Lovato electric
ENERGY AND AUTOMATION

11B400400440

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 550A, AC/DC COIL, 440...480VAC/DC

Product designation			Power contactor
Product type designation			B400
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	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-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	lbin	0.74
	max	lbin	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	1114
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, 60Hz			
	min	V	440
	max	V	480
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	440
	max	V	480
DC operating voltage			

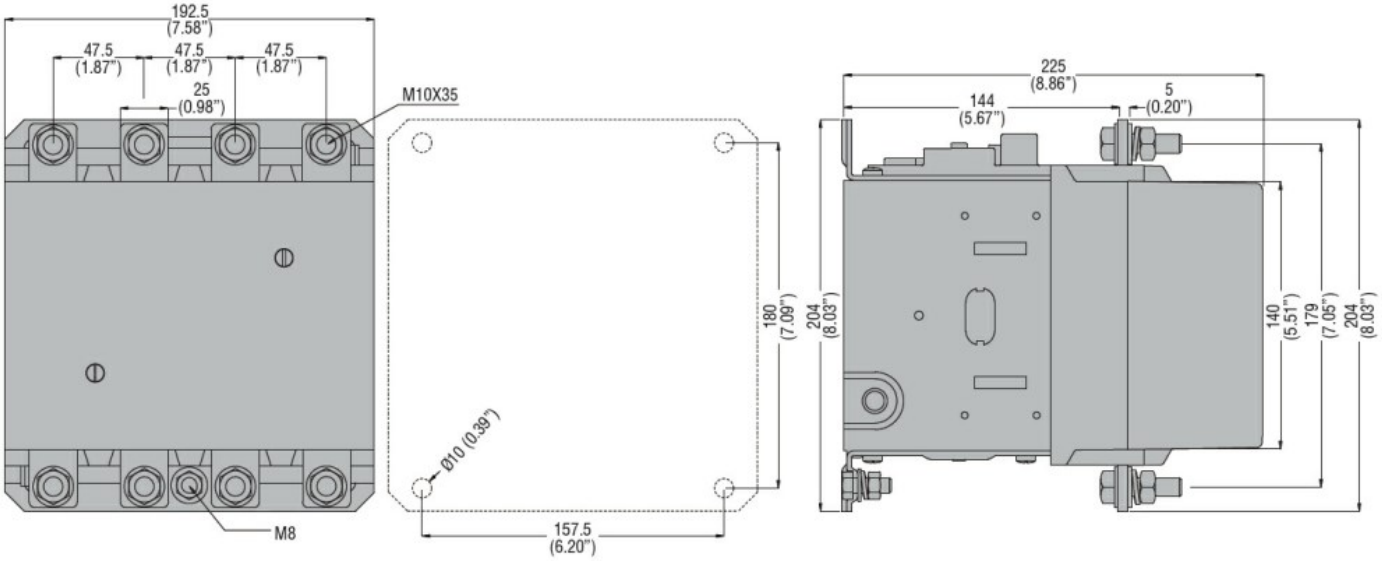
pick-up					
			min	%Us	80
			max	%Us	110
drop-out					
			min	%Us	20
			max	%Us	60
Average coil consumption ≤20°C					
			in-rush	W	300
			holding	W	10
Max cycles frequency					
Mechanical operation				cycles/h	2400
Operating times					
Average time for Us control					
in AC					
	Closing NO				
			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

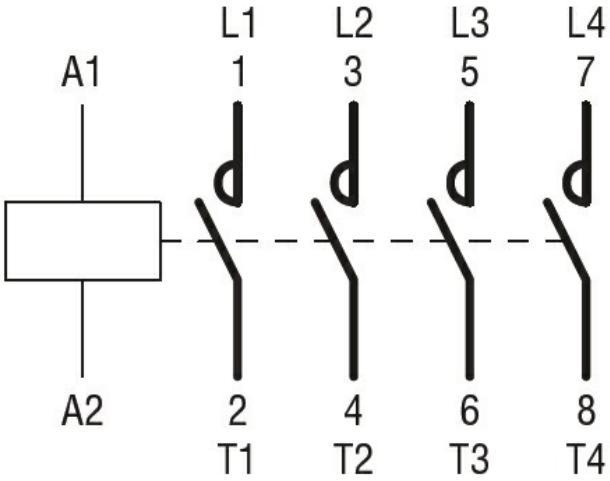
Resistance & Protection

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