

3. CSA Approved Equipment

CSA is a semi-governmental organization established in Canada for the purpose of assuring the safety to life and property of equipment which uses electrical devices, such as machine tools, electrical machines, electronic equipment, medical facilities and business machines.

Magnetic starters, push-button switches and other products are also subject to this standard. Therefore, to be exported, these products must be CSA approved.

On the other hand, when these products are installed in panels or equipment, the assemblies may be dangerous depending on the installation method even if all the parts used are CSA approved. To avoid this, additional standards have been established, besides those applicable to unit products, regarding the structure and wiring of panels and equipment, and the insulation distance and mounting methods for installing these products in narrow places. Assemblies must conform to these standards as well.

When non-approved parts are used, tests will be made to see whether they are suitable for the panel or equipment in which they are to be installed, and then their use will be approved only as part of said panel or equipment.






However, it is more advantageous to use CSA approved parts because non-approved parts require extra time and labor in obtaining CSA approval for panel or equipment. Besides, even in using non-approved products after obtaining CSA approval for panel or equipment, power cords, internal wires, plugs and fuse holders must be CSA approved.

Further, in some U.S. states, CSA standard is regarded as equivalent to UL standard. Therefore, using CSA approved equipment is advantageous also in U.S. markets.

■ Contactors and Starters

CSA approved products are the same as UL approved ones. For details, see the following documents:

| | NEW SC and NEO SC series Magnetic contactors and starters | NEW SC series Auxiliary relays | NEW SC and NEO SC series Thermal overload relays | NEW SC series Optional units | SJ series High-sensitivity contactors | FC series Magnetic contactors | SB series DC magnetic contactors | SC-M series magnetic contactors |
|----------------|--|--------------------------------|--|------------------------------|---------------------------------------|--|----------------------------------|--|
| CSA File No. | Acquisition in  | | | | LR20479 | Acquisition in  | LR20479 | Acquisition in  |
| Reference page | 11 | 14 | 17 | 19 | 24 | 24 | 25 | 20 |


■ Solid-state Contactors

CSA approved products are the same as UL approved ones. For details, see the following documents:

| | 3-pole Solid-state contactors | Single-pole Solid-state contactors |
|----------------|-------------------------------|------------------------------------|
| CSA File No. | LR20479-245 | LR20479-165 |
| Reference page | 27 | 27 |

■ Molded Case Circuit Breakers/Earth Leakage Circuit Breakers/Manual Motor Starters

CSA approved products are the same as UL approved ones. For details, see the following documents:

| | BU□A, BU□B series | α-TWIN series | SG-UL, EG-UL series | SA-UL series | Manual motor starters |
|----------------|-------------------|---------------|---|--------------|-----------------------|
| CSA File No. | LR66856 | | Acquisition in  | | |
| Reference page | 32 | 30 | 30 | 28 | 33 |

■ Circuit Protectors

CSA approved products are as follows. For their types and rating, see Catalog No. EH450.

| | Type CP-P/B | Type CP-F/T | Type CP-E | Type CP-V | Type CP-R | Type CP-H | Type CP-Q | Type CP-E dedicated socket |
|----------------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|----------------------------|
| CSA File No. | LR63868 | | | | | | | LR67978 |
| Reference page | 33 | | | | | | | |

■ Super-rapid Fuses

CR2LS series products of 10A, 20A, 30A, 50A or 75A rating are CSA approved based on the following specifications. When they are used in semiconductor power supplies which require CSA approval, CSA approval shall be applied for, with the following CSA File No. indicated in the application form.

| | CR2LS-10/UL | CR2LS-20/UL | CR2LS-30/UL | CR2LS-50/UL | CR2LS-75/UL |
|----------------|-------------|-------------|-------------|-------------|-------------|
| CSA File No. | LO4000-4090 | | | | |
| Reference page | 34 | | | | |

■ Pushbuttons, Selector Switches, Pilot Lights, Buzzers

Standard products are CSA approved. For details, see the following documents.

| | AR22, DR22, AR30, DR30, AM22, DM22 series | AG28, DG28 series | AH25 series | AH164, AH165 (except AH165-ZM) series | AH165-2 (without pilot light) AH225, AG225, AH16P, AH16P-2, AH22P series | AH165-2 (with pilot light) series AM165-ZM |
|----------------|---|-------------------|-------------|---------------------------------------|--|--|
| CSA File No. | LR20479 | | | | | LR84365 |
| Reference page | 34 | | | | | |

■ Control Relays

CSA approved products are the same as UL approved ones. For details, see the following documents:

| | Miniature control relays | Power relays | | | Control relays | | Card relays | Terminal relays |
|----------------|--------------------------|--------------|---------|---------|----------------|-----------|-------------|--------------------|
| | HH52□, 53□, 54□ | HH62□ | HH63P | HH64P | HH22P□-UL | HH23P□-UL | RB104, 105 | RS4N, 6N(P), 16(P) |
| CSA File No. | LR20479 | LR20479 | LR35144 | LR35144 | LR20479 | LR20479 | LR20479 | LR20479 |
| Reference page | 43 | | | | | | | |

■ Timers

CSA approved products are the same as UL approved ones. For details, see the following documents:

| | Super timers MS7S1 | Digital timers MD4E |
|----------------|--------------------|---------------------|
| CSA File No. | LR20479 | LR20479 |
| Reference page | 45 | 45 |

■ Terminal Blocks

● Combination terminal blocks

| Type | Withstand voltage [V] | Rated current [A] | Connecting wire size | CSA File No. |
|-----------|-----------------------|-------------------|----------------------|--------------|
| LT2F-010 | 600 | 15 | 20-16 AWG-Cu | LR702989 |
| LT2F-020 | | 19 | 16-14 AWG-Cu | |
| LT2F-030 | | 27 | 14-10 AWG-Cu | |
| LT2F-040 | | 35 | 12-10 AWG-Cu | |
| LT2F-080 | | 68 | 6-8 AWG-Cu | |
| LT2F-020W | | 19 | 18-14 AWG-Cu | |
| LT2E-020 | | 20 | 20-14 AWG-Cu | |
| LT2E-030 | | 30 | 18-12 AWG-Cu | |
| LT2E-040 | | 40 | 18-10 AWG-Cu | |
| LT2E-080 | | 75 | 10-6 AWG-Cu | |
| LT2E-090 | | 95 | 8-4 AWG-Cu | |
| LT2E-150 | | 150 | 4-2/0 AWG-Cu | |
| LT2E-200 | | 200 | 2-4/0 AWG-Cu | |
| LT2E-300 | | 300 | 2/0-300 AWG-Cu | |
| LT2E-400 | | 400 | 4/0-350 AWG-Cu | |
| LT2E-600 | | 550 | 300-600 AWG-Cu | |

● Relaying connector terminal blocks

CSA approved products are the same as UL approved ones. For details, see the following documents:

| | LP5W series |
|----------------|-------------|
| CSA File No. | E45457 |
| Reference page | 46 |