



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
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 cycles	900000 5000000
EMC compatibility	yes		
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz	min max	V V	24 60
AC operating voltage			
of 50/60Hz coil powered at 50Hz pick-up	min max	%Us %Us	80 Us min 110 Us max
drop-out	max	%Us	≤70 Us min
of 50/60Hz coil powered at 60Hz pick-up	min max	%Us %Us	80 Us min 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 VA	300 6.4
of 50/60Hz coil powered at 60Hz	in-rush holding	VA VA	300 6.4
of 60Hz coil powered at 60Hz	in-rush holding	VA VA	300 6.4
Dissipation at holding ≤20°C 50Hz		W	3.5...8.0
DC coil operating			
DC rated control voltage	min max	V V	20 60
max		V	60
DC operating voltage			
pick-up	min max	%Us %Us	85 Us min 110 Us max
drop-out	max	%Us	≤70 Us min
Average coil consumption ≤20°C	in-rush holding	W W	220 2.7
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

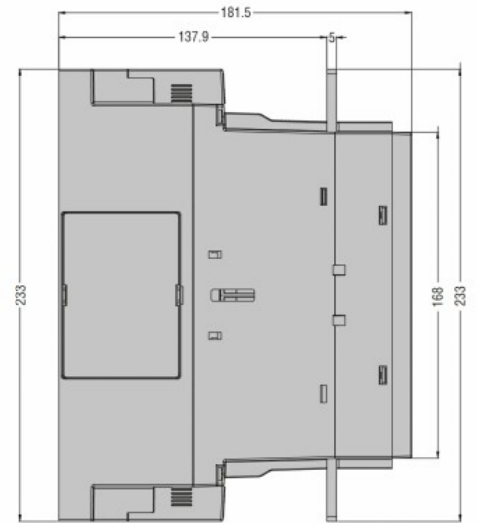
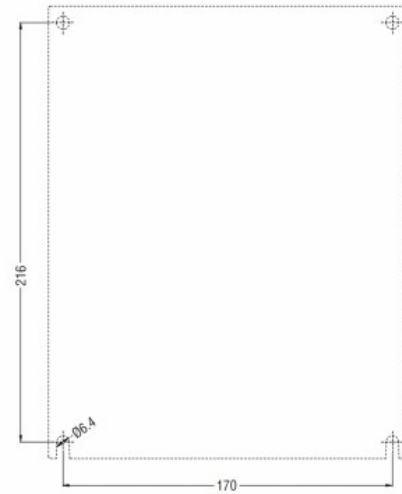
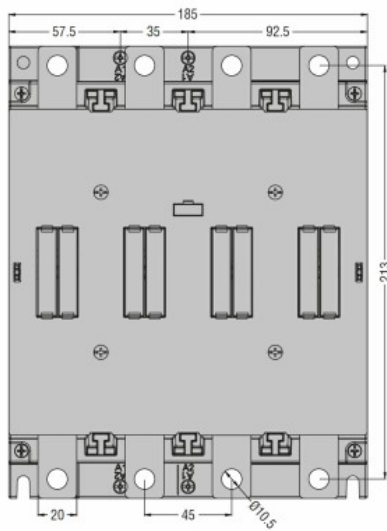
m	3000
---	------

Resistance & Protection

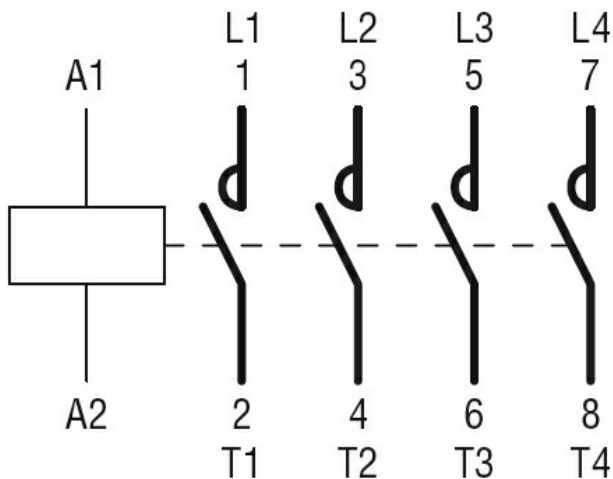
Pollution degree

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