



### Contact characteristics

Number of poles	Nr.	4
Rated insulation voltage U <sub>i</sub> IEC/EN	V	1000
Rated impulse withstand voltage U <sub>imp</sub>	kV	8
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I <sub>th</sub> ≤ 40°C	A	450
Operational current I <sub>e</sub>	AC-1 (≤40°C)	A 450
	AC-1 (≤55°C)	A 375
	AC-1 (≤70°C)	A 325
	AC-3 (≤440V ≤55°C)	A 265
	AC-4 (400V)	A 125
Rated operational power AC-3 (T≤55°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≤55°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≤40°C)	230V	kW 170
	400V	kW 296
	500V	kW 326
	690V	kW 511
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 1 poles in series	75V	A 350
	110V	A 160
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 2 poles in series	75V	A 350
	110V	A 300
	220V	A 250
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 3 poles in series	75V	A 350
	110V	A 300

	220V	A	300
	330V	A	250
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 4 poles in series			
	75V	A	350
	110V	A	300
	220V	A	300
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	75V	A	280
	110V	A	150
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	75V	A	280
	110V	A	250
	220V	A	200
IEC max current I <sub>e</sub> 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 I <sub>e</sub> 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)			
	I <sub>th</sub>	W	24.3
	AC-3	W	8.4
Tightening torque for terminals			
	min	Nm	35
	max	Nm	35
	min	I <sub>bin</sub>	310
	max	I <sub>bin</sub>	310
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
Conductor section			
Flexible with insulated spade lug conductor section			
	max	mm <sup>2</sup>	16
Power terminal protection according to IEC/EN 60529			IP00
Cable stripping length			
	main circuit	mm	10
	command circuit	mm	8

### Mechanical features

Operating position

	normal allowable	Vertical plan $\pm 30^\circ$
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
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**AC coil operating**

Rated AC voltage at 50/60Hz, 60Hz	min	V	100
	max	V	250

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	$\leq 70$ 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	$\leq 70$ Us min

AC average coil consumption at 20°C			
of 50/60Hz coil powered at 50Hz	in-rush holding	VA	160...320
		VA	3.5...8.0
of 50/60Hz coil powered at 60Hz	in-rush holding	VA	160...320
		VA	3.5...8.0
of 60Hz coil powered at 60Hz	in-rush holding	VA	160...320
		VA	3.5...8.0

Dissipation at holding $\leq 20^\circ\text{C}$ 50Hz	W	3.5...8.0
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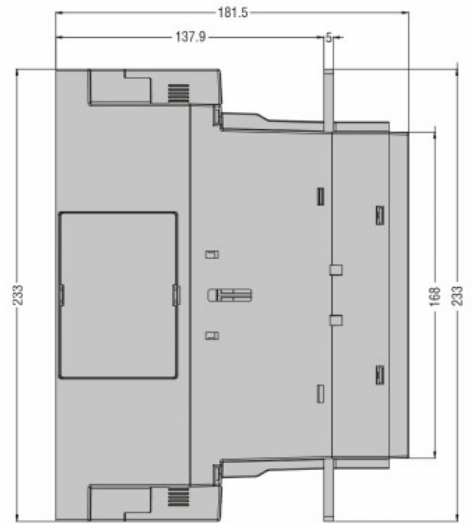
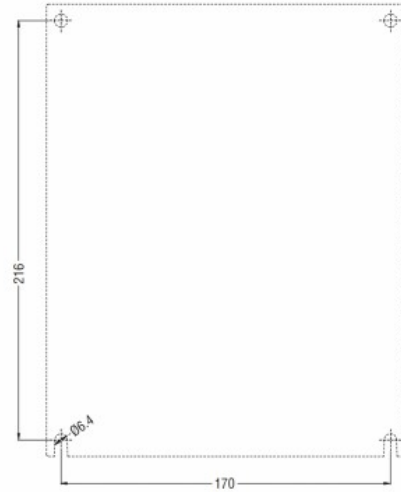
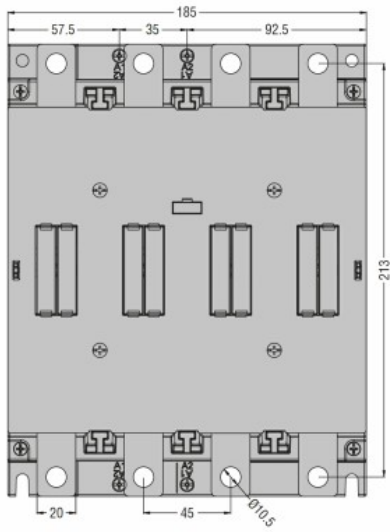
**DC coil operating**

DC rated control voltage	min	V	100
	max	V	250
max		V	250

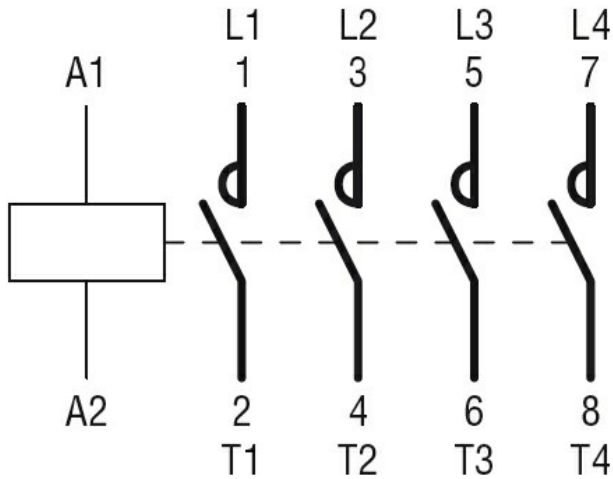
DC operating voltage			
pick-up	min	%Us	85 Us min
	max	%Us	110 Us max
drop-out	max	%Us	$\leq 70$ Us min

Average coil consumption $\leq 20^\circ\text{C}$	in-rush	W	160...230
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		holding	W	3.5...8.0
<b>Max cycles frequency</b>				
Mechanical operation			cycles/h	1000
<b>Operating times</b>				
Average time for Us control				
	in AC			
		Closing NO		
			min	ms 80
			max	ms 120
		Opening NO		
			min	ms 30
			max	ms 75
<b>UL technical data</b>				
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
<b>General USE</b>				
	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
<b>Ambient conditions</b>				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude			m	3000
<b>Resistance &amp; Protection</b>				
Pollution degree				3
<b>Dimensions</b>				



**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