



**Contact characteristics**

Number of poles	Nr.	3
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	56
Operational current I <sub>e</sub>	AC-1 (≤40°C)	A 56
	AC-1 (≤40°C) with 16mm <sup>2</sup> wire and fork end lug	A 60
	AC-1 (≤55°C)	A 45
	AC-1 (≤55°C) with 16mm <sup>2</sup> wire and fork end lug	A 48
	AC-1 (≤70°C)	A 40
	AC-1 (≤70°C) with 16mm <sup>2</sup> wire and fork end lug	A 42
	AC-3 (≤440V ≤55°C)	A 38
Rated operational power AC-3 (T≤55°C)	AC-4 (400V)	A 15.5
	230V	kW 11
	400V	kW 18.5
	415V	kW 18.5
	440V	kW 18.5
	500V	kW 20
	690V	kW 22
Rated operational power AC-1 (T≤40°C)	230V	kW 21
	400V	kW 36
	500V	kW 45
	690V	kW 62
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A 35
	48V	A 30
	75V	A 23
	110V	A 8
	220V	A –
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 2 poles in series	≤24V	A 36
	48V	A 34
	75V	A 29
	110V	A 32
	220V	A 4
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V	A 36
	48V	A 34
	75V	A 33

	110V	A	34
	220V	A	30
<hr/>			
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	36
	48V	A	34
	75V	A	33
	110V	A	34
	220V	A	38
<hr/>			
IEC max current I <sub>e</sub> 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	–
<hr/>			
IEC max current I <sub>e</sub> 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
<hr/>			
IEC max current I <sub>e</sub> 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
<hr/>			
IEC max current I <sub>e</sub> 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
<hr/>			
Short-time allowable current for 10s (IEC/EN60947-1)		A	320
<hr/>			
Protection fuse			
	gG (IEC)	A	63
	aM (IEC)	A	40
<hr/>			
Making capacity (RMS value)		A	380
<hr/>			
Breaking capacity at voltage			
	440V	A	304
	500V	A	240
	690V	A	192
<hr/>			
Resistance per pole (average value)		mΩ	2
<hr/>			
Power dissipation per pole (average value)			
	I <sub>th</sub>	W	6
	AC-3	W	2.9
<hr/>			
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
<hr/>			
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
<b>Mechanical features</b>			
Operating position			
	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	560
<b>Operations</b>			
Mechanical life		cycles	20000000
Electrical life		cycles	1400000
<b>Safety related data</b>			
Performance level B10d according to EN/ISO 13489-1			
	rated load	cycles	1400000
	mechanical load	cycles	20000000
EMC compatibility			yes
<b>DC coil operating</b>			
DC rated control voltage		V	125
DC operating voltage			
pick-up			
	min	%U <sub>s</sub>	70
	max	%U <sub>s</sub>	125
drop-out			
	min	%U <sub>s</sub>	10
	max	%U <sub>s</sub>	40
Average coil consumption ≤20°C			
	in-rush	W	5.4
	holding	W	5.4
<b>Max cycles frequency</b>			
Mechanical operation		cycles/h	3600
<b>Operating times</b>			
Average time for U <sub>s</sub> 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 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

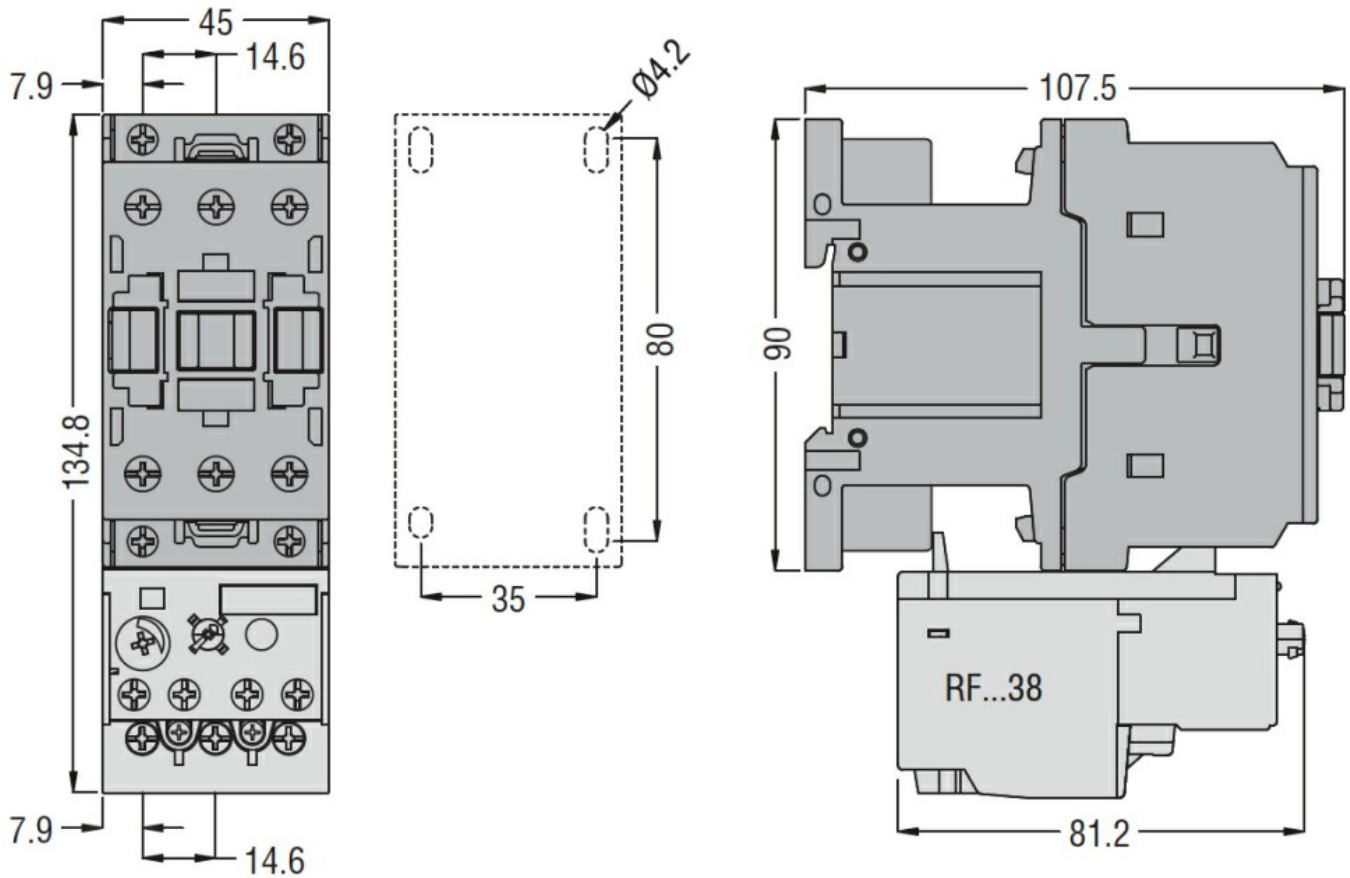
	min	°C	-60
	max	°C	80

Max altitude m 3000

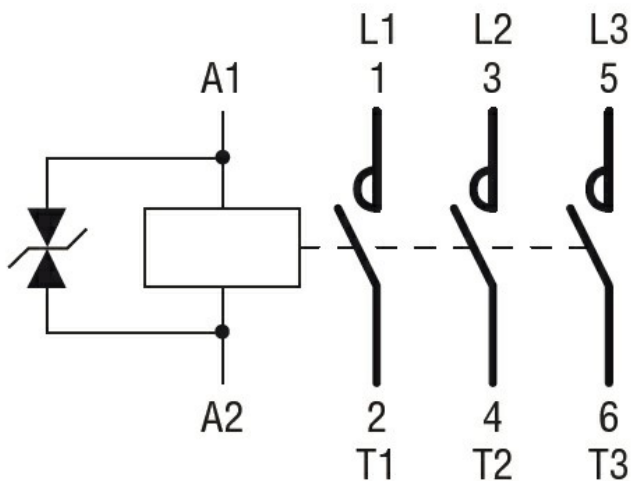
**Resistance & Protection**

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