



Contact characteristics

Number of poles	Nr.	4
Rated insulation voltage U_i IEC/EN	V	1000
Rated impulse withstand voltage U_{imp}	kV	8
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current $I_{th} \leq 40^\circ\text{C}$	A	500
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A 500
	AC-1 ($\leq 55^\circ\text{C}$)	A 415
	AC-1 ($\leq 70^\circ\text{C}$)	A 360
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A 330
	AC-4 (400V)	A 160
Rated operational power AC-3 ($T \leq 55^\circ\text{C}$)	230V	kW 90
	400V	kW 160
	415V	kW 160
	440V	kW 160
	500V	kW 200
	690V	kW 250
	1000V	kW 185
Rated operational current AC-3 ($T \leq 55^\circ\text{C}$)	230V	A 330
	400V	A 330
	415V	A 330
	440V	A 330
	500V	A 300
	690V	A 300
	1000V	A 140
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW 189
	400V	kW 329
	500V	kW 362
	690V	kW 568
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	75V	A 375
	110V	A 195
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series	75V	A 375
	110V	A 350
	220V	A 300
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	75V	A 375
	110V	A 350

	220V	A	350
	330V	A	300
IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series			
	75V	A	375
	110V	A	350
	220V	A	350
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	75V	A	310
	110V	A	170
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	75V	A	310
	110V	A	290
	220V	A	230
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	75V	A	310
	110V	A	310
	220V	A	290
	330V	A	230
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	75V	A	310
	110V	A	310
	220V	A	310
	330V	A	310
	460V	A	230
Short-time allowable current for 10s (IEC/EN60947-1)		A	2640
Protection fuse			
	gG (IEC)	A	630
	aM (IEC)	A	500
Making capacity (RMS value)		A	3300
Breaking capacity at voltage			
	440V	A	2640
	500V	A	2240
	690V	A	2000
Resistance per pole (average value)		mΩ	0.12
Power dissipation per pole (average value)			
	Ith	W	30
	AC-3	W	13
Tightening torque for terminals			
	min	Nm	35
	max	Nm	35
	min	Ibin	310
	max	Ibin	310
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 allowable	Vertical plan ±30°	
Fixing			Screw
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
EMC compatibility					yes
AC coil operating					
Rated AC voltage at 50/60Hz, 60Hz					
		min	V		250
		max	V		500
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		≤70 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		≤70 Us min
AC average coil consumption at 20°C					
	of 50/60Hz coil powered at 50Hz				
		in-rush	VA		160...320
		holding	VA		3.5...8.0
	of 50/60Hz coil powered at 60Hz				
		in-rush	VA		160...320
		holding	VA		3.5...8.0
	of 60Hz coil powered at 60Hz				
		in-rush	VA		160...320
		holding	VA		3.5...8.0
Dissipation at holding ≤20°C 50Hz			W		3.5...8.0
DC coil operating					
DC rated control voltage					
		min	V		250
		max	V		500
max			V		500
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		160...230
		holding	W		3.5...8.0
Max cycles frequency					
Mechanical operation				cycles/h	1000
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

UL technical data

Rated operational voltage AC (UL)	V	600
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Yielded mechanical performance

for three-phase AC motor

200/208V	HP	100
220/240V	HP	125
460/480V	HP	250
575/600V	HP	300

General USE

Contactor

AC current	A	500
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Short-circuit protection fuse, 600V

High fault

Short circuit current	kA	100
Fuse rating	A	600
Fuse class		J

Standard fault

Short circuit current	kA	18
Fuse rating	A	600
Fuse class		RK5

Ambient conditions

Temperature

Operating temperature

min	°C	-40
max	°C	70

Storage temperature

min	°C	-50
max	°C	80

Max altitude

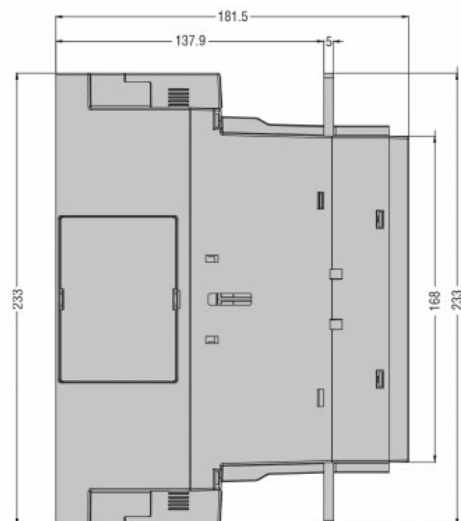
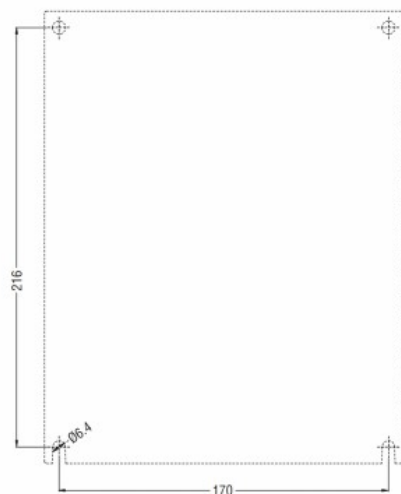
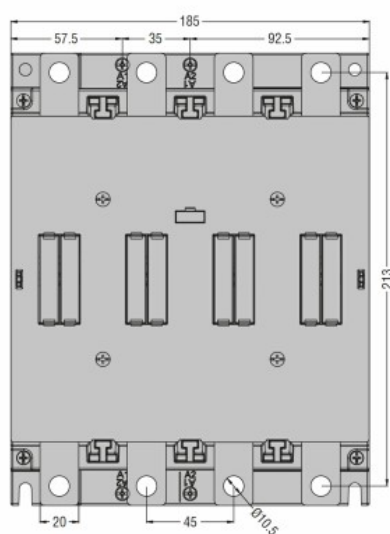
m	3000
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Resistance & Protection

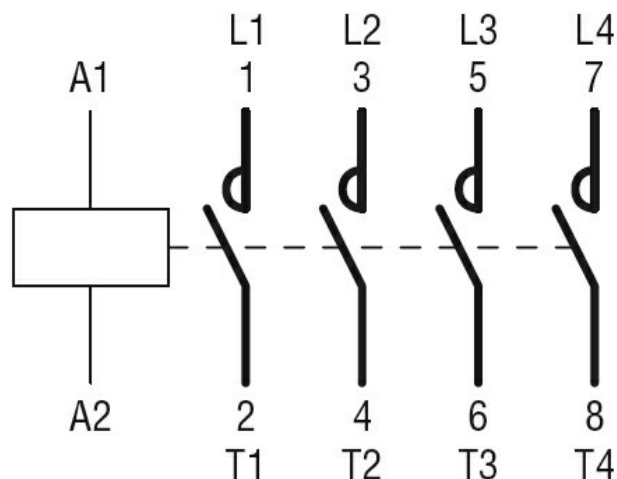
Pollution degree

3

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/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