



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 I _e in DC1 with L/R ≤ 1ms with 4 poles in series			
	75V	A	350
	110V	A	300
	220V	A	300
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	75V	A	280
	110V	A	150
IEC max current I _e 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 _e 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 _e 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 _{th}	W	24.3
	AC-3	W	8.4
Tightening torque for terminals			
	min	Nm	35
	max	Nm	35
	min	I _{bin}	310
	max	I _{bin}	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 length			
	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
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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 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 ≤20°C 50Hz	W	3.5...8.0
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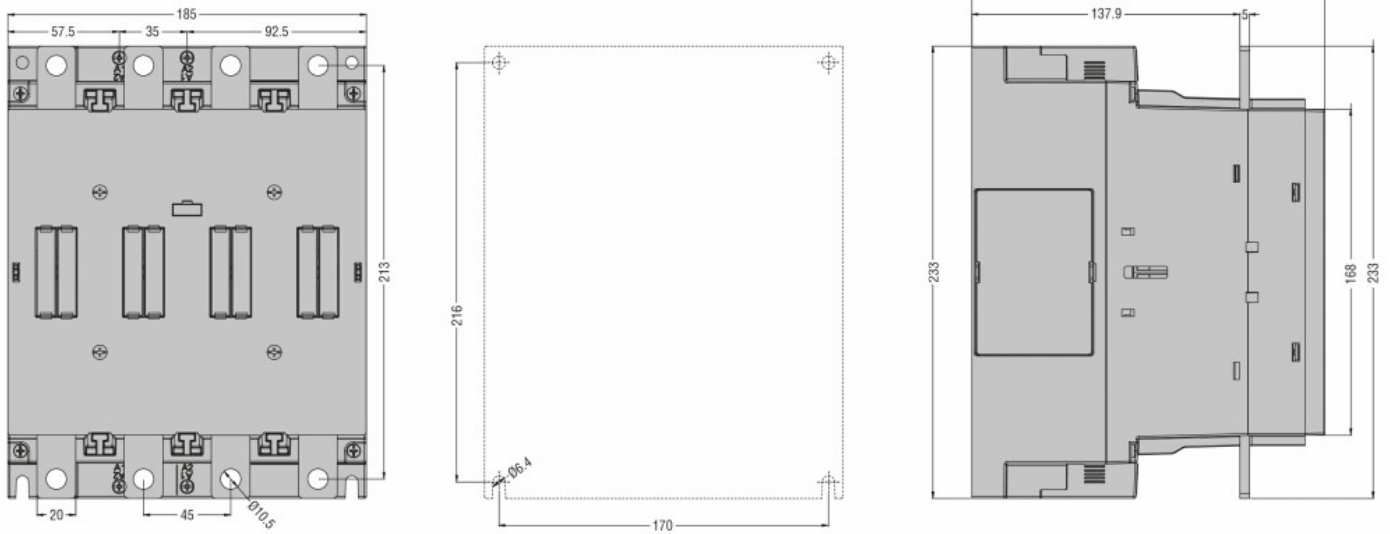
DC coil operating

DC rated control voltage	min	V	20
	max	V	60
max		V	60

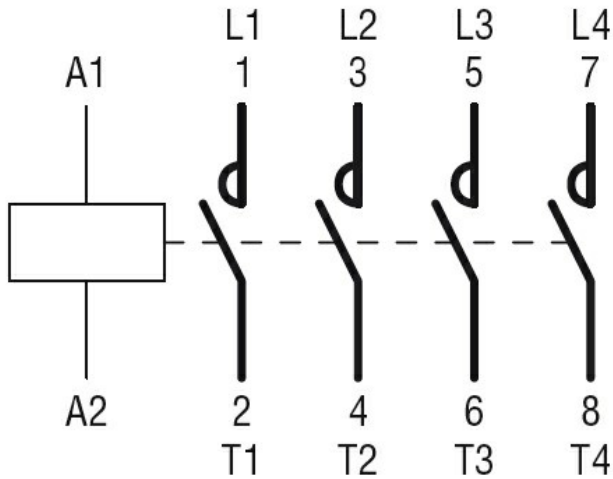
DC operating voltage			
pick-up	min	%Us	85 Us min
	max	%Us	110 Us max
drop-out	max	%Us	≤70 Us min

Average coil consumption ≤20°C	in-rush	W	160...230
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	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