



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 $I_{th} \leq 40^\circ C$	A	28
Operational current I_e	AC-1 ($\leq 40^\circ C$)	A 28
	AC-1 ($\leq 55^\circ C$)	A 23
	AC-1 ($\leq 70^\circ C$)	A 20
	AC-3 ($\leq 440V \leq 55^\circ C$)	A 12
	AC-4 (400V)	A 7.9
Rated operational power AC-1 ($T \leq 40^\circ C$)	230V	kW 10
	400V	kW 18
	500V	kW 23
	690V	kW 32
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 1 poles in series	$\leq 24V$	A 17
	48V	A 15
	75V	A 13
	110V	A 6
	220V	A -
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 2 poles in series	$\leq 24V$	A 20
	48V	A 20
	75V	A 18
	110V	A 13
	220V	A 1
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 3 poles in series	$\leq 24V$	A 22
	48V	A 22
	75V	A 20
	110V	A 16
	220V	A 11
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 4 poles in series	$\leq 24V$	A 20
	48V	A 20
	75V	A 20
	110V	A 16
	220V	A 12
IEC max current I_e in DC3-DC5 with $L/R \leq 15ms$ with 1 poles in series	$\leq 24V$	A 12

	48V	A	11
	75V	A	10
	110V	A	2
	220V	A	–
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IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	≤24V	A	15
	48V	A	13
	75V	A	12
	110V	A	8
	220V	A	2
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IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	≤24V	A	18
	48V	A	18
	75V	A	15
	110V	A	12
	220V	A	6
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IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	≤24V	A	15
	48V	A	15
	75V	A	15
	110V	A	16
	220V	A	7
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Short-time allowable current for 10s (IEC/EN60947-1)		A	150
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Protection fuse	gG (IEC)	A	32
	aM (IEC)	A	12
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Making capacity (RMS value)		A	120
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Breaking capacity at voltage	440V	A	96
	500V	A	96
	690V	A	94
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Resistance per pole (average value)		mΩ	2.5
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Power dissipation per pole (average value)	I _{th}	W	2
	AC-3	W	0.4
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Tightening torque for terminals	min	Nm	1.5
	max	Nm	1.8
	min	I _{bin}	1.1
	max	I _{bin}	1.5
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Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	I _{bin}	0.8
	max	I _{bin}	0.74
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Max number of wires simultaneously connectable		Nr.	2
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Conductor section	AWG/Kcmil		
	max		10
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Flexible w/o lug conductor section	min	mm ²	1
	max	mm ²	6
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Flexible c/w lug conductor section			

	min	mm ²	1
	max	mm ²	4
Flexible with insulated spade lug conductor section			
	min	mm ²	1
	max	mm ²	4
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	366
Operations			
Mechanical life		cycles	20000000
Electrical life		cycles	2000000
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	rated load	cycles	2000000
	mechanical load	cycles	20000000
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 50/60Hz		V	400
AC operating voltage			
	of 50/60Hz coil powered at 50Hz		
	pick-up		
	min	%Us	80
	max	%Us	110
	drop-out		
	min	%Us	20
	max	%Us	55
	of 50/60Hz coil powered at 60Hz		
	pick-up		
	min	%Us	85
	max	%Us	110
	drop-out		
	min	%Us	20
	max	%Us	55
AC average coil consumption at 20°C			
	of 50/60Hz coil powered at 50Hz		
	in-rush	VA	75
	holding	VA	9
	of 50/60Hz coil powered at 60Hz		
	in-rush	VA	70
	holding	VA	6.5
	of 60Hz coil powered at 60Hz		
	in-rush	VA	75
	holding	VA	9
Dissipation at holding ≤20°C 50Hz		W	2.5
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	10
	max	ms	20
Closing NC	min	ms	14
	max	ms	28
Opening NC	min	ms	7
	max	ms	18

UL technical data

Rated operational voltage AC (UL) V 600

Full-load current (FLA) for three-phase AC motor

at 480V	A	11
at 600V	A	11

Yielded mechanical performance

for single-phase AC motor

110/120V	HP	1
230V	HP	2

for three-phase AC motor

200/208V	HP	5
220/240V	HP	5
460/480V	HP	7.5
575/600V	HP	10

General USE

Contactor

AC current	A	28
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Short-circuit protection fuse, 600V

High fault

Short circuit current	kA	100
Fuse rating	A	30
Fuse class		J

Standard fault

Short circuit current	kA	5
Fuse rating	A	70

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

m	3000
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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 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