



Certificate of Compliance

Certificate: 70021797

Master Contract: 153247

Project: 80223150

Date Issued: 2024-08-28

Issued To: Rotork Controls Inc.
675 Mile Crossing Blvd
Rochester, New York, 14624
United States

Attention: Anastassiya Fixel

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only



Issued by:

Oong Lee

PRODUCTS

CLASS - C225206 - PROCESS CONTROL EQUIPMENT Process Control Equipment

CLASS - C225286 - PROCESS CONTROL EQUIPMENT Certified to US Standards

Model(s)

PART A – CK series and CKc series isolating duty valve actuators

CK series and CKc series isolating duty valve actuators, 3 phase, rated 220, 240, 380, 400, 415, 440, 500 V at 50 Hz, 3 phase, rated 220, 240, 380, 440, 460, 480, 600 V at 60 Hz, 3 phase, with ten actuator speeds for each model
CK30, CK60, CK120, CK250, CK500, CKc30, CKc60, CKc120, CKc250, CKc500 of 9, 12, 18, 24, 36, 48, 72, 96, 144, 192 RPM (at 50 Hz), 11, 14, 21, 29, 43, 57, 86, 115, 173, 230 RPM (at 60 Hz), with a duty cycle of S2-30 min, S4-25% or S4-50% for 3 phase models, maximum external load contacts 150 Vac, 5 A inductive load (cos > 0.8), 0.5 A resistive load; operating ambient temperature range -40 °C to +70 °C.



Certificate: 70021797
Project: 80223150

Master Contract: 153247
Date Issued: 2024-08-28

CK series and CKc series isolating duty valve actuators, 1 phase,
 rated 110, 115, 220, 230, 240 V at 50 Hz, 1 phase,
 rated 110, 115, 220, 230, 240 V at 60 Hz, 1 phase,
 with 8 actuator speeds for each model CK30, CK60, CKc30, CKc60 of
 18, 24, 36, 48, 72, 96, 144, 192 RPM (at 50 Hz),
 21, 29, 43, 57, 86, 115, 173, 230 RPM (at 60 Hz),

rated 110, 115, 220, 230, 240 V at 50 Hz, 1 phase,
 rated 110, 115, 220, 230, 240 V at 60 Hz, 1 phase,
 with 8 actuator speeds for each model CK120, CKc120 of
 18, 24, 36, 48, 72, 96, 144, 192 RPM (at 50 Hz),
 21, 29, 43, 57, 86, 115, 173, 230 RPM (at 60 Hz),

rated 220, 230, 240 V at 50 Hz, 1 phase,
 rated 220, 230, 240 V at 60 Hz, 1 phase,
 with 2 actuator speeds for each model CK120, CKc120 of
 144, 192 RPM (at 50 Hz),
 173, 230 RPM (at 60 Hz),

rated 110, 115, 220, 230, 240 V at 50 Hz, 1 phase,
 rated 110, 115, 220, 230, 240 V at 60 Hz, 1 phase,
 with 4 actuator speeds for each model CK250, CKc250, of
 18, 24, 36, 48 RPM,

with a duty cycle of S2-30 min, S4-25% or S4-50% for 1 phase models,
 maximum external load contacts 150 Vac, 5 A inductive load (cos > 0.8), 0.5 A resistive load;
 operating ambient temperature range -40 °C to +70 °C.

The actuator range consisting of the following model types:

Overview technical data – Isolating CK Standard / CKc – 3 phase

Models	Rated output torque (max.) (lbs.ft.)	Rated output torque (operational) (lbs.ft.)	RPM (at 50 Hz)	RPM (at 60 Hz)**
CK30 and CKc30	22	7	9, 12, 18, 24, 36, 48, 72, 96, 144	11, 14, 21, 29, 43, 57, 86, 115, 173
	18		192	230
CK60 and CKc60	44	15	9, 12, 18, 24, 36, 48, 72, 96, 144	11, 14, 21, 29, 43, 57, 86, 115, 173
	37		192	230



Certificate: 70021797
Project: 80223150

Master Contract: 153247
Date Issued: 2024-08-28

CK120 and CKc120	89	30	9, 12, 18, 24, 36, 48, 72, 96, 144	11, 14, 21, 29, 43, 57, 86, 115, 173
	74		192	230
CK250 and CKc250	184	61	9, 12, 18, 24, 36, 48, 72, 96, 144	11, 14, 21, 29, 43, 57, 86, 115, 173
	148		192	230
CK500 and CKc500	369	123	9, 12, 18, 24, 36, 48, 72, 96, 144	11, 14, 21, 29, 43, 57, 86, 115, 173
	295		192	230

