



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 $I_{th} \leq 40^\circ C$	A	16
Operational current I_e	AC-1 ($\leq 40^\circ C$)	A 16
	AC-3 ($\leq 440V \leq 55^\circ C$)	A 6
	AC-4 (400V)	A 3.3
Rated operational power AC-3 ($T \leq 55^\circ C$)	230V	kW 1.5
	400V	kW 2.2
	415V	kW 2.4
	440V	kW 2.5
	500V	kW 3
	690V	kW 3
Rated operational power AC-1 ($T \leq 40^\circ C$)	230V	kW 6
	400V	kW 10
	500V	kW 13
	690V	kW 18
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 1 poles in series	$\leq 24V$	A 9
	48V	A 8
	75V	A 4
	110V	A 3
	220V	A -
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 2 poles in series	$\leq 24V$	A 12
	48V	A 11
	75V	A 7
	110V	A 6
	220V	A -
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 3 poles in series	$\leq 24V$	A 14
	48V	A 14
	75V	A 8
	110V	A 8
	220V	A 1
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 4 poles in series	$\leq 24V$	A -
	48V	A -

	75V	A	–
	110V	A	–
	220V	A	–
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IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	≤24V	A	6
	48V	A	5
	75V	A	2
	110V	A	1
	220V	A	–
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IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	≤24V	A	7
	48V	A	7
	75V	A	4
	110V	A	3
	220V	A	–
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IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	≤24V	A	9
	48V	A	9
	75V	A	5
	110V	A	4
	220V	A	0,5
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IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	≤24V	A	–
	48V	A	–
	75V	A	–
	110V	A	–
	220V	A	–
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Short-time allowable current for 10s (IEC/EN60947-1)		A	96
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Protection fuse	gG (IEC)	A	16
	aM (IEC)	A	6
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Making capacity (RMS value)		A	92
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Breaking capacity at voltage	440V	A	72
	500V	A	72
	690V	A	72
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Resistance per pole (average value)		mΩ	10
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Power dissipation per pole (average value)	Ith	W	2.6
	AC-3	W	0.36
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Tightening torque for terminals	min	Nm	0.8
	max	Nm	1
	min	Ibin	9
	max	Ibin	9
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Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	Ibin	9
	max	Ibin	9
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Max number of wires simultaneously connectable		Nr.	2
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Conductor section	AWG/Kcmil		

	max		12
Flexible w/o lug conductor section	min	mm ²	0.75
	max	mm ²	2.5
Flexible c/w lug conductor section	min	mm ²	1.5
	max	mm ²	2.5
Flexible with insulated spade lug conductor section	min	mm ²	1.5
	max	mm ²	2.5
Power terminal protection according to IEC/EN 60529			IP20 when properly wired
Mechanical features			
Operating position	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	185
Auxiliary contact characteristics			
Thermal current I _{th}		A	10
IEC/EN 60947-5-1 designation			A600 - Q600
Operating current AC15	230V	A	3
	400V	A	1.9
	500V	A	1.4
Operating current DC12	110V	A	2.9
Operating current DC13	24V	A	2.9
	48V	A	1.4
	60V	A	1.2
	110V	A	0.6
	125V	A	0.55
	220V	A	0.3
	600V	A	0.1
Operations			
Mechanical life		cycles	20000000
Electrical life		cycles	500000
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load	cycles	500000
	mechanical load	cycles	20000000
Mirror contacts according to IEC/EN 60947-4-1 annex F			Yes
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 60Hz		V	460
AC operating voltage	of 60Hz coil powered at 60Hz		
	pick-up		
	min	%Us	75
	max	%Us	115
	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	30
	holding	VA	4
of 50/60Hz coil powered at 60Hz			
	in-rush	VA	25
	holding	VA	3
of 60Hz coil powered at 60Hz			
	in-rush	VA	30
	holding	VA	4
Dissipation at holding ≤20°C 50Hz		W	0.95
Max cycles frequency			
Mechanical operation		cycles/h	3600
Operating times			
Average time for Us control in AC			
Closing NO	min	ms	12
	max	ms	21
Opening NO	min	ms	9
	max	ms	18
Closing NC	min	ms	17
	max	ms	26
Opening NC	min	ms	7
	max	ms	17
in DC			
Closing NO	min	ms	18
	max	ms	25
Opening NO	min	ms	2
	max	ms	3
Closing NC	min	ms	3
	max	ms	5
Opening NC	min	ms	11
	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	4.8
	at 600V	A	3.9
Yielded mechanical performance for single-phase AC motor			
	110/120V	HP	0.3
	230V	HP	1
for three-phase AC motor			
	200/208V	HP	1.5
	220/240V	HP	2

		460/480V	HP	3
		575/600V	HP	3
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General USE	Contactor	AC current	A	16
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Short-circuit protection fuse, 600V	High fault	Short circuit current	kA	100
		Fuse rating	A	30
		Fuse class		J
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	Standard fault	Short circuit current	kA	5
		Fuse rating	A	30
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Contact rating of auxiliary contacts according to UL				A600 - Q600
Ambient conditions				
Temperature				
	Operating temperature	min	°C	-50
		max	°C	+70
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	Storage temperature	min	°C	-60
		max	°C	+80
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Max altitude			m	3000
Resistance & Protection				
Pollution degree				3