

# Certificate of Compliance

Certificate: 1511569

Master Contract: 180115 (LR 84927)

Project: 1835464

Date Issued: December 16, 2006

Issued to: **TECO Electric & Machinery Co., Ltd.**  
 3F, No. 49, Wu Kong 6 Rd.,  
 Wu-Ku Industrial Park,  
 Taipei County 248,  
 Taiwan

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US'*



Authorized by: **Fred Mark, P. Eng.,**  
 Area Director, Asia

**PRODUCTS**

Class 3211 04 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Magnetic  
 Class 3211 84 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Magnetic - Certified to U.S. Standard

**PART A:** Across-the-line AC motor starting Magnetic Contactors, main contacts 600 V max, 60 Hz, with integral auxiliary contacts, detail electrical ratings are as listed below.

Series No.	Ratings					
	Phase	Volts	HP	FLA	Main contact max. continuous Ratings (Amps)- General Use	S/C (kA, Size, Class)
CN-5(K), SOC-5(D), GPC0, HM07	3 phase	200/208	2 1/2	7.5	20	5 kA, 70 / J
		240	2	6.8	20	
		480	3	4.8	20	
		600	3	3.9	20	

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CN-6(K), SOC-6(D), HA-5F(G2), HI-5J(G2), YS1N-5F(G2), YS3N-5F(G2), J7KN-06(D), C06(D), S06, HM09,	3 phase	200/208	3	11	20	5 kA, 70 / J
		240	3	9.6	20	
		480	5	7.6	20	
		600	5	6.1	20	
CN-9, SOC-9, C09, CU-9	Single phase	120	0.75	13.8	24	5 kA, 70 / J
		230	2	12	24	
	3 phase	200/208	3	12	24	
		240	3	9.6	24	
		480	5	7.6	24	
		600	7.5	9	24	
CN-22(4P), SOC-25(4P), C28(4P), S22(4P), CU-22 (4P)	Single phase	120	2.5	28.3	35	5 kA, 110 / J
		230	5	28	35	
	3 phase	200/208	7.5	26	40	
		240	10	28	40	
		480	20	27	40	
		600	20	22	40	



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CN-50, SOC-50, C50, CU-50	Single phase	120	5	56	72	10 kA, 175 / J
		230	10	50	72	
	3 phase	200/208	15	49	72	
		240	20	54	72	
		480	40	52	72	
		600	50	52	72	
CN-80, SOC-85, C80, CU-80	Single phase	120	7.5	80	104	10 kA, 225 / J
		230	15	68	104	
	3 phase	200/208	25	79	104	
		240	30	80	104	
		480	60	77	104	
		600	60	62	104	
CN-100, SOC-100, HI-80J(N), HI-100J(N), HA-80F(G), HA-100F(G), YS1N-80F(G), YS1N-100F(G), C95, C105	Single phase	120	10	100	130	10 kA, 250 / J
		230	15	68	130	
	3 phase	200/208	30	92	130	
		240	40	104	130	
		480	75	96	130	
		600	100	99	130	



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CN-125, SOC-125, GPC8, HI-125J(N) , HA-125F(G), YSIN-125F, HA-125, C130	3 phase	200/208	40	120	150	10 kA, 300 / J
		240	50	130	150	
		480	100	124	150	
		600	100	99	150	
CN-150, SOC-150, HA-150F(G), HI-150J(N), YSIN-150F, C160	3 phase	200/208	50	150	200	10 kA, 350 / K5
		240	75	154	200	
		480	125	156	200	
		600	125	125	200	
CN-180, SOC-180, HA-180F(G), HI-180J(N), YSIN-180F, C200SOC-180(R) , H(C)A-180F(G), H(I)C-180J(N), YSIN-180F, C200(R),	3 phase	200/208	60	177	240	10 kA, 350 / K5
		240	75	192	240	
		480	150	180	240	
		600	150	144	240	
CN-220, SOC-220, HA-220F(G), HI-220J(N), YSIN-220F, J7Y-220, C250	3 phase	200/208	75	221	260	18 kA, 600 / J
		240	100	248	260	
		480	200	240	260	
		600	200	192	260	
CN-300, SOC-300, HA-300F(G), HI-300J(N), YSIN-300F, J7Y-300, C320	3 phase	200/208	100	285	350	18 kA, 600 / J
		240	125	312	350	
		480	250	302	350	
		600	250	242	350	





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**Date Issued:** December 16, 2006

Coil Rating: 24 V through 600 V AC (CN-5(K)/CN-6(K)/9/22/50/80/100/125/150/180/220/300 are listed below as being representative of the Listing)

Series	Coil Ratings
CN-5/6/9/50/80/100/125/150/180/220/300	12 V to 600 V AC, 60 Hz,
CN-22	24 V to 575 V AC, 60 Hz
CN-5(K)/6(K)	24 V to 220 V DC

Integral Auxiliary Contacts: Normally open and normally closed  
(CN-5(K)/CN-6(K)/9/22/50/80/100/125/150/180/220/300 are listed below as being representative of the Listing).

Series	Auxiliary Contact
CN-5(K)/6(K)/9/50/80/100/125/150/180/220/300	A600, Q300
CN-22(4P)	A600, Q300, Pilot duty

Additionally Mounted Auxiliary Contacts:

The above contactors may be provided with the Submitter's CSA Certified Auxiliary Contact Block as below:  
(CN-5, CN-6 / CN-9 through CN-80 / CN-9 through CN-35 / CN-100 through CN-300 are listed below as being representative of the Listing).