Overview technical data – Isolating CK Standard / CKc – 1 phase

Models	Rated output torque (max.) (lbs.ft.)	Rated output torque (operational) (lbs.ft.)	RPM (at 50 Hz)	RPM (at 60 Hz)**
CK30 and CKc30	22	7	18, 24, 36, 48, 72, 96, 144	21, 29, 43, 57, 86, 115, 173
	18		192	230
CK60 and CKc60	44	15	18, 24, 36, 48, 72, 96, 144	21, 29, 43, 57, 86, 115, 173
	37		192	230
CK120 and CKc120	89	30	18, 24, 36, 48, 72, 96, 144*	21, 29, 43, 57, 86, 115, 173*
	74		192*	230*
CK250 and CKc250	184	61	18, 24, 36, 48	21, 29, 43, 57

Note: * 110 V and 115 V is not available for this actuator size and speed combination.

Notes:

- (1) All models class I, pollution degree 2, overvoltage category II, IP68 protected.
- (2) Mode of operation: Short-term operation.
- (3) Environmental Conditions: 2000 m max.

**60 Hz actuator operating speed will be 120% of 50Hz

Model(s)
PART B – CKr series and CKrc series regulating/modulating duty valve actuators

CKr series and CKrc series regulating/modulating duty valve actuators, rated 220, 240, 380, 400, 415, 440, 500 V at 50 Hz, 3 phase,



Certificate: 70021797
Project: 80223150

Master Contract: 153247
Date Issued: 2024-08-28

rated 220, 240, 380, 440, 460, 480, 600 V at 60 Hz, 3 phase,
 with eight actuator speeds for each model
 CKr30, CKr60, CKr120, CKr250, CKr500, CKrc30, CKrc60, CKrc120, CKrc250, CKrc500 of
 9, 12, 18, 24, 36, 48, 72, 96 RPM,
 with a duty cycle of S2-30 min, S4-25% or S4-50% for 3 phase models,
 maximum external load contacts 150 Vac, 5 A inductive load (cos > 0.8), 0.5 A resistive load;
 operating ambient temperature range -40 °C to +70 °C.

The actuator range consisting of the following model types:

Overview technical data – Regulating/modulating CKr Standard / CKrc

Models	Rated output torque (max.) (lbs.ft.)	Rated output torque (operational) (lbs.ft.)	RPM (at 50 Hz)	RPM (at 60 Hz)**
CKr30 and CKrc30	22	11	9, 12, 18, 24, 36, 48, 72, 96	11, 14, 21, 29, 43, 57, 86, 115
CKr60 and CKrc60	44	22	9, 12, 18, 24, 36, 48, 72, 96	11, 14, 21, 29, 43, 57, 86, 115
CKr120 and CKrc120	89	44	9, 12, 18, 24, 36, 48, 72, 96	11, 14, 21, 29, 43, 57, 86, 115
CKr250 and CKrc250	184	89	9, 12	11, 14
			18, 24	21, 29
			36, 48	43, 57
			72, 96	86, 115
CKr500 and CKrc500	369	148	9, 12	11, 14
			18, 24	21, 29
			36, 48	43, 57
			72, 96	86, 115

Notes:

- (1) All models class I, pollution degree 2, overvoltage category II, IP68 protected.
- (2) Mode of operation: Short-term operation.
- (3) Environmental Conditions: 2000 m max.

**60 Hz actuator operating speed will be 120% of 50Hz

Model(s)
PART C – CKA, CKRA series isolating and modulating duty valve actuators



Certificate: 70021797
Project: 80223150

Master Contract: 153247
Date Issued: 2024-08-28

CK series and CKRA series Isolating duty valve actuators – 3 Phase models

CK series and CKA series isolating duty valve actuators
 Rated 220, 240, 380, 400, 415, 440, 500 V at 50 Hz,
 rated 220, 240, 380, 440, 460, 480, 600 V at 60 Hz
 with a duty cycle of up to S2-30 min (See overview technical data)
 maximum external load contacts 250 Vac, 2 A; Customer Supply 24VDC, 120VAC 5W;
 Optional External load Contacts 24VDC, 2A; 250 Vac 0.5A;
 operating ambient temperature range -40 °C to +70 °C.

CK series and CKRA, series modulating duty valve actuators – 3 Phase models

CK series and CKA series modulating duty valve actuators,
 Rated 220, 240, 380, 400, 415, 440 V at 50 Hz,
 rated 220, 240, 380, 440, 460, 480 V at 60 Hz
 with a duty cycle of up to S2-30 min or S4-25% (See overview technical data)
 maximum external load contacts 250 Vac, 2 A; Customer Supply 24VDC, 120VAC 5W;
 Optional External load Contacts 24VDC, 2A; 250 Vac 0.5A;
 operating ambient temperature range -40 °C to +70 °C.

CK series and CKA, series Isolating duty valve actuators – 1 Phase models

CK series and CKA series isolating duty valve actuators,
 Rated 110, 115, 220, 230, 240 V at 50 Hz, 1 phase,
 rated 110, 115, 220, 230, 240 V at 60 Hz, 1 phase,
 with a duty cycle of up to S2-15 min (See overview technical data)
 maximum external load contacts 250 Vac, 2 A; Customer Supply 24VDC, 120VAC 5W;
 Optional External load Contacts 24VDC, 2A; 250 Vac 0.5A;
 operating ambient temperature range -40 °C to +70 °C.

Overview technical data – Isolating CK Standard / CKA – 3 phase

Models	Rated output torque (max.) (lbs.ft.)	Rated output torque (operational) (lbs.ft.)	RPM (at 50 Hz)	RPM (at 60 Hz)**
CK30 and CKA30	22	7	9, 12, 18, 24, 36, 48, 72, 96, 144	11, 14, 21, 29, 43, 57, 86, 115, 173
	18		192	230
CK60 and CKA60	44	15	9, 12, 18, 24, 36, 48, 72, 96, 144	11, 14, 21, 29, 43, 57, 86, 115, 173
	37		192	230
CK120 and CKA120	89	30	9, 12, 18, 24, 36, 48, 72, 96, 144	11, 14, 21, 29, 43, 57, 86, 115, 173
	74		192	230
CK250 and CKA250	184	61	9, 12, 18, 24, 36, 48, 72, 96, 144	11, 14, 21, 29, 43, 57, 86, 115, 173



Certificate: 70021797
Project: 80223150

Master Contract: 153247
Date Issued: 2024-08-28

	148		192	230
CK500 and CKA500	369	123	9, 12, 18, 24, 36, 48, 72, 144	11, 14, 21, 29, 43, 57, 86, 173
	295		192	230

Overview technical data – Isolating CK Standard / CKa – 1 phase

Models	Rated output torque (max.) (lbs.ft.)	Rated output torque (operational) (lbs.ft.)	RPM (at 50 Hz)	RPM (at 60 Hz)**
CK30 and CKA30	22	7	18, 24, 36, 48, 72, 96, 144	21, 29, 43, 57, 86, 115, 173
	18		192	230
CK60 and CKA60	44	15	18, 24, 36, 48, 72, 96, 144	21, 29, 43, 57, 86, 115, 173
	37		192	230
CK120 and CKA120	89	30	18, 24, 36, 48, 72, 96, 144	21, 29, 43, 57, 86, 115, 173
	74		192	230
CK250 and CKA250	184	61	18,24, 36, 48	21, 29, 43, 57

Overview technical data – Modulating CK Standard / CKRA – 3 phase

Models	Rated output torque (max.) (lbs.ft.)	Rated output torque (operational) (lbs.ft.)	RPM (at 50 Hz)	RPM (at 60 Hz)**
CK30 and CKRA30	22	7	9, 12, 18, 24, 36, 48, 72, 96	11, 14, 21, 29, 43, 57, 86, 115
CK60 and CKRA60	44	15	9, 12, 18, 24, 36, 48, 72, 96	11, 14, 21, 29, 43, 57, 86, 115
CK120 and CKRA120	89	30	9, 12, 18, 24, 36	11, 14, 21, 29
CK250 and CKRA250	184	61	9, 12	11, 14

Notes:

- (1) All models class I, pollution degree 2, overvoltage category II, IP68 protected.
- (2) Mode of operation: Short-term operation.
- (3) Environmental Conditions: 2000 m max.



Certificate: 70021797
Project: 80223150

Master Contract: 153247
Date Issued: 2024-08-28

- (4) During 60 Hz supply, actuator operating speed will be 120% of 50Hz

Conditions of Acceptability

- (1) A switch or circuit breaker must be included in the wiring installation to the actuator. The switch or circuit breaker shall meet the relevant requirements of IEC60947-1 and IEC60947-3 or equivalent standard, which shall be an approved type acceptable to the authorities in the country where the equipment is sold and shall be suitable for the application. The switch or circuit breaker shall not disconnect the protective earth conductor. The switch or circuit breaker shall be mounted as close to the actuator as possible and shall be marked to indicate that it is the disconnect device for that particular actuator.
- (2) The main supply cord set shall be an approved type acceptable to the authorities in the country where the equipment is sold. The rating of supply cord installed at final equipment is specified in user manual, the consideration and evaluation is taken at final system.
- (3) The overcurrent protection device shall be an approved type acceptable to the authorities where the equipment is sold and shall be suitable for the application.
- (4) Equipment is only to be installed by trained personnel.
- (5) If at any time there is a conflict between the system safety provisions and any relevant local (national or regional) requirements, the local requirements always take precedence.
- (6) Equipment has only been tested for electrical safety. No evaluation of functional safety and performance characteristics has been conducted.
- (7) Equipment is not intended for use in hazardous locations.

