

# The heart of your building<sup>™</sup>

KONE's ReSolve Modular Modernisation Solution ensures smooth starting, running and stopping of elevators and ensures accurate floor levelling. Unlike a new building lobby or elevator, your customers do not receive satisfaction solely from their visual senses. A smooth and safe elevator ride also plays an important role in their overall perception.

# **RELIABILITY & PERFORMANCE**

The performance of today's computers is 3000-times greater than those used in the 1970s. Kone SSB can replace outdated electromechanical controllers with the latest technology in serial transmission and AMD or Intel® processors. This technology makes system evaluations over 100 times per second, optimising performance, efficiency and safety.

# **SAFETY**

Elevators are considered to be one of the safest forms of transportation today. Yet safety levels are continually improved through the development of innovations and the introduction of new legislation. Advancements in this critical area have been made since your customer's elevator was first installed.

When you put the safety of your customers first (and in turn their tenants and visitors), you not only deliver an important message to them, but they also minimise their legal risk exposure.

# **PRODUCT MODELS**

KONE's ReSolve Modular Modernisation Solutions are now available in A-process product models offering you greater efficiency and turnaround in order delivery to your clients. Whether you require a traction or hydraulic solution, SSB has designed the models to meet your specific requirements in the cost-sensitive, image conscious and special needs market segments.

From the 1st January 2004, ReSolve will only be available in model format. There are 20 models across the entire range (10 Traction and 10 Hydraulic) tailored specifically to your customers needs. This brochure and the accompanying traction model selection chart provide you with the detail you need to select a solution suited to your customer needs.

# **AVAILABLE OPTIONS**

Two kinds of options are available in each model:

- 1. Option selections that allow you to configure each model to your specific needs and don't add cost to the core model.
- 2. Options selections that allow you to configure and upgrade the model that do add cost to the core model.

You can identify easily in the brochure which options add cost by referring to the symbol at the left hand side of the option and referencing the legend table for its definition.

## COUNTRY OPTION PACKS

In the scope of the new ReSolve model structure, it is possible for you to pre-define one or more option packs suited specifically to your local market. By working with SSB to pre-define your standard options (those you order with every purchase), we can assist you in reducing the amount of time taken during the order process. We can also work with you to eliminate the potential for errors in the order process through the structuring and implementing of your country option packs. Once agreed, we can make modifications at any time on your request.

If you would like to discuss this further, please contact:

SSB Product Development Bristol, United Kingdom Email. SSB Product Development (from the KONE Global Address List) Tel. +44 (0)117 966 2741

# **C-PROCESS**

C-Process solutions are still available in the new model structure for the special applications that require specialist engineering involvement. All you need to do is select the model that is most relevant to your needs and provide special instructions for changes in a separate attachment. It is that easy!

# **CUSTOMER SERVICE**

Should you have any specific queries in relation to the new ReSolve Model structure, please contact us:

### For General Enquiries

Email. SSB ReSolve Orders (from the KONE Global Address List) Tel. +44 (0)117 966 2741

### C-Process/Specialist Applications & Technical Enquiries

Email. SSB Product Development (from the KONE Global Address List)

# **LEGEND**

- Included as Standard
- O No Cost Option
- ♦ Cost Option
- \* This option is currently available as C-Process. Due for A-Process release later in 2004.



SSB...First Choice!

# **AVAILABLE OPTIONS**

V3F10 Open Loop <= 15kW Inverter  $(\ln \le 26.4A \text{ at } 400V \text{ or } \ln \le 54.4A \text{ at } 230V)$  O 2 Speed, In <= 26A

# **GENERAL EQUIPMENT**

- Standard Document Set in English Language
- 2 Floors included
- Simplex (no group control)
- 400V Mains Supply & 230V Safety Circuit
- **Bar Position System**
- Overspeed Governor (car only) Generic Type OSG
- Overspeed Governor (car only) in Machine Room (5m cable) OSG
- EN81 Standard
- Governor Tension Weight Switch in Pit (5m cable) TWS
- No Alarm Bell
- Recall Drive inside the Controller RDF
- **Essential Installation Materials**

