

6. CCC Approved Equipment

6.1. What is CCC?

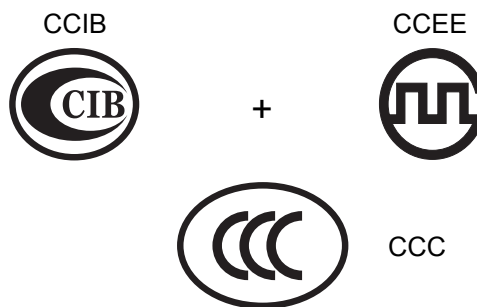
In 1993, CCIB (China Commodity Inspection Bureau) has introduced Safety Certification (CCIB Certification) for imported electric and electronic products under the control of SAIQ (The State Administration for Entry-Exit Inspection and Quarantine of P.R. of China).

In 1994, CCEE (China Commission for Conformity Certification of Electrical Equipment) has introduced Safety Certification (CCEE Certification) for electric and electronic products sold in China, under the control of CSBTS (China State Bureau of Quality and Technical Supervision).

In such situation, the government of China took the opportunity of joining in WTO (World Trade Organization) in November 2001, and two certification (CCEE and CCIB) merged into a single certification.

CCC (China Compulsory Certification) was announced as a new compulsory product safety certification.

CCC has enforced on May 1, 2002 and effective on August 1, 2003.



6.2. Certification Mark

One of the following 4 marks shall be displayed on products or packages and instruction manuals.



S: Safety



EMC: EMC



S&E: Safety and EMC



F: Fire-fighting Products

6.3. Products Requiring CCC

Products requiring Certification should be the following 19 items, 132 categories listed in the "First Catalogue of Products Subjects to Compulsory Certification" published as "Joint Announcement No. 2001-33 by AQSIQ*1 and CNCA*2".

*1: State General Administration of the People's Republic of China for Quality Supervision and Inspection and Quarantine

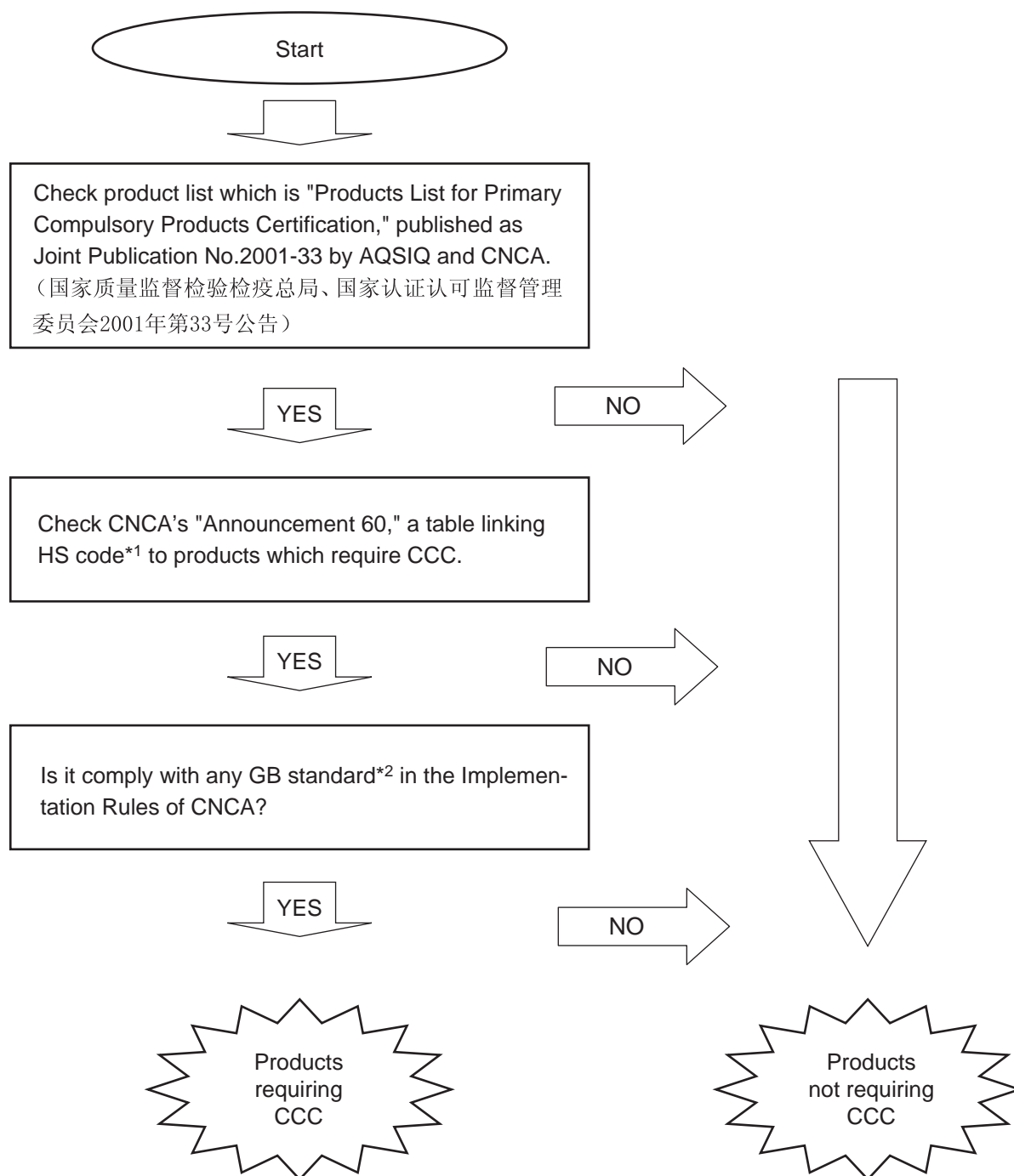
*2: Certification and Accreditation Administration of the People's Republic of China

1	Electrical wires and cables (5 categories)	2	Switches for circuits, Installation protective and connection devices (6 categories)
3	Low-voltage Electrical Apparatus (9 categories) (1) Residual current protective devices (2) Circuit-breakers (RCCB, RCBO, MCB) (3) Fuses (4) Low-voltage switches (disconnectors, switch-disconnectors, and fuse-combination units) (5) Other protective equipment for circuits (current limiting devices, circuits protective devices, over current protective devices, thermal protectors, over load relays, low-voltage electromechanical contactors and motor starters) (6) Relays (36V < voltage ≤ 1000V) (7) Other switches (switches for appliances, vacuum switches, pressure switches, proximity switches, foot switches, thermal sensitive switches, hydraulic switches, push-button switches, Position limit switches, Micro-gap switches, two direction switches, temperature sensitive switches, travel switches, change-over switches, auto-change-over switches, knife switches) (8) Other devices (contactors, motor starters, indicator lights, auxiliary contact assemblies, master controllers, A.C. Semiconductor motor controllers and starters) (9) Low-voltage switchgear and control gear assemblies		
4	Small power motors (1 category) (1) Small power motors		
5	Electric tools (16 categories)	6	Welding machines (15 categories)
7	Household and similar electrical appliances (18 categories)	8	Audio and video apparatus (not including the acoustics apparatus for broadcasting service and automobiles) (16 categories)
9	Information technology equipment (IT) (12 categories)	10	Lighting apparatus (2 categories) (not including the lighting apparatus with the voltage lower than 36V)
11	Telecommunication Terminal equipment (9 categories)	12	Motor vehicles and Safety Parts (4 categories)
13	Motor vehicle Tyres (3 categories)	14	Safety Glasses (3 categories)
15	Agricultural Machinery (1 category)	16	Latex Products (1 category)
17	Medical Devices (7 categories)	18	Fire Fighting Equipment (3 categories)
19	Detectors for Intruder Alarm Systems (1 category)		

Note: Our products belong to the above item 3 and 4.

6.4. The Application Process of FUJI's Products Requiring CCC

(1) Determine whether your products require CCC



Note 1) CNCA finally judges whether or not the product requires CCC. For products other than FUJI's products, if judgment as to whether or not they are subject to the categories cannot be clearly determined, contact CNCA.

*1: Product classification codes internationally unified (customs clearance for export and import)

*2: Chinese national standard

(2) List of FUJI's products for CCC

Model	GB Standard	IEC Standard for reference ²	CCC required?	What is being done?	
Power distribution & control equipments	Magnetic contactor, magnetic motor starter	GB14048.4-1993	IEC60947-4-1-1990	Yes	Certification acquired
	Thermal overload relay	GB14048.4-1993	IEC60947-4-1-1990	Yes	Certification acquired
	Magnetic relay	GB14048.5-1993	IEC60947-5-1-1990	Yes	Certification acquired
	Solid-state contactor	GB14048.6-1998	IEC60947-4-2-1995	Yes	-
	Molded case circuit breaker	GB14048.2-1994	IEC60947-2-1988	Yes	Certification acquired
	Earth leakage circuit breaker	GB14048.2-1994	IEC60934-2-1988	Yes	Certification acquired
	Manual motor starter	GB14048.2-1994	IEC60947-2-1988	Yes	Certification acquired
	Circuit protector	GB17701 -1999	IEC60934-1993	Yes	Certification acquired
	Semiconductor protection fuse (CR series)	GB13539.1-1992 GB13539.4-1992	IEC60269-1-1986 IEC60269-4-4-1986	Yes	Having been applied
	D-type fuse	-	-	Yes	-
	Pushbutton, selector switch, pilot lamp	GB14048.5-1993	IEC60947-5-1-1990	Yes	Certification acquired
	Rotary switch	-	-	No	*1
	Multi display light	GB14048.5-1993	IEC60947-5-1-1990	Yes	-
	Cam switch	GB14048.5-1993	IEC60947-5-1-1990	Yes	Certification acquired (only AK series)
	Control relay (HH relay/Card relay)	GB14598.2-1993	IEC60255-1-00-1975	No	*1
	Timer	-	-	No	*1
	Terminal block	-	-	No	
	Limit switch	GB14048.5-1993	IEC60947-5-1-1990	Yes	-
	Proximity limit switch	GB14048.10-1999	IEC60947-5-2-1992	Yes	-
	Power monitoring equipment (F-MPC)	-	-	No	
	Automatic power factor regulator	-	-	No	
	UPS	-	-	No	
	Transducer	-	-	No	
Instrument transformer	-	-	No		
Measuring instrument	-	-	No		
Panel meter	-	-	No		
Rotating machines	Induction motor (under 1.1 kW)	GB12350-2000	-	Yes	(Having been applied)
	VG, high-speed motor (induction motor under 1.1kW)	GB12350-2000	-	Yes	-
	Brake motor (under 750W)	GB12350-2000	-	Yes	-
	Geared motor	GB12350-2000	-	Yes	-
	Single-phase motor	GB12350-2000	-	Yes	-
	Ring blow, turbo blow fan	-	-	No	
FA equipments	Coolant pump	-	-	No	
	Inverter	-	-	No	
	AC servo amplifier	-	-	No	
	AC servomotor	-	-	No	
	PLC (Programmable logic controller)	-	IEC61131-1,2,3	No	
POD (Programmable operational display)	-	-	No		

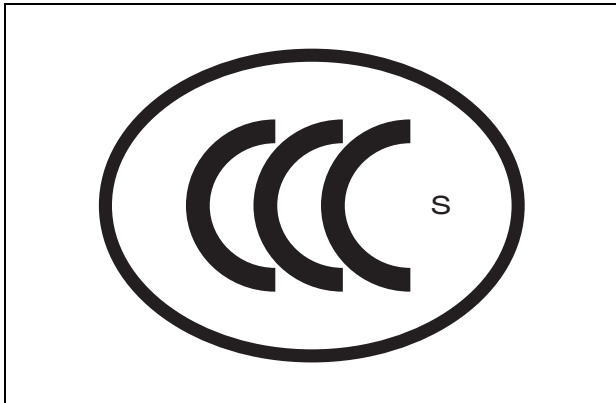
*1: CNCA-published certificate for inapplicable categories obtained

*2: Conformity standards required by CCC are GB Standards. IEC Standards are shown for reference, as they are partly inconsistent with GB Standards.

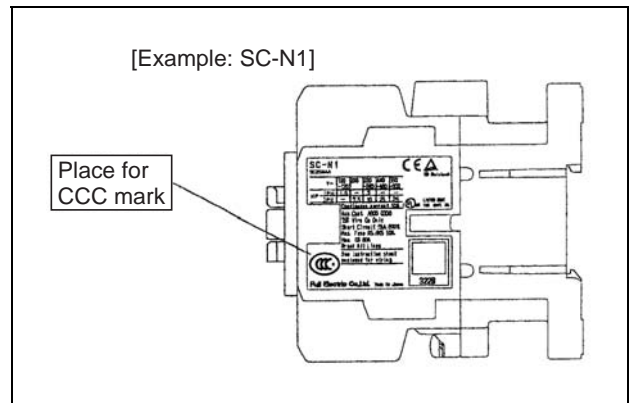
6.5. Example of Displaying Certification Marks

All our products have obtained certification for S (Safety) and the following mark is displayed on products or on packages and instruction manual.

Certification mark



Example of name plate: Magnetic contactor



6.6. Ordering Type Number for CCC

Example for a magnetic contactor

SC-5-1 AC220 50HZ 1 a 1 b (CCC)

Add after Type/Specification

Example for an molded case circuit breaker

EA103B/100W with terminal block (CCC)

Add after Type/Specification

Example for a pushbutton switch

AR22FOR-11B (CCC)

Add after Type

Example for a circuit protector

CP33FM/30 (CCC)

Add after Type

6.7. List of Certified Products

(1) Contactors

● Standard magnetic contactors

Frame	Type	Certificate No.
03	SC-03	2003010304063432
0	SC-0	
05	SC-05	
4-0	SC-4-0	2003010304063438
4-1	SC-4-1	
5-1	SC-5-1	
N1	SC-N1	2003010304063394
N2	SC-N2	
N2S	SC-N2S	2003010304067046
N3	SC-N3	
N4	SC-N4	2003010304063396
N5	SC-N5	
N6	SC-N6	2003010304063437
N7	SC-N7	
N8	SC-N8	2003010304063435
N10	SC-N10	
N11	SC-N11	2003010304063393
N12	SC-N12	
N14	SC-N14	2003010304067052
N16	SC-N16	

● Reversing magnetic contactors

Frame	Type	Certificate No.
03	SC-03RM	2003010304063432
05	SC-0RM	
4-0	SC-05RM	
4-0	SC-4-0RM	2003010304063438
4-1	SC-4-1RM	
5-1	SC-5-1RM	
N1	SC-N1RM	2003010304063394
N2	SC-N2RM	
N2S	SC-N2SRM	2003010304067046
N3	SC-N3RM	
N4	SC-N4RM	2003010304063396
N5	SC-N5RM	
N6	SC-N6RM	2003010304063437
N7	SC-N7RM	
N8	SC-N8RM	2003010304063435
N10	SC-N10RM	
N11	SC-N11RM	2003010304063393
N12	SC-N12RM	
N14	SC-N14RM	2003010304067052

● DC operated magnetic contactors

Frame	Type	Certificate No.
03	SC-03/G	2003010304063432
0	SC-0/G	
05	SC-05/G	
4-0	SC-4-0/G	2003010304063438
4-1	SC-4-1/G	
5-1	SC-5-1/G	
N1	SC-N1/G	2003010304063394
N2	SC-N2/G	
N2S	SC-N2S/G	2003010304067046
N3	SC-N3/G	

● Reversing DC operated magnetic contactors

Frame	Type	Certificate No.
03	SC-03RM/G	2003010304063432
0	SC-0RM/G	
05	SC-05RM/G	
4-0	SC-4-0RM/G	2003010304063438
4-1	SC-4-1RM/G	
5-1	SC-5-1RM/G	
N1	SC-N1RM/G	2003010304063394
N2	SC-N2RM/G	
N2S	SC-N2SRM/G	2003010304067046
N3	SC-N3RM/G	

● Magnetic contactors with super magnet

Frame	Type	Certificate No.
N1	SC-N1/SE	2003010304063394
N2	SC-N2/SE	
N2S	SC-N2S/SE	2003010304067046
N3	SC-N3/SE	
N4	SC-N4/SE	2003010304063396

● Reversing magnetic contactors with super magnet

Frame	Type	Certificate No.
N1	SC-N1RM/SE	2003010304063394
N2	SC-N2RM/SE	
N2S	SC-N2SRM/SE	2003010304067046
N3	SC-N3RM/SE	
N4	SC-N4RM/SE	2003010304063396

● Low-voltage compensation type magnetic contactors

Frame	Type	Certificate No.
03	SC-03/U	2003010304063432
0	SC-0/U	
05	SC-05/U	
4-0	SC-4-0/U	2003010304063438
4-1	SC-4-1/U	
5-1	SC-5-1/U	
N1	SC-N1/U	2003010304063394
N2	SC-N2/U	
N2S	SC-N2S/U	2003010304067046
N3	SC-N3/U	
N4	SC-N4/U	2003010304063396

● Reversing low-voltage compensation type magnetic contactors

Frame	Type	Certificate No.
03	SC-03RM/U	2003010304063432
0	SC-0RM/U	
05	SC-05RM/U	
4-0	SC-4-0RM/U	2003010304063438
4-1	SC-4-1RM/U	
5-1	SC-5-1RM/U	
N1	SC-N1RM/U	2003010304063394
N2	SC-N2RM/U	
N2S	SC-N2SRM/U	2003010304067046
N3	SC-N3RM/U	
N4	SC-N4RM/U	2003010304063396

● **Magnetic contactors with high-capacity contact (single contact)**

Frame	Type	Certificate No.
03	SC-03H	2003010304063432
0	SC-0H	
05	SC-05H	
4-0	SC-4-0H	2003010304063438
4-1	SC-4-1H	
5-1	SC-5-1H	
N1	SC-N1H	2003010304063394
N2	SC-N2H	
N2S	SC-N2SH	2003010304067046
N3	SC-N3H	
N4	SC-N4H	
N5	SC-N5H	
N6	SC-N6H	2003010304063437
N7	SC-N7H	2003010304063436
N8	SC-N8H	2003010304063435
N10	SC-N10H	
N11	SC-N11H	2003010304063393
N12	SC-N12H	

● **Reversing high-capacity contact (single contact) -incorporated magnetic contactors**

Frame	Type	Certificate No.
03	SC-03HRM	2003010304063432
0	SC-0HRM	
05	SC-05HRM	
4-0	SC-4-0HRM	2003010304063438
4-1	SC-4-1HRM	
5-1	SC-5-1HRM	
N1	SC-N1HRM	2003010304063394
N2	SC-N2HRM	
N2S	SC-N2SHRM	2003010304067046
N3	SC-N3HRM	
N4	SC-N4HRM	
N5	SC-N5HRM	
N6	SC-N6HRM	2003010304063437
N7	SC-N7HRM	2003010304063436
N8	SC-N8HRM	2003010304063435
N10	SC-N10HRM	
N11	SC-N11HRM	2003010304063393
N12	SC-N12HRM	

● **Other combination magnetic contactors**

Certification is granted to combinations of above-listed certified types.

● **SJ series high-sensitivity contactors**

Frame	Type of magnetic contactors	Type of reversing magnetic contactors	Certificate No.
0	SJ-0G	SJ-0GRM	2003010304067070
06	SJ-06G	SJ-06GRM	2003010304067070
1S	SJ-1SG	SJ-1SGRM	2003010304067065

● **Mini-Contactor**

Frame	Type of magnetic contactors	Certificate No.
01	SC-M01	2004010304113296
	SC-M01G□	
02	SC-M02	
	SC-M02G□	

● **FC series AC operated magnetic contactors**

Frame	Type of standard products	Type of UL/CSA products	Certificate No.
0	FC-0	FC-0UL	2003010304088942
0T	FC-0T	FC-0TUL	
0S	FC-0S	FC-0SUL	
0ST	FC-0ST	FC-0STUL	
1	FC-1	FC-1UL	2003010304088935
1S	FC-1S	FC-1SUL	
2S	FC-2S	FC-2SUL	2003010304088929
3	FC-3	FC-3UL	
4	FC-4	FC-4UL	2003010304088923

● **FC series DC operated magnetic contactors**

Frame	Type of magnetic contactors	Type of UL/CSA products	Certificate No.
0	FC-0/G	FC-0/GUL	2003010304088942
0T	FC-0T/G	FC-0T/GUL	
0S	FC-0S/G	-	-
0ST	FC-0ST/G	-	-