APPLICABLE REQUIREMENTS

Standards Used	Description
CSA C22.2 No. 61010-1-12, Rev May 11, 2012	Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use
UL 61010-1, Third Edition, Rev May 11, 2012	UL Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements - Third Edition

MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.


Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.





The following markings appear on the product:

1. Submitter's identification (company name and/or file number and/or registered tradename);
2. Model designation;
3. Electrical rating;
4. Date of manufacture: Month and year of manufacture or date code. If a serial number is used instead of date of manufacture, a record of serial numbers shall be kept traceable to date of manufacture. (Not related to date of sale).
5. The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US, or with adjacent indicator 'US' for US only, or without either indicator for Canada only:



6. Protective earthing TERMINAL is identified by the IEC 60417 No 5019 symbol  , adjacent to the TERMINAL.
7. The IEC 60417 Symbols 5007-a and 5008-a ("I" and "O"), or equivalent, on or adjacent to the principal on/off switch/circuit breaker when serving as a disconnect device; "I" inside a circle for push-push type switches.


The following additional markings are also provided:

Symbol	Reference	Title
	IEC 60417-5032-1	Three-phase alternating current
	IEC 60417-5019	Protective earth (ground)
	IEC 60417-5007	“ON” (power)
	IEC 60417-5008	“OFF” (power)



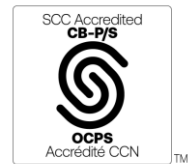
Certificate: 70021797
Project: 80223150

Master Contract: 153247
Date Issued: 2024-08-28

Symbol	Reference	Title
	ISO 7000-0434A	Caution

Notes:

Products certified under Class C225206, C225286 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





Supplement to Certificate of Compliance

Certificate: 70021797

Master Contract: 153247

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
80223150	2024-08-28	Variation to CSA 70021797 - Adding interchangeability to the Insulation Tape on the motor (Changshu Fubang Adhesive Tape co – FCB-03C) Switch G606 by Zing rebranded to Unionwell. Change of the brand on the CCL.
80199371	2024-03-13	Variation to CSA 70021797 - 1. Option added to allow the user to supply auxiliary 24VDC nominal supply to the unit, in addition to the primary power supply. 2. Correction - standards of existing thermistor, S05.150.05 to UL 60730-1, UL 60730-2-9, CSA-E60730-1 and CSA-E60730-2-9, as noted in UL Listing E54236. 3. Replace Solid State Starter (for CKr series and CKrc series) internal Rotork p/n from 136891 to 189961. 4. Add 2 alternative components to CK145183LOP for component U1(CCL).
80161421	2024-03-07	Update of Report 70021797 to add alternate motor contactor, Schneider LC1D32F7.
80144111	2022-12-09	Update of Report 70021797 to add interchangeability to existing Omron G6CK-2114P-US on the optional relay board as well as alternate, interchangeable component relay.
80107857	2021-12-15	Update of Report 70021797 to extend minimum temperature range for all range of actuators from -30C to -40C.
80014790	2019-09-24	Update to Report 70021797 to add an alternative component to the LOCC
70214468	2019-03-15	Update to report 70021797 to add an alternate component for the motor contactor to the LoCC with same ratings, and update to Att9, to delete the “Transparent self-adhesive fixing tape” in the LoCC which is not used. According to C22.2 No. 61010-1-12 / UL 61010-1 (3rd Edition) under class 2252 06/86.



70189059	2018-12-17	Update to Report 70021797 for addition of Atronik control module. The addition of the Atronik control module with current approved CK series actuators results in the following added models: CK and CKRA series, CK and CKA series. Class 2252 06/86
70172950	2018-03-08	Update to Report 70021797 addition of 2 relay boards 157051PCBA, 165841PCBA and RL5 (Monitor relay) and SK7 (Relay contacts connector) were moved slightly up direction in the PCB layout on PCBA 119693. Update to critical components for RoHS compliance. Addition of alternative plug and socket.
70159518	2017-11-21	Update to Report 70021797 critical component to add alternate fuse, and electrical ratings 500/60Vac for Valve Actuator Models CK, CKr, CKc, CKrc series according to CAN/CSA-C22.2 No. 61010-1-12 and ANSI/UL Std. No. 61010-1 (3rd Edition).
70150271	2017-08-02	Update to Report 70021797 to cover addition of new models and new series and update of critical components list. According to CAN/CSA-C22.2 No. 61010-1-12 and ANSI/UL Std. No. 61010-1 (3rd Edition), classes 2252-06/2252-86.
70021797	2015-12-18	Original Certification of isolating duty valve actuators, CK series and CKc series for ordinary locations. Applicable requirements: CAN/CSA-C22.2 No. 61010-1-12 and ANSI/UL Std. No. 61010-1 (3rd Edition)