



Product designation Product type designation Contact characteristics Number of poles Rated insulation voltage Ui IEC/EN Rated insulation voltage Ui IEC/EN Rated insulation voltage Uimp  Product designation Rated insulation voltage Uimp  Rated Ac-1 (≤40°C)  RAC-1 (≤40°C) RAC-3 (≤440°C) RAC-3 (≤4				211. 411 411 32 AZ
Product type designation   Signature	Product designation			Power contactor
Number of poles         Nr.         3           Rated insulation voltage Ui IEC/EN         V         690           Rated insulation voltage Withstand voltage Uimp         kV         6           Operational frequency         min         Hz         25           max         Hz         400         Hz         25           max         Hz         400         Hz         25           max         Hz         400         Hz         20           Operational current le         AC-1 (≤40°C) A         20         20           AC-3 (≤440V ≤55°C) A         12         AC-3 (≤440V ≤55°C) A         12           AC-4 (400V) A         A         48         A         20           AC-3 (≤440V ≤55°C) A         A         20         A         48         A         20         A         48         A         20         A         48         A<				BG12
Rated insulation voltage Ui IEC/EN         V         690           Rated impulse withstand voltage Uimp         kV         6           Operational frequency         min         Hz         25           IEC Conventional free air thermal current Ith         A         20           Operational current Ie         AC-1 (≤40°C)         A         20           AC-3 (≤4400 ≤55°C)         A         12         AC-4 (400v)         A         4.8           Rated operational power AC-3 (T≤55°C)         230v         kW         3.2         400v         kW         5.7           415v         kW         5.2         500v         kW         5.5         500v         kW         5.5           Rated operational power AC-1 (T≤40°C)         230v         kW         5.5         500v         kW         5.5           Rated operational power AC-1 (T≤40°C)         230v         kW         8         400v         kW         16           690v         kW         14         500v         kW         16         690v         kW         22           IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series         ≤24v         A         12         48v         A         10         75v         A         1         <	Contact characteristics			
Rated impulse withstand voltage Uimp	Number of poles		Nr.	3
Operational frequency         min max max max         Hz max max max         Hz max max max         Hz max max max         Hz max max max max         Hz max	Rated insulation voltage Ui IEC/EN		V	690
EC Conventional free air thermal current lth	Rated impulse withstand voltage Uimp		kV	6
EC Conventional free air thermal current Ith	Operational frequency			
EC Conventional free air thermal current lth		min	Hz	25
Operational current le       AC-1 (≤40°C) A 20 AC-3 (≤440V ≤55°C) A 12 AC-4 (400V) A 4.8         Rated operational power AC-3 (T≤55°C)       230V kW 3.2 400V kW 5.7 415V kW 6.2 440V kW 5.5 500V kW 5.5 690V kW 1.4 500V kW 1.4 500V kW 1.4 500V kW 1.6 690V kW 2.2         IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series       ≤24V A 12 48V A 10 75V A 4 110V A 3 220V A -         IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series       ≤24V A 15 48V A 10 75V A 9 110V A 8 220V A -         IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series       ≤24V A 15 48V A 14 75V A 9 110V A 8 220V A -         IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series       ≤24V A 15 48V A 16 48V A 16 48V A 16 75V A 16 48V A 16 75V A 10 110V A 10		max	Hz	400
AC-1 (≤40°C) A 20 AC-3 (≤440V ≤55°C) A 12 AC-4 (400V) A 4.8  Rated operational power AC-3 (T≤55°C)  230V kW 3.2 440V kW 5.7 415V kW 6.2 4440V kW 5.5 500V kW 5.5 500V kW 5.7 A15V kW 14 500V kW 14 500V kW 14 500V kW 14 500V kW 16 690V kW 22  IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series  ≤24V A 12 48V A 10 75V A 4 110V A 3 220V A −  IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series  ≤24V A 15 48V A 14 75V A 9 110V A 3 220V A −  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series  ≤24V A 15 48V A 14 75V A 9 110V A 8 220V A −  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	IEC Conventional free air thermal current Ith		Α	20
AC-3 (≤440V ≤55°C) A 12 AC-4 (400V) A 4.8  Rated operational power AC-3 (T≤55°C)  230V kW 3.2 400V kW 5.7 415V kW 6.2 440V kW 5.5 500V kW 5.5 690V kW 5.  Rated operational power AC-1 (T≤40°C)  Rated operational power AC-1 (T≤40°C)  230V kW 14 500V kW 14 500V kW 14 500V kW 14 500V kW 16 690V kW 22  IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series  ≤24V A 12 48V A 10 75V A 4 110V A 3 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series  ≤24V A 15 48V A 10 75V A 9 110V A 3 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series  ≤24V A 15 48V A 16 48V A 16 48V A 16 75V A 9 110V A 8 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	Operational current le			
Rated operational power AC-3 (T≤55°C)  230V kW 3.2 400V kW 5.7 415V kW 6.2 440V kW 5.5 500V kW 5.6 690V kW 5.6 690V kW 5.6 8ated operational power AC-1 (T≤40°C)  Rated operational power AC-1 (T≤40°C)  230V kW 8 400V kW 14 500V kW 16 690V kW 22  IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series  ≤24V A 12 48V A 10 75V A 4 110V A 3 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series  ≤24V A 15 48V A 14 75V A 9 110V A 8 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series  ≤24V A 15 48V A 14 75V A 9 110V A 8 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			Α	20
Rated operational power AC-3 (T≤55°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≤40°C)  Rated operational power AC-1 (T≤40°C)  230V kW 8 400V kW 14 500V kW 16 690V kW 22  IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series  ≤24V A 12 48V A 10 75V A 4 110V A 3 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series  ≤24V A 15 48V A 14 75V A 9 110V A 8 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series  ≤24V A 15 48V A 14 75V A 9 110V A 8 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		,	Α	12
230V   kW   3.2   400V   kW   5.7   415V   kW   6.2   440V   kW   5.5   500V   kW   5   500V   kW   14   500V   kW   14   500V   kW   16   690V   kW   22   500V		AC-4 (400V)	Α	4.8
400V   kW   5.7   415V   kW   6.2   4440V   kW   5.5   500V   kW   5   500V   kW   14   500V   kW   14   500V   kW   16   690V   kW   22   500V   kW   23   500V   kW   24   500V   kW   24   500V   kW   24   500V   kW   25   500V   kW   25   500V   kW   25   500V   kW   26   500V   kW	Rated operational power AC-3 (T≤55°C)			
415V		230V	kW	3.2
A40V   kW   5.5   500V   kW   5   5   500V   kW   5   5   5   500V   kW   5   5   5   5   5   5   5   5   5		400V	kW	
S00V   kW   5		415V	kW	6.2
Rated operational power AC-1 (T≤40°C)  230V kW 8 400V kW 14 500V kW 16 690V kW 22  IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series  ≤24V A 12 48V A 10 75V A 4 110V A 3 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series  ≤24V A 15 48V A 10 75V A 4 110V A 3 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series  ≤24V A 15 48V A 14 75V A 9 110V A 8 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series  ≤24V A 15 48V A 16 48V A 16 48V A 16 75V A 10 110V A 10		440V	kW	5.5
Rated operational power AC-1 (T≤40°C)  230V kW 8 400V kW 14 500V kW 16 690V kW 22  IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series  ≤24V A 12 48V A 10 75V A 4 110V A 3 220V A −  IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series  ≤24V A 15 48V A 14 75V A 9 110V A 8 220V A −  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series  ≤24V A 15 48V A 14 75V A 9 110V A 8 220V A −  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		500V	kW	5
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		690V	kW	5
A00V   kW   14   500V   kW   16   690V   kW   22	Rated operational power AC-1 (T≤40°C)			
Soov   kW   16   690V   kW   22			kW	8
EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series   ≤24V		400V	kW	14
Section   Sec				
		690V	kW	22
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
T5V   A   4   110V   A   3   220V   A   -			Α	
110V   A   3   220V   A   -			Α	10
EC max current le in DC1 with L/R $\leq$ 1ms with 2 poles in series   $\leq$ 24V   A   15   48V   A   14   75V   A   9   110V   A   8   220V   A   -			Α	
EC max current le in DC1 with L/R ≤ 1ms with 2 poles in series   ≤24V			Α	3
		220V	Α	_
	IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
110V   A   8   220V   A   -				
EC max current le in DC1 with L/R $\leq$ 1ms with 3 poles in series   $\leq$ 24V   A   16   48V   A   16   75V   A   10   110V   A   10				
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series  ≤24V A 16  48V A 16  75V A 10  110V A 10				8
≤24V A 16 48V A 16 75V A 10 110V A 10		220V	Α	-
48V A 16 75V A 10 110V A 10	IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
75V A 10 110V A 10				
110V A 10				
220V A 2				
		220V	Α	2



	≤24V	Α	_
	48V	Α	_
	75V	Α	_
	110V	Α	_
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	2201	- , ,	
TEO Max current le in 200-200 with E/N = 15ms with 1 poles in series	≤24V	۸	7
		A	7
	48V	Α	6
	75V	Α	2
	110V	Α	1
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
·	≤24V	Α	8
	48V	Α	8
	75V	A	5
	110V	A	4
	220V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	10
	48V	Α	10
	75V	Α	6
	110V	Α	5
	220V	Α	0,8
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			0,0
TEC max current le in DC3-DC3 with E/N = 13ms with 4 poles in series	<b>~</b> 041/	۸	
	≤24V	Α	_
	48V	Α	_
	75V	Α	_
	110V	Α	_
	220V	Α	_
Short-time allowable current for 10s (IEC/EN60947-1)		Α	96
Protection fuse			
	gG (IEC)	Α	20
	aM (IEC)	Α	16
Making capacity (RMS value)	aivi (ILO)	A	120
		<u> </u>	120
Breaking capacity at voltage		_	
	440V	Α	96
	500V	Α	72
	690V	Α	72
Resistance per pole (average value)		$m\Omega$	10
Power dissipation per pole (average value)			
,	Ith	W	4
	AC3	W	1.44
Tightening torque for terminals	7.00	• • • • • • • • • • • • • • • • • • • •	1111
riginering torque for terminals	noin	Nimo	0.0
	min	Nm	0.8
	max	Nm	1
	min	lbin	7.1
	max	lbin	8.8
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	9
		Ibin	9
May number of wires simultaneously same stable	max		2
Max number of wires simultaneously connectable		Nr.	۷



**ENERGY AND AUTOMATION** 

Conductor section				
Conductor Scotlon	AWG/Kcmil			
	, the Control	max		12
	Flexible w/o lug conductor section			· <del>-</del>
	- Total of the same of the sam	min	mm²	0.75
		max	mm²	2.5
	Flexible c/w lug conductor section			
	ŭ	min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug conductor section	າ		
		min	mm²	1.5
		max	mm²	2.5
Power terminal protect	ction according to IEC/EN 60529			IP20 when properly wired
Mechanical features				1 -1 - 7
Operating position				
. 01		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	183
Conductor section			9	
	AWG/kcmil conductor section			
		max		12
Auxiliary contact chara	acteristics			
Thermal current Ith			Α	10
IEC/EN 60947-5-1 de	esignation			A600 - Q600
Operating current AC	15			
		230V	Α	3
		400V	Α	1.9
		500V	Α	1.4
Operating current DC	12			
		110V	Α	2.9
Operating current DC	13			
		24V	Α	2.9
		48V	Α	1.4
		60V	Α	1.2
		110V	A	0.6
		125V	A	0.55
		220V	A	0.3
Operations		600V	A	0.1
Operations  Mechanical life			oved a a	20000000
Electrical life			cycles	2000000
Safety related data			cycles	500000
	l 0d according to EN/ISO 13489-1			
r enormance level B1	Tou according to ETV/ISO 13409-1	rated load	cycles	500000
	r	mechanical load	cycles	2000000
Mirror contate accord	ing to IEC/EN 609474-4-1	nechanicai idau	Cycles	
EMC compatibility	ing to ILO/LIN 0034/4-4-1			yes
AC coil operating				yes
Rated AC voltage at 5	50/60Hz		V	230
AC operating voltage			V	230
To operating voitage				



	of 50/60Hz coil powere	d at 50Hz			
		pick-up			
			min	%Us	75
			max	%Us	115
		drop-out			
			min	%Us	20
	. = 0 /0 0 L U	1	max	%Us	55
	of 50/60Hz coil powere				
		pick-up	min	0/116	0.0
			min max	%Us %Us	80 115
		drop-out	Шах	/005	113
		drop-out	min	%Us	20
			max	%Us	55
AC average coil consu	mption at 20°C		max	7000	
710 avorago com comoa	of 50/60Hz coil powere	d at 50Hz			
	01 007001 12 0011 portoro	d dt 001.12	in-rush	VA	30
			holding	VA	4
	of 50/60Hz coil powere	d at 60Hz			
			in-rush	VA	25
			holding	VA	3
	of 60Hz coil powered a	t 60Hz	<u> </u>		
	'		in-rush	VA	30
			holding	VA	4
Dissipation at holding ≤	20°C 50Hz			W	0.95
Max cycles frequency					
Mechanical operation				cycles/h	3600
				Cycles/II	3000
Operating times				Cycles/II	3000
				Cycles/II	3000
Operating times	ntrol in AC			Cycles/II	3000
Operating times		Closing NO			
Operating times		Closing NO	min	ms	12
Operating times		-	min max		
Operating times		Closing NO Opening NO	max	ms ms	12 21
Operating times		-	max min	ms ms	12 21 9
Operating times		Opening NO	max	ms ms	12 21
Operating times		-	max min max	ms ms ms	12 21 9 18
Operating times		Opening NO	max min max min	ms ms ms ms	12 21 9 18
Operating times		Opening NO Closing NC	max min max	ms ms ms	12 21 9 18
Operating times		Opening NO	max min max min max	ms ms ms ms	12 21 9 18 17 26
Operating times		Opening NO Closing NC	max min max min max min	ms ms ms ms ms	12 21 9 18 17 26
Operating times	in AC	Opening NO Closing NC	max min max min max	ms ms ms ms	12 21 9 18 17 26
Operating times		Opening NO Closing NC	max min max min max min	ms ms ms ms ms	12 21 9 18 17 26
Operating times	in AC	Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms ms	12 21 9 18 17 26
Operating times	in AC	Opening NO Closing NC Opening NC Closing NO	max min max min max min max	ms ms ms ms ms ms	12 21 9 18 17 26 7
Operating times	in AC	Opening NO Closing NC Opening NC	max min max min max min max min max	ms ms ms ms ms	12 21 9 18 17 26 7 17
Operating times	in AC	Opening NO Closing NC Opening NC Closing NO	max min max min max min max min max min max min	ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Operating times	in AC	Opening NO Closing NC Opening NC Closing NO Opening NO	max min max min max min max min max	ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Operating times	in AC	Opening NO Closing NC Opening NC Closing NO	max min max min max min max min max  min max	ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Operating times	in AC	Opening NO Closing NC Opening NC Closing NO Opening NO	max min	ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Operating times	in AC	Opening NO Closing NC Opening NO Closing NO Opening NO Closing NO	max min max min max min max min max  min max	ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Operating times	in AC	Opening NO Closing NC Opening NC Closing NO Opening NO	max min	ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17

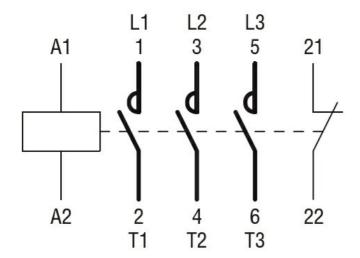


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		max	ms	17
UL technical data				
Full-load current (FL	_A) for three-phase AC motor			
,	,	at 480V	Α	11
		at 600V	Α	11
Yielded mechanical	nerformance	4,000		••
riciaca mediamoai	for single-phase AC motor			
	ioi single-phase Ac motor	110/120V	HP	0.5
	for the contract A O contract	230V	HP	1.5
	for three-phase AC motor	000/0001/		
		200/208V	HP	3
		220/230V	HP	3
		460/480V	HP	7.5
		575/600V	HP	10
General USE				
	Contactor			
		AC current	Α	20
Short-circuit protect	ion fuse, 600V			
	High fault			
	. ng i.g.i.	Short circuit current	kA	100
		Fuse rating	A	30
		Fuse class	Λ	J
	Standard fault	i use class		J
	Standard fault	Ob ant allowed a commont	Ι. Λ	F
		Short circuit current	kA	5
		Fuse rating	Α	30
	xiliary 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 & Prote	ction			
Pollution degree			<del>_</del>	3
Dimensions				
		0.0		
4.4 (1.73") (0.11 (0.17") (0.11	47") 557 (2.24")	44 (1.73") ○ ○ ○ ③ ③ ③ ⑤ ⑤	(2	57
<ul><li>★ ★ ★ ★</li><li>★ ★ ★ ★</li><li>8.5</li></ul>	(1.97")	3.7.1°) 3.7.1°) 3.7.1°) 3.7.1°) 3.7.1°) 3.7.1°)	(2.28")	
(0.33") 8.5 (0.33")	34.9 (1.37")	(1.37") (0.12"	)	RF9 -7.6 (0.30)
		44	_	0.30
8.5 (0.33")		(1.73")		(3.51")



**ENERGY AND AUTOMATION** 



## Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN 60947-1

IEC/EN 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

EAC

## ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching