



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	450
Operational current I_e		
	AC-1 ($\leq 40^\circ\text{C}$)	A 450
	AC-1 ($\leq 55^\circ\text{C}$)	A 375
	AC-1 ($\leq 70^\circ\text{C}$)	A 325
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A 265
	AC-4 (400V)	A 125
Rated operational power AC-3 ($T \leq 55^\circ\text{C}$)		
	230V	kW 75
	400V	kW 132
	415V	kW 132
	440V	kW 160
	500V	kW 160
	690V	kW 200
	1000V	kW 160
Rated operational current AC-3 ($T \leq 55^\circ\text{C}$)		
	230V	A 265
	400V	A 265
	415V	A 265
	440V	A 265
	500V	A 250
	690V	A 250
	1000V	A 115
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)		
	230V	kW 170
	400V	kW 296
	500V	kW 326
	690V	kW 511
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series		
	75V	A 350
	110V	A 160
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series		
	75V	A 350
	110V	A 300
	220V	A 250
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series		
	75V	A 350
	110V	A 300

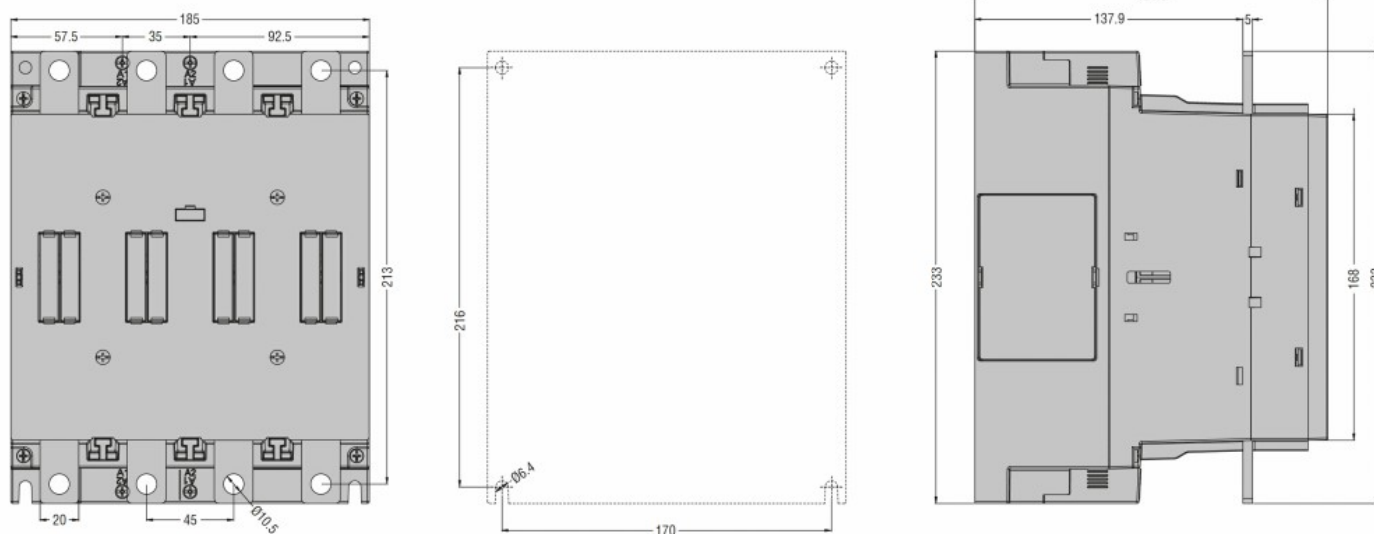
	220V	A	300
	330V	A	250
IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series			
	75V	A	350
	110V	A	300
	220V	A	300
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	75V	A	280
	110V	A	150
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	75V	A	280
	110V	A	250
	220V	A	200
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	75V	A	280
	110V	A	280
	220V	A	250
	330V	A	200
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	75V	A	280
	110V	A	280
	220V	A	280
	330V	A	280
	460V	A	200
Short-time allowable current for 10s (IEC/EN60947-1)		A	2120
Protection fuse			
	gG (IEC)	A	630
	aM (IEC)	A	400
Making capacity (RMS value)		A	2650
Breaking capacity at voltage			
	440V	A	2120
	500V	A	1792
	690V	A	1624
Resistance per pole (average value)		mΩ	0.12
Power dissipation per pole (average value)			
	Ith	W	24.3
	AC-3	W	8.4
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
Conductor section			
Flexible with insulated spade lug conductor section			
	max	mm ²	16
Power terminal protection according to IEC/EN 60529			IP00
Cable stripping lenght			
	main circuit	mm	10
	command circuit	mm	8

Mechanical features

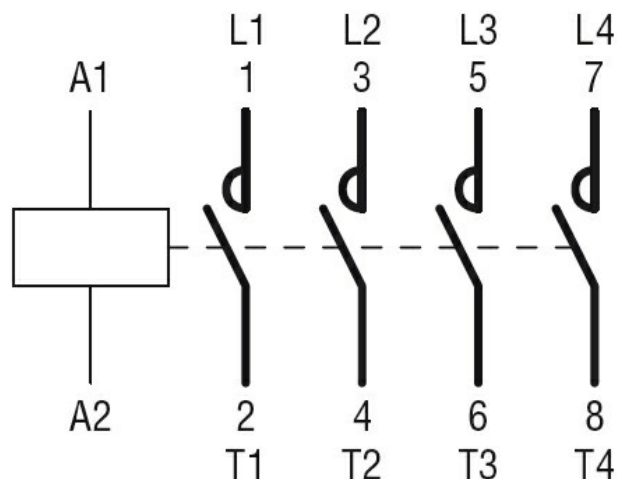
Operating position

	normal allowable	Vertical plan ±30°	
Fixing		Screw	
Operations			
Mechanical life	cycles	5000000	
Electrical life	cycles	900000	
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	rated load mechanical load	cycles	900000
		cycles	5000000
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	≤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	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	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
Yielded mechanical performance				
	for three-phase AC motor			
		200/208V	HP	75
		220/240V	HP	100
		460/480V	HP	200
		575/600V	HP	250
General USE				
	Contactor			
		AC current	A	450
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
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 60335-2-89

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CSA C22.2 n. 60335-2-40:22 LZGH A2L

CSA C22.2 No. 60335-2-89:21 LZGH A2L

cULus

UL 60335-2-40 LZGH A2L

UL 60335-2-89 LZGH A2L

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching