



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	275
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A 275
	AC-1 ($\leq 55^\circ\text{C}$)	A 230
	AC-1 ($\leq 70^\circ\text{C}$)	A 200
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A 195
	AC-4 (400V)	A 95
Rated operational power AC-3 ($T \leq 55^\circ\text{C}$)	230V	kW 55
	400V	kW 90
	415V	kW 110
	440V	kW 110
	500V	kW 132
	690V	kW 160
	1000V	kW 90
Rated operational current AC-3 ($T \leq 55^\circ\text{C}$)	230V	A 195
	400V	A 195
	415V	A 195
	440V	A 195
	500V	A 184
	690V	A 165
	1000V	A 85
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW 104
	400V	kW 181
	500V	kW 199
	690V	kW 312
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A 275
	48V	A 275
	75V	A 275
	110V	A 120
	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 275
	48V	A 275
	75V	A 275

	110V	A	170
	220V	A	150
IEC max current I _e in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	275
	110V	A	170
	220V	A	150
	330V	A	150
IEC max current I _e in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	275
	110V	A	275
	220V	A	275
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	90
	220V	A	–
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	140
	220V	A	100
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	160
	220V	A	140
	330V	A	100
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	160
	220V	A	160
	330V	A	160
	460V	A	100
Short-time allowable current for 10s (IEC/EN60947-1)		A	1560
Protection fuse			
	gG (IEC)	A	315
	aM (IEC)	A	250
Making capacity (RMS value)		A	1658
Breaking capacity at voltage			
	440V	A	1658
	500V	A	1326
	690V	A	1377
Resistance per pole (average value)		mΩ	0.18
Power dissipation per pole (average value)			
	I _{th}	W	13

	AC-3	W	6.7
Tightening torque for terminals	min	Nm	18
	max	Nm	18
	min	lbin	159
	max	lbin	159
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
Power terminal protection according to IEC/EN 60529			IP00
Mechanical features			
Operating position	normal allowable		Vertical plan $\pm 30^\circ$
Fixing			Screw
Weight		g	3000
Operations			
Mechanical life		cycles	10000000
Electrical life		cycles	1000000
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	cycles	1000000
		cycles	10000000
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz	min	V	24
	max	V	60
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	160...230
		VA	1.5...3.0
of 50/60Hz coil powered at 60Hz	in-rush holding	VA	160...230
		VA	1.5...3.0
of 60Hz coil powered at 60Hz	in-rush holding	VA	160...230
		VA	1.5...3.0
Dissipation at holding $\leq 20^\circ\text{C}$ 50Hz		W	1.5...3.0
DC coil operating			

DC rated control voltage

	min	V	20
	max	V	60
max		V	60

DC operating voltage

pick-up

min	%Us	85 Us min
max	%Us	110 Us max

drop-out

max	%Us	≤70 Us min
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Average coil consumption ≤20°C

in-rush	W	160...230
holding	W	1.5...3.0

Max cycles frequency

Mechanical operation cycles/h 1000

Operating times

Average time for Us control

in AC

Closing NO

min	ms	50
max	ms	100

Opening NO

min	ms	35
max	ms	75

UL technical data

Rated operational voltage AC (UL) V 600

Yielded mechanical performance

for three-phase AC motor

200/208V	HP	60
220/240V	HP	75
460/480V	HP	150
575/600V	HP	150

General USE

Contactor

AC current A 275

Short-circuit protection fuse, 600V

High fault

Short circuit current	kA	100
Fuse rating	A	400
Fuse class		J

Standard fault

Short circuit current	kA	10
Fuse rating	A	400
Fuse class		RK5

Ambient conditions

Temperature

Operating temperature

min	°C	-40
max	°C	70

Storage temperature

min	°C	-50
max	°C	80

Max altitude

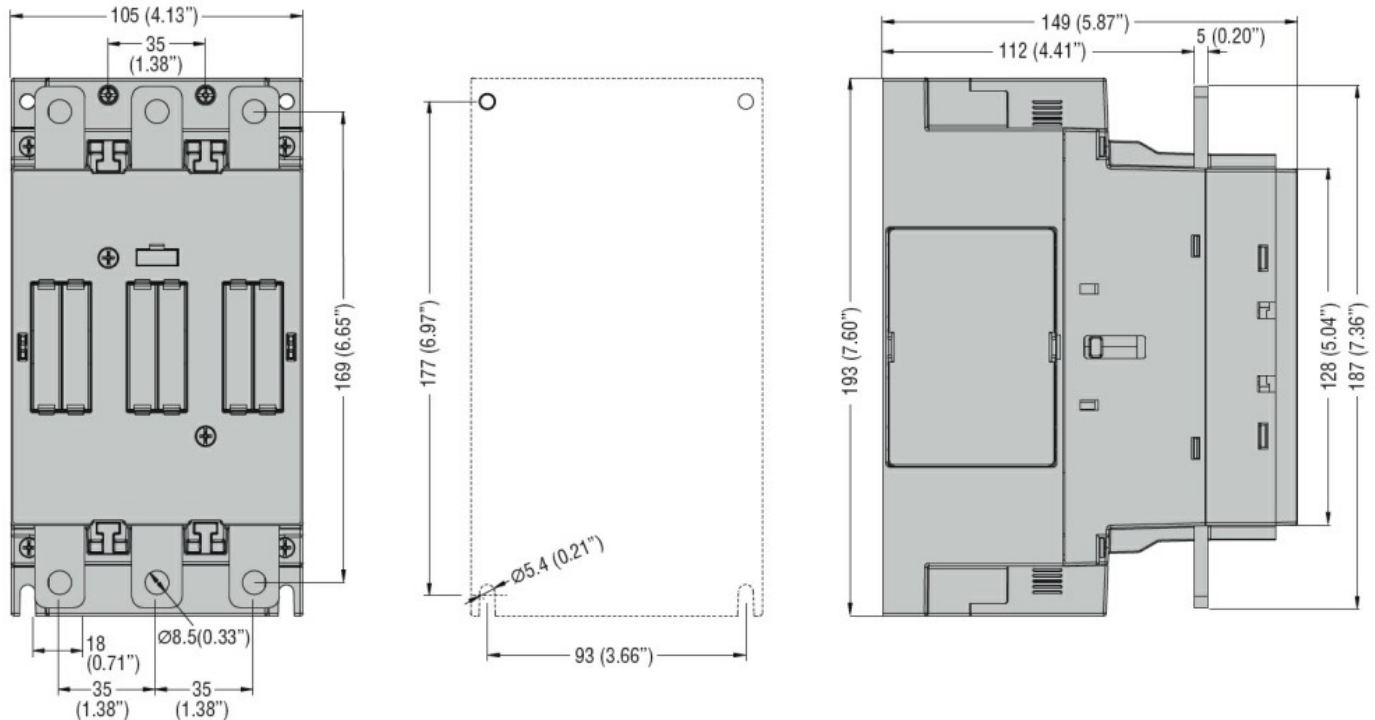
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Resistance & Protection

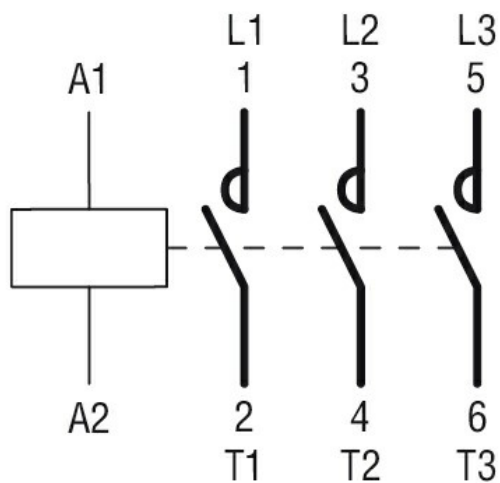
Pollution degree

3

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

cULus

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching