



Product designation Power contactor
Product type designation B1600

Contact characteristics

Number of poles	Nr.	3
Rated insulation voltage U _i IEC/EN	V	690
Rated impulse withstand voltage U _{imp}	kV	8

Operational frequency	min	Hz	25
	max	Hz	400

IEC Conventional free air thermal current I _{th}	A	1600
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Operational current I _e	AC-1 (≤40°C)	A	1600
	AC-1 (≤55°C)	A	1360
	AC-1 (≤70°C)	A	1120

Rated operational power AC-1 (T≤40°C)	230V	kW	550
	400V	kW	950
	500V	kW	1200
	690V	kW	1650

Short-time allowable current for 10s (IEC/EN60947-1)	A	8300
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Protection fuse	gG (IEC)	A	1600
		A	6300

Making capacity (RMS value)	A	6300
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Breaking capacity at voltage	440V	A	6300
	500V	A	5600
	690V	A	5000

Resistance per pole (average value)	mΩ	7
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Power dissipation per pole (average value)	I _{th}	W	180

Tightening torque for terminals	min	Nm	35
	max	Nm	35
	min	I _{bin}	25.8
	max	I _{bin}	25.8

Max number of wires simultaneously connectable	Nr.	2
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Power terminal protection according to IEC/EN 60529	IP00
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Mechanical features

Operating position	normal allowable	Vertical plan ±30°
		Screw

Fixing		Screw
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Weight	g	4950
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Auxiliary contact characteristics

Thermal current I _{th}	A	16
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IEC/EN 60947-5-1 designation	A600 - P600		
Operating current AC15	230V	A	3
	400V	A	1.9
	500V	A	1.4
Operating current DC12	110V	A	5.7
Operating current DC13	24V	A	5.7
	48V	A	2.9
	60V	A	2.3
	125V	A	0.6
	220V	A	0.2
	600V	A	1.2

Operations

Mechanical life	cycles	5000000
Electrical life	cycles	700000

Safety related data

Performance level B10d according to EN/ISO 13489-1

	rated load	cycles	700000
	mechanical load	cycles	5000000
Mirror contacts according to IEC/EN 60947-4-1			yes
EMC compatibility			yes

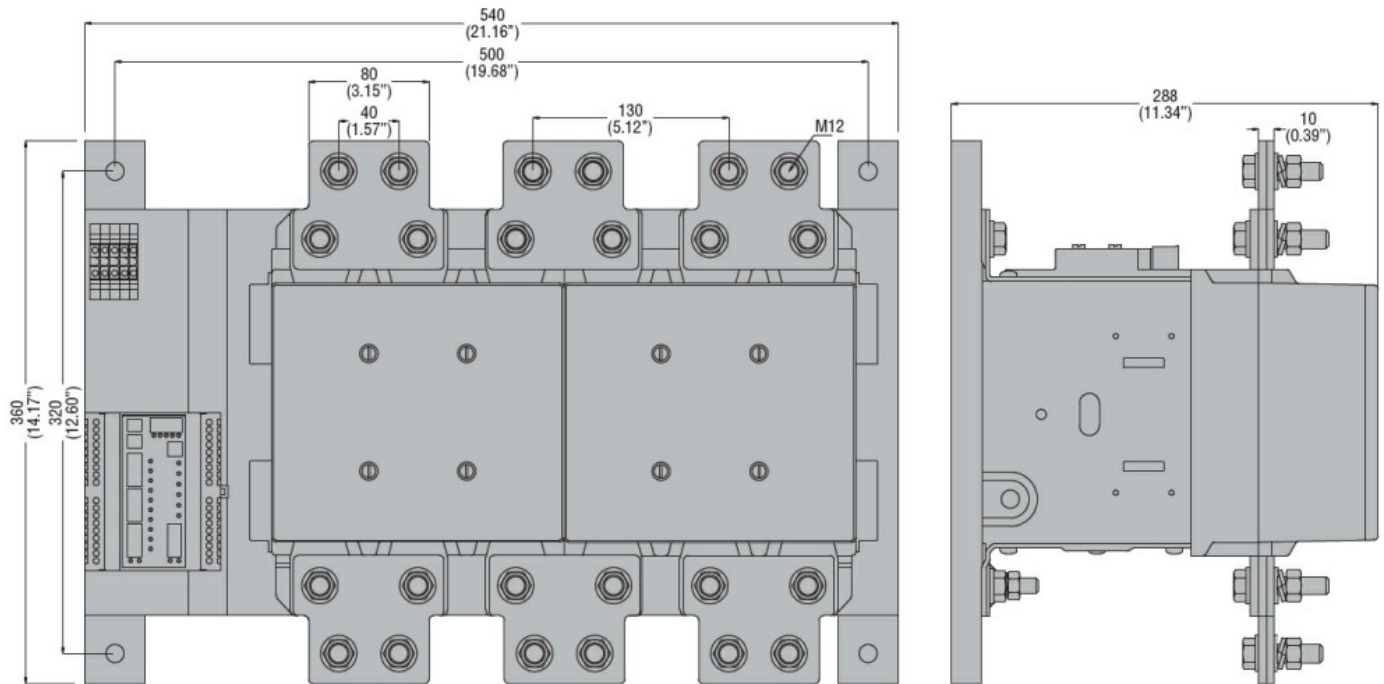
AC coil operating

Rated AC voltage at 50/60Hz, 60Hz	min	V	110
	max	V	125

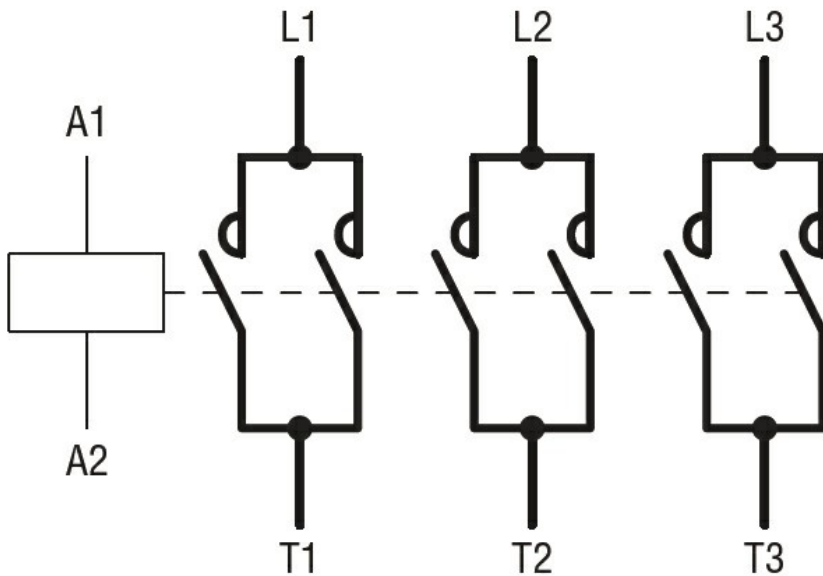
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up	min	%Us	80
	max	%Us	110
drop-out	min	%Us	20
	max	%Us	60
of 50/60Hz coil powered at 60Hz			
pick-up	min	%Us	80
	max	%Us	110
drop-out	min	%Us	20
	max	%Us	60
of 60Hz coil powered at 60Hz			
pick-up	min	%Us	80
	max	%Us	110
drop-out	min	%Us	20
	max	%Us	60

AC average coil consumption at 20°C			
of 50/60Hz coil powered at 50Hz	in-rush	VA	800
	holding	VA	45
of 50/60Hz coil powered at 60Hz			

		in-rush	VA	800	
		holding	VA	45	
Dissipation at holding ≤20°C 50Hz				W	40
DC coil operating					
DC rated control voltage					
		min	V	110	
		max	V	125	
DC operating voltage					
	pick-up				
		min	%Us	80	
Max cycles frequency					
Mechanical operation				cycles/h	1200
Operating times					
Average time for Us control					
	in AC				
		Closing NO			
		min	ms	300	
		max	ms	450	
		Opening NO			
		min	ms	70	
		max	ms	130	
	in DC				
		Closing NO			
		min	ms	300	
		max	ms	450	
		Opening NO			
		min	ms	70	
		max	ms	130	
UL technical data					
Contact rating of auxiliary contacts according to UL				A600 - P600	
Ambient conditions					
Temperature					
	Operating temperature				
		min	°C	-50	
		max	°C	60	
	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

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ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching