



Contact characteristics

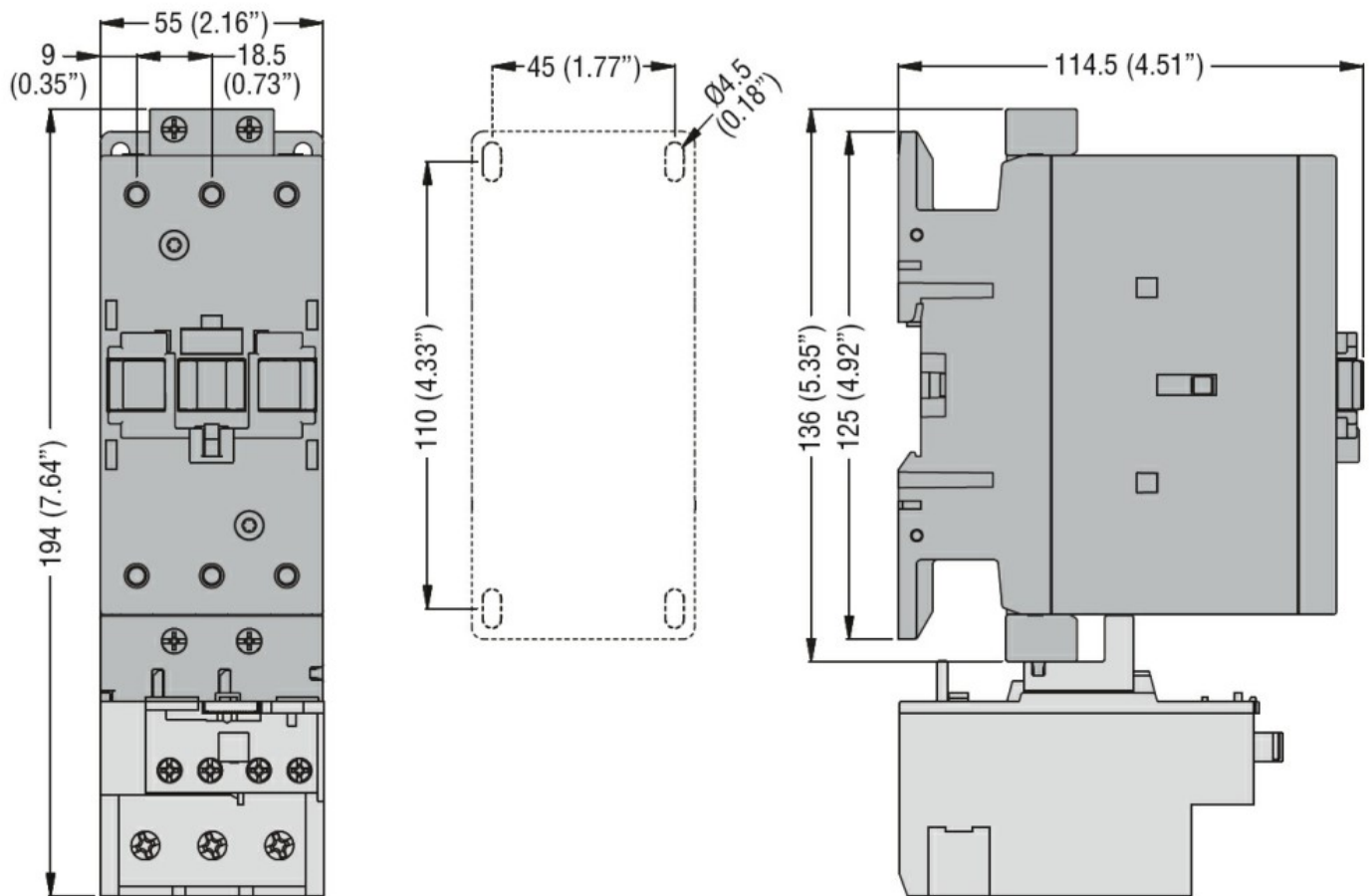
Number of poles	Nr.	3
Rated insulation voltage U_i IEC/EN	V	1000
Rated impulse withstand voltage U_{imp}	kV	8
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current $I_{th} \leq 40^\circ\text{C}$	A	70
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A 70
	AC-1 ($\leq 55^\circ\text{C}$)	A 60
	AC-1 ($\leq 70^\circ\text{C}$)	A 50
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A 40
	AC-4 (400V)	A 24
Rated operational power AC-3 ($T \leq 55^\circ\text{C}$)	230V	kW 11
	400V	kW 18.5
	415V	kW 22
	440V	kW 22
	500V	kW 22
	690V	kW 30
	1000V	kW 18.5
Rated operational current AC-3 ($T \leq 55^\circ\text{C}$)	230V	A 40
	400V	A 40
	415V	A 40
	440V	A 40
	500V	A 33
	690V	A 32
	1000V	A 21
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW 26
	400V	kW 46
	500V	kW 58
	690V	kW 79
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A 40
	48V	A 35
	75V	A 30
	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 48
	48V	A 48
	75V	A 45

	110V	A	42
	220V	A	5
IEC max current Ie in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	A	48
	48V	A	48
	75V	A	48
	110V	A	44
	220V	A	56
IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	–
	48V	A	–
	75V	A	–
	110V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	27
	48V	A	23
	75V	A	19
	110V	A	3
	220V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	32
	48V	A	30
	75V	A	27
	110V	A	22
	220V	A	5
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	40
	48V	A	40
	75V	A	38
	110V	A	27
	220V	A	32
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	–
	48V	A	–
	75V	A	–
	110V	A	–
Short-time allowable current for 10s (IEC/EN60947-1)		A	400
Protection fuse			
	gG (IEC)	A	100
	aM (IEC)	A	50
Making capacity (RMS value)		A	400
Breaking capacity at voltage			
	440V	A	320
	500V	A	265
	690V	A	256
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
	Ith	W	3.9
	AC-3	W	1.3
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	Ibin	2.95

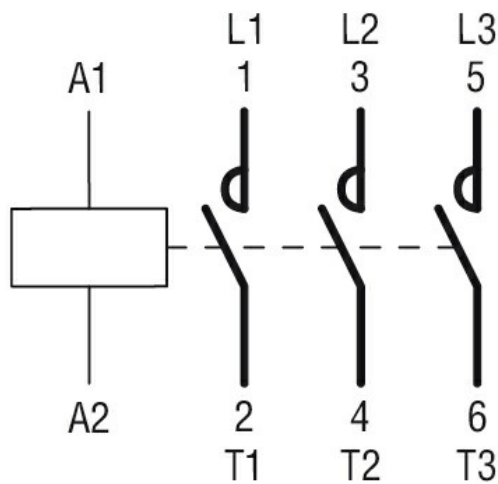
		max	Ibin	3.69
Tightening torque for coil terminal		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
Max number of wires simultaneously connectable		Nr.		2
Conductor section				
AWG/Kcmil				
		max	2	
Flexible w/o lug conductor section		min	mm²	1.5
		max	mm²	35
Flexible c/w lug conductor section		min	mm²	1.5
		max	mm²	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		1060
Operations				
Mechanical life		cycles		15000000
Electrical life		cycles		1500000
Safety related data				
Performance level B10d according to EN/ISO 13489-1		rated load mechanical load		cycles 1500000
				cycles 15000000
EMC compatibility		yes		
AC coil operating				
Rated AC voltage at 50/60Hz, 60Hz		min	V	20
		max	V	48
AC operating voltage				
of 50/60Hz coil powered at 50Hz pick-up		min	%Us	85 Us min
drop-out		max	%Us	≤70 Us min
of 50/60Hz coil powered at 60Hz pick-up		min	%Us	85 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
			VA	2.7
of 50/60Hz coil powered at 60Hz				

		in-rush	VA	90
		holding	VA	2.7
of 60Hz coil powered at 60Hz				
		in-rush	VA	90
		holding	VA	2.7
Dissipation at holding ≤20°C 50Hz			W	1...2.5
DC coil operating				
DC rated control voltage				
		min	V	20
		max	V	48
				60 for AC-1 U≤415VAC
				48
max			V	60 for AC-1 U≤415VAC
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	40
		at 600V	A	32
Yielded mechanical performance				
for single-phase AC motor				
		110/120V	HP	3
		230V	HP	7.5
for three-phase AC motor				
		200/208V	HP	10
		220/240V	HP	15

		460/480V	HP	30
		575/600V	HP	30
General USE				
	Contactor			
		AC current	A	70
	Auxiliary contacts			
		AC voltage	V	600
		AC current	A	10
		DC voltage	V	250
		DC current	A	1
Short-circuit protection fuse, 600V				
	High fault			
		Short circuit current	kA	100
		Fuse rating	A	150
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	A	150
		Fuse class		RK5
Contact rating of auxiliary contacts according to UL				SI - A600
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

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