



## Quick Topics

- MCE Specification Toolset
- Using the Manual
- The CD-ROM
- MCE Services
- Performance Requirements



## How to use Specifications

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### MCE Specification Toolset

The specification toolset includes this manual and MCE Services.

- **Specifications Manual:** The manual provides a reference tool, guiding you through selecting equipment to meet job requirements.
- **MCE Services:** The second component of your specification toolset is your partnership with Motion Control Engineering. MCE professionals are available to answer technical questions, provide supporting information, even to provide hands-on assistance when developing specifications or quotations for extensive, multi-car, modernizations or new installations.

# Using the Manual

The manual is organized so that you can quickly:

1. [Identify equipment sets](#) to meet specific performance requirements.
2. Immediately locate supporting information about specific components.
3. Copy or “cut and paste” supporting text into your job specification. (Text intended to be inserted in a specification document is identified by a red “Specification Text” heading.)

## Performance Requirements

The [charts](#) at the end of this section let you quickly identify specific equipment sets depending upon job performance requirements including:

- Maximum required car speed
- Required motor drive type
- Analog or Digital drive control
- Motor control implementation
- Maximum number of stops
- Car Control Groups
- Landing system choices
- Load weighing choices
- Load pre-torque availability
- Door operator choices
- Hoistway switch support
- Hall call support
- Annunciator/Indicator support
- Security support
- Central monitoring support

## Locate Supporting Information

Supporting information for equipment listed in the performance charts is provided according to category in the body of the manual. Where practical, the chart will provide specific page or section references. If you are reading the manual on-line (pdf format), blue text or blue page numbers are active links you can click on to immediately jump to the referenced information.

## Cut and Paste

When viewing the specifications manual in Adobe Reader, just select the Text Select tool or the Formatted Text Tool and drag through any text you want to copy. With the text selected, pick Copy from the Edit menu, or use the Control and C keys, or right-click and select Copy. Then, open your specification and paste the copied text into your document.

## MCE Services

MCE Services is our name for the supporting relationship and services that add really tremendous value to choosing MCE equipment for your jobs. MCE Services are your key to MCE expertise. If you need specific support or information you don't see described here, please call and let us know. We are constantly looking for ways to improve our partnership with you.

- Factory technical training at MCE
- [Technical training at customer sites](#)
- [Job site surveys](#)
- [Field adjustment support and/or training](#)
- [Project completion audits](#)
- [Telephone hotline support](#)
- [Field troubleshooting support](#)
- [Field modifications](#)
- [Original Parts packages and discounts](#)
- [Premier Support Plan](#)

## Factory Technical Training

Factory Technical Training classes provide better working knowledge of installation, operation, and maintenance practices for MCE controls. Factory Technical Training has a long history at MCE and past attendees report that classes reduce installation, adjustment, and troubleshooting time on the very next job.

Call your MCE sales representative or call us at (916) 463-9200 and ask for MCE Services to receive a program summary by email or fax including upcoming class dates and a registration form.

### Technical Training at Your Site

Your city or job site might be the most economical choice for technical training, particularly for groups of four or more trainees. MCE will tailor a program to your individual needs — where key personnel are trained on the equipment they work with every day. Call (916) 463-9200 and ask for MCE Services to discuss fees, content, and scheduling options.

### Job Site Survey

Job site survey assistance during the initial information gathering phase of a project can save significant, sometimes critical, time for contractors. Let the control engineers who need the data assist you in collecting the required information. Call your MCE sales representative or MCE Services directly at (916) 463 9200.

#### Specification Text

A job site survey shall be performed by MCE and shall include the preparation of a detailed job survey report, assistance with measurements, participation in meetings with consultant / contractor / building owner for clarification and coordination, verification that MCE equipment will meet project specifications, and coordination of equipment shipments to meet the installation schedule.

### Field Adjustment Training

Field Adjustment Training significantly reduces the amount of time required to install and adjust a controller. Each day of field adjustment training can save several days of installation / adjustment time on the present job and provide skills for the future. Call your MCE sales representative or 916 / 463-9200 and ask for MCE Services for more information.

#### Specification Text

Field Adjustment Support / Training services shall be provided by MCE and shall include hands-on adjustment training, installation and adjustment coaching, advice and guidance for installation and an evaluation to identify and correct any controller-related installation problems.

## Project Completion Audit

Utilize the skills of a factory trained technician to measure and evaluate the performance of every car. Includes review to eliminate the most common installation faults. Provides a performance yardstick for future projects. Ensures that the completed project delivers the optimum performance that MCE control equipment is capable of providing. Call your MCE sales representative or 916 / 463-9200 and ask for MCE Services for more information.

### Specification Text

Field Adjustment Support / Training services shall be provided by MCE and shall include hands-on adjustment training, final adjustment coaching and tuning to MCE's high ride quality standards.

## Telephone Hotline Support

Factory trained technicians are available to provide answers to installation, adjustment and troubleshooting questions. This is your resource for quickly identifying solutions to the most common problems. No need to struggle...call the experts. Call 916 / 463-9200 and ask for MCE Services for more information.

### Specification Text

Telephone Hotline Support is provided at no cost for products under warranty. Beyond the warranty period, per-incident service charges apply. All Telephone Hotline Support issues are logged in the MCE computer system and every call is tracked until the problem is resolved. Extended service hours are available.

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## Field Troubleshooting Support

Field Troubleshooting Support can save many frustrating hours spent tracking and resolving difficult or elusive problems and is particularly valuable when unresolved field problems persist. Ensure quick resolution to current problems and become better equipped to resolve future issues more quickly. Call 916 / 463-9200 and ask for MCE Services to discuss scheduling options and fees.

### Specification Text

Field Troubleshooting Support services shall be provided by MCE and shall include in-depth analysis by a factory-trained technician, troubleshooting and problem resolution, deployment of the manufacturer's full array of technical resources as required and a trouble-shooting clinic for contractors' field personnel.

## Field Modifications

MCE software, hardware and R&D engineers will develop a custom modification to satisfy your unique needs. This service can be used to develop enhancements, obtain functions not originally specified or remedy unanticipated hardware or software issues. Call 916 / 463-9200 and ask for MCE's Field Modifications Team to discuss specific needs.



### Original Parts/Packages Discounts

We've got your parts, whether you need a single replacement part or recommended spare parts package. Insist on genuine MCE parts. Discounts are available for volume purchases of replacement / spare parts, and special pricing applies to recommended spare parts packages. Call 916 / 463-9200 and ask for the MCE Parts Counter to discuss specific needs.

### Premier Support Plan

Premier Support Plan bundles MCE's most requested services and provides them at substantial savings. Fees are based on the number of controllers in the portfolio and the level of support required.

Premier Support Plan includes priority 800-number Technical Support, portfolio-wide extended warranty for all MCE manufactured components and boards, preferred rates for MCE field services, no charge for MCE Factory Training classes, preferred rates for custom engineering or software / hardware modifications, unlimited telephone hotline support for all jobs in customer's maintenance portfolio\*, no charge drive exchange (System 12), no charge on expedited repair service for non-exchange drives and no charge freight back-to-you on MCE repair or exchange items. Call 916 / 463-9200 and ask for MCE Services for a portfolio.

\* Call volume during the current plan year will become the basis for fees in the following year.

# Performance Requirements

To use this chart:

1. Choose the appropriate controller for your application.
2. Turn to the section specified in the selection chart under “Recommended Use” to verify that the selected controller is appropriate for the application. (If you are reading this on a computer, just click on blue text to jump immediately to that topic.)
3. Use the sections listed at the end of “Recommended Use” to compile the specification for your project. Product dimensions are located in [Section 16, Physical Specifications](#).
4. If your traction project requires a group of elevators under dispatch control, refer to [Section 7, M3 Group System](#) for specifications.
5. Select features your project requires from [Section 8, Optional Features for Controllers](#).
6. Refer to the [Table of Contents](#) to locate descriptions and specifications for other MCE products that may be required for your project.
7. Select and specify MCE Services for your project from this section.

## Elevator Controller Technology Selection Charts

### Traction Elevator Controllers - IMC Intelligent Motion Control

	IMC Performa	IMC-SCR	IMC-AC	IMC-MG
Maximum Car Speed	1800 fpm, 9.14 m/s	1800 fpm, 9.14 m/s	700 fpm, 3.565 m/s	1800 fpm, 9.14 m/s
Drive Type	System 12 SCR	System 12 SCR	Flux Vector	Motor Generator
Drive Control	Digital - IMC	Digital - IMC	Digital - IMC	Digital - IMC
Motor Control Technique	Distance & Velocity Feedback	Distance & Velocity Feedback	Distance & Velocity Feedback	Distance & Velocity Feedback
Maximum Number of Stops	64	64	64	64
Configuration	Simplex, <a href="#">M3 Group</a>	Simplex, <a href="#">M3 Group</a>	Simplex, <a href="#">M3 Group</a>	Simplex, <a href="#">M3 Group</a>
Landing Systems	<a href="#">LS-QUAD, LS-QUIK</a>	<a href="#">LS-QUAD, LS-QUIK</a>	<a href="#">LS-QUAD, LS-QUIK</a>	<a href="#">LS-QUAD, LS-QUIK</a>
Short Floor	Yes	Yes	Yes	Yes
Pre-Torquing	Yes	Yes	No	Yes
Recommended Use	<a href="#">Page 3-4</a>	<a href="#">Page 3-7</a>	<a href="#">Page 3-8</a>	<a href="#">Page 3-9</a>

### Traction Elevator Controllers - PTC Programmable

	PTC-SCR	PTC-AC	PTC-MG
Maximum Car Speed	350 fpm, 1.78 m/s	350 fpm, 1.78 m/s	350 fpm, 1.78 m/s
Drive Type	6 Pulse SCR	VVVF	Motor Generator
Drive Control	Analog	Analog/Digital	Analog
Motor Control Technique	Velocity Feedback	Open Loop or Velocity Feedback	Velocity Feedback
Maximum Number of Stops	32	32	32
Configuration	Simplex, Duplex	Simplex, Duplex	Simplex, Duplex
Landing Systems	<a href="#">LS-STAN, LS-QUTE</a>	<a href="#">LS-STAN, LS-QUTE</a>	<a href="#">LS-STAN, LS-QUTE</a>
Short Floor	No	No	No
Pre-Torquing	No	No	No
Recommended Use	<a href="#">Page 4-3</a>	<a href="#">Page 4-4</a>	<a href="#">Page 4-6</a>





<b>Traction Elevator Controllers - VVMC / VFMC Group</b>			
	<b>VVMC-1000 SCR</b>	<b>VFMC-1000 AC</b>	<b>VVMC-1000 MG</b>
Maximum Car Speed	350 fpm, 1.78 m/s	350 fpm, 1.78 m/s	350 fpm, 1.78 m/s
Drive Type	6 Pulse SCR	VVVF	Motor Generator
Drive Control	Analog	Analog/Digital	Analog
Motor Control Technique	Velocity Feedback	Open Loop or Velocity Feedback	Velocity Feedback
Maximum Number of Stops	64	64	64
Configuration	<a href="#">M3 Group</a>	<a href="#">M3 Group</a>	<a href="#">M3 Group</a>
Landing Systems	<a href="#">LS-STAN, LS-QUTE</a>	<a href="#">LS-STAN, LS-QUTE</a>	<a href="#">LS-STAN, LS-QUTE</a>
Short Floor	No	No	No
Pre-Torquing	No	No	No
Recommended Use	<a href="#">Page 4-9</a>	<a href="#">Page 4-9</a>	<a href="#">Page 4-10</a>

<b>Hydraulic Elevator Controllers - PHC, HS</b>		
	<b>HMC-1000 PHC</b>	<b>HMC-1000 HS</b>
Maximum Number of Stops	16	16
Configuration	Simplex, Duplex	<a href="#">M3 Group</a>
Landing Systems	<a href="#">LS-STAN, LS-QUTE</a>	<a href="#">LS-STAN, LS-QUTE</a>
Recommended Use	<a href="#">Page 5-2</a>	<a href="#">Page 5-5</a>