(2) **Auxiliary Relays**

● **Standard auxiliary relays**

Type	Certificate No.
SH-4	2003010309087168
SH-5	

● **DC operated auxiliary relays**

Type	Certificate No.
SH-4/G	2003010309087168
SH-5/G	

● **Constant voltage compensation type auxiliary relays**

Type	Certificate No.
SH-4/U	2003010309087168
SH-5/U	

● **Single contact type auxiliary relays**

Type	Certificate No.
SH-4H	2003010309087168
SH-5H	

(3) **Optional Equipment and Parts of Magnetic Contactors and Auxiliary Relays**

Part name	Type	Applicable type	Certificate No.
Auxiliary contact block (front mounting, bifurcated)	SZ-A40	SC-03~N3 SH-4, SH-5	Certified according to an applicable type.
	SZ-A31		
	SZ-A22		
	SZ-A20		
	SZ-A11		
	SZ-A02		
Auxiliary contact block (front mounting, single button)	SZ-A40H	SC-03~N3 SH-4, SH-5	
	SZ-A31H		
	SZ-A22H		
Auxiliary contact block (side mounting, bifurcated)	SZ-AS1	SC-03~N3 SH-4, SH-5	
	SZ-AS2		
Auxiliary contact block (side mounting, single button)	SZ-AS1H	SC-03~N3 SH-4, SH-5	
	SZ-AS2H		
	SZ-AS3H		
		SC-N4~N12	
		SC-N4~N12	
		SC-N14, N16	

(4) Thermal Overload Relays

● **Standard thermal overload relays**

Frame	Type of magnetic starters	Separate mounting type	Certificate No.
0N	TR-0N/3	TR-0NH/3	2003010304063397
5-1N	TR-5-1N/3	TR-5-1NH/3	2003010304063400
N2	TR-N2/3	TR-N2H/3	2003010304063425
N3	TR-N3/3	TR-N3H/3	2003010304063404
N5	TR-N5/3		
N6	TR-N6/3	TR-N6H/3	2003010304063447
N7	TR-N7/3		
N8	TR-N8/3		
N10	TR-N10/3	TR-N10H/3	2003010304063429
N12	TR-N12/3	TR-N12H/3	2003010304063434
N14	TR-N14/3	TR-N14H/3	2003010304063406

● **Quick operating type thermal overload relays**

Frame	Type of magnetic starters	Separate mounting type	Certificate No.
0N	TR-0NQ	TR-0NQH	2003010304063397
5-1N	TR-5-1NQ	TR-5-1NQH	2003010304063400
N2	TR-N2Q	TR-N2QH	2003010304063425
N3	TR-N3Q	TR-N3QH	2003010304063404
N5	TR-N5Q		

● **Automatically resetting type thermal overload relays**

Frame	Type of magnetic starters	Separate mounting type	Certificate No.
0N	TR-0N/3A	TR-0NH/3A	2003010304063397
5-1N	TR-5-1N/3A	TR-5-1NH/3A	2003010304063400
N2	TR-N2/3A	TR-N2H/3A	2003010304063425
N3	TR-N3/3A	TR-N3H/3A	2003010304063404
N5	TR-N5/3A		
N6	TR-N6/3A	TR-N6H/3A	2003010304063447
N7	TR-N7/3A		
N8	TR-N8/3A		
N10	TR-N10/3A	TR-N10H/3A	2003010304063429
N12	TR-N12/3A	TR-N12H/3A	2003010304063434
N14	TR-N14/3A	TR-N14H/3A	2003010304063406

● **Thermal overload relays for high-sensitivity contactor**

Frame	Type of magnetic starters	Certificate No.
0N	TR-0NZ716/3 TK-0NZ716	2003010304063397

● **2E thermal overload relays**

Frame	Type of magnetic starters	Separate mounting type	Certificate No.
0N	TK-0N	TK-0NH	2003010304063397
5-1N	TK-5-1N	TK-5-1NH	2003010304063400
N2	TK-N2	TK-N2H	2003010304063425
N3	TK-N3	TK-N3H	2003010304063404
N5			
N6	TK-N6	TK-N6H	2003010304063447
N7	TK-N7		
N8	TK-N8		
N10	TK-N10	TK-N10H	2003010304063429
N12	TK-N12	TK-N12H	2003010304063434
N14	TK-N14	TK-N14H	2003010304063406

● **2E quick operating type thermal overload relays**

Frame	Type of magnetic starters	Separate mounting type	Certificate No.
0N	TK-0NQ	TK-0NQH	2003010304063397
5-1N	TK-5-1NQ	TK-5-1NQH	2003010304063400
N2	TK-N2Q	TK-N2QH	2003010304063425
N3	TK-N3Q	TK-N3QH	2003010304063404
N5	TK-N5Q		

● **FC series thermal overload relays**

Frame	Type of magnetic starters	Certificate No.
0NF	TR-0NF/3 TK-0NF TR-0NFQ TK-0MFQ	2003010304063397
5-1N	TR-5-1N/3 TK-5-1N TR-5-1NQ TK-5-1NQ	2003010304063400
N2F	TR-N2F/3 TK-N2F TR-N2FQ TK-N2FQ	2003010304063425
N3	TR-N3/3 TK-N3 TR-N3Q TK-N3Q	2003010304063404

(5) Molded Case Circuit Breakers

● Mainframe of MCCBs

Series	AF	2-poles	3-poles	Rated breaking current (Icu/lcs) [kA] ^{*1}			Certificate No.
				Ue: 230V AC	Ue : 400V AC	Ue: 440V AC	
E	30	EA32AC	EA33AC	2.5/2	1.5/1	1.5/1	2003010307063433
	50	EA52AC	EA53AC	2.5/2	1.5/1	1.5/1	2003010307063433
		EA52C	EA53C	5/3	2.5/2	2.5/2	2003010307063635
	60	EA62C	EA63C	5/3	2.5/2	2.5/2	2003010307063385
	100	-	EA103AC	5/3	1.5/1	-	2003010307063440
		EA102C	EA103C	25/13	10/5	10/5	2003010307063647
	225	EA202C	EA203C	35/18	15/4	-	2004010307116273
		-	EA203CM	35/18	15/4	-	2004010307116273
400	EA402C	EA403C	35/18	25/13	-	Available in Jan. 2005	
600	-	EA603C	50/25	35/18	-	Available in Jan. 2005	
800	-	EA803C	50/25	35/18	-	Available in Jan. 2005	
S	30	SA32C	SA33C	5/3	2.5/2	2.5/2	2003010307063635
	50	SA52C	SA53C	10/5	7.5/4	7.5/4	2003010307063640
		SA52RC	SA53RC	25/13	10/5	10/5	2003010307063643
	60	SA62C	SA63C	10/5	7.5/4	7.5/4	2003010307063646
		SA62RC	SA63RC	25/13	10/5	10/5	2003010307063647
	100	SA102C	SA103C	50/25	25/7	-	2004010307116286
		-	SA103CM	50/25	25/7	-	2004010307116286
		SA102RC	SA103RC	100/50	50/13	-	2004010307116288
		-	SA103RCM	100/50	50/13	-	2004010307116288
	225	SA202C	SA203C	50/25	25/7	-	2004010307116280
		-	SA203CM	50/25	25/7	-	2004010307116280
		SA202RC	SA203RC	100/50	50/13	-	2004010307116280
		-	SA203RCM	100/50	50/13	-	2004010307116280
	400	SA402C	SA403C	50/25	35/18	-	Available in Jan. 2005
SA402RC		SA403RC	85/43	50/25	-	Available in Jan. 2005	
600	-	SA603RC	85/43	50/25	-	Available in Jan. 2005	
800	-	SA803RC	85/43	50/25	-	Available in Jan. 2005	

*1 For rated breaking current and rated voltage, the values in this table are approved.

(6) Earth Leakage Circuit Breakers

● Mainframe of ELCBs

Series	AF	2-pole	3-pole	Rated breaking current [kA]		Certificate No.
				Ue: 230V	Ue : 400V	
EG	30	EG32AC	EG33AC	2.5/2	-	2004010307138037
		-	EG33C, EG33CM	2.5/2	1.5/1	2004010307138028
	50	EG52AC	EG53AC	2.5/2	-	2004010307138037
		-	EG53C, EG53CM	5/3	2.5/2	2004010307138024
	60	-	EG63C, EG63CM	5/3	2.5/2	2004010307138036
	100	-	EG103AC	5/3	2.5/2	2004010307138038
		EG102C	-	10/5	-	2004010307138025
-		EG103C, EG103CM	25/13	10/5	2004010307138027	
225	-	EG203C, EG203CM	35/18	15/4	2005010307140482	
400	-	EG403C	35/18	25/13	2004010307138029	
SG	30	-	SG33C, SG33CM	5/3	2.5/2	2004010307138024
	50	-	SG53RC	25/13	10/5	2004010307138026
		-	SG53C, SG53CM	10/5	7.5/4	2004010307138031
	60	-	SG63C, SG63CM	10/5	7.5/4	2004010307138033
		-	SG63RC	25/13	10/5	2004010307138027
	100	-	SG103C, SG103CM	50/25	25/7	2005010307140481
		-	SG103RC, SG103RCM	100/50	50/13	2004010307138030
	225	-	SG203C, SG203CM	50/25	25/7	2004010307138035
		-	SG203RC, SG203RCM	100/50	50/13	2004010307138035
	400	-	SG403C	50/25	35/18	2004010307138029
-		SG403RC	85/43	50/25	2004010307138029	

● Internal accessories of MCCBs and ELCBs

30 TO 100AF

- 2-pole

Internal accessories	Type of breaker with accessory	Certificate No.	
W (Auxiliary)	EA32AC/□■	2003010307063443	
K (Alarm)	EA52AC/□■	2003010307063443	
F (Shunt trip)	EA52C/□■	2003010307063635	
R (Undervoltage trip)	EA62C/□■	2003010307063385	
W+K	EA102RC/□■	2003010307063645	
W+R	SA32C/□■	2003010307063635	
K+R		2003010307063640	
W+K+R		2003010307063643	
		2003010307063646	
		2003010307063647	
		EG32AC/□■	
		EG52AC/□■	
		EG102C/□■	

100 and 225AF

- 2-pole / 3-pole

Internal accessories	Type of breaker with accessory	Certificate No.
W (Auxiliary)	EA202C/□■	2004010307116278
K (Alarm)	EA203C/□■	
F (Shunt trip)	EA203CM/□■	
R (Undervoltage trip)	SA103C/□■	2004010307116286
W2	SA103RC/□■	
W+K	SA102RC/□■	2004010307116288
K2	SA103RC/□■	
W+K2	SA103RCM/□■	
W2+K2	SA202C/□■	2004010307116280
W+F	SA203C/□■	
W+R	SA203CM/□■	
	SA202RC/□■	
K+F	SA203RC/□■	
K+R	SA203RCM/□■	
K2+R	EG203C/□■	
W+K+F	EG203CM/□■	
W+K+R	SG103C/□■	
	SG103RC/□■	
	SG103RCM/□■	
	SG203C/□■	
	SG203CM/□■	
	SG203RC/□■	
	SG203RCM/□■	

100AF

- 2-pole

Internal accessories	Type of breaker with accessory	Certificate No.
W (Auxiliary)	SA102C/□■	2004010307116286
K (Alarm)		
F (Shunt trip)		
R (Undervoltage trip)		
W+K		

400, 600, 800AF

- 2-pole / 3-pole

Available accessories	Type of breaker with accessory	Certificate No.
W (Auxiliary)	EA402C/□■	Available in Jan. 2005
K (Alarm)	EA403C/□■	
F (Shunt trip)	EA603C/□■	
R (Undervoltage trip)	EA803C/□■	
W2	SA402RC/□■	Available in Jan. 2005
W+K	SA403RC/□■	
W2+K	SA603RC/□■	
K2	SA803RC/□■	
W+K2	EG403C/□■	200401030718029
W2+K2	SG403C/□■	
W+F	SG403RC/□■	
W+R		
W2+R		
K+F		
K+R		
K2+R		
W+K+F		
W+K+R		
K2+F		
K2+R		
W2+K+F		
W2+K+R		
W+K2+F		
W+K2+R		
W2+K2+F		
W2+K2+R		

- 2-pole/3-pole

Available accessories	Type of breaker with accessory	Certificate No.	
W (Auxiliary)	EA33AC/□■	2003010307063433	
K (Alarm)	EA33ACM/□■	2003010307063433	
F (Shunt trip)	EA53AC/□■	2003010307063635	
R (Undervoltage trip)	EA53C/□■	2003010307063385	
W2	EA53CM/□■	2003010307063440	
W+K	EA63C/□■	2003010307063647	
K2	EA63CM/□■	2003010307063635	
W+K2	EA103AC/□■	2003010307063640	
W2+K2	EA103C/□■	2003010307063643	
W+F	EA103CM/□■	2003010307063646	
W+R	SA33C/□■	2003010307063647	
W2+R		SA33CM/□■	
K+F		SA53C/□■	
K+R		SA53CM/□■	
K2+R		SA53RC/□■	
W+K+F		SA53RCM/□■	
W+K+R		SA63C/□■	
W2+K+R		SA63RC/□■	
W+K2+R		SA63CM/□■	
W2+K2+R		EG33AC/□■	
		EG33C/□■	
		EG33CM/□■	
		EG53AC/□■	
		EG53C/□■	
		EG53CM/□■	
		EG63C/□■	
	EG63CM/□■		
	EG103AC/□■		
	EG102C/□■		
	EG103C/□■		
	EG103CM/□■		

Notes 1: Replace the □ mark by the rated current code.
 2: Replace the ■ mark by required accessory code.

Example Breaker: SA52C with W, K and R
 Rated current: 50A } Type number: SA52C/50WKR

● External operating handle (optional equipment)

Handle		Applicable type	Certificate No.
N type	V type		
BZ6N10C	BZ6V10C	EA32AC,EA33AC,EA33ACM,EA52AC,EA53AC EA52C,EA53C,EA53CM,EA62C,EA63C,EA63CM EA103AC,EA102C,EA103C,EA103CM SA32C,SA33C,SA32CM,SA33CM,SA53C,SA53CM SA52C,SA53C,SA53CM,SA62C,SA63C,SA63CM SA62RC,SA63RC EG32AC,EG33AC,EG33C,EG33CM EG52AC,EG53AC,EG53C,EG53CM EG63C,EG63CM,EG103AC,EG103C,EG103CM	Certified according to an applicable main body.
BZ6N30C	BZ6V30C	SA102C SA103C SA103CM SA102RC SA103RC SA103RCM SG103C,SG103CM,SG103RC,SG103RCM	
BZ6N40C	BZ6V40C	SA202C SA203C SA203CM SA202RC SA203RC SA203RCM EA202C EA203C EA203CM EG203C,EG203CM SG203C,SG203CM,SG203RC,SG203RCM	
BZ-N60C	BZ6V60C	EA402C EA403C SA402C SA403C SA402RC SA403RC EG403C,SG403C,SG403RC	
BZ-N70C	BZ6V70C	EA603C EA803C SA603RC SA803RC	

(7) Pushbuttons, Selector Switches, Pilot Lights

● AR22/DR22 and AD30/DR30 Series

a. Pushbutton switches

Bezel	Operator	Type			
		AR22		AR30	
		Momentary action	Alternate action (Turn-reset for V5R)	Momentary action	Alternate action (Turn-reset for V5R)
Round bezel	Flush round head	AR22F0R	AR22F5R	AR30F0R	AR30F5R
	Extended round head	AR22E0R	AR22E5R	AR30E0R	AR30E5R
	Flush round head (symbol mark type)	AR22FAR	AR22FBR	AR30FAR	AR30FBR
	Extended round head (symbol mark type)	AR22EAR	AR22EBR	AR30EAR	AR30EBR
	Extended with half guard	AR22G0R	AR22G5R	AR30G0R	AR30G5R
	Extended with full guard (24mm dia.)	AR22G3R	AR22G8R	AR30G1R	AR30G6R
	Flush with full guard (24mm dia.)	AR22G2R	—	—	—
	Mushroom head with full guard (40mm dia.)	AR22M3R	—	AR30M3R	AR30M8R
	Mushroom head with full guard (35mm dia. metal nut)	—	—	AR30GSR	—
	Mushroom head (29mm dia.)	AR22M4R	AR22M9R	AR30M4R	—
	Mushroom head (40mm dia.)	AR22M0R	AR22M5R	AR30M0R	AR30M5R
	Giant head	—	—	AR30B0R	—
	Giant head with guard	—	—	AR30B1R	—
	Giant head with full guard	—	—	AR30B2R	—
	Giant head with full guard	—	—	AR30B3R	—
Push-lock, turn-reset (40mm dia. with white arrow)	—	AR22V5R	—	AR30V5R	
Square bezel	Flush square head	AR22F0S	AR22F5S	—	—
	Extended square head	AR22E0S	AR22E5S	—	—
	Flush round head	AR22F0Y	AR22F5Y	—	—
	Extended round head	AR22E0Y	AR22E5Y	—	—
	Mushroom head	AR22M4Y	—	—	—
Certificate No.		2003010305063372		2003010305063384	

Note: Certified contact: within 4 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC, 3NO, 3NC, 2NO+2NC, 4NO, 4NC)

b. Ring selection type pushbutton switches

Bezel	Operator	Type	
		AR22	AR30
Round bezel	With selector ring	AR22S1R	AR30S1R
		AR22S2R	AR30S2R
		AR22S3R	AR30S3R
		AR22S6R	AR30S6R
Certificate No.		2003010305063372	2003010305063384

Note: Certified contact: 2NO+2NC (S2R: 2NO is also certified)

c. Emergency stop pushbutton switches

Bezel	Operator	Type			
		AR22		AR30	
		With white arrow (soft-touch)	No white arrow	With white arrow (soft-touch)	No white arrow
Round bezel	Push-lock, turn-reset (29mm dia.)	AR22VSR	AR22V4R	—	—
	Push-lock, turn-reset (40mm dia.)	AR22V0R	AR22V2R	AR30V0R	AR30V2R
	Push-lock, turn-reset (65mm dia.)	—	—	AR30V1R	—
	Key-release push-lock, turn-reset (40mm dia.)	—	AR22V7R	—	—
	Push-lock, pull-reset (35mm dia.)	—	AR22Q2R	—	AR30Q2R
Certificate No.		2003010305063372		2003010305063384	

Note 1: Certified contact: 1NC, 1NO+1NC, 2NC, 3NC, 2NO+2NC, 4NC (except for Q2R type)
 2: Certified contact of Q2R type: 1NC, 1NO+1NC and 2NC only
 3: Certified button color: red (R) only

d. Illuminated pushbutton switches

Bezel	Operator	Type			
		AR22		AR30	
		Momentary	Alternate	Momentary	Alternate
Round bezel	Flush round head	AR22F0L	AR22F5L	—	—
	Extended round head	AR22E0L	AR22E5L	AR30E0L	AR30E5L
	Mushroom head (29mm dia.)	AR22M4L	AR22M9L	—	—
	Mushroom head (40mm dia.)	AR22M0L	AR22M5L	—	—
	Extended with transparent full guard (24mm dia.)	AR22G4L	AR22G9L	AR30G4L	AR30G9L
	Extended with full guard (24mm dia. with openings)	AR22G2L	AR22G7L	AR30G2L	AR30G7L
	Extended with full guard (24mm dia.)	AR22G1L	AR22G6L	AR30G3L	AR30G8L
Square bezel	Push-lock, turn-reset (40mm dia. with white arrow)	—	—	—	AR30V5L
	Flush square head	AR22F0M	AR22F5M	—	—
	Extended square head	AR22E0M	AR22E5M	—	—
	Flush round head	AR22F0P	AR22F5P	—	—
	Extended round head	AR22E0P	AR22E5P	—	—
	Mushroom head	AR22M4P	—	—	—
Certificate No.		2003010305063372		2003010305063384	
Specifications		<ul style="list-style-type: none"> · Contact <ul style="list-style-type: none"> Without transformer: within 3 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC, 3NO, 3NC) With transformer: within 2 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC) · Color of button <ul style="list-style-type: none"> Green, red, white, yellow, orange, blue · Light source <ul style="list-style-type: none"> LED lamp, incandescent lamp · Operating voltage of lamp <ul style="list-style-type: none"> Without transformer <ul style="list-style-type: none"> LED: 6V AC, 6V DC, 12V AC/DC Incandescent lamp: 5.5V AC/DC, 20V AC/DC LED, incandescent lamp: 15V AC/DC, 24V AC/DC With transformer <ul style="list-style-type: none"> LED, incandescent lamp: 100-110V AC, 115-127V AC, 200-220V AC, 230-254V AC, 350-380V AC, 400-440V AC, 480V AC, 500-550V AC 			

e. Emergency stop illuminated pushbutton switches

Bezel	Operator	Type			
		AR22		AR30	
		With white arrow (soft-touch)	No white arrow	With white arrow (soft-touch)	No white arrow
Round bezel	Push-lock, turn-reset (29mm dia.)	AR22VSL	—	—	—
	Push-lock, turn-reset (40mm dia.)	AR22V0L	AR22V2L	AR30V0L	AR30V2L
	Push-lock, turn-reset (40mm dia. transparent in all colors)	AR22VDL	AR22VAL	—	—
Certificate No.		2003010305063372		2003010305063384	

Note 1: Certified contact without transformer: 1NC, 1NO+1NC, 2NC, 3NC
2: Certified contact with transformer: 1NC, 1NO+1NC, 2NC
3: Certified button color: red (R) only

f. Selector switches

Bezel	Operator	Type			
		AR22		AR30	
		Standard type	Control type	Standard type	Control type
Round bezel	Knob	AR22PPR	AR22PCR	AR30PPR	AR30PCR
	Lever	AR22WR	AR22WCR	AR30WR	AR30WCR
	Cylindrical knob	AR22RR	AR22RCR	—	—
	Key	AR22JR	AR22JCR	AR30JR	AR30JCR
	Key (long durability)	AR22JAR	—	AR30JAR	—
Square bezel	Knob	AR22PY	AR22PCY	—	—
	Lever	AR22WY	AR22WCY	—	—
	Cylindrical knob	AR22RY	AR22RCY	—	—
	Key	AR22JY	AR22JCY	—	—
Certificate No.		2003010305063372		2003010305063384	

Note: Certified contact: within 4 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC, 3NO, 3NC, 2NO+2NC, 4NO, 4NC)

g. Illuminated selector switches

Bezel	Operator	Type	
		AR22	AR30
		Standard type	Standard type
Round bezel	Knob	AR22PL	AR30PL
Square bezel	Knob	AR22PP	—
Certificate No.		2003010305063372	
		2003010305063384	

Note 1: Certified contact without transformer: within 3 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC, 3NO, 3NC)
2: Certified contact with transformer: within 2 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC)
3: Certified lamp: both LED and incandescent lamp

h. Pilot lights

Bezel	Lens	Type	
		DR22	DR30
Round bezel	Dome	DR22D0L	DR30D0L
	Extended round	DR22E3L	DR30E3L
	Faceted	DR22K0L	DR30K0L
Square bezel	Flush square	DR22F3M	—
	Flush square (transparent lens)	DR22F4M	DR30F4M
	Flush square (12mm high frame)	DR22F5M	—
	Extended square	DR22E3M	—
	Flush rectangular	DR22E3N	—
	Flush rectangular (transparent lens)	—	DR30F4N
	Flush square large type (transparent lens)	—	DR30M4M
	Extended round	DR22E3P	—
Certificate No.		2003010305063383	2003010305063487

Note 1: Certified lamp: both LED and incandescent lamp
 2: Certified transformer type: standard and short-body
 3: Except for with resistor/resistor unit

i. Item with degree of protection IP2X (IP20)

Type	Certificate No.
AR22□ZB	2003010305063372
AR30□ZB	2003010305063384
DR22□ZB	2003010305063383
DR30□ZB	2003010305063487

Note: Certified for all types listed in the above items except for short-body transformer of pilot light.

● AH164, 165, 165-2 Series

a. Pushbutton switches

Operator	Type					
	AH164		AH165		AH165-2	
	Momentary action	Alternate action	Momentary action	Alternate action (Turn-reset for V, V1)	Momentary action	Alternate action (Turn-reset for 2V, 2YV)
Flush round head	—	—	—	—	AH165-2F	AH165-2F5
Extended round head	AH164-E	AH164-E5	AH165-E	AH165-E5	AH165-2E	AH165-2E5
Extended square head	—	—	—	—	AH165-2SE	AH165-2SE5
Extended square concave head	—	—	—	—	AH165-2SCE	AH165-2SCE5
Flush square head	AH164-SF	AH164-SF5	AH165-SF	AH165-SF5	AH165-2SF	AH165-2SF5
Flush rectangular head	AH164-TF	AH164-TF5	AH165-TF	AH165-TF5	—	—
Flush square head with guard	AH164-SGF	AH164-SGF5	AH165-SGF	AH165-SGF5	—	—
Flush rectangular head with guard	AH164-TGF	AH164-TGF5	AH165-TGF	AH165-TGF5	—	—
Mushroom head (round bezel)	—	—	—	—	AH165-2M	—
Mushroom head (square bezel)	—	—	—	—	AH165-2YM	—
Mushroom head	AH164-M	AH164-M5	AH165-M	AH165-M5	—	—
Convex square head	AH164-SM	AH164-SM5	AH165-SM	AH165-SM5	—	—
Convex rectangular head	AH164-TM	AH164-TM5	AH165-TM	AH165-TM5	—	—
Push-locked (round bezel)	—	—	—	—	AH165-V	AH165-2V
Push-locked large type	—	—	—	AH165-V1	—	—
Push-locked (square bezel)	—	—	—	—	—	AH165-2YV
Certificate No.	2003010305071068					

Note 1: Certified contact: 1NO+1NC, 2NO+2NC, 3NO+3NC. AH165-V and -V1: 1NC and 2NC only.
 2: Certified button color: all in manufactured range of corresponding type. AH165-V and -V1: red (R) only.
 3: Certified terminal shape: for soldering and tab, and for wrapping. AH165-V and -V1: soldering and tab only.

b. Ring selection type pushbutton switches

Operator	Type
	AH165-2
With selector ring (round bezel)	AH165-2S2
With selector ring (square bezel)	AH165-2YS2
Certificate No.	2003010305071068

Note: Certified contact: 2NO+2NC

c. Emergency stop pushbutton switches

Operator	Type
	AH165
Push-lock, turn-reset (32mm dia.)	AH165-V5
Push-lock, turn-reset (40mm dia.)	AH165-V6
Certificate No.	2003010305071068

Note 1: Certified contact: 1NC and 2NC only
 2: Certified button color: red (R) only
 3: Certified terminal shape: soldering and tab only

d. Illuminated pushbutton switches

Operator	Type					
	AH164		AH165		AH165-2	
	Momentary action	Alternate action	Momentary action	Alternate action	Momentary action	Alternate action (Turn-reset for 2VL, 2YVL)
Flush round head	—	—	—	—	AH165-2FL	AH165-2FL5
Extended round head	AH164-L	AH164-L5	AH165-L	AH165-L5	AH165-2EL	AH165-2EL5
Extended square head	—	—	—	—	AH165-2SEL	AH165-2SEL5
Concave square head	—	—	—	—	AH165-2SCL	AH165-2SCL5
Flush square head	AH164-SL	AH164-SL5	AH165-SL	AH165-SL5	AH165-2SFL	AH165-2SFL5
Flush rectangular head	AH164-TL	AH164-TL5	AH165-TL	AH165-TL5	—	—
Flush square head with guard	AH164-SGL	AH164-SGL5	AH165-SGL	AH165-SGL5	—	—
Flush rectangular head with guard	AH164-TGL	AH164-TGL5	AH165-TGL	AH165-TGL5	—	—
Mushroom head (round bezel)	—	—	—	—	AH165-2ML	—
Mushroom head (square bezel)	—	—	—	—	AH165-2YML	—
Push-locked (round bezel)	—	—	—	—	—	AH165-2VL
Push-locked (square bezel)	—	—	—	—	—	AH165-2YVL
Certificate No.	2003010305071068					

- Note 1: Certified contact: 1NO+1NC, 2NO+2NC, 3NO+3NC
 2: Certified terminal shape: for soldering and tab, and for wrapping.
 3: Certified lamp: LED, incandescent lamp and neon
 4: Certified operating lamp voltage: 6, 12 and 24V DC (LED)/ 5, 12, 15 and 24V AC/DC (incandescent lamp) / 110, 120, 220 and 240V AC (neon)
 (LED and incandescent lamps with transformer are not certified.)
 5: The spot LED type and 2-color LED type have not been approved.

e. Selector switches (Standard)

Operator	Type		
	AH164	AH165	AH165-2
Knob (round bezel)	—	—	AH165-2P
Knob (rectangular bezel)	AH164-P	AH165-P	—
Knob (square bezel)	AH164-SP	AH165-SP	AH165-2YP
Key (round bezel)	—	—	AH165-2J
Key (rectangular bezel)	AH164-J	AH165-J	—
Key (square bezel)	AH164-SJ	AH165-SJ	AH165-2YJ
Key, 45-degree notch (rectangular bezel)	AH164-JK	AH165-JK	—
Certificate No.	2003010305071068		

- Note 1: Certified contact: 1NO+1NC, 2NO+2NC, 3NO+3NC
 2: Certified terminal shape: for soldering and tab, and for wrapping

f. Selector switches (Direct opening action)

Operator	Type
Key (rectangular bezel)	AH165-JM2
Key (round bezel)	AH165-RJM2
Certificate No.	2003010305071068

- Note 1: Certified contact: 1NO+1NC, 2NO+2NC
 2: Certified position quantity: 2-position only.
 Certified returning method: maintained only.

g. Illuminated selector switches

Operator	Type
Knob (round bezel)	AH165-2PL
Certificate No.	2003010305071068

- Note 1: Certified contact: 1NO+1NC, 2NO+2NC
 2: Certified operating lamp voltage: 6, 12 and 24V DC (LED)/ 5, 12, 15 and 24V AC/DC (incandescent lamp)

h. Pilot light

Lens	Type		
	AH164	AH165	AH165-2
Flush round	—	—	AH165-2Z
Extended round	AH164-Z	AH165-Z	AH165-2ZE
Extended square	—	—	AH165-2SZE
Flush square	AH164-ZS	AH165-ZS	AH165-2SZ
Flush rectangular	AH164-ZT	AH165-ZT	—
Certificate No.	2003010305071044		

- Note 1: Certified lamp: LED, incandescent lamp and neon
 2: Certified operating lamp voltage: 6, 12 and 24V DC (LED)/ 5, 12, 15 and 24V AC/DC (incandescent lamp)/ 110, 120, 220 and 240V AC (neon) (LED and incandescent lamp with transformer are not certified.)
 3: The spot LED type and 2-color LED type have not been approved.

● ϕ 16 AH16P, 16P-2 Series

a. Pushbutton switches(Operator)

Operator	Type		AH16P-2	
	AH16P		Momentary action	Alternate action
Flush round head	—	—	AH16P-2F	AH16P-2F5
Extended round head	AH16P-E	AH16P-E5	AH16P-2E	AH16P-2E5
Extended square head	—	—	AH16P-2SE	AH16P-2SE5
Extended square concave head	—	—	AH16P-2SCE	AH16P-2SCE5
Flush square head	AH16P-SF	AH16P-SF5	AH16P-2SF	AH16P-2SF5
Flush rectangular head	AH16P-TF	AH16P-TF5	—	—
Flush square head with guard	AH16P-SGF	AH16P-SGF5	—	—
Flush rectangular head with guard	AH16P-TGF	AH16P-TGF5	—	—
Mushroom head (round bezel)	—	—	AH16P-2M	—
Mushroom head (square bezel)	—	—	AH16P-2YM	—
Push-locked (round bezel)	—	—	—	AH16P-2V
Push-locked (square bezel)	—	—	—	AH16P-2YV
Certificate No.	2003010305071068			

b. Ring selection type pushbutton switches(Operator)

Operator	Type	
	AH16P-2	
With selector ring (round bezel)	—	AH16P-2S2
With selector ring (square bezel)	—	AH16P-2YS2
Certificate No.	2003010305071068	

c. Illuminated pushbutton switches(Operator)

Operator	Type		AH16P-2	
	AH16P		Momentary action	Alternate action
Flush round head	—	—	AH16P-2FL	AH16P-2FL5
Extended round head	AH16P-L	AH16P-L5	AH16P-2EL	AH16P-2EL5
Extended square head	—	—	AH16P-2SEL	AH16P-2SEL5
Extended square concave head	—	—	AH16P-2SCL	AH16P-2SCL5
Flush square head	AH16P-SL	AH16P-SL5	AH16P-2SFL	AH16P-2SFL5
Flush rectangular head	AH16P-TL	AH16P-TL5	—	—
Flush square head with guard	AH16P-SGL	AH16P-SGL5	—	—
Flush rectangular head with guard	AH16P-TGL	AH16P-TGL5	—	—
Mushroom head (round bezel)	—	—	AH16P-2ML	—
Mushroom head (square bezel)	—	—	AH16P-2YML	—
Push-locked (round bezel)	—	—	—	AH16P-2VL
Push-locked (square bezel)	—	—	—	AH16P-2YVL
Certificate No.	2003010305071068			

Note 1: Certified lamp: LED, incandescent lamp.

Note 2: Certified operating lamp voltage: 6, 12 and 24V DC (LED)/ 5, 12, 15 and 24V AC/DC (incandescent lamp).

d. Selector switches (Operator)

Operator	Type	
	AH16P	AH16P-2
Knob (round bezel)	—	AH16P-2P
Knob (rectangular bezel)	AH16P-P	—
Knob (square bezel)	AH16P-SP	AH16P-2YP
Key (round bezel)	—	AH16P-2J
Key (rectangular bezel)	AH16P-J	—
Key (square bezel)	AH16P-SJ	AH16P-2YJ
Certificate No.	2003010305071068	

Note Certified Knob color: black only.

f. Pilot light

Lens	Type	
	AH16P	AH16P-2
Flush round	—	AH16P-2Z
Extended round	AH16P-Z	AH16P-2ZE
Extended square	—	AH16P-2SZE
Flush square	AH16P-ZS	AH16P-2SZ
Flush rectangular	AH16P-ZT	—
Certificate No.	2003010305071044	

Note 1: Certified lamp: LED, incandescent lamp.

Note 2: Certified operating lamp voltage: 6, 12 and 24V DC (LED)/ 5, 12, 15 and 24V AC/DC (incandescent lamp).

e. Contact part(AH16P and AH16P-2 sharing)

Usage	Type
Illuminated	AH16P-L11
	AH16P-L22
Non-Illuminated	AH16P-11
	AH16P-22
Pilot light	AH16P-Z1
Certificate No.	2003010305071068

● **AM22/DM22 Series**

a. Pushbutton switches

Bezel	Operator	Type	
		AM22	
		Momentary action	Alternate action (Turn-reset for V5R)
Round bezel	Flush round head	AM22F0R	AM22F5R
	Extended round head	AM22E0R	AM22E5R
	Extended with full guard (24mm dia.)	AM22G3R	AM22G8R
	Mushroom head with full guard (40mm dia.)	AM22M3R	AM22M8R
	Mushroom head (29mm dia.)	AM22M4R	—
	Mushroom head (40mm dia.)	AM22M0R	AM22M5R
Certificate No.	2003010305063372		

Note: Certified contact: within 4 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC, 3NO, 3NC, 2NO+2NC, 4NO, 4NC)

b. Illuminated pushbutton switches

Bezel	Operator	Type	
		AM22	
		Momentary	Alternate
Round bezel	Flush round head	AM22F0L	AM22F5L
	Extended round head	AM22E0L	AM22E5L
	Mushroom head (29mm dia.)	AM22M4L	AM22M9L
	Mushroom head (40mm dia.)	AM22M0L	AM22M5L
	Extended with transparent full guard (24mm dia.)	AM22G4L	AM22G9L
	Extended with full guard (24mm dia. with openings)	AM22G2L	AM22G7L
Certificate No.	2003010305063372		

Specifications

- Contact
 - Without transformer: within 3 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC, 3NO, 3NC)
 - With transformer: within 2 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC)
- Color of button
 - Green, red, white, yellow, orange, blue
- Light source
 - LED lamp, incandescent lamp
- Operating voltage of lamp
 - Without transformer
 - LED: 6V AC, 6V DC, 12V AC/DC
 - Incandescent lamp: 5.5V AC/DC, 20V AC/DC
 - LED, incandescent lamp: 15V AC/DC, 24V AC/DC
 - With transformer
 - LED, incandescent lamp: 100-110V AC, 115-127V AC, 200-220V AC, 230-254V AC, 350-380V AC, 400-440V AC, 480V AC, 500-550V AC

c. Selector switches

Bezel	Operator	Type	
		AM22	
		Standard type	Control type
Round bezel	Knob	AM22PR	AM22PCR
	Lever	AM22WR	AM22WCR
	Key	AM22JR	AM22JCR
Certificate No.	2003010305063372		

Note: Certified contact: within 4 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC, 3NO, 3NC, 2NO+2NC, 4NO, 4NC)

d. Illuminated selector switches

Bezel	Operator	Type
		AM22
		Standard type
Round bezel	Knob	AM22PL
Certificate No.	2003010305063372	

- Note 1: Certified contact without transformer: within 3 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC, 3NO, 3NC)
 2: Certified contact with transformer: within 2 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC)
 3: Certified lamp: both LED and incandescent lamp

e. Pilot lights

Bezel	Lens	Type
		DM22
Round bezel	Dome	DM22D0L
	Extended round	DM22E3L
	Faceted	DM22K0L
Certificate No.	2003010305063383	

- Note 1: Certified lamp: both LED and incandescent lamp
 2: Certified transformer type: standard and short-body
 3: Except for with resistor unit

f. Item with degree of protection IP2X (IP20)

Type	Certificate No.
AM22□ZB	2003010305063372
DM22□ZB	2003010305063383

Note: Certified for all types listed in the above items except for short-body transformer of pilot light

● AG28, DG28 series

a. Pushbutton switches

Bezel	Operator	Type	
		Momentary	Alternate
Square bezel	Flush head	AG28F0S	AG28F5S
	Full guard	AG28G2S	AG28G7S
Certificate No.		2003010305063372	

Note: Certified contact: within 4 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC, 3NO, 3NC, 2NO+2NC, 4NO, 4NC)

b. Ring selection type pushbutton switches

Bezel	Operator	Type
Square and Round bezel	Ring selection type	AG28S2Y AG28S6Y
Certificate No.		2003010305063372

Note: Certified contact: 2NO, 2NO+2NC

c. Illuminated pushbutton switches

Bezel	Operator	Type	
		Momentary	Alternate
Square bezel	Flush head	AG28F0M	AG28F5M
	Full guard	AG28G2M	AG28G7M
Certificate No.		2003010305063372	

Specifications

- Contact
 - Without transformer: within 3 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC, 3NO, 3NC)
 - With transformer: within 2 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC)
- Color of button
 - Green, red, white, yellow, orange, blue
- Light source
 - LED lamp, incandescent lamp
- Operating voltage of lamp
 - Without transformer
 - LED: 6V AC, 6V DC, 12V AC/DC
 - Incandescent lamp: 5.5V AC/DC, 20V AC/DC
 - LED, incandescent lamp: 15V AC/DC, 24V AC/DC
- With transformer
 - LED, incandescent lamp: 100-110V AC, 115-127V AC, 200-220V AC, 230-254V AC, 350-380V AC, 400-440V AC, 480V AC, 500-550V AC

d. Selector switches

Bezel	Operator	Type	
		Standard type	Control type
Square and round bezel	Knob	AG28PY	AG28PCY
Certificate No.		2003010305063372	

Note: Certified contact: within 4 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC, 3NO, 3NC, 2NO+2NC, 4NO, 4NC)

e. Illuminated selector switches

Bezel	Operator	Type
		Standard type
Square and round bezel	Knob	AG28PP
Certificate No.		2003010305063372

Note1: Certified contact without transformer: within 3 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC, 3NO, 3NC)
 2: Certified contact with transformer: within 2 contacts (1NO, 1NC, 1NO+1NC, 2NO, 2NC)
 3: Certified lamp: both LED and incandescent lamp

f. Pilot lights

Bezel	Lens	Type
Square bezel	Flush	DG28F3M
Certificate No.		2003010305063383

Note: Certified lamp: both LED and incandescent lamp

g. Item with terminal supporting IP2X

Type	Certificate No.
AG28□ZB	2003010305063372
DG28□ZB	2003010305063383

Note: Certified for all types listed in the above items

(8) Circuit Protectors

● **CP-F series**

Operating characteristic	Type			Certificate No.
	1-pole item	2-pole item	3-pole item	
Momentary type	OP31FI	CP32FI	CP33FI	2003010309067080
Middle-speed type	CP31FM	CP32FM	CP33FM	
Low-speed type	CP31FS	CP32FS	CP33FS	

Note1: Certified accessories (with auxiliary switch, alarm switch): all in manufactured range

2: The type with delay unit is also certified.

● **CP-T series**

Operating characteristic	Type			Certificate No.
	1-pole item	2-pole item	3-pole item	
Momentary type	OP31TI	CP32TI	CP33TI	2003010309067080
Middle-speed type	CP31TM	CP32TM	CP33TM	
Low-speed type	CP31TS	CP32TS	CP33TS	

Note1: Certified accessories (with auxiliary switch, alarm switch): all in manufactured range

2: Types for both AC circuit and DC circuit are certified.

(9) Manual Motor Starters (MMS)

● **MMS**

Frame	Standard breaking capacity	High breaking capacity		Certificate No.
	Adjustable thermal-magnetic trip type	Adjustable thermal-magnetic trip type	Instantaneous trip type	
32A	BM3RSB			2003010307076338
		BM3RHB	BM3RHBK	2003010307076342
63A	BM3VSB	BM3VHB	BM3VHBK	2003010307076333

(10) Cam Switches

Operator mechanism	Type	Certificate No.
Manual reset	AK22-1M	2003010305063492
Automatic reset	AK22-1A	
Mixed reset	AK22-1C	

Note1: Certified contact configuration: all in manufactured range

2: Certified shape and color of handle: all in manufactured range

3: Certified key type and key removal position: all in manufactured range

6.8. Related Information for CCC

(1) Product Quality Law (中华人民共和国产品质量法)

a. What is Product Quality Law?

1. Enforced on September 1, 1993
2. To cover all the products distributed and sold in the People's Republic of China (Article 2)
3. Sampling inspection is carried out in the market. Products ready for sale either in the market or in companies' products warehouses shall be subject to sampling inspection. (Article 15)
4. This law has penalty clauses requiring suspension of production and sales or imposing fines. (Articles 49 to 72)

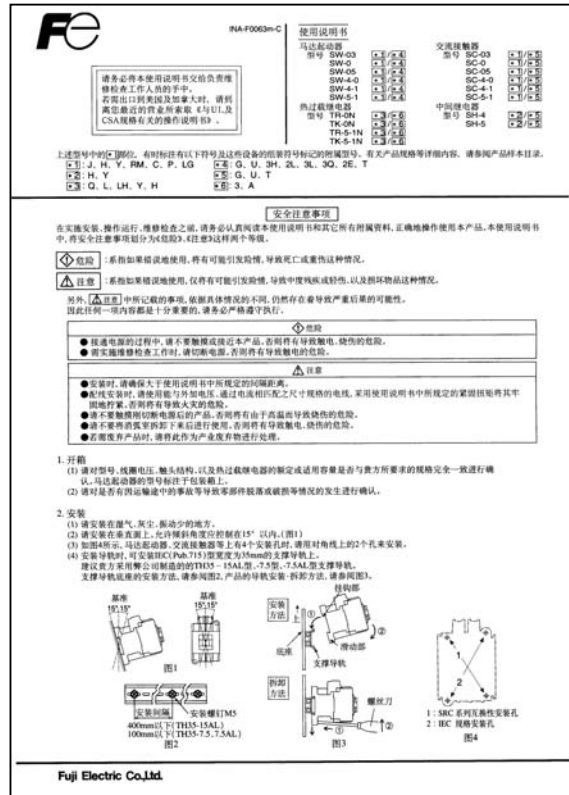
b. What are required by Product Quality Law? (Responsibilities and duties of manufacturers and sellers for their products quality)

1. Conformity with Chinese Standards about quality. (Article 26)
2. Marking in Chinese on products or packages. (Article 27)
 - Certificate of successful product quality inspection
 - Product name, factory name, factory address
 - Instruction manual
 - Notes (Warning indication, etc.)

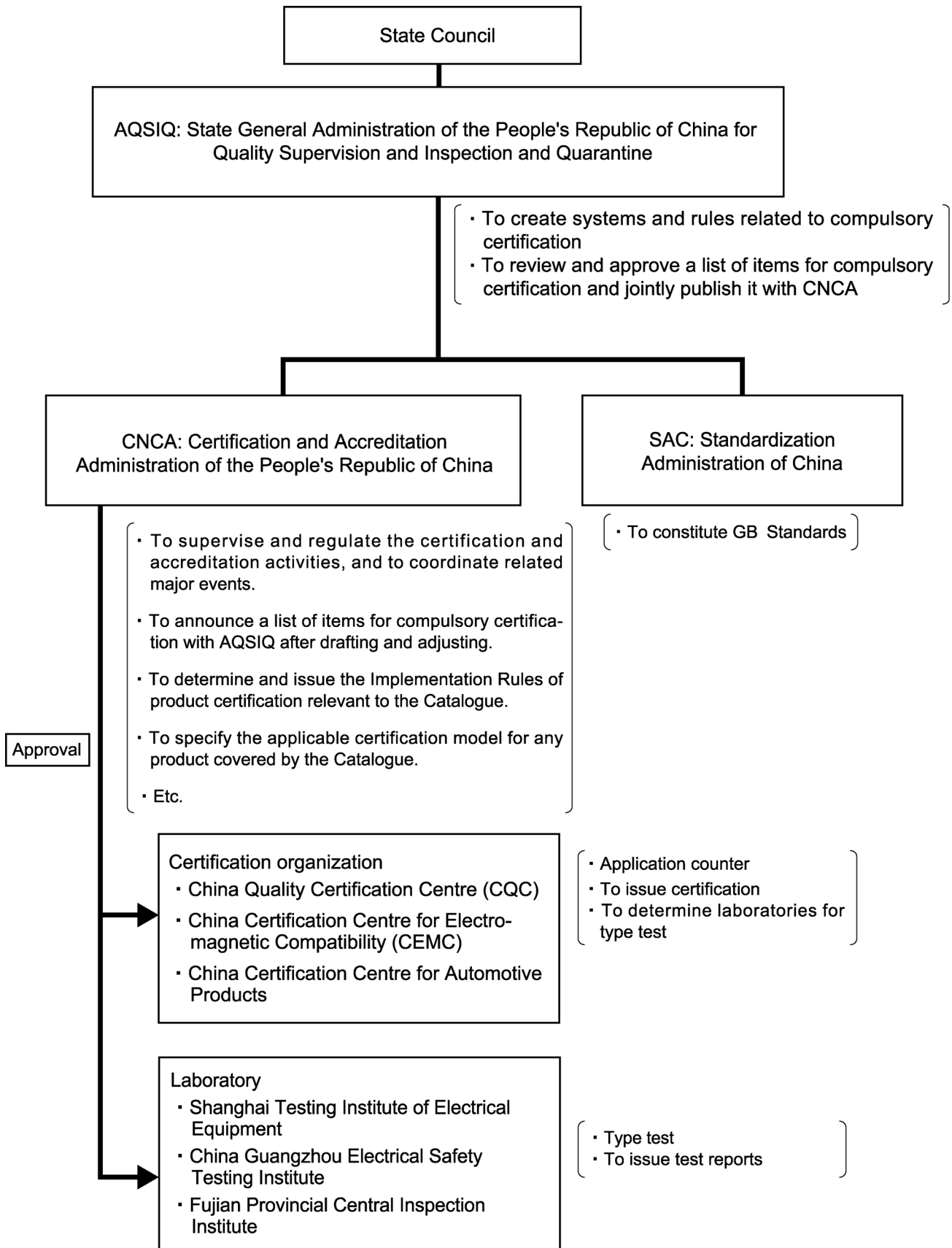
Sample of a certificate of successful product quality inspection



Sample of an instruction manual in Chinese

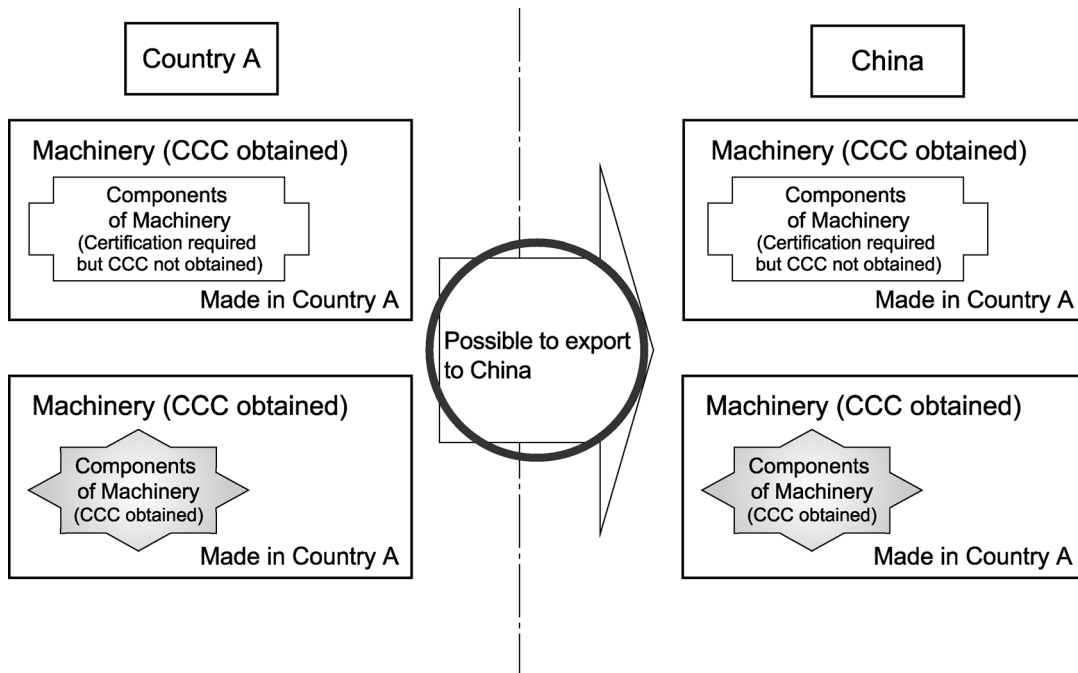


(2) CCC-related organizations



(3) In case of exporting machinery from country A to China (Relations between FUJI products and machinery)

a. Exporting machinery from Country A to China (in case such machinery requires CCC)

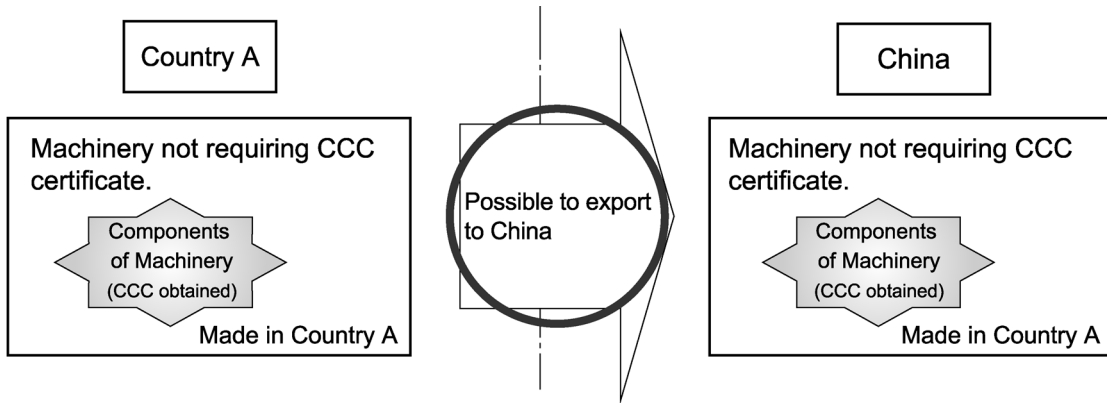


◇ If the machinery itself requires certification (farming machines and welding machines are included in the Product catalogue*1), the machinery certification must be obtained. If the machinery certification has been obtained, the machinery can be exported to China even when Fuji's products used as its components have not been certified (though they require certification as individual products). If certified Fuji's products are used in the machinery at the time of application for machinery certification, however, that portion is exempted from the test, resulting in shortening of the period for obtaining the certification. It is, therefore, recommended to use certified products (if such products require certification) as components of the machinery applied for certification.

*1: Refer to "Implementation Rules for compulsory products certification" published by CNCA for further details of the farming and welding machines.

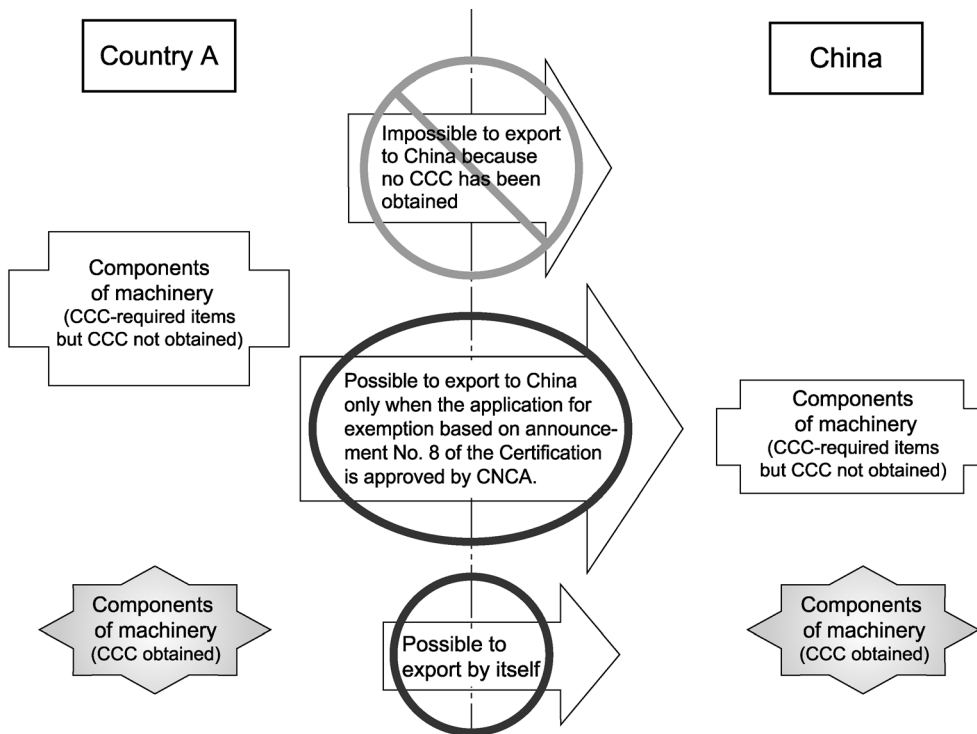
b. Exporting machinery from Country A to China

(in case such machinery does not require CCC certification. example: machine tools, semiconductor manufacturing equipment, elevators, etc.)



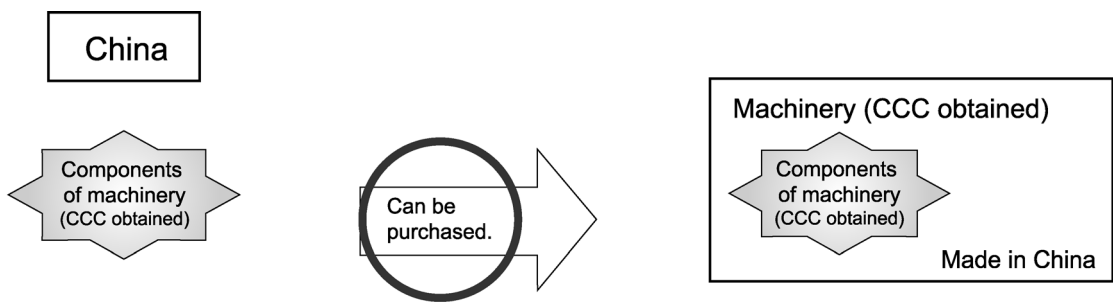
◇ It is recommended to use certified Fuji's products as components of the machinery even when the machinery itself does not require CCC certification. This is recommended according to the principle of the certification system that expects use of certified components when they individually require certification.

c. Exporting components (FUJI's products) for machinery from Country A to China (example: spare parts, etc.)



◇ It is not possible to export individual FUJI's products to China unless they have obtained Certification. However, it is possible to export from country A to China only when the application for exemption based on announcement No. 8 of the Certification is approved by CNCA.

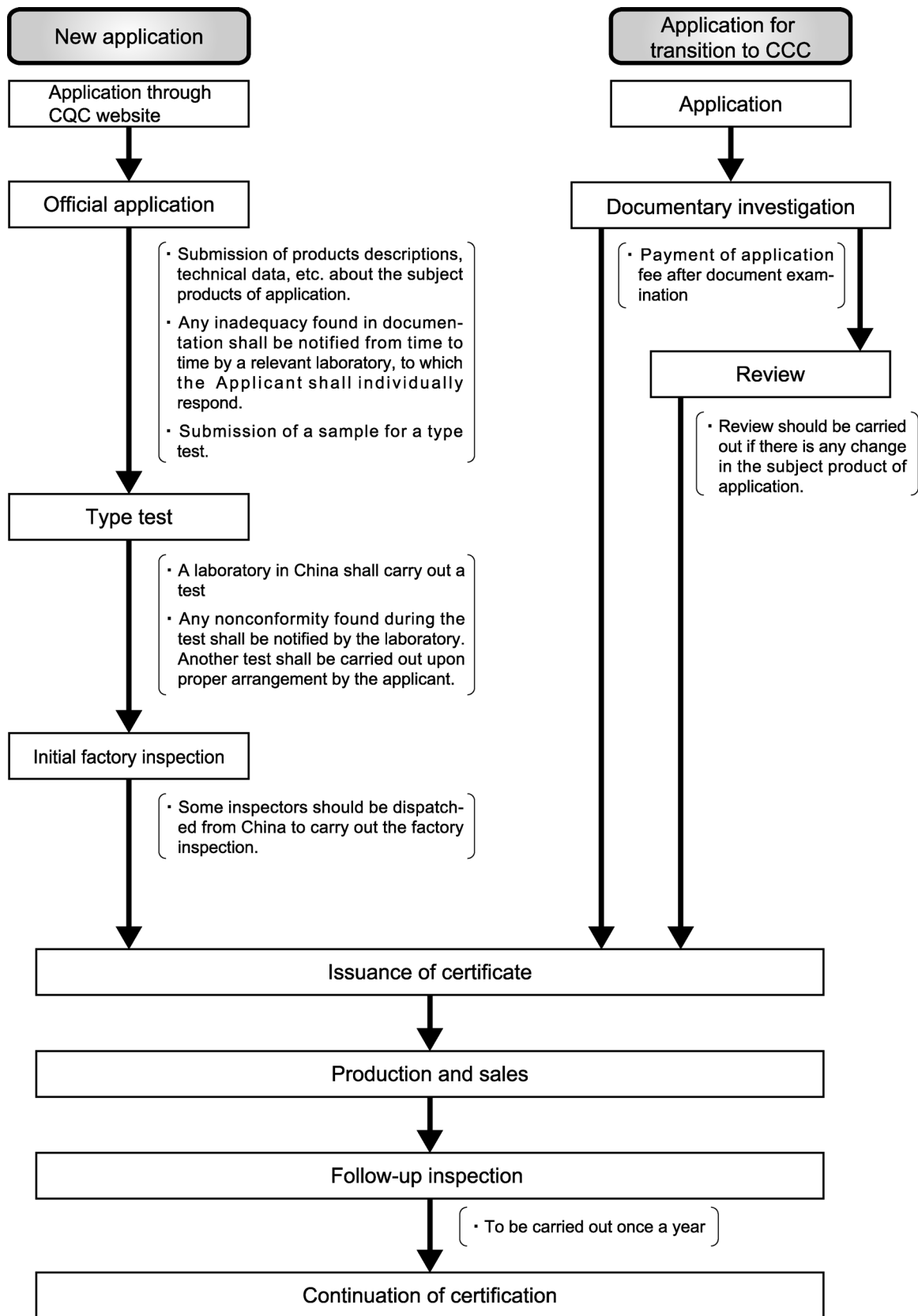
(4) In the case of purchasing FUJI's products for use in machinery in China



◇ To purchase parts for machinery in China, you must purchase certified products. However, you can use them only when your application for an exemption according to announcement No. 8 of the certification is approved by the CNCA.

(5) Procedures from application to acquisition and maintenance of Certification

(New application, application for transition to CCC)



(6) Homepage addresses of CCC-related organizations

State General Administration of the People's Republic of China for Quality Supervision and Inspection and Quarantine (AQSIQ)

<http://www.aqsiq.gov.cn/cms/template/index.html>

Certification and Accreditation Administration of the People's Republic of China (CNCA)

<http://www.cnca.gov.cn/>

China Export Import Quality and Quantity Certification Centre (CQC)

<http://www.cqc.com.cn/>

Shanghai Testing Institute of Electrical Equipment

<http://www.tilva.com/>

(page providing boards-related information)

<http://www.tilva.com/ccs.htm>

For application for an exemption, refer to the following CNCA website.

<http://www.cnca.gov.cn/cl.htm>

<http://www.cnca.gov.cn/cx.doc>