



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	20
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A 20
	AC-1 ($\leq 55^\circ\text{C}$)	A 18
	AC-1 ($\leq 70^\circ\text{C}$)	A 15
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A 12
	AC-4 (400V)	A 4.8
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 5.5
	500V	kW 5
	690V	kW 5
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW 8
	400V	kW 14
	500V	kW 16
	690V	kW 22
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A 12
	48V	A 10
	75V	A 4
	110V	A 3
	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 15
	48V	A 14
	75V	A 9
	110V	A 8
	220V	A —
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	$\leq 24\text{V}$	A 16
	48V	A 16
	75V	A 10
	110V	A 10
	220V	A 2
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series		

	≤24V	A	—
	48V	A	—
	75V	A	—
	110V	A	—
	220V	A	—
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	7
	48V	A	6
	75V	A	2
	110V	A	1
	220V	A	—
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	8
	48V	A	8
	75V	A	5
	110V	A	4
	220V	A	—
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	10
	48V	A	10
	75V	A	6
	110V	A	5
	220V	A	0,8
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	—
Short-time allowable current for 10s (IEC/EN60947-1)		A	96
Protection fuse			
	gG (IEC)	A	20
	aM (IEC)	A	16
Making capacity (RMS value)		A	120
Breaking capacity at voltage			
	440V	A	96
	500V	A	72
	690V	A	72
Resistance per pole (average value)		mΩ	10
Power dissipation per pole (average value)			
	Ith	W	4
	AC-3	W	1.44
Tightening torque for terminals			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	9
	max	Ibin	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	9
	max	Ibin	9
Max number of wires simultaneously connectable		Nr.	2

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 184
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	%U _s	75

drop-out	max	%Us	115
	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	11
	at 600V	A	11
Yielded mechanical performance			
for single-phase AC motor			
	110/120V	HP	0.5
	230V	HP	1.5

for three-phase AC motor

200/208V	HP	3
220/240V	HP	3
460/480V	HP	7.5
575/600V	HP	10

General USE

Contactor

AC current	A	20
------------	---	----

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	30
Fuse class		RK5

Contact rating of auxiliary contacts according to UL

A600 - Q600

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