



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	100
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A 100
	AC-1 ($\leq 55^\circ\text{C}$)	A 80
	AC-1 ($\leq 70^\circ\text{C}$)	A 70
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A 65
	AC-4 (400V)	A 31
Rated operational current AC-3 ($T \leq 55^\circ\text{C}$)	230V	A 65
	400V	A 65
	415V	A 65
	440V	A 65
	500V	A 53
	690V	A 47
	1000V	A 25
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW 38
	400V	kW 65
	500V	kW 82
	690V	kW 114
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A 50
	48V	A 50
	75V	A 50
	110V	A 8
	220V	A —
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series	$\leq 24\text{V}$	A 70
	48V	A 70
	75V	A 70
	110V	A 60
	220V	A 9
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	$\leq 24\text{V}$	A 70
	48V	A 70
	75V	A 70
	110V	A 60
	220V	A 90

IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series

$\leq 24\text{V}$	A	70
48V	A	70
75V	A	70
110V	A	70
220V	A	110

IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series

$\leq 24\text{V}$	A	35
48V	A	25
75V	A	25
110V	A	3
220V	A	—

IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series

$\leq 24\text{V}$	A	45
48V	A	40
75V	A	40
110V	A	30
220V	A	5

IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 3 poles in series

$\leq 24\text{V}$	A	55
48V	A	50
75V	A	50
110V	A	35
220V	A	52

IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 4 poles in series

$\leq 24\text{V}$	A	60
48V	A	60
75V	A	60
110V	A	50
220V	A	65

Short-time allowable current for 10s (IEC/EN60947-1)

A	640
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Protection fuse

gG (IEC)	A	125
aM (IEC)	A	80

Making capacity (RMS value)

A	650
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Breaking capacity at voltage

440V	A	520
500V	A	425
690V	A	376

Resistance per pole (average value)

mΩ	0.8
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Power dissipation per pole (average value)

Ith	W	8
AC-3	W	3.4

Tightening torque for terminals

min	Nm	4
max	Nm	5
min	Ibin	2.95
max	Ibin	3.69

Tightening torque for coil terminal

min	Nm	0.8
max	Nm	1
min	Ibin	0.8
max	Ibin	0.74

Max number of wires simultaneously connectable			Nr.	2
Conductor section				
AWG/Kcmil			max	2
Flexible w/o lug conductor section				
			min	mm ² 1.5
			max	mm ² 35
Flexible c/w lug conductor section				
			min	mm ² 1.5
			max	mm ² 35
Power terminal protection according to IEC/EN 60529				IP20 front
Mechanical features				
Operating position			normal allowable	Vertical plan ±30°
Fixing				Screw / DIN rail 35mm
Weight			g	1280
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	1400000
Safety related data				
Performance level B10d according to EN/ISO 13489-1				
			rated load	cycles 1400000
			mechanical load	cycles 15000000
EMC compatibility				yes
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 ≤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 90 2.7
of 50/60Hz coil powered at 60Hz				
			in-rush holding	VA 90 2.7
of 60Hz coil powered at 60Hz				
			in-rush holding	VA 90 2.7

Dissipation at holding ≤20°C 50Hz		W	1...2.5
DC coil operating			
DC rated control voltage		min	V 100
		max	V 250
max		V	250
DC operating voltage			
pick-up		min	%Us 80 Us min
		max	%Us 110 Us max
drop-out			
		max	%Us ≤70 Us min
Average coil consumption ≤20°C		in-rush	W 67
		holding	W 1.3
Max cycles frequency			
Mechanical operation		cycles/h	1500
Operating times			
Average time for Us control			
in AC	Closing NO	min	ms 12
		max	ms 28
	Opening NO	min	ms 8
		max	ms 22
in DC	Closing NO	min	ms 40
		max	ms 85
	Opening NO	min	ms 20
		max	ms 55
UL technical data			
Rated operational voltage AC (UL)		V	600
Full-load current (FLA) for three-phase AC motor		at 480V	A 65
		at 600V	A 62
Yielded mechanical performance			
for three-phase AC motor		200/208V	HP 20
		220/240V	HP 25
		460/480V	HP 50
		575/600V	HP 60
General USE			
Contactor		AC current	A 100
Short-circuit protection fuse, 600V			
High fault	Short circuit current	kA	100
	Fuse rating	A	200
	Fuse class		J
Standard fault			
	Short circuit current	kA	10

Fuse rating	A	200
Fuse class		RK5

Ambient conditions

Temperature

Operating temperature

min	°C	-40
max	°C	70

Storage temperature

min	°C	-50
max	°C	80

Max altitude

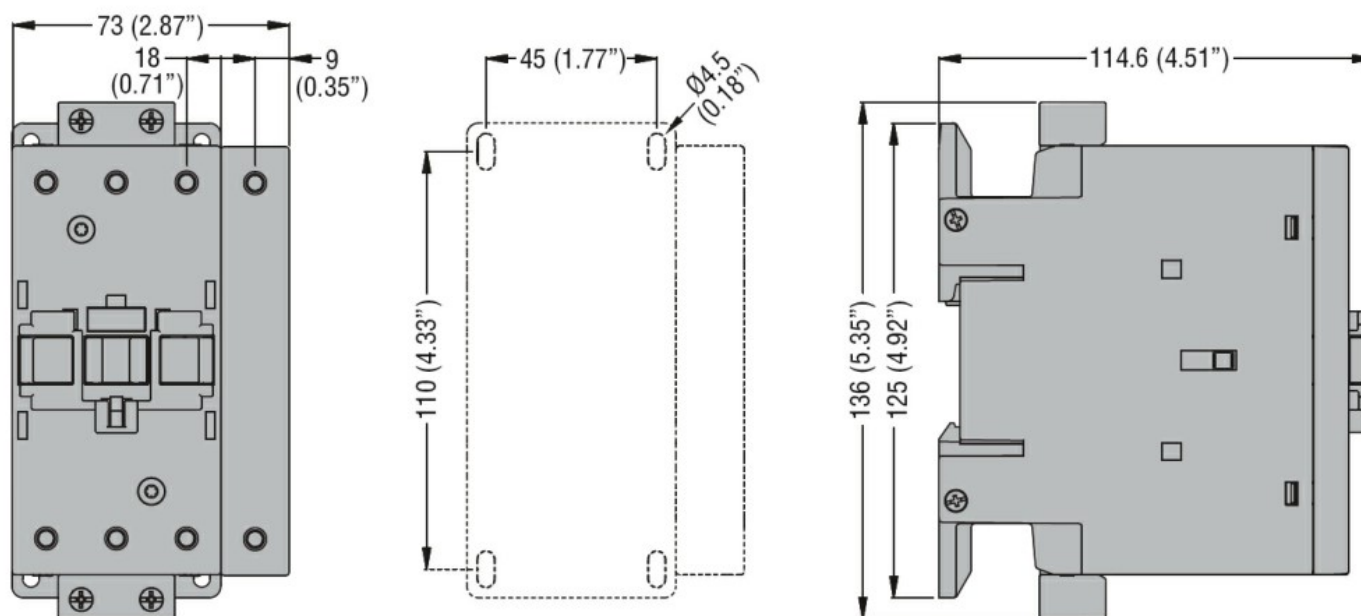
m	3000
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Resistance & Protection

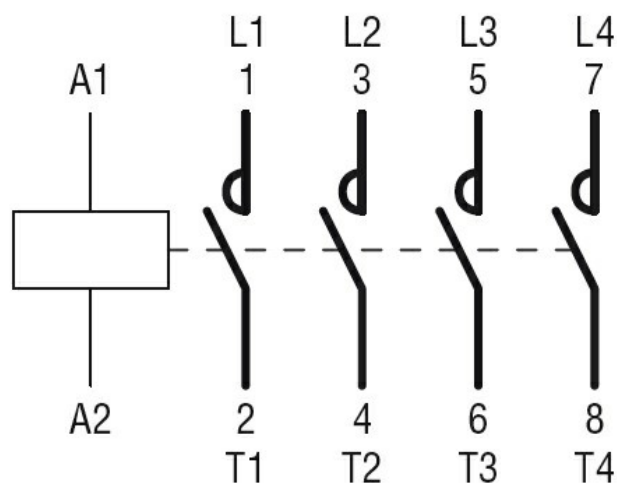
Pollution degree

3

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN 60335-2-89

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

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