



Contact characteristics

Number of poles	Nr.	4
Rated insulation voltage U_i IEC/EN	V	690
Rated impulse withstand voltage U_{imp}	kV	6
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current $I_{th} \leq 40^\circ\text{C}$	A	56
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A 56
	AC-1 ($\leq 40^\circ\text{C}$) with 16mm ² wire and fork end lug	A 60
	AC-1 ($\leq 55^\circ\text{C}$)	A 45
	AC-1 ($\leq 55^\circ\text{C}$) with 16mm ² wire and fork end lug	A 48
	AC-1 ($\leq 70^\circ\text{C}$)	A 40
	AC-1 ($\leq 70^\circ\text{C}$) with 16mm ² wire and fork end lug	A 42
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A 38
	AC-4 (400V)	A 15.5
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW 21
	400V	kW 36
	500V	kW 45
	690V	kW 62
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A 35
	48V	A 30
	75V	A 23
	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 36
	48V	A 34
	75V	A 29
	110V	A 32
	220V	A 4
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	$\leq 24\text{V}$	A 36
	48V	A 34
	75V	A 33
	110V	A 34
	220V	A 30
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series	$\leq 24\text{V}$	A 36
	48V	A 34
	75V	A 33
	110V	A 34

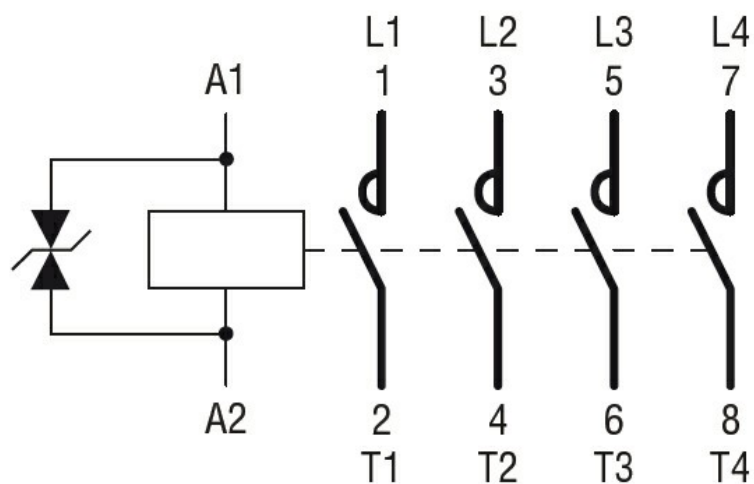
	220V	A	38
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	24
	48V	A	20
	75V	A	17
	110V	A	2,5
	220V	A	–
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	28
	48V	A	25
	75V	A	22
	110V	A	18
	220V	A	3
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	32
	48V	A	28
	75V	A	28
	110V	A	23
	220V	A	25
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	32
	48V	A	28
	75V	A	28
	110V	A	23
	220V	A	15
Short-time allowable current for 10s (IEC/EN60947-1)		A	320
Protection fuse			
	gG (IEC)	A	63
	aM (IEC)	A	40
Making capacity (RMS value)		A	380
Breaking capacity at voltage			
	440V	A	304
	500V	A	240
	690V	A	192
Resistance per pole (average value)		mΩ	2
Power dissipation per pole (average value)			
	I _{th}	W	6
	AC-3	W	2.9
Tightening torque for terminals			
	min	Nm	2.5
	max	Nm	3
	min	I _{bin}	1.8
	max	I _{bin}	2.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	I _{bin}	0.8
	max	I _{bin}	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil			
	max		6
Flexible w/o lug conductor section			

		min	mm ²	2.5
		max	mm ²	16
Flexible c/w lug conductor section				
		min	mm ²	1
		max	mm ²	10
Flexible with insulated spade lug conductor section				
		min	mm ²	1
		max	mm ²	16
Power terminal protection according to IEC/EN 60529				IP20 when properly wired
Cable stripping lenght				
	main circuit	mm		10
	command circuit	mm		8
Mechanical features				
Operating position				
	normal allowable			Vertical plan ±30°
Fixing				Screw / DIN rail 35mm
Weight			g	664
Operations				
Mechanical life			cycles	20000000
Electrical life			cycles	1400000
Safety related data				
Performance level B10d according to EN/ISO 13489-1				
	rated load	cycles		1400000
	mechanical load	cycles		20000000
EMC compatibility				yes
DC coil operating				
DC rated control voltage			V	48
DC operating voltage				
	pick-up	min	%Us	80
		max	%Us	125
	drop-out	min	%Us	10
		max	%Us	40
Average coil consumption ≤20°C				
	in-rush	W		5.4
	holding	W		5.4
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us control in AC				
	Closing NO			
		min	ms	8
		max	ms	24
	Opening NO			
		min	ms	5
		max	ms	15
	Closing NC			
		min	ms	9
		max	ms	20

		Opening NC	min	ms	9
			max	ms	17
in DC		Closing NO	min	ms	54
			max	ms	66
		Opening NO	min	ms	14
			max	ms	17
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		55
Short-circuit protection fuse, 600V					
High fault		Short circuit current	kA		100
		Fuse rating	A		100
		Fuse class			J
Standard fault		Short circuit current	kA		5
		Fuse rating	A		150
Ambient conditions					
Temperature					
Operating temperature		min	°C		-50
		max	°C		70
Storage temperature		min	°C		-60
		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
EAC

UL 60335-2-40 LZGH A2L

UL 60335-2-89 LZGH A2L

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching