Lovato electric
ENERGY AND AUTOMATION

11B4000024

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 420A, AC/DC COIL, 24VAC/DC

Product designation			Power contactor
Product type designation			B400
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	550
Operational current Ie			
	AC-1 (≤40°C)	A	550
	AC-1 (≤55°C)	A	430
	AC-1 (≤70°C)	A	360
	AC-3 (≤440V ≤55°C)	A	420
	AC-4 (400V)	A	200
Rated operational power AC-3 (T≤55°C)			
	230V	kW	130
	400V	kW	225
	415V	kW	247
	440V	kW	263
	500V	kW	271
	690V	kW	352
	1000V	kW	208
Rated operational power AC-1 (T≤40°C)			
	230V	kW	200
	400V	kW	345
	500V	kW	452
	690V	kW	598
IEC max current Ie in DC1 with L/R ≤ 1ms with 1 poles in series			
	75V	A	400
	110V	A	250
	220V	A	--
	330V	A	--
	460V	A	--
IEC max current Ie in DC1 with L/R ≤ 1ms with 2 poles in series			
	75V	A	400
	110V	A	400
	220V	A	350
	330V	A	--
	460V	A	--
IEC max current Ie in DC1 with L/R ≤ 1ms with 3 poles in series			
	75V	A	400
	110V	A	400
	220V	A	400

	330V	A	350
	460V	A	--
IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series			
	75V	A	400
	110V	A	400
	220V	A	400
	330V	A	400
	460V	A	350
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	75V	A	350
	110V	A	200
	220V	A	--
	330V	A	--
	460V	A	--
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	75V	A	350
	110V	A	350
	220V	A	280
	330V	A	--
	460V	A	--
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	75V	A	350
	110V	A	350
	220V	A	350
	330V	A	280
	460V	A	--
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	75V	A	350
	110V	A	350
	220V	A	350
	330V	A	280
	460V	A	280
Short-time allowable current for 10s (IEC/EN60947-1)		A	3600
Protection fuse			
	gG (IEC)	A	630
	aM (IEC)	A	400
Making capacity (RMS value)		A	4200
Breaking capacity at voltage			
	440V	A	4000
	500V	A	3400
	690V	A	3360
Resistance per pole (average value)		mΩ	0.2
Power dissipation per pole (average value)			
	Ith	W	52
	AC-3	W	32
Tightening torque for terminals			
	min	Nm	35
	max	Nm	35
	min	lbin	25.8
	max	lbin	25.8
Tightening torque for coil terminal			
	min	Nm	1
	max	Nm	1

		min	Ibin	0.74
		max	Ibin	0.74
Max number of wires simultaneously connectable			Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2x 300 kcmil
Power terminal protection according to IEC/EN 60529				IP00
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Weight			g	9770
Operations				
Mechanical life			cycles	10000000
Electrical life			cycles	700000
Safety related data				
Performance level B10d according to EN/ISO 13489-1				
		rated load	cycles	700000
		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

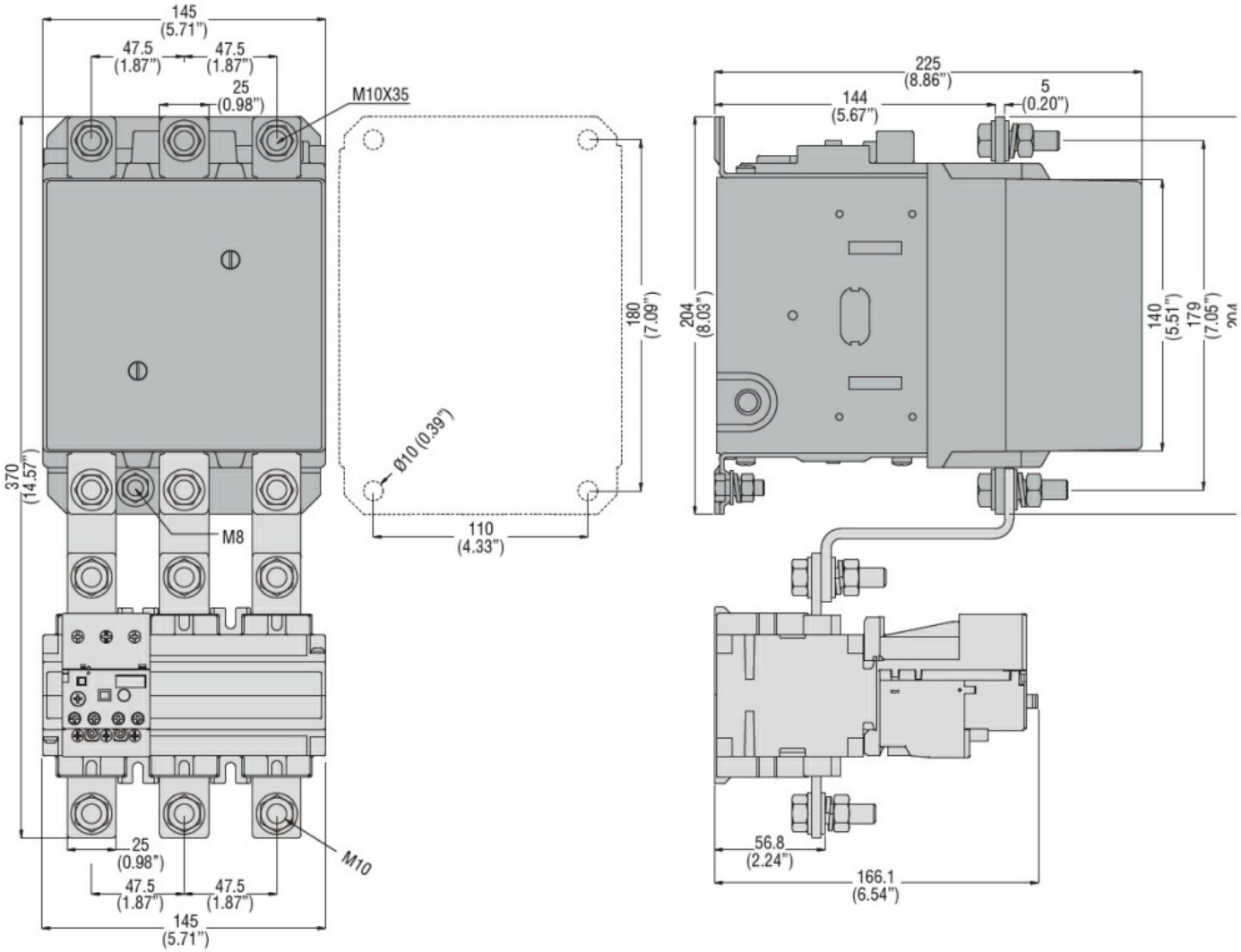
Dissipation at holding ≤20°C 50Hz				W	10
DC coil operating					
DC rated control voltage				V	24
DC operating voltage					
	pick-up				
			min	%Us	80
			max	%Us	110
	drop-out				
			min	%Us	20
			max	%Us	60
Average coil consumption ≤20°C					
			in-rush	W	300
			holding	W	10
Max cycles frequency					
Mechanical operation				cycles/h	2400
Operating times					
Average time for Us control					
	in AC				
		Closing NO			
			min	ms	80
			max	ms	120
		Opening NO			
			min	ms	30
			max	ms	75
	in DC				
		Closing NO			
			min	ms	80
			max	ms	120
		Opening NO			
			min	ms	30
			max	ms	75
UL technical data					
Rated operational voltage AC (UL)				V	600
Full-load current (FLA) for three-phase AC motor					
			at 480V	A	414
			at 600V	A	382
Yielded mechanical performance					
	for three-phase AC motor				
			200/208V	HP	125
			220/230V	HP	150
			460/480V	HP	350
			575/600V	HP	400
General USE					
	Contactor				
			AC current	A	550
Short-circuit protection fuse, 600V					
	Standard fault				
			Short circuit current	kA	18
			Fuse rating	A	800
			Fuse class		L
Ambient conditions					
Temperature					
	Operating temperature				
			min	°C	-50

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

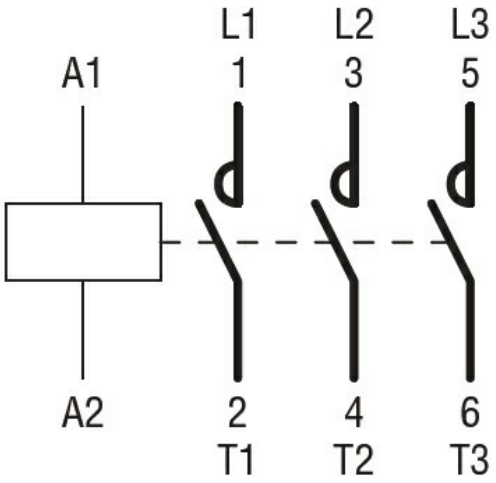
Resistance & Protection

Pollution degree			3

Dimensions



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