11B14540024

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 250A, AC/DC COIL, 24VAC/DC

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 (≤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	196
	690V	kW	270
IEC max current Ie 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 Ie 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 Ie 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 Ie in DC1 with L/R ≤ 1ms with 4 poles in series			
	75V	A	220
	110V	A	150
	220V	A	150
	330V	A	150
	460V	A	130

IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	75V	A	160
	110V	A	80
	220V	A	–
	330V	A	–
	460V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	75V	A	160
	110V	A	120
	220V	A	90
	330V	A	–
	460V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	75V	A	160
	110V	A	140
	220V	A	120
	330V	A	90
	460V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms 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)		mΩ	0.3
Power dissipation per pole (average value)			
	Ith	W	14.5
	AC-3	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

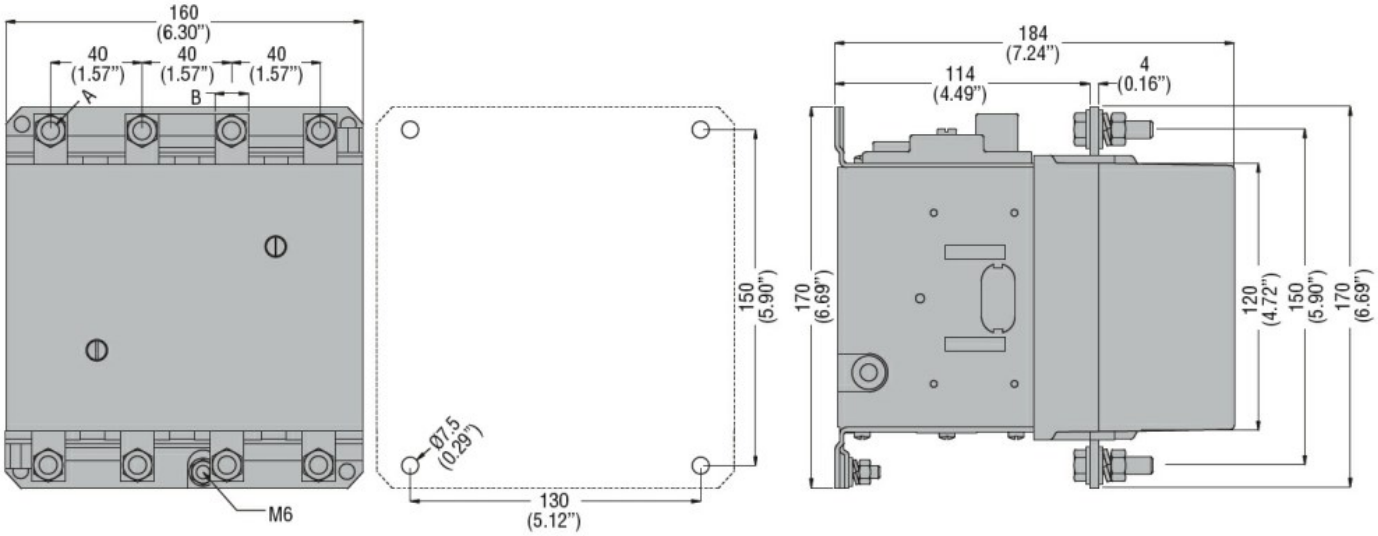
Mechanical features

Operating position				
		normal allowable		Vertical plan ±30°
Fixing				Screw
Weight			g	6400
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 contats according to IEC/EN 609474-4-1				Yes
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 50/60Hz			V	24
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			W	10
DC coil operating				
DC rated control voltage			V	24
DC operating voltage				
	pick-up			
			min	%Us 80
			max	%Us 110
	drop-out			

		min	%Us	20
		max	%Us	60
Average coil consumption ≤20°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				
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	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	°C	80
Max altitude			m	3000
Resistance & Protection				
Pollution degree				3
Dimensions				

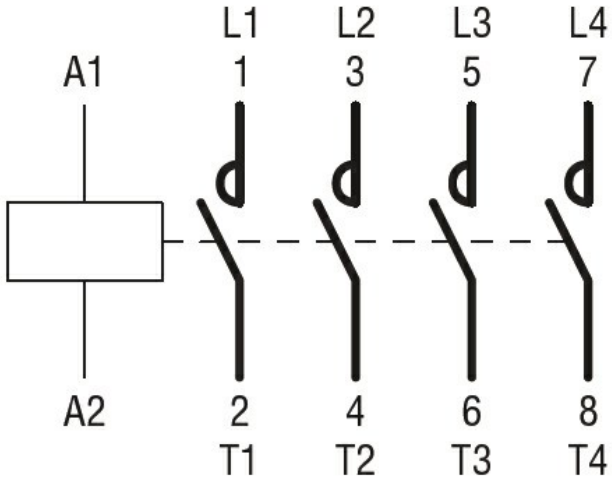
11B14540024

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 250A, AC/DC COIL, 24VAC/DC



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