

Certificate of Compliance

Certificate: 1041746 (LR 56745-20)

Master Contract: 173766

Project: 1531432

Date Issued: May 27, 2004

Issued to: ABB Entrelec Control Division
 10, Rue Ampere
 Zone Industrielle
 B.P. 114
 69 685 Chassieu Cedex
 France

The products listed below are eligible to bear the CSA Mark shown




Authorized by: G. Foulem,

PRODUCTS

CLASS 3211 04 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Magnetic

Contactors, open type, coil voltages 600V ac or less, 50/60Hz, 250V dc or less (AE Types) rated as tabulated below:

Type	Amps at 600V ac 3-ph	HP 3-ph ac				HP 3-ph ac		
		200V	240V	480V	600V	120V	208V	230V
A 8	21	2	2	5	7.5	0.5	-	2
A(E)9	21	2	2	5	7.5	0.5	-	2
A 11	25	3	3	7.5	10	0.75	-	2
A(E)12	25	3	3	7.5	10	0.75	-	2
A(E)16	30	5	5	10	15	1.5	3	3

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Type	Electric Heating Control (A) 600 Vac 3-ph	Incandescent Lamp Control (A) 600 Vac 3-ph	Discharge Lamp Control (A) 600 Vac 3-ph
A(E)9	15	15	15
A(E)12	15	15	15
A(E)16	20	20	20

Type	Elevator Control (hp)			
	230 Vac 1-ph	220-240 Vac 3-ph	440-480 Vac 3-ph	550-600 Vac 3-ph
A16	2	5	10	10

Type	3-phase 240V	3-pole break 480V	KVArS 600 V
UA16...R	8.5	17	20
UA16...RA	8.5	17	20

Contactors, open type, coil voltages 12 Vdc up to 250 Vdc, rated as tabulated below:

Type	Amps at 600 V 3-ph	HP 3-ph ac				HP 1-ph ac	
		200 V	240 V	480 V	600 V	120 V	240 V
AL9	21	2	2	5	7.5	0.33	2
AL12	25	3	3	7.5	10	0.5	2
AL16	30	5	5	10	15	1.0	3

Type	Electric Heating Control (A) 600 Vac 3-ph	Incandescent Lamp Control (A) 600 Vac 3-ph	Discharge Lamp Control (A) 600 Vac 3-ph
AL9	15	15	15
AL12	15	15	15
AL16	20	20	20

Contactors, 4-pole, open type, coil voltages 600 Vac or less, 50/60 Hz rated as tabulated below:

Type	Amps at 600 Vac 4-ph
A9	21
A16	30

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Type	Electric Heating Control (A) <u>600 Vac 3-ph</u>	Incandescent Lamp Control (A) <u>600 Vac 3-ph</u>	Discharge Lamp Control (A) <u>600 Vac 3-ph</u>
A9	15	15	15
A16	20	20	20

Contactors, 4-pole, open type, coil voltages 600 Vac or less, 50/60 Hz rated as tabulated below:

Type	Amps at 600 Vac 4-ph
AL9-40	21
AL16-40	30

Type	Electric Heating Control (A) <u>600 Vac 3-ph</u>	Incandescent Lamp Control (A) <u>600 Vac 3-ph</u>	Discharge Lamp Control (A) <u>600 Vac 3-ph</u>
AL9-40	15	15	15
AL16-40	20	20	20

Contactors, 1-pole, open type, coil voltage 600 Vac 50/60 Hz or less.

Type	General Use Amps at 240 Vdc	HP at 120 Vdc	HP at 240 Vdc
A9	-	1	2
A12	-	1.5	3
A16	-	2	3

Contactors, open type, coil voltages 12 Vdc up to 230 Vdc; rated as tabulated below:

Type	Amps at 600 V 3-ph	HP 3-ph ac				HP 1-ph ac	
		200 V	240 V	480 V	600 V	120 V	240 V
TAL9	21	2	2	5	7.5	0.33	2
TAL12	25	3	3	7.5	10	0.5	2
TAL16	30	5	5	10	15	1.0	3

Type	Electric Heating Control (A) <u>600 Vac 3-ph</u>	Incandescent Lamp Control (A) <u>600 Vac 3-ph</u>	Discharge Lamp Control (A) <u>600 Vac 3-ph</u>
TAL9	15	15	15
TAL12	15	15	15
TAL16	20	20	20

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Notes:

- 1 The type designation may be completed with numbers indicating number and type of auxiliary contacts and/or number of main contacts and with a letter indicating minor mechanical details.
- 2 The contactors are provided with a NO or NC auxiliary contact code rated A600 P300.
- 3 The contactors may be provided with side-mounted auxiliary contact units Type CAL5-11 with one NO and NC contact, code rated A600 Q300 or with front mounted auxiliary contact units Type CA5-10, with one NO contact, Type CA5-01, with one NC contact, Type CA5-13, CA5-22, CA5-31 or CA5-40, with four NC and/or NO contacts, each contact code rated A600 Q300 (See LR 56745-19).
- 4 Contactors may be provided with a mechanical/electrical interlock unit, connecting two contactors together to form a reversing contactor, Type VE5-1, with two auxiliary contacts code rated A600 Q300, or with a mechanical interlock unit Type VM5-1.
- 5 The type designation of contactors Types A(E)9, A(E)12, A(E)16, AL9, AL12 and AL16 (3- and 4-pole versions) may be followed by letters RT for ring tongue terminals (not suitable as wire binding terminals).
- 6 Following contactors have been subjected to a special investigation mechanical endurance test of 500,00 operations (no load) with the last 5 operations making and breaking 3-phase motor load of twice nominal current, pf 0,4-0,5 for 3-phase hp ratings. The contactors are suitable for use in elevator drive service (contactor is not intended to make and break current) in accordance with Clause 19.2.2 of CSA B44.1/ASME A17.5-1996 as indicated below:

<u>Type</u>	HP at 200-208 Vac <u>3-ph</u>	HP at 220-240 Vac <u>3-ph</u>	HP at 440-480 Vac <u>3-ph</u>	HP at 550-600 Vac <u>3-ph</u>
A(E)9	2	2	5	7.5
A(E)12	3	3	7.5	10
A(E)16	5	5	10	10

- 7 The devices are Certified as components for use only in other Certified equipment where the suitability of the combination is determined by CSA International.

PRODUCT

3211 03 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Auxiliary Devices

Industrial Relays, open type, coil voltages 600 Vac or less, 50/60 Hz,

- Types N22E, N31E, N40E, provided with 4 NO and/or NC contacts, code rated A600 Q300;
- Types N44E, N53E, N62E, N71E, N80E, provided with 8 NO and/or NC contacts, code rated A600 Q300.
- Types N33/11, provided with 3 NO, 3 NC, 1 early making NO and with 1 late breaking NC contact, code rated A600 Q300.

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Industrial Relays, open type, coil voltages 12 Vdc up to 250 Vdc.

- Types NL22E, NL31E, NL40E, provided with 4 NO and/or NC contacts, code rated A600 Q300;
- Types NL44E, NL53E, NL62E, NL71E, NL80E, provided with 8 NO and/or NC contacts, code rated A600 Q300.
- Types NL33/11, provided with 3 NO, 3 NC, 1 early making NO and with 1 late breaking NC contact, code rated A600 Q300.

Industrial Relays, open type, coil voltages 12 Vdc up to 250 Vdc.

- Types TNL22E, TNL31E, TNL40E, provided with 4 NO and/or NC contacts, code rated A600 Q300;
- Types TNL44E, TNL53E, TNL62E, TNL71E, TNL80E, provided with 8 NO and/or NC contacts, code rated A600 Q300.
- Types TNL33/11, provided with 3 NO, 3 NC, 1 early making NO and with 1 late breaking NC contact, code rated A600 Q300.

Notes:

- 1 The types designation may be followed by letters RT for ring tongue terminals. (Not suitable as wire-binding terminals).
- 2 The devices are Certified as components for use only in other Certified equipment where the suitability of the combination is determined by CSA International.

Note:

The devices are Certified as components for use only in other Certified equipment where the suitability of the combination is determined by CSA International.

APPLICABLE REQUIREMENTS

- | | | |
|-----------------------------|---|------------------------------|
| CAN/CSA-C22.2 No. 0-M91 | - | General Requirements |
| CAN/CSA-C22.2 No. 14-95 | - | Industrial Control Equipment |
| CAN/CSA-C22.2 No. 190-M1985 | - | Capacitors for Power Factor |

Correction (Types UA...R and UA...RA only)

Supplement to Certificate of Compliance

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*The products listed, including the latest revision described below,
are eligible to be marked in accordance with the referenced Certificate.*

Product Certification History

Project	Date	Description
1531432	May 27, 2004	- Update to report 1041746 to include Types TAL9, -12, -16, to add elevator control ratings to Types A(E)9, -12, -16, to include Types with ring torque terminals
1488380	November 26, 2003	CSA – Addition of Types AL9 (Z), AL12 (Z), AL16 (Z), N33/11, NLZ..RE, NL(Z)22E, NL(Z)31E, NL(Z)40E, NL44E, NL53E, NL62E, NL71E, NL80E, NL33/11.
1467441	August 28, 2003	CSA - Addition of Types AL9-..., AL12-..., AL16-.. and UA16...RA.
1252421	November 5, 2001	CSA - Update to add electrical ratings to Type A(E)16.
1041746	December 16, 1999	Supersedes Report LR 56745-20. Update to include Types AE9, AE12 and AE16.
LR 56745-20	July 30, 1997	Original Certification. Superseded by Report 173766-1041746.