Lovato electric
ENERGY AND AUTOMATION

11B11500380

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 110A, AC/DC COIL, 380...415VAC/DC

Product designation			Power contactor
Product type designation			B115
Contact characteristics			
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		A	160
Operational current Ie			
	AC-1 (≤40°C)	A	160
	AC-1 (≤55°C)	A	150
	AC-1 (≤70°C)	A	110
	AC-3 (≤440V ≤55°C)	A	110
	AC-4 (400V)	A	47
Rated operational power AC-3 (T≤55°C)			
	400V	kW	61
Rated operational power AC-1 (T≤40°C)			
	230V	kW	57
	400V	kW	98
	500V	kW	129
	690V	kW	173
IEC max current Ie in DC1 with L/R ≤ 1ms with 1 poles in series			
	75V	A	160
	110V	A	100
	220V	A	–
	330V	A	–
	460V	A	–
IEC max current Ie in DC1 with L/R ≤ 1ms with 2 poles in series			
	75V	A	160
	110V	A	130
	220V	A	100
	330V	A	–
	460V	A	–
IEC max current Ie in DC1 with L/R ≤ 1ms with 3 poles in series			
	75V	A	160
	110V	A	130
	220V	A	130
	330V	A	100
	460V	A	–
IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series			
	75V	A	160
	110V	A	130
	220V	A	130

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	330V	A	130
	460V	A	100
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	75V	A	140
	110V	A	70
	220V	A	–
	330V	A	–
	460V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	75V	A	140
	110V	A	100
	220V	A	80
	330V	A	–
	460V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	75V	A	140
	110V	A	120
	220V	A	100
	330V	A	80
	460V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	75V	A	140
	110V	A	120
	220V	A	120
	330V	A	120
	460V	A	80
Short-time allowable current for 10s (IEC/EN60947-1)		A	1100
Protection fuse			
	gG (IEC)	A	200
	aM (IEC)	A	125
Making capacity (RMS value)		A	1300
Breaking capacity at voltage			
	440V	A	1300
	500V	A	1100
	690V	A	880
Resistance per pole (average value)		mΩ	0.3
Power dissipation per pole (average value)			
	Ith	W	7.7
	AC-3	W	4
Tightening torque for terminals			
	min	Nm	10
	max	Nm	10
	min	lbin	7.4
	max	lbin	7.4
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil			
	max		2/0
Power terminal protection according to IEC/EN 60529			IP00
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°

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Fixing			Screw
Weight		g	5290
Conductor section			
AWG/kcmil conductor section			
	max		2/0
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 contats 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	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			
	min	V	380
	max	V	415
DC operating voltage			

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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				
Full-load current (FLA) for three-phase AC motor				
		at 480V	A	96
		at 600V	A	99
Yielded mechanical performance				
for three-phase AC motor				
		200/208V	HP	30
		220/230V	HP	40
		575/600V	HP	100
General USE				
Contactor				
		AC current	A	160
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				

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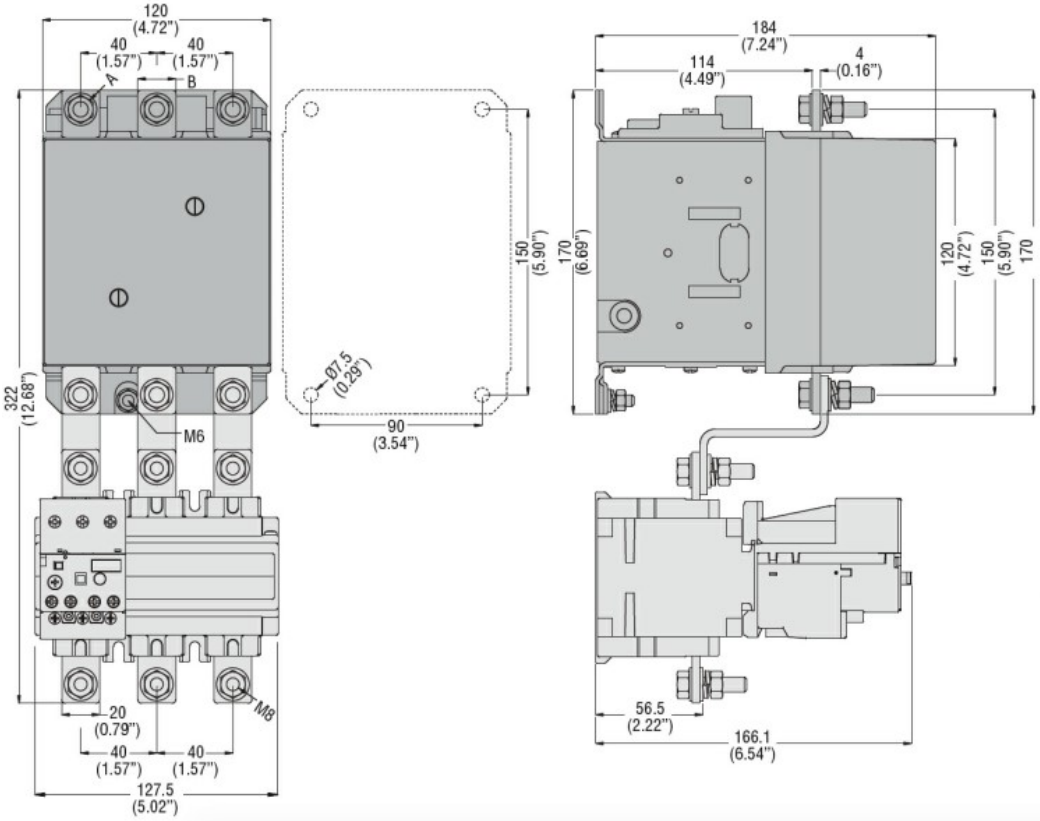
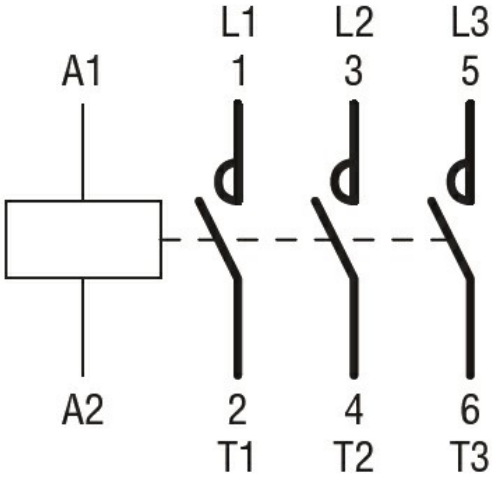
Pollution degree	3

Dimensions



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

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EAC

ETIM classification

ETIM 8.0	EC000066 - Power contactor, AC switching

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