- O Danish, Dutch, Finnish, French, German, Italian, Spanish or Swedish
- Up to 8 Floors
- **Basic Duplex Group Control**
- O 230V or 420V Mains Supply
- **48VDC Safety Circuit**
- Magnetic Position Switches\*
- Overspeed Governor OL35 + trip/reset
- Overspeed Governor in Machine Room (10m cable) or Top of the Shaft (5m cable)
- No Overspeed Governor and No Tension Weight Switch
- Alarm Bell + Device at Main Floor or on the Car ABE-M or ABE-C
- Delayed Alarm with Volt Free Contact Full Installation Kit (drills, rag, insulation tape....)
- Earth Leakage Circuit Breaker for Lightning Supply

## **MACHINE ROOM EQUIPMENT**

- Machine Room at the Top (PT)
- Control Panel fixed to the Wall
- Retain existing Mains Switch
- Brake 200V DC <2A
- Lift Motor Protection by Thermistors MOP-T
- No Motor Cooling Fan
- Cables from the Controller to the Machine (5m)
- Cables from the Controller to the Main Switch (5m)

- Bottom Drive (PU) & Stop Switch in Pulley Room (5m cable)
- Control and Drive Cabinet Floor Stands 800mm or 400mm high
- New Mains Switch in the Controller or External to the Controller
- Additional Brake Voltages
- Lift Motor Protection by Current Relay MOP-I
- 1 Phase Motor Fan (230V), 2 Phase Motor Fan or 3 Phase Motor Fan (supply voltage only)
- Machine Room Temperature Sensor
- Emergency Stop Switch by Machine
- Mechanical Cable Protection (Trunking)
- Three Phase Final Limit Switch in Machine Room
- Thermal Mains Switch in Machine Room
- **Brake Supervision**

# **SHAFT EQUIPMENT**

- Standard Travelling Cables (25m)
- New Shaft Wiring with 100mm Wide Shaft Trunking
- T-Guide (T70-T125) Fixings for Ramps & Position Equipment
- Wall Fixings for Travelling Cables
- Service Drive Limited Top & Bottom (77:U/N + Magnetic 68:U) SED-B
- 3m Landing Branch Cables (door locks)

- Total Travelling Cable Length <=60m
- Full Shaft Lighting (1ph 230V only) SHL
- Wall Fixings for Ramps & Position Equipment
- T-Guide (T70-T125)
  O-Guide Fixings for Ramps, Position Equipment and Travelling Cables\*

  O-Guide Fixings for Ramps, Position Equipment and Travelling Cables\*
- Service Drive Limited Top & Bottom (77:U/N + Mechanical 68:U)
- 10m Pack of Flexible Plastic Conduit

## **CAR EQUIPMENT**

- Cable for Konexion Socket on Car Top Connection Box CCBS
- Sling Fixing for Car Top Connection Box LCECCBS
- Car Light Permanent or Automatic OCL
- Car Fan Permanent or Automatic OCV
- Car Light Supervision CLS
- Cable for Emergency Light CEL
- Emergency Stop Switch in Car (Manual or No Car Door Only) EMC
- Buffer Switch on Car with 7m Cable BFS-C
- EBRA Guide Rail Brake ASC-G
- Car Light Switch OCL-M
- Car Fan Switch OCV-M
- Car Extension Door CED
- Door Opening with Extended Door Time DOE-B
- Slack Rope Switch on Car with 5m cable

- Down Collective Control Type with Call Acceptance Light
- Parking at Main Floor (Doors Closed with Automatic Landing Doors) PAM
- Car Overload Function OLF-C
- Priority Car Calls PRC-K

- ♦ Bypass Load Function BLF
- O Single Button Collective, Full Collective or Push Button Control System
- Locking of Landing Doors (Automatic Doors only) LLD Disturbance Alarm RAL
- Fire Detection (whole building or machine room) FID
- ♦ Emergency Power Drive EPD

## **SIGNALISATION & FLOORS**

- ReVive or LCE Compatible Signalisation in Shaft and Car
- 1 Car Operating Panel

- O Car Position Indicator CPI, Direction Arrows DIA & Gong in the Car GOC
- Car Position Indicator, Main Floor or All Floors CPI
- Direction Arrows DIA/Lanterns LAL & Gongs GOL, Main Floor or All Floors
- Here Signal Light HSL
- Out of Service Indicator at Landings OSI

- Automatic Landing Door (Driven and Locked by Automatic Car Door)
- Door Open DOB & Door Close Buttons DCB
- AMD1 230V Car Door

- Swing Landing Door, Manual Car Door or No Car Door
- Aljo, P4VR, 24V Closed Command 230V Mains Supply, AMD2 230V, ADV 230V, ADX 230V, Isola 96, Athena 96, 3ph Contactor, 3Ph Starlift, 250W Inverter or other electronic auto car doors
- 24V or 230V Photocell and Curtain of Light
- Safety Edge (1 Mechnical Switch)
- 1 Retiring Ramp 36-200VDC
- ◆ Door Open & Closed Limit Switches

 V3F10 Open Loop <= 15kW Inverter</li>  $(\ln \le 26.4A \text{ at } 400V \text{ or } \ln \le 54.4A \text{ at } 230V)$ 

# O 2 Speed, In <= 26A

**AVAILABLE OPTIONS** 

### **GENERAL EQUIPMENT**

- Standard Document Set in English Language
- 2 Floors included
- Simplex (no group control)
- 400V Mains Supply & 230V Safety Circuit
- **Bar Position System**
- Overspeed Governor (car only) Generic Type OSG
- Overspeed Governor (car only) in Machine Room (5m cable) OSG
- EN81 Standard
- Governor Tension Weight Switch in Pit (5m cable) TWS
- No Alarm Bell
- Recall Drive inside the Controller RDF
- **Essential Installation Materials**

- O Danish, Dutch, Finnish, French, German, Italian, Spanish or Swedish
- Up to 8 Floors
- **Basic Duplex Group Control**
- 230V or 420V Mains Supply
- 48VDC Safety Circuit
- Magnetic Position Switches\*
- Overspeed Governor OL35 + trip/reset
- Overspeed Governor in Machine Room (10m cable) or Top of the Shaft (5m cable)
- No Overspeed Governor and No Tension Weight Switch
- Alarm Bell + Device at Main Floor or on the Car ABE-M or ABE-C
- Delayed Alarm with Volt Free Contact
- Full Installation Kit (drills, rag, insulation tape....)
- ♦ Earth Leakage Circuit Breaker for Lightning Supply

## **MACHINE ROOM EQUIPMENT**

- Machine Room at the Top (PT)
- Control Panel fixed to the Wall
- Retain existing Mains Switch
- Brake 200V DC <2A
- Lift Motor Protection by Thermistors MOP-T
- No Motor Cooling Fan

- Bottom Drive (PU) & Stop Switch in Pulley Room (5m cable)
- Control and Drive Cabinet Floor Stands 800mm or 400mm high
- New Mains Switch in the Controller or External to the Controller
- Additional Brake Voltages
- Lift Motor Protection by Current Relay MOP-I

  1 Phase Motor Fan (230V), 2 Phase Motor Fan or 3 Phase Motor Fan (supply voltage only)
- Machine Room Temperature Sensor
- **Emergency Stop Switch by Machine**
- Mechanical Cable Protection (Trunking)
- Three Phase Final Limit Switch in Machine Room
- Thermal Mains Switch in Machine Room
- Brake Supervision

# **SHAFT EQUIPMENT**

- Standard Travelling Cables (25m)
- New Shaft Wiring with 100mm Wide Shaft Trunking
- T-Guide (T70-T125) Fixings for Ramps & Position Equipment
- Wall Fixings for Travelling Cables
- Service Drive Limited Top & Bottom (77:U/N + Magnetic 68:U) SED-B
- 3m Landing Branch Cables (door locks)

- Total Travelling Cable Length <=60m
- Full Shaft Lighting (1ph 230V only) SHL
- Wall Fixings for Ramps & Position Equipment
- T-Guide (T70-T125)
- O-Guide Fixings for Ramps, Position Equipment and Travelling Cables\*
- Service Drive Limited Top & Bottom (77:U/N + Mechanical 68:U)
- 10m Pack of Flexible Plastic Conduit

### **CAR EQUIPMENT**

- Cable for Konexion Socket on Car Top Connection Box CCBS
- Sling Fixing for Car Top Connection Box LCECCBS
- Car Light Permanent or Automatic OCL Car Fan Permanent or Automatic OCV
- Car Light Supervision CLS
- Cable for Emergency Light CEL
- Emergency Stop Switch in Car (Manual or No Car Door Only) EMC
- Buffer Switch on Car with 7m Cable BFS-C
- EBRA Guide Rail Brake ASC-G
- Car Light Switch OCL-M
- Car Fan Switch OCV-M
- Car Extension Door CED
- Door Opening with Extended Door Time DOE-B
- Slack Rope Switch on Car with 5m