



### Contact characteristics

Number of poles	Nr.	4
Rated insulation voltage U <sub>i</sub> IEC/EN	V	690
Rated impulse withstand voltage U <sub>imp</sub>	kV	6
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I <sub>th</sub> ≤ 40°C	A	45
Operational current I <sub>e</sub>	AC-1 (≤40°C)	A 45
	AC-1 (≤55°C)	A 36
	AC-1 (≤70°C)	A 32
	AC-3 (≤440V ≤55°C)	A 26
	AC-4 (400V)	A 11.5
Rated operational power AC-1 (T≤40°C)	230V	kW 17
	400V	kW 30
	500V	kW 37
	690V	kW 51
Short-time allowable current for 10s (IEC/EN60947-1)	A	210
Protection fuse	gG (IEC)	A 50
	aM (IEC)	A 32
Making capacity (RMS value)	A	260
Breaking capacity at voltage	440V	A 208
	500V	A 184
	690V	A 168
Resistance per pole (average value)	mΩ	2
Power dissipation per pole (average value)	I <sub>th</sub>	W 4
	AC-3	W 1.4
Tightening torque for terminals	min	Nm 2.5
	max	Nm 3
	min	I <sub>bin</sub> 1.8
	max	I <sub>bin</sub> 2.2
Tightening torque for coil terminal	min	Nm 0.8
	max	Nm 1
	min	I <sub>bin</sub> 0.8
	max	I <sub>bin</sub> 0.74
Max number of wires simultaneously connectable	Nr.	2
Conductor section	AWG/Kcmil	

	max		6
Flexible w/o lug conductor section	min	mm <sup>2</sup>	2.5
	max	mm <sup>2</sup>	16
Flexible c/w lug conductor section	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	10
Flexible with insulated spade lug conductor section	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	16
Power terminal protection according to IEC/EN 60529			IP20 when properly wired
Cable stripping length	main circuit	mm	10
	command circuit	mm	8

**Mechanical features**

Operating position	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	660

**Operations**

Mechanical life		cycles	20000000
Electrical life		cycles	1600000

**Safety related data**

Performance level B10d according to EN/ISO 13489-1	rated load	cycles	1600000
	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
<hr/>				
	in DC			
	Closing NC			
		min	ms	23
		max	ms	28
	Opening NC			
		min	ms	46
		max	ms	56

**UL technical data**

Rated operational voltage AC (UL)		V		600
Full-load current (FLA) for three-phase AC motor				
	at 480V	A		21
	at 600V	A		22

**Yielded mechanical performance**

for single-phase AC motor				
	110/120V	HP		2
	230V	HP		5
<hr/>				
for three-phase AC motor				
	200/208V	HP		7.5
	220/240V	HP		7.5
	460/480V	HP		15
	575/600V	HP		20

**General USE**

Contactor		AC current	A	45
-----------	--	------------	---	----

**Ambient conditions**

**Temperature**

Operating temperature				
	min	°C		-50
	max	°C		70
<hr/>				
Storage temperature				
	min	°C		-60
	max	°C		80

Max altitude		m		3000
--------------	--	---	--	------

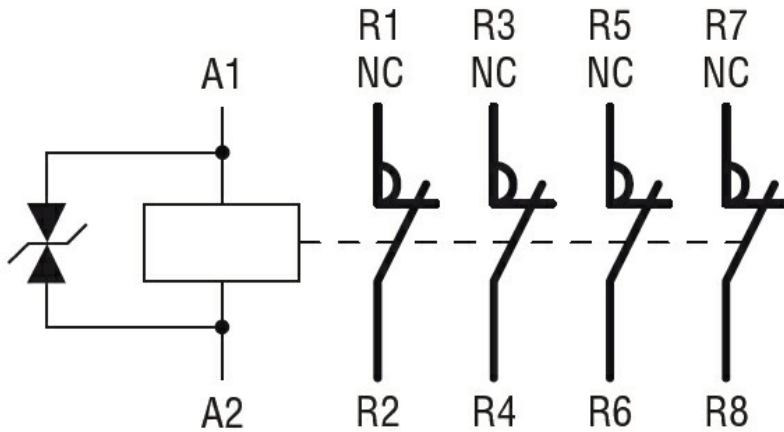
**Resistance & Protection**

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