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ENERGY AND AUTOMATION

BF19500E024

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 195A, AC/DC COIL, 24...60VAC - 20...60VDC



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 ≤ 40°C		A	275
Operational current Ie			
	AC-1 (≤40°C)	A	275
	AC-1 (≤55°C)	A	230
	AC-1 (≤70°C)	A	200
	AC-3 (≤440V ≤55°C)	A	195
	AC-4 (400V)	A	95
Rated operational power AC-3 (T≤55°C)			
	230V	kW	55
	400V	kW	90
	415V	kW	110
	440V	kW	110
	500V	kW	132
	690V	kW	160
	1000V	kW	90
Rated operational current AC-3 (T≤55°C)			
	230V	A	195
	400V	A	195
	415V	A	195
	440V	A	195
	500V	A	184
	690V	A	165
	1000V	A	85
Rated operational power AC-1 (T≤40°C)			
	230V	kW	104
	400V	kW	181
	500V	kW	199
	690V	kW	312
IEC max current Ie in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	275
	110V	A	120
	220V	A	–
IEC max current Ie in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	275

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	110V	A	170
	220V	A	150
IEC max current Ie in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	275
	110V	A	170
	220V	A	150
	330V	A	150
IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	275
	110V	A	275
	220V	A	275
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	90
	220V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	140
	220V	A	100
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	160
	220V	A	140
	330V	A	100
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	160
	220V	A	160
	330V	A	160
	460V	A	100
Short-time allowable current for 10s (IEC/EN60947-1)		A	1560
Protection fuse			
	gG (IEC)	A	315
	aM (IEC)	A	250
Making capacity (RMS value)		A	1658
Breaking capacity at voltage			
	440V	A	1658
	500V	A	1326
	690V	A	1377
Resistance per pole (average value)		mΩ	0.18
Power dissipation per pole (average value)			
	Ith	W	13

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		AC-3	W	6.7
Tightening torque for terminals				
		min	Nm	18
		max	Nm	18
		min	lbin	159
		max	lbin	159
Tightening torque for coil terminal				
		min	Nm	0.8
		max	Nm	1
Power terminal protection according to IEC/EN 60529				IP00
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Weight			g	3000
Operations				
Mechanical life			cycles	10000000
Electrical life			cycles	1000000 (Ie AC-3 400V)
Safety related data				
Performance level B10d according to EN/ISO 13489-1				
		rated load	cycles	1000000
		mechanical load	cycles	10000000
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 50/60Hz, 60Hz				
		min	V	24
		max	V	60
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out			
		max	%Us	≤75 Us min
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out			
		max	%Us	≤75 Us min
AC average coil consumption at 20°C				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	300
		holding	VA	6.9
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	300
		holding	VA	6.9
	of 60Hz coil powered at 60Hz			
		in-rush	VA	300
		holding	VA	6.9
Dissipation at holding ≤20°C 50Hz			W	1.5...3.0
DC coil operating				

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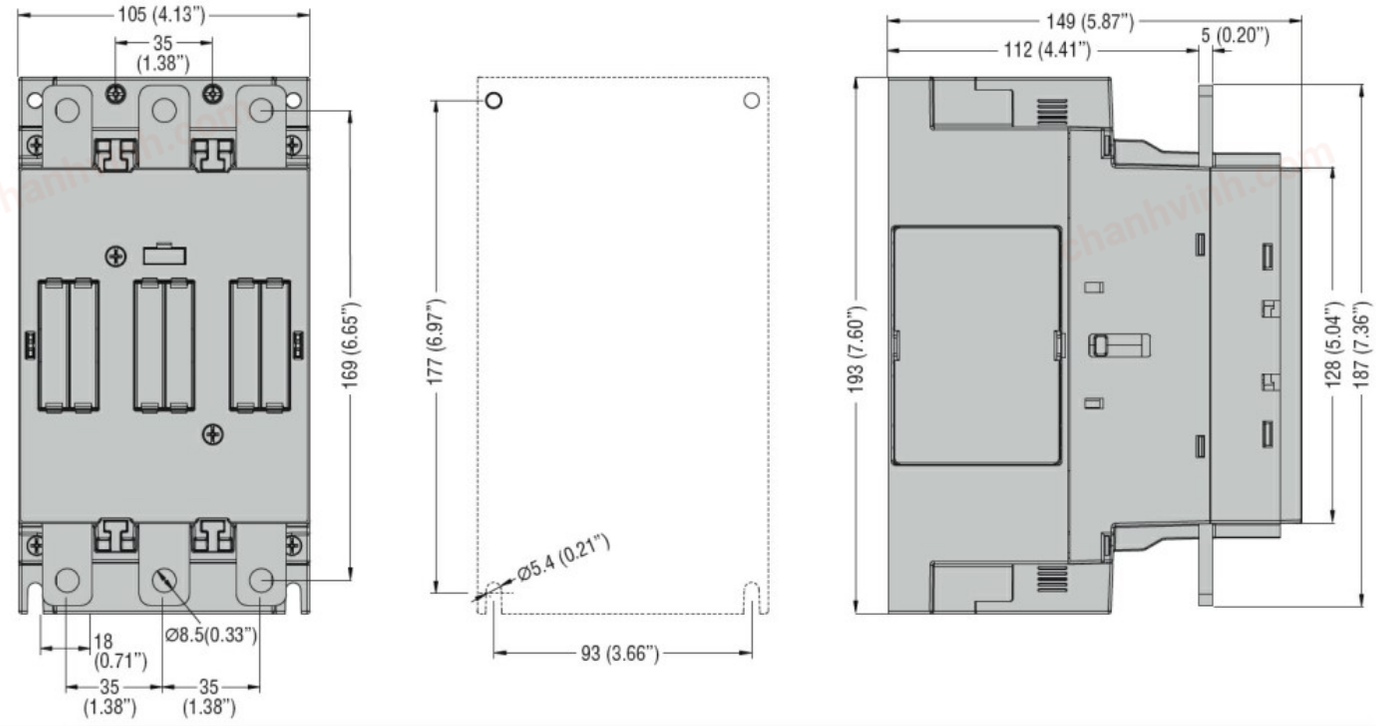
DC rated control voltage				
		min	V	20
		max	V	60
max			V	60
DC operating voltage				
	pick-up			
		min	%Us	85 Us min
		max	%Us	110 Us max
	drop-out			
		max	%Us	≤70 Us min
Average coil consumption ≤20°C				
		in-rush	W	161
		holding	W	2.3
Max cycles frequency				
Mechanical operation			cycles/h	1000
Operating times				
Average time for Us control				
	in AC			
	Closing NO			
		min	ms	50
		max	ms	100
	Opening NO			
		min	ms	35
		max	ms	75
UL technical data				
Rated operational voltage AC (UL)			V	600
Yielded mechanical performance				
	for three-phase AC motor			
		200/208V	HP	60
		220/240V	HP	75
		460/480V	HP	150
		575/600V	HP	150
General USE				
	Contactor			
		AC current	A	275
Short-circuit protection fuse, 600V				
	High fault			
		Short circuit current	kA	100
		Fuse rating	A	400
		Fuse class		J
	Standard fault			
		Short circuit current	kA	10
		Fuse rating	A	400
		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude			m	3000
Resistance & Protection				

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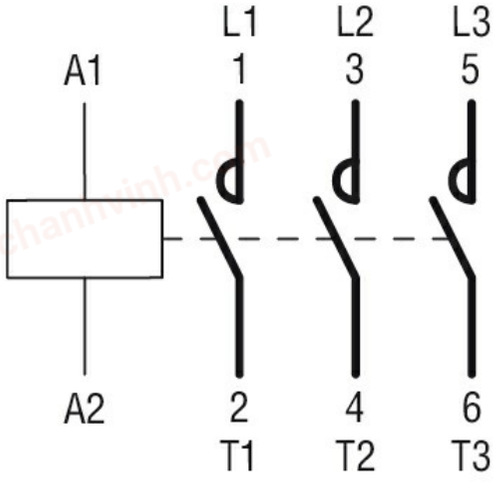
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Pollution degree	3

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1
CSA C22.2 n° 60947-4-1
IEC/EN/BS 60947-1
IEC/EN/BS 60947-4-1
UL 60947-1
UL 60947-4-1

Certificates

cULus

ETIM classification

ETIM 8.0	EC000066 - Power contactor, AC switching

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