



Contact characteristics

Number of poles	Nr.	3
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	28
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A 28
	AC-1 ($\leq 55^\circ\text{C}$)	A 23
	AC-1 ($\leq 70^\circ\text{C}$)	A 20
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A 12
	AC-4 (400V)	A 7.9
Rated operational power AC-3 ($T \leq 55^\circ\text{C}$)	230V	kW 3.2
	400V	kW 5.7
	415V	kW 6.2
	440V	kW 6.2
	500V	kW 7.5
	690V	kW 10
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW 10
	400V	kW 18
	500V	kW 23
	690V	kW 32
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A 17
	48V	A 15
	75V	A 13
	110V	A 6
	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 20
	48V	A 20
	75V	A 18
	110V	A 13
	220V	A 1
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	$\leq 24\text{V}$	A 22
	48V	A 22
	75V	A 20
	110V	A 16
	220V	A 11
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series		

	≤24V	A	20
	48V	A	20
	75V	A	20
	110V	A	16
	220V	A	12
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IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	≤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

Conductor section

AWG/Kcmil				
		max		10
Flexible w/o lug conductor section		min	mm ²	1
		max	mm ²	6
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°
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Fixing

Screw / DIN rail 35mm

Weight

g 500

Auxiliary contact characteristics

Thermal current I_{th}

A 10

IEC/EN 60947-5-1 designation

A600 - P600

Operating current AC15

230V	A	3
400V	A	1.9
500V	A	1.4

Operating current DC12

110V	A	5.7
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Operating current DC13

24V	A	5.7
48V	A	2.9
60V	A	2.3
110V	A	1.25
125V	A	1.1
220V	A	0.55
600V	A	0.2

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

Mirror contacts according to IEC/EN 60947-4-1 annex F

Yes

EMC compatibility

yes

DC coil operating

DC rated control voltage

V 24

DC operating voltage

pick-up	min	%Us	80
	max	%Us	110
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drop-out	min	%Us	10
	max	%Us	40

Average coil consumption $\leq 20^{\circ}\text{C}$

in-rush	W	2.4
holding	W	2.4

Max cycles frequency

Mechanical operation	cycles/h	3600
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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

in DC

Closing NO

min	ms	75
max	ms	91

Opening NO

min	ms	15
max	ms	19

Closing NC

min	ms	24
max	ms	30

Opening NC

min	ms	67
max	ms	81

UL technical data

Rated operational voltage AC (UL)	V	600
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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

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, DC COIL LOW CONSUMPTION, 24VDC, 1NC AUXILIARY CONTACT WITH MIRROR CONTACT FUNCTION

Contactor		AC current	A	28
Auxiliary contacts		AC voltage	V	600
		AC current	A	10
		DC voltage	V	250
		DC current	A	1
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
Contact rating of auxiliary contacts according to UL				A600 - P600
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