Series	Auxiliary Contact Block, Model
CN-5, CN-6	CNA-2M, CNA-4M
CN-9 through CN-80	CNA-1, CNA-2, CNA-4
CN-9 through CN-35	CNA-111S
CN-100 through CN-300	CNA-111B(C)



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**PART B: Reversing Magnetic Contactor**

These devices combine two Submitter's Certified contactors with dovetail joints Mechanical Interlock. The contactors may also provide with CSA Certified Auxiliary Contact Block as listed below.

Series	Contactors Series	Mechanical Interlock, Model	Auxiliary Contact Block, Model
CNL-5(K), SOC-5(R)/(D), GPC0	CN-5(K)	CNI-6	CNA-2M, CNA-4M
CNL-6(K), SOC-6(D), HCA-5F(G2), HC-5J(G2), C06D(R), S06R, SL-6	CN-6(K)	CNI-6	CNA-2M, CNA-4M
CNL-9, SOC-9R, C09R, CUL-9	CN-9	CI-18, CNI-18	CNA-111S, CNA-2, CNA-4
CNL-11 SOC-12R, GPC1, C12R, S11R, SL-11, CUL-11	CN-11	CI-18, CNI-18	CNA-111S, CNA-2, CNA-4
CNL-16, SOC-18R, GPC2, C16R, S16R, CUL-16	CN-16	CI-18, CNI-18	CNA-111S CNA-2, CNA-4
CNL-18, SOC-22R, GPC3, C23R, S18R, SL-18, CUL-18	CN-18	CI-18, CNI-18	CNA-111S, CNA-2, CNA-4
CNL-18 (4P), SOC-22R(4P), C23R(4P), S18R (4P), SL-18(4P), SL-18(4P), CUL-18(4P)	CN-18	CI-18, CNI-18	CNA-111S, CNA-2, CNA-4
CNL-22, SOC-25R, C28R, S22R, SL-22, CUL-22	CN-22	CI-18, CNI-18	CNA-111S, CNA-2, CNA-4
CNL-22 (4P), SOC-25R(4P), C28R(4P), S22R(4P), SL-22(4P), CUL-22 (4P)	CN-22	CI-18, CNI-18	CNA-111S, CNA-2, CNA-4
CNL-25 SOC-32R, GPC4, C32R, S25R, SL-25, CUL-25	CN-25	CI-35	CNA-111S, CNA-2, CNA-4
CNL-35, SOC-40R, GPC5, C40R, S35R, SL-35, CUL-40	CN-35	CI-35	CNA-111S, CNA-2, CNA-4
CNL-50, SOC-50R, C50R, CUL-50	CN-50	CI-35	CNA-2, CNA-4
CNL-65, SOC-65R, C65R, CUL-65	CN-65	CI-35	CNA-2, CNA-4
CNL-80, SOC-85R, C80R, CUL-80	CN-80	CI-35	CNA-2, CNA-4
CNL-100, SOC-100R, HC-80J(N), HC-100J(N), HCA-80F(G), HCA-100F(G), C95R, C105R	CN100	CNI-100	CNA-111B(C)

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CNL-125, SOC-125R, HC-125J(G), HCA-125F(G), C-130R	CN-125	CNI-100	CNA-111B(C)
CNL-150, SOC-150R, HCA-150F(G), HC-150J(N), C160R	CN-150	CNI-100	CNA-111B(C)
CNL-180, SOC-180R, HCA-180F(G), HC-180J, C200R	CN-180	CNI-100	CNA-111B(C)
CNL-220, SOC-220R, HCA-220F(G), HC-220J(N), C250R	CN-220	CNI-100	CNA-111B(C)
CNL-300, SOC-300R, HCA-300F(G), HC-300J(N), C320R	CN-300	CNI-100	CNA-111B(C)

Note:

1. Certified only for use in complete assemblies where the suitability of the combination is subject to further investigation.
2. The type designation may be completed with suffixes indicating frame size, coil ratings, contact arrangement, etc.
3. Short circuit testing of these devices has been performed together with Submitter's Thermal Overload Relay.

**APPLICABLE REQUIREMENTS**

- CAN/CSA-C22.2 No. 0-M91 - General Requirements - Canadian Electrical Code, PART II
- CAN/CSA-C22.2 No. 14 - Industrial Control Equipment
- CSA STD C22.2 No. 65 - 93 - Wire Connectors
- UL Std No. 508, 17<sup>th</sup> Ed. - Industrial Control Equipment



# Certificate of Compliance

Certificate: 1018512

Master Contract: 180115 (LR 84927)

Project: 1853819

Date Issued: December 16, 2006

Issued to: TECO Electric & Machinery Co., Ltd.  
2F, No. 22, Sec. 1, Chung Shan Rd.,  
Sin-Chuang City  
Taipei County, 242  
Taiwan

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US'*



Authorized by:  Fred Mark, P. Eng.,  
Area Director, Asia

## PRODUCTS

CLASS 3211 04 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Magnetic  
CLASS 3211 84 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Magnetic - CERTIFIED TO  
U.S. STANDARDS

Ac contactors, open type Types CN16, CNL16, CU-16, CN11, CU-11 and CNL11, 3 or 4-Pole, or -Pole with auxiliary contact, rated: general purpose, 600V, 24A; across-the-line motor starting, 600V ac max, 10 hp max; coil 480V ac max; Auxiliary contacts rated A600, P600.

## Notes:

1. The equipment is Certified as an open type device to be used in other equipment where the suitability of the combination is determined by CSA.
2. The equipment is Certified within the following ratings:
  - a) Coil 24V min, 480V ac max;
  - b) Auxiliary contact 1NO or 1NC, A600; P600; or same as main contacts.



**Certificate of Compliance**

Certificate: 1018512

Master Contract: 180115 (LR 84927)

Project: 1853819

Date Issued: December 16, 2006

c) Main contacts:

Type	60Hz, 3 ph	Across-the-Line Motor Starting 60Hz			
		1 ph		3 ph	
		115V	230V	208V	230V 460V 600V
CN11, CU11	600V, 24A	0.5 hp	2 hp	3 hp	3 hp 7.5 hp 10 hp
CNL11	600V, 24A	0.5 hp	2 hp	3 hp	3 hp 7.5 hp 10 hp
CN16, CU16	600V, 24A	1 hp	3 hp	5 hp	5 hp 10 hp 10 hp
CNL16	600V, 24A	1 hp	3 hp	5 hp	5 hp 10 hp 10 hp
or CN11 CU11	600V, 24A	0.5hp	2 hp	2 NO contacts and 2NC contacts	
CN16 CU16	600V, 24A	1 hp	3 hp	2 NO contacts and 2NC contacts	

**APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No.	14-95	-	Industrial Control Equipment
UL Std No. (16 th Ed.)	508	-	Industrial Control Equipment





CSA INTERNATIONAL

附件 - FFTN-07017  
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### Supplement to Certificate of Compliance

Certificate: 1018512

Master Contract: 180115 (LR 84927)

*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
1853819	December 16, 2006	Include Models CU11 and CU16.
1018512	May 9, 2000	Cover Addition of Alternate Plastic Materials for Type CN 11/16 Contactors.(Supersedes Report LR 84927-1)
LR 84927-20	September 17, 1999	Cover Alternate Construction for CN 11/16 Series Contactors.
LR 84927-16	June 17, 1996	Cover Modified Construction for Type CN-11 and CN-16 ac Contactors.
LR 84927-15	March 29, 1994	Extend Ratings of Auxiliary Contacts.
LR 84927-14	March 16, 1993	Omit Factory Test and to include Alternate Bobbin Plastic, Surface Tape, Base Plastic and Stationary Contact Arm Material.
LR 84927-4	November 22, 1989	Update of Report LR 84927-1.
LR 84927-1	March 16, 1993	Original Certification.(Superseded and Reissued as Report 1018512)



附件 - EFTN-07017  
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# Certificate of Compliance

Certificate: 1853818

Master Contract: 180115 (LR 84927)

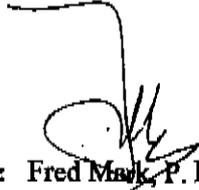
Project: 1853818

Date Issued: December 16, 2006

Issued to: **TECO Electric & Machinery Co., Ltd.**  
 2F, No. 22, Sec. 1, Chung Shan Rd.,  
 Sin-Chuang City  
 Taipei County, 242  
 Taiwan

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



  
 Authorized by: Fred Mark, P. Eng.,  
 Area Director, Asia

**PRODUCTS**

3211 04 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Magnetic

Contactors Types CN-18, CU-18, CN-25, CU-25, CN-35 and CU-40 and reversing contactors Types CNL-18, CNL-25 and CNL-35 for across-the-line motor starting with max rated horsepowers as follows:

	115V 1 ph	230V 1 ph	208V 3 ph	230V 3 ph	460V 3 ph	575V 3 ph
CN-18, CU-18, CNL-18	2	3	7.5	7.5	15	20
CN-25, CU-25, CNL-25	2	5	10	10	20	30
CN-35, CU-40, CNL-35	3	7.5	15	15	30	40

**APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No. 14-95 - Industrial Control Equipment





附件 - FFN-07019  
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### Supplement to Certificate of Compliance

Certificate: 1853818

Master Contract: 180115 (LR 84927)

*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
1853818	December 16, 2006	Include Contactors Types CU-18, CU-25, CU-40. Contactors Types CN-18, CU-18, CU-25, CN-35, CU-40 AND reversing Contactor Types CNL-18, CNL-25 and CNL-35(Supersedes Report LR 84927-3)
LR 84927-18	April 28, 1998	Cover Alternate Construction for Type CN18-22 ac Contactors.
LR 84927-14	March 16, 1993	Include Editorial Changes and Alternative Material for Contact Base.
LR 84927-10	January 29, 1992	Include Editorial Changes.
LR 84927-3	February 2, 1990	Original Certification.(Superseded and Reissued as Report 1853818)





## CERTIFICATION RECORD

The company named below has been authorized by CSA International to represent the products listed in this record as "CSA Certified" and to affix the CSA Mark to these products according to the terms and conditions of the CSA Service Agreement and applicable CSA program requirements (including additional Markings).

File No: 084927\_0\_000

Class No: 3211 04 INDUSTRIAL CONTROL EQUIPMENT Motor Controllers - Magnetic

### SUBMITTOR

4559432 TECO Electric & Machinery Co., Ltd.  
2F, No. 22, Sec. 1  
Chung Shan Rd  
Sin-Chuang City  
Taipei County, 242  
Taiwan

### FACTORIES

4551031 TECO Electric & Machinery Co., Ltd.  
No. 15 Chung Hwa Rd  
Hsin Chu Industrial Area  
Hu Kou  
Hsin Chu Hsien,  
Taiwan

4655292 Taian (Subic) Electric, Inc.  
Subic Bay Industrial Park  
Argonaut Hwy Corner Brave Heart St  
Subic Bay  
Freeport Zone,  
Philippines

4709216 Taian Technology (Wuxi) Co., Ltd.  
Wuxi State High & New Tech.  
Ind. Development Zone (Block65, C), Jiangsu  
China

August 14, 2007(Replaces: December 16, 2006)

- Contactors, open type Types CN16, CU-16, CNL16, CN11, CU-11 and CNL11, 3 or 4-pole and 3-pole with auxiliary contact rated: general purpose, 600V, 24A; across-the-line motor starting, 600V ac max, 10 hp max; coil 480V ac max; auxiliary contacts rated A600, P600.

- Contactors types CN-18, CU-18, CN-25, CU-25, CN-35 and CU-40 and Reversing Contactors Types CNL-18, CN-L-25 and CNL-35 for Across-the-Line motor starting with maximum rated horsepowers as follows:

	115V	230V	208V	230V	460V	575V
	1 ph	1 ph	3 ph	3 ph	3 ph	3 ph
CN-18,						
CNL-18	2	3	7.5	7.5	15	20
CN-25,						
CNL-25	2	5	10	10	20	30
CN-35,						
CNL-35	3	7.5	15	15	30	40
1 Ph	1 Ph	1 Ph	3 Ph	3 Ph	3 Ph	3 Ph
Hp	FLA	V	Hp	FLA	V	V
5	56	115-120	20	60	208	
10	50	230-240	20	54	230-240	
			40	52	460-480	
			50	52	575-600	

Note: Certified as open type devices to be used only in other equipment where the suitability of the combination is determined by CSA International.

- Across-the-line AC motor starting Magnetic Contactors, main contacts 600 V max, 60 Hz, with integral auxiliary contacts, detail electrical ratings are as listed below.

Series No.	Phase	Volts	Ratings		General Purpose Amps
			HP	FLA	
CN-5(K), SOC-5(D), GPC0, HM07	3 phase	200/208	2	7.5	20
		240	2	6.8	20
		480	3	4.8	20
		600	3	3.9	20
CN-6(K), SOC-6(D), HA-5F(G2), HI-5J(G2), YS1N-5F(G2), YS3N-5F(G2), J7KN-06(D), C06(D), S06, HM09	3 phase	200/208	3	11	20
		240	3	9.6	20
		480	5	7.6	20
		600	5	6.1	20
CN-9, SOC-9, C09, CU9	Single Phase	120	0.75	13.8	24
		230	2	12	24
	3 phase	200/208	3	12	24
		240	3	9.6	24
		480	5	7.6	24
CN-22(4P), SOC-25(4P),	Single	600	7.5	9	24
		120	2.5	28.3	35

C28(4P), S22(4P). CU-22(4P)	Phase	230	5	28	35
	3 phase	200/208	7.5	26	40
		240	10	28	40
		480	20	27	40
		600	20	22	40
CN-50, SOC-50, C50, CU-50	Single Phase	120	5	56	72
	3 phase	230	10	50	72
		200/208	15	49	72
		240	20	54	72
		480	40	52	72
CN-80, SOC-85, C80, CU-80	Single Phase	120	7.5	80	104
	3 phase	230	15	68	104
		200/208	25	79	104
		240	30	80	104
		480	60	77	104
CN-100, SOC-100, HI-80J(N), HI-100J(N), HA-80F(G), HA-100F(G), YS1N-80F(G), YS1N-100F(G), C95, C105	Single Phase	120	10	100	130
	3 phase	230	15	68	130
		200/208	30	92	130
		240	40	104	130
		480	75	96	130
CN-125, SOC-125, GPC8, HI-125J(N), HA-125F(G), YS1N-125F, HA-125, C130	3 phase	200/208	40	120	150
		240	50	130	150
		480	100	124	150
		600	100	99	150
	3 phase	200/208	50	150	200
CN-150, SOC-150, HA-150F(G), HI-150J(N), YS1N-150F, C160	3 phase	240	75	154	200
		480	125	156	200
		600	125	125	200
		200/208	60	177	240
	CN-180, SOC-180, HA-180F(G) HI-180J(N), YS1N-180F, C200	3 phase	240	75	192
480			150	180	240
600			150	144	240
3 phase		200/208	75	221	260
CN-220, SOC-220, HA-220F(G), HI-220J(N), YSIN-220F, J7Y-220, C250	3 phase	240	100	248	260
		480	200	240	260
		600	200	192	260
	3 phase	200/208	100	285	350
CN-300, SOC-300, HA-300F(G), HI-300J(N), YSIN-300F, J7Y-300, C320	3 phase	240	125	312	350

480	250	302	350
600	250	242	350

Coil Rating: 24 V through 600 V ac or dc

Auxiliary Contacts: Normally open and normally closed, A600, Q300, or Pilot duty.

- Reversing Magnetic Contactor:

Series	Contactor Series	Mechanical Interlock Model	Auxiliary Contact Block Model
CNL-5(K) SOC-5(R)(/D), GPC0	CN-5(K)	CNI-6	CNA-2M, CNA-4M
CNL-6(K), SOC-6(/D), HCA-5F(G2), HC-5J(G2), C06D(R), S06R, SL-6	CN-6(K)	CNI-6	CNA-2M, CNA-4M
CN-9, SOC-9R, C09R, CUL-9	CN-9	CI-18, CNI-18	CNA-111S, CNA-2, CNA-4
CNL-11, SOC-12R, GPC1, C12R, S11R, SL-1, CUL-11	CN-11	CI-18, CNI-18	CNA-111S, CNA-2, CNA-4
CNL-16, SOC-18R, GPC2, C16R, S16R, CUL-16	CN-16	CI-18, CNI-18	CNA-111S, CNA-2, CNA-4
CNL-18, SOC-22R, GPC3, C23R, S18R, SL-18, CUL-18	CN-18	CI-18, CNI-18	CNA-111S, CNA-2, CNA-4
CNL-18 (4P), SOC-22R(4P), C23R(4P), S18R (4P), SL-18(4P), SL-18(4P), CUL-18 (4P)	CN-18	CI-18, CNI-18	CNA-111S, CNA-2, CNA-4
CNL-22, SOC-25R, C28R, S22R, SL-22, CUL-22	CN-22	CI-18, CNI-18	CNA-111S, CNA-2, CNA-4
CNL-22 (4P), SOC-25R(4P), C28R(4P), S22R(4P), SL-22(4P), CUL-22(4P)	CN-22	CI-18, CNI-18	CNA-111S, CNA-2, CNA-4
CNL-25, SOC-32R, GPC4, C32R, S25R, SL-25, CUL-25	CN-25	CI-35	CNA-111S, CNA-2, CNA-4
CNL-35, SOC-40R, GPC5, C40R, S35R, SL-35, CUL-40	CN-35	CI-35	CNA-111S, CNA-2, CNA-4
CNL-50, SOC-50R, C50R, CUL-50	CN-50	CI-35	CNA-2, CNA-4
CNL-65, SOC-65R, C65R, CUL-65	CN-65	CI-35	CNA-2, CNA-4
CNL-80, SOC-85R, C80R, CUL-80	CN-80	CI-35	CNA-2, CNA-4
CNL-100, SOC-100R,	CN100	CNI-100	CNA-111B(C)

HC-80J(N), HC-100J(N), HCA-80F(G), HCA-100F(G), C95R, C105R			
CNL-125, SOC-125R, HC-125J(G), HCA-125F(G), C-130R	CN-125	CNI-100	CNA-111B(C)
CNL-150, SOC-150R, HCA-150F(G), HC-150J(N), C160R	CN-150	CNI-100	CNA-111B(C)
CNL-180, SOC-180R, HCA-180F(G), HC-180J, C200R	CN-180	CNI-100	CNA-111B(C)
CNL-220, SOC-220R, HCA-220F(G), HC-220J(N), C250R	CN-220	CNI-100	CNA-111B(C)
CNL-300, SOC-300R, HCA-300F(G), HC-300J(N), C320R	CN-300	CNI-100	CNA-111B(C)

Notes:

1. Certified only for use in complete assemblies where the suitability of the combination is subject to further investigation.
  2. The above contactors may be additionally provided with Submittor's Certified Auxiliary Contact Block.
  3. Short circuit testing of these devices has been performed together with Submittor's Thermal Overload Relay.
  4. The type designation may be completed with suffixes indicating frame, size, coil ratings, contact arrangement, etc.
- Definite purpose non-reversing contactors intended for use in air conditioning equipment, Models DPA, followed by -1020, -1025, -1030, -1040, -1520, -1525, -1530, -1540, -2020, -2025, -2030, -2040, followed by L, ratings are as below.

Rating/Model No	DPA-1020(L) DPA-1520(L) DPA-2020(L)	DPA-1025(L) DPA-2525(L) DPA-2025(L)	DPA-1030(L) DPA-1530(L) DPA-2030(L)	DPA-1040(L) DPA-1540(L) DPA-2040(L)
Resistive	277 V ac, 30 A	277 V ac, 35 A	277 V ac, 40 A	227 V ac, 50 A
Across the line Motor Starting	277 V ac, 5 HP	277 V ac, 5 HP	277 V ac, 5 HP	227 V ac, 7.5 HP
Air Voltage	240 V/277 V ac	240 V/277 V ac	240 V/277 V ac	240 V/277 V

Conditioning						ac
	FLA/LRA	30/180 A	30/180 A	30/180 A		40/240 A

Coil Rating: 24, 110/120, 208/220/240, 277 V ac; 50/60 Hz.

Notes:

1. Certified for use in other equipment where the acceptability of the combination is to be determined by CSA International.
2. Short circuit testing of these devices has not been performed. Consideration should be given to determine if this test is necessary in the end-use application.
3. The terminals are to be factory wired only and the suitability of the connections including spacings between factory connections should be determined in the end-use application.

- Across-the-line, AC magnetic contactors, non-reversing type, Models DPA, followed by -3020, -3025, -03030, -3040, ratings are as below, and may be provided with auxiliary contact rated C300.

Application	Voltage, V ac	Model / Phase / Ratings							
		DPA-3020(L)		DPA-3025(L)		DPA-3030(L)		DPA-3040(L)	
		1 phase	3 phase	1 phase	3 phase	1 phase	3 phase	1 phase	3 phase
Across-the-line	110-120	1.5 hp	-	2 hp	-	2 hp	-	3 hp	-
	220-240, 277	3 hp	-	5 hp	-	5hp	-	7.5 hp	-
Motor Starting	440-480	5 hp	-	5 hp	-	7.5 hp	-	15 hp	-
	220-240, 277	-	7.5 hp	-	10 hp	-	10 hp	-	10 hp
	440-480	-	7.5 hp	-	15 hp	-	15 hp	-	20 hp
	550-600	-	7.5 hp	-	20 hp	-	20 hp	-	25 hp
Resistive	600	30 A	30 A	35 A	35 A	40 A	40 A	50 A	50 A
Refrigeration Control	277	30 FLA / 180 LRA		30 FLA / 180 LRA		30 FLA / 180 LRA		40 FLA / 240 LRA	
	480	30 FLA / 150 LRA		30 FLA / 150 LRA		30 FLA / 150 LRA		40 FLA / 200 LRA	
	600	30 FLA / 120 LRA		30 FLA / 120 LRA		30 FLA / 120 LRA		40 FLA / 160 LRA	

- Across-the-line, AC magnetic contactors, reversing type, Models DPAL, followed by -30-20, -3025, -3030, -3040, ratings are as below, and may be provided with auxiliary contact rating C300.

Model / Application

Rating	DPAL-3020(L)		DPAL-3025(L)		DPAL-3030(L)		DPAL-3040(L)	
	1 phase	3 phase						
Voltage, V ac								
220-240, 277	-	7.5	-	10	-	10	-	10
440-480	-	7.5	-	15	-	15-	-	20
550-600	-	7.5	-	20	-	20	-	25

Coil Rating: 24 V, 110, 120, 220, 277, 380, 440 and 550 V ac, 50/60 Hz.

Contacts: C300, Normally open and normally closed.

Notes:

1. Certified for use in other equipment where the acceptability of the combination is to be determined by CSA International.
  2. The terminals are to e factory wired only and the suitability of the connections including spacings between factory connections should be determined in the end-use application.
  3. These contactors are provided with optional auxiliary contact, rated C300 only. If the coil voltage exceed 240 V, these contacts may not be suitable for that application.
  4. These contactors were not evaluated for use with automatic reset device in refrigeration control circuit.
- Across-the-line AC motor starting Magnetic Contactors, main contacts 600 V max, 60 Hz, with integral auxiliary contacts:

Series No.	Phase	Volts	Ratiings		Main Contact max. continuous Ratings (Amps) - General Use
			HP	Fla	
CU-27	Single phase	110-120	2	24	45
		220-240	5	28	
		200	7.5	25.3	
	Three phase	220-240	10	28	
		440-480	20	27	
		550-600	20	22	
	Single phase	110-120	3	34	
		220-240	5	28	

		200	10	32.2	
CU-32	Three phase	220-240	15	42	50
		440-480	25	34	
		550-600	30	32	
	Single phase	110-120	3	34	
		220-240	7.5	40	
CU-38	Three phase	200	10	32.2	55
		220-240	15	42	
		440-480	30	40	
		550-600	30	32	

Coil Rating: 24 V through 600 V AC

Series	Coil Ratings
CU-27	24 V to 600 V AC, 60 Hz
CU-32	24 V to 600 V AC, 60 Hz
CU-38	24 V to 600 V AC, 60 Hz

Note:

1. Certified only for use in complete assemblies where the suitability of the combination is subject to further investigation.
2. Short circuit testing of these devices has not been performed. As these devices are rated in excess of 1 HP, short circuit testing at 5000 Amps 75-80% power factor is required for CSA certification when used as motor starter. If these devices are used in applications where the motor load exceeds 1 HP, end-product short circuit testing shall be performed.

# Certificate of Compliance

Certificate: 1511570

Master Contract: 180115 (LR 84927)

Project: 1835466

Date Issued: December 16, 2006

Issued to: **TECO Electric & Machinery Co., Ltd.**  
 3F, No. 49, Wu Kong 6 Rd.,  
 Wu-Ku Industrial Park,  
 Taipei County 248  
 Taiwan

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US'*



  
 Authorized by: **Fred Mar, P. Eng.,**  
 Area Director, Asia

**PRODUCTS**

Class 3211 03 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Auxiliary Devices  
 Class 3211 83 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Auxiliary Devices - Certified to U.S. Standard

Industry Control Relay, open type, coil and contact ratings are as below:

PART A: Series RAN-4, SMR-4, RN09, and RAU-4

PART B: RAM-4(K), SMR-4M(/S), RAM-4F(G), J7KN-RA(-), RM06(D).

Coil Rating: 24 V through 600 V AC

Series	Coil Ratings
RAN-4, SMR-4, RN09, RAU-4	12 V to 600 V AC, 60 Hz
RAM-4(K), SMR-4M(/S), RAM-4F(G), J7KN-RA(-), RM06(D)	24 V to 575 V AC, 60 Hz



原封付 - FF(N-0)017

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CSA INTERNATIONAL

**Certificate of Compliance**

**Certificate:** 1511570

**Master Contract:** 180115 (LR 84927)

**Project:** 1835466

**Date Issued:** December 16, 2006

Contacts: Normally open and normally closed

Series	Auxiliary Contact
RAN-4, SMR-4, RN09, RAU-4	A600, Q300
RAM-4(K), SMR-4M(/S), RAM-4F(G), J7KN-RA(-), RM06(D)	A600, Q300

Notes:

1. The above industry control relays are to be used with other equipments where the suitability of the combination is to be determined by CSA International.
2. The type designation may be completed with suffixes indicating contact arrangement, coil rating, etc.

**APPLICABLE REQUIREMENTS**

- CAN/CSA-C22.2 No. 0-M91 - General Requirements - Canadian Electrical Code, PART II
- CAN/CSA-C22.2 No. 14 - Industrial Control Equipment
- CSA STD C22.2 No. 65 - 93 - Wire Connectors
- UL Std No. 508, 17<sup>th</sup> Ed. - Industrial Control Equipment





附件- PPTN-0701

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## Supplement to Certificate of Compliance

Certificate: 1511570

Master Contract: 180115 (LR 84927)

*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
1835466	December 16, 2006	Include Alternative model RAU-4.
1511570	November 5, 2004	Original Certification.





# Certificate of Compliance

Certificate: 1511568

Master Contract: 180115 (LR 84927)

Project: 1835467

Date Issued: December 16, 2006

Issued to: **TECO Electric & Machinery Co., Ltd.**  
3F, No. 49, Wu Kong 6 Rd.,  
Wu-Ku Industrial Park,  
Taipei County 248  
Taiwan

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US'*



Authorized by: Fred Mack, P. Eng.,  
Area Director, Asia

### PRODUCTS

Class 3211 03 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Auxiliary Devices  
Class 3211 83 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Auxiliary Devices - Certified to U.S. Standard

### PART A:

RHN-5, SOR-6, GPOLM, RH6, RHS6, BR-7, C312BN, and RHU-5  
RHN-10, SOR-22, GPOLN, RH20, RHS20, BR-16, BR-30, JA12 and RHU-10.

Thermal Overload Relay, are either ambient-compensated or non-ambient compensated, with two or three adjustable heater elements, open-type, adjustable, with reset knobs, three phases or single phase, main contacts rated 600 V ac, 60 Hz, with short circuit rating of 5000 A, 600 V, auxiliary contacts rated A600 for normally open contacts, B600, Q300 for normally closed contacts. Current ratings are tabulated as below.



附件一: FRN: 01011

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GSA INTERNATIONAL

**Certificate of Compliance**

**Certificate:** 1511568

**Master Contract:** 180115 (LR 84927)

**Project:** 1835467

**Date Issued:** December 16, 2006

Models RHN-80(L), SOR-85(L), GPOLN, RH80(L), RHS80(L), RHU-80	Current Range	Short Circuit
25	17-25 A	5 kA, 60 A, Class J
32	23-32 A	5 kA, 70 A, Class J
40	30-40 A	5 kA, 90 A, Class J
50	37-50 A	5 kA, 125 A, Class J
65	48-65 A	10 kA, 150 A, Class J
80	63-80 A	10 kA, 175 A, Class J
97	77-97 A	10 kA, 225 A, Class J

For use with Submitter's Certified contactor, Models CN-18 / 22 / 25 / 35 / 50 / 65 / 80 or CNL-18 / 22 / 25 / 35 / 50 / 65 / 80.

**PART C:**

RHN-180(L), SOR-180(L), GPOLN, RHA-125F, RHA-150F, RHA-180F, RH-125J, RH-150J, RH-180J, RH180(L), RHS180(L).

Thermal Overload Relay, are either ambient-compensated or non-ambient compensated, with two or three adjustable heater elements, open-type, adjustable, with reset knobs, three phases or single phase, main contacts rated 600 V ac, 60 Hz, auxiliary contacts rated A600, Q300. Current rating and short circuit rating are tabulated as below.

Models RHN-180(L), SOR-180(L), GPOLN, RHA-125F, RHA-150F, RHA-180F, RH125J, RH-150J, RH-180J, RH180(L), RHS180(L).	Current Range	Short Circuit
95	65-95 A	10 kA, 225 A, Class J
125	85-125 A	10 kA, 300 A, Class J
160	110-160 A	10 kA, 350 A, Class J
185	125-185 A	10 kA, 400 A, Class J

For use with Submitter's Certified contactor, Models CN-100 / 125 / 150 / 180 / 220 / 300 or CNL-100 / 125 / 150 / 180 / 220 / 300.

**Note:**

1. Certified only for use in complete assemblies where the suitability of the combination is subject to further investigation.
2. The type designation may be completed with suffixes indicating frame size, contact arrangement, coil ratings, etc.





CSA INTERNATIONAL

**Certificate of Compliance**

**Certificate:** 1511568

**Master Contract:** 180115 (LR 84927)

**Project:** 1835467

**Date Issued:** December 16, 2006

Models RHN- 5, SOR-6, GPOLM, RH6, RHS6, BR-7, C312BN, RHU-5	Models RHN-10, SOR-22, GPOLN, RH20, RHS20, BR-16, BR-30, JA12, RHU-10	Current Range (A)
-0.45		0.3 - 0.45
-0.67		0.45 - 0.67
-1		0.67 - 1
-1.5		1.0 - 1.5
-2.1		1.4 - 2.1
-2.7		1.8 - 2.7
-3.6		2.4 - 3.6
-5		3.5 - 5
-6		4 - 6
-8.5		5.5 - 8.5
-12.5		8.5 - 12.5
-	-18	12.5 - 18
-	-24	17 - 24
-	-30	22 - 30

Type RHN-5, are to be used with Submitter's Certified contactor, Models CN-5(K) / -6(K) or CNL-5(K) / -6(K).  
 Type RHN-10, are to be used with Submitter's Certified contactor, Models CN-9 / -11 / -16 / -18 / -22 or CNL-9 / -11 / -16 / -18 / -22.

**PART B:**

RHN-80(L), SOR-85(L), GPOLN, RH80(L), RHS80(L), and RHU-80

Thermal Overload Relay, are either ambient-compensated or non-ambient compensated, with two or three adjustable heater elements, open-type, adjustable, with reset knobs, three phases or single phase, main contacts rated 600 V ac, 60 Hz, auxiliary contacts rated A600, Q300. Current rating and short circuit rating are tabulated as below.





CSA INTERNATIONAL

附件 - FFIN-07017

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# Certificate of Compliance

Certificate: 1511572

Master Contract: 180115 (LR 84927)

Project: 1835465

Date Issued: December 16, 2006

Issued to: **TECO Electric & Machinery Co., Ltd.**  
3F, No. 49, Wu Kong 6 Rd.,  
Wu-Ku Industrial Park,  
Taipei County 248  
Taiwan

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US'*



Authorized by: **Fred Mark, P. Eng.,**  
Area Director, Asia

## PRODUCTS

Class 3211 03 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Auxiliary Devices  
Class 3211 83 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Auxiliary Devices - Certified to U.S. Standard

Auxiliary Contact Blocks, Rated A600, Q300 with NC and NO contacts

### PART A:

Series CNA-2, SU-2, GPAC2, CA-2, CUA-2;  
Series CNA-4, SU-4, GPAC4, CA-4, CUA-4;  
Series CNA-2M, SU-2M, GPACM, TAHM-2F, J73N-RA-2, CA-2M, IRM;  
Series CNA-4M, SU-4M, GPACM, TAHM-4F, J73N-RA-4, CA-4M, IRM

### PART B:

Series CNA-111S, SU-9;  
Series CNA-1, SU-1, GPSS1, SS-1, SS-1M

### PART C:

Series CNA-111B(C), SU-100, TAS-211(F)(J)L, CA-11BC



附件 - EFTN-07017

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CSA INTERNATIONAL

**Certificate of Compliance**

**Certificate:** 1511572

**Master Contract:** 180115 (LR 84927)

**Project:** 1835465

**Date Issued:** December 16, 2006

**PART D:**

Series CNI-18, SR-9N

**Notes:**

1. The above auxiliary contacts are to be used with client's Certified industry control equipments where the suitability of the combination is to be determined by CSA International.
2. The type designation may be completed with suffixes indicating frame size, mounting, contact arrangement, etc.

**APPLICABLE REQUIREMENTS**

- CAN/CSA-C22.2 No. 0-M91 - General Requirements - Canadian Electrical Code, PART II
- CAN/CSA-C22.2 No. 14 - Industrial Control Equipment
- CSA Std C22.2 No. 65-93 - Wire Connectors
- UL Standard No. 508, 17<sup>th</sup> Ed. - Industrial Control Equipment



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### Supplement to Certificate of Compliance

Certificate: 1511572

Master Contract: 180115 (LR 84927)

*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
1835465	December 16, 2006	Include Models CUA-2, CUA-4
1511572	October 18, 2004	Original Certification.



# Certificate of Compliance

Certificate: 1511571

Master Contract: 180115 (LR 84927)

Project: 1511571

Date Issued: November 5, 2004

Issued to: **TECO Electric & Machinery Co., Ltd.**  
3F, No. 49, Wu Kong 6 Rd.,  
Wu-Ku Industrial Park,  
Taipei County 248, Taiwan

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US'*



Authorized by:   
Fred Mark  
Director, Far East Operation

### PRODUCTS

Class 3211 03 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Auxiliary Devices  
Class 3211 83 - INDUSTRIAL CONTROL EQUIPMENT - Motor Controllers - Auxiliary Devices - Certified to U.S. Standard

Coil Drive, Series CNE-1, SE-1, TCE-, CD-1, CD-2, rated 24-26 V ac, 50-55 V ac, 100-120 V ac, or 200-240 V ac (50/60 Hz); 22-24 V dc, 45-50 V dc, 100-110 V dc, 200-220 V dc, 300 V dc.

### Notes:

1. The above coil drives are to be used with Submitter's Certified contactors, Models CN-5 through CN-300 where the suitability of the combination is to be determined by CSA International.
2. The type designation may be completed with suffixes indicating operating voltage, coil type, etc.

### APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 0-M91 - General Requirements - Canadian Electrical Code, PART II  
CAN/CSA-C22.2 No. 14 - Industrial Control Equipment  
CSA Std C22.2 No. 65 - 93 - Wire Connectors  
UL Std No. 508, 17<sup>th</sup> Ed. - Industrial Control Equipment

The 'C' and 'US' indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards for use in Canada and the U.S., respectively. This 'US' indicator includes products eligible to bear the 'NRTL' indicator. NRTL, i.e. National Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognized to perform certification to U.S. standards.

