

Elevator Control Systems Custom Built For Your Application!

FAST FACTS

1914

*is the year CJA started manufacturing
controllers. We still have job records
and prints that date back to this period.*



VVVF Controller Pictured above with NEMA 4 Cabinet

For almost a century C.J. Anderson & Company has been manufacturing controllers for both national and international markets. As a pioneer in the field CJA has manufactured thousands of controllers, from tiller rope and car switch to the present day microprocessor. With this vast number of controllers in the field most elevator constructors or mechanics are familiar with CJA's design, operation and construction. It is our policy to retain the familiar design principles while incorporating modern technology into the control systems.

We specialize in providing complete fixture/control system packages for ease of installation. You don't have to worry about coordinating schedules and lead times and will receive a completed package on time with all the features for your project. We also can provide serial link wiring for CJA Fixture/Control System packages which can greatly decrease your installation time.

All of the controllers shown can be manufactured to meet the following standards.

- Water Resistant - NEMA 4
- Corrosion Resistant - NEMA 4X
- Hazardous Location - NEMA 7/9
- Dust Proof - NEMA 12
- Conventional - NEMA 1

With the advent of computer logic into the elevator industry there have been a vast number of new companies promoting their control systems. Many of these new companies no longer exist. With C.J. Anderson Control Systems you have the assurance that technical assistance, wiring diagrams and replacement parts will be available for years to come. With CJA you enjoy the benefits of "today's systems" coupled with years of proven reliability, and the confidence that we will be here in the future.

CJA's objective is to utilize the best available technology, equipment selection and design which will suit the contractor's needs for performance and cost. This includes the selection of the processor, computer software, programming, control equipment, drives, relays, resistors, etc. which go into the final design. The overriding goal of the entire system is that the final product must be reliable and cost effective.

This line of Non-Proprietary Logic Controls provides enough power to compete with any other elevator microprocessor systems.

Reliability is insured by pre-testing all connection points and then completely testing the finished product prior to shipping. Cost effectiveness is realized by ease of installation, adjustment and maintenance after completion.

Controller Types

VVVF Variable Voltage Variable Frequency

For traction elevators traveling faster than 100 FPM. Solid State controls, dynamic braking and force guided relays make our controllers the most solid state in the industry. For elevators that are under 150 feet per minute no encoder feedback from the motor is required. For speeds 150 feet per minute and above we recommend that you use encoder feedback. We can provide a new motor and encoder for your elevator system along with a new controller.

RTC-1 - Soft Start For One Speed Motors

For traction elevators that travel less than 90 FPM. With this system, stopping of the elevator occurs when the elevator comes to the floor and the door zone sensor is activated. The brake sets and the elevator stops. The slower the elevator travels the better this controller stops. Motor control is by Power Electronics Smooth Control or soft start from one of the other soft start manufacturers.

RTC-2 - Soft Start For Two Speed Motors

For traction elevators with speeds less than 180 feet per minute. This is a very good alternative for older elevators. Soft start units are controlled by the Power Electronics 2 Speed Smooth Move. It slowly ramps up into the first motor winding and then the second and it also has the ability to slow down when a selector is added to your elevator. We can provide this as a PLC Based system or relay logic without Fire Service for repair or like for like replacements.

Hydraulic - Soft Start, Wye Delta or SOL

Our CJA controllers for hydraulic projects are ideal for direct replacement or new installations and have solid state industry type PLC and components that are readily available and off the shelf in the event of a shut down. Available with Soft Start, Wye Delta or Straight Accross The Line, we can build a controller to meet your specifications.

VVVF Line Regen

Line Regeneration with elevator controllers is being specified for more and more projects. Instead of energy transforming into heat when the elevator stops and dissipating into a resistor bank, the energy that's created when the elevator stops gets pushed back into the AC line through a REGEN unit. The upfront cost associated with line regenerative drives is more than a traditional VVVF controller. However over time you'll know that your elevator is conserving what used to be wasted energy and helping in your effort to keep your building green.

SCR - For DC Motors

They are still out there, elevators running with DC motors. We still build elevator controllers for these types of applications utilizing a solid state SCR Drive. We also use PLC Based logic, encoder feed back and recommend you installing a new line isolation transformer to ensure that noise and interference is kept to a minimum. There's still a market for DC controllers, it's just not as large as for VVVF AC elevators.

Features & Options

Microprocessor Control (PLC)

CJA utilizes the best software and PLC's to achieve the best performance for your elevator. Each Control System has a "brain" which contains a non volatile memory program that cannot be erased in the event of a power outage.

Microprocessor control allows CJA to upgrade programs in the future to allow for code changes and new elevator requirements. We also manufacture controllers using PLC's that are industrial type. One of the most popular among the ones we build with is Allen Bradley.

Relay Logic

Need Relay Logic? We still make them. Keep in mind that the price of a Relay based system when compared to a Microprocessor based system is actually more due to an increased number of relays and time involved with manufacturing and testing the controller. Also note that certain Fire Service Codes are not available with this type of logic, and Single Automatic Pushbutton operation can only be accommodated with elevators over three floors. Ideal for elevator speeds under 100 Feet Per Minute and using motor controls that are anything but VVVF. Perfect in some cases for like for like repair replacements.

Touchscreen Diagnostics

CJA Microprocessor control systems come equipped with touch screen controls for monitoring the elevator and reporting faults of the system, such as bad door interlock contacts. Each LCD screen is easy to navigate through and also allows the mechanic the ability to change simple parameters such as door timing and alternative floor for fire service. This is a standard feature on all PLC based controllers.

Easy to Wire Terminal Blocks

Easy to view and wire terminal blocks make wiring a breeze. We specifically use easy to wire blocks to help with wiring.

Controller Air Conditioners & Heaters

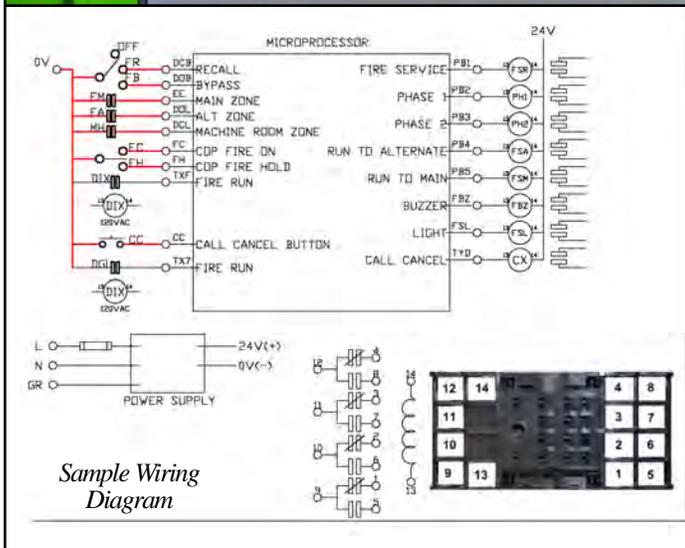
We can upon request provide cabinet cooled air conditioners to prevent damage to both microprocessor and solid state motor controls for excessively hot machine rooms. Available in NEMA 1, 4/12 and 4X, we can easily provide them should you require one. Each unit is wired directly in to the control system and comes with a manually adjusted thermostat. Heaters are also available for colder climates as well.

Motor Control

Constant Pressure, Car Switch, Single Speed, Two Speed, Hydraulic, Variable Frequency Variable Voltage or DC SCR Applications. We can manufacture your controller for any horsepower or elevator speed you need. This is dependent upon what type of system you have.

These are just a few of the many features available to you when you purchase a CJA Control System. Each control system is built to your job specifications and tested prior to shipping. Call today for controller pricing on your next project.

Elevator Control Systems Fire Service Overlays



Fire Service Panels

We're not going to sugar coat it. Fire Service Overlays either install relatively easy or become a nightmare that can last weeks. This directly relates to how good the existing wiring diagrams are and whether or not the controller has been rewired over the years. We're all obviously trying to save our customers money, and if you're confident that the wiring diagrams you have are pretty accurate, we can provide a price for your overlay after we've reviewed your wiring diagrams.

Using PLC logic we build a control system with fire service features so that you can integrate the fire service panel into your non code compliant elevator system. Depending on the type of control, manufacturer, and operating voltage, all fire service panels can be designed and programmed to meet the local code where they are to be installed. Working from the existing controller wiring diagram each new fire service overlay is built for ease of connecting the two. Complete wiring diagrams and cross connection sheets are provided.

In addition to the fire service panels, the car and hall fixtures necessary to make the system operable are available. A standard CJA fire service key switch is used for the car and hall fixtures. However, the customer's switches can easily be substituted. Fire Fighters instructions, "In Case of Fire....," etc. can be engraved on the fixtures if requested.

In the process of designing the fire service panel, requirements which may not be in the present control system can be included at little or no additional cost. Of particular note are ADA requirements such as passing buzzers, directional and arrival indicators and chimes. Buzzers, chimes, etc. can also be incorporated into the fire service fixtures. While installing fire service, the contractor can bring his customer's elevator into ADA compliance.

Fire Service Cabinets & Replacement Parts

Fire Service Fixtures

CJA was one of the first companies to come up with a solution when in 2004 the elevator code was updated. This update made it mandatory that all fire service functions be placed in a separate cabinet as shown. Along with this challenge, other design requirements included a self latching lock for the door, as well as a feature that would not allow the door to close when the key was in the phase II key switch.

CJA engineers rose to the occasion and came up with this solid built unit for code compliance.

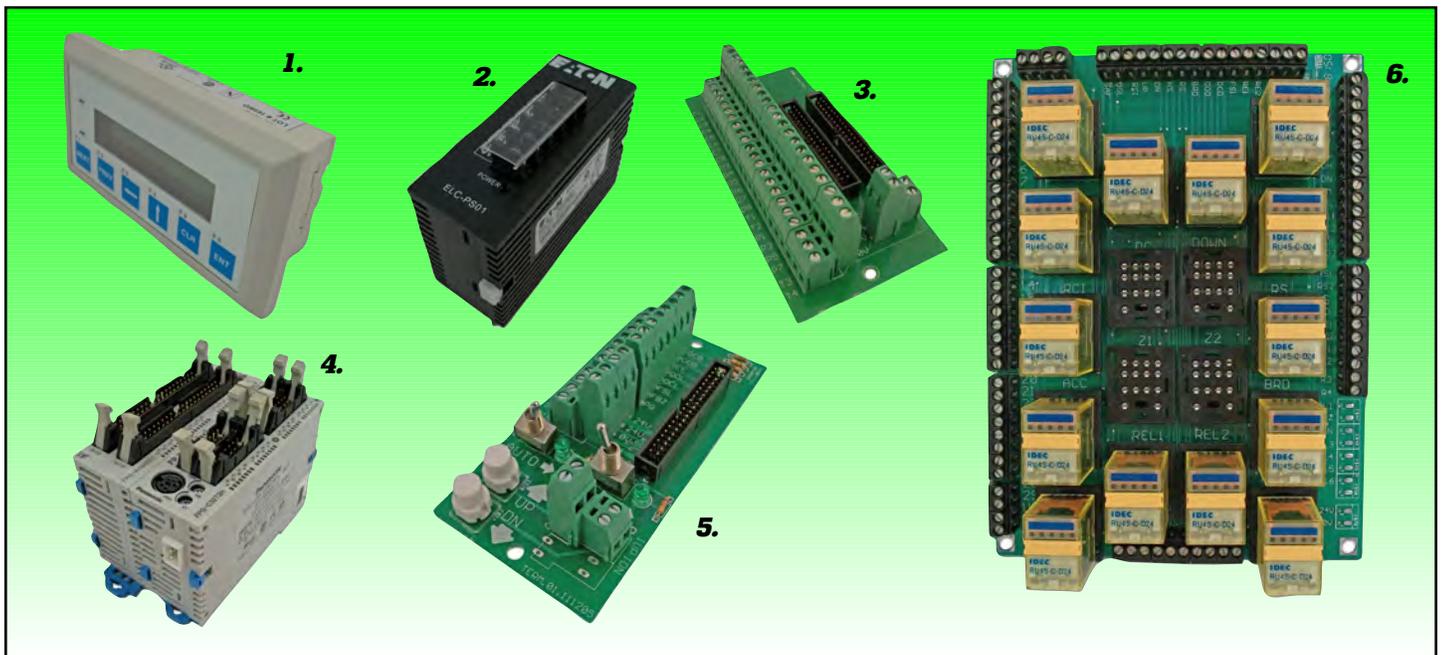
Each unit comes with an FEOK1 Key for National Code Compliance. The unit can be fabricated to meet the State of Florida various zones as well as accommodating the 2642 (NY) and 3502 (Boston, MA) key numbers.

Phase II Fire Cabinet Shown Without Door Controls For Manual Doors



MODELS AVAILABLE

FM3004-FEOK1	Car Station Cabinet Phase II - FEOK1 Key Switch
FH3001-FS	Hall Station Phase I FEOK1 Key Switch



Controller Replacement Parts

CJA controllers are built with components that are readily available off the shelf. Throughout the years, CJA has improved the design of the controller and simplified the installation by attempting to minimize the number of point to point wiring needed for installations.

If you have an old controller there's a good chance that you'll be able to locate replacement relays, contactors and motor controls for your unit. Just make sure that the replacement is rated at the same voltage and amperage rating. For new controllers, 1996-until now, the PCB boards are the units that help decrease your installation time, and are available.

CJA provides free telephone support for all of our controllers whether they were built in 1914 or 2014! Please note that some older PLC's may be obsolete. While CJA does its best to provide PLC's that have a long life, manufacturers of these units may decide to discontinue or upgrade.

MODELS AVAILABLE

1. PLC-IDEK-HG1X-252 - Fault/Status Display & Data Entry Interface - Provides Controller Fault Information
2. PS-SPD24181 - Power Supply - 110-240VAC In 24VDC 1.0 Amp - Output
3. TERM#2-363-757 - Terminal Block #2 I/O Module Interface Provides Interface with the microprocessor/plc inputs and outputs. Contains Car Calls, Hall Calls, Fire Service Controls, Position Indicators, ETC
4. PLC-FPG-C32T2-CPU: Panasonic 16 Inputs + 16 Outputs & PLC-FPG-XY64D2T - I/O Expansion Module Expansion Module - 32 Inputs + 32 Outputs
5. TERM#1-363-756 - Terminal Block #2 - I/O Module Interface Provides Interface with PLC inputs and outputs
6. REL-363-755- Main Relay Control Board - Provides basic safety and redundancy of relays, required by the code. Provides the structural frame for elevator operation. Flexible and easily adaptable to custom requirements.