultaneously connectable Conductor section AWG/Kcmil Power terminal protection according to IEC/EN 60529	max min max min max min	Ibin Ibin Nm Nm Ibin Ibin	13.3 1 1 0.74 0.74



Operating position

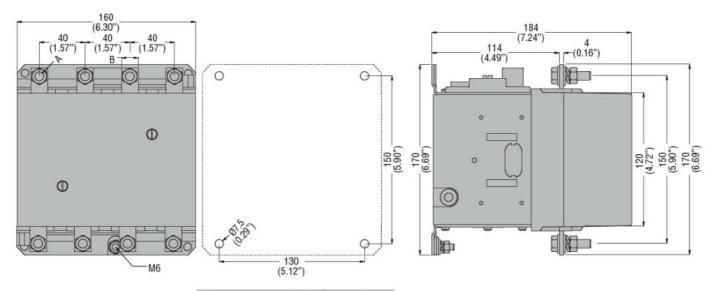
allowable		±30° Screw
	-	
	g	6280
max		4/0
	cycles	10000000
	cycles	1100000
rated load	cycles	1100000
mechanical load	-	10000000
		yes
		yes
	V	48
min	%Us	80
max		110
min	%Us	20
max	%Us	60
min	%Us	80
max	%Us	110
min	%Us	20
max	%Us	60
min	%Us	80
max	%Us	110
min	%Us	20
max	%Us	60
in-rush	VA	300
holding	VA	10
in-rush	VA	300
holding	VA	10
	W	10
	V	48
	V	48
	rated load mechanical load min max min max min max min max in-rush holding in-rush	rated load cycles cycles mechanical load vyles min %Us max %Us min %Us max %Us min %Us max %Us min %Us max %Us



Min Min						
Average coil consumption ≤20°C minx min wubs 20 minx min wubs 50 min min wubs 50 min min wubs 50 min					%Us	80
Max				max	%Us	110
Average coil consumption ≤20°C in-rush holding w 300 holding w 10		drop-out			0/116	20
Average coil consumption ≤20°C In-rush holding W 300 holding W 10						
In-rush Molding Mold	Average coil consumnt	ion <20°C		IIIax	7005	60
Max cycles frequency	Average con consumpt	1011 =20 C		in-rush	W	300
Max cycles frequency Cycles/h 2400 Operating times Average time for Us control min ms 60 Average time for Us control In AC Closing NO min ms 60 min ms 60 In DC Closing NO min ms 60 min ms 60 Opening NO min ms 25 min ms 60 UL technical data Fund 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 at 480V A 125 Yielded mechanical performance for three-phase AC motor A 200/208V HP 50 General USE Contactor AC current A 250 Short-circuit protection Juse, 600V Standard fault Short circuit current Fund Fund Fund Fund Fund Fund Fund Fund						
Closing NO	Max cycles frequency			5		
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 60 max ms 60 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 General USE Contactor AC current A 250 Short-circuit protection fuse, 600V Standard fault Short circuit current A 5 Fuse rating A 500 Fuse class RK5 Ambient conditions Temperature Operating temperature Operating temperature min °C -50 max °C 70 Storage temperature min °C -60 max °C 80 Max altitude min °C -60 max °C 80 Resistance & Protection Resistance & Protection Pollution degree 3	Mechanical operation				cycles/h	2400
in AC Closing NO	Operating times					
Closing NO	Average time for Us co					
March Marc		in AC				
Max			Closing NO			0.0
Opening NO						
Min m			Opening NO	IIIax	1115	100
Max			Opening NO	min	ms	25
in DC Closing NO						
Closing NO		in DC			2	
Min min ms 60 max min ms 100			Closing NO			
Opening NO min ms 25 max ms 60				min	ms	60
Min max Min				max	ms	100
Max altitude Max			Opening NO			
UL technical data						
Full-load current (FLA) for three-phase AC motor at 480V	III technical data			max	ms	60
A		for three-phase AC mot	tor			
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 current kA 5 Fuse rating puse rating protections A 500 Fuse class RK5 Ambient conditions Temperature Operating temperature Min °C -50 min °C -50 Storage temperature min °C -60 min	r an load barront (1 L7 t)	ioi unos priaso rio mo	.01	at 480V	Α	124
Yielded mechanical performance for three-phase AC motor 200/208V 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 Temperature Operating temperature min °C -50 max °C 70 Storage temperature min °C -60 max °C 80 Max altitude Max altitude Pollution degree						
200/208V	Yielded mechanical per	rformance				
Contactor		for three-phase AC mo	otor			
Contactor						
Contactor AC current A 250				220/230V	HP	50
AC current	General USE	•				
Short-circuit protection fuse, 600V Standard fault Short circuit current kA 5 Fuse rating Fuse class RK5		Contactor		A C	۸	250
Standard fault	Chart aircuit protoction	fuee 600\/		AC current	А	∠50
Short circuit current Fuse rating Fuse rating Fuse class RK5	Short-circuit protection					
Fuse rating Fuse class RK5		Giaridaid fauit		Short circuit current	kΑ	5
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 9 Pollution degree 3				<u> </u>		
Operating temperature min or company	Ambient conditions					
min max °C 70 Storage temperature min °C -60 max °C 80 Max altitude m 3000 Resistance & Protection 3	Temperature					
max °C 70 Storage temperature min or C or -60 max °C or 80 Max altitude m or 3000 Resistance & Protection Pollution degree 3		Operating temperature	•			
Storage temperature min or company or c						
min max °C -60 max -60 80 Max altitude m 3000 Resistance & Protection 3 Pollution degree 3		<u> </u>		max	°C	70
Max altitudemax°C80Resistance & Protectionm3000Pollution degree3		Storage temperature			۰.	60
Max altitude m 3000 Resistance & Protection Pollution degree 3						
Resistance & Protection Pollution degree 3	Max altitude			IIIax		
Pollution degree 3		n			111	3000
Ü						3

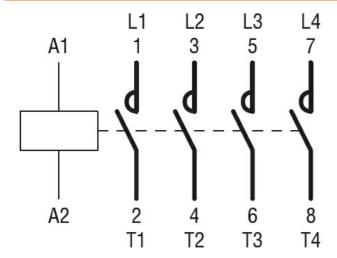
ENERGY AND AUTOMATION

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



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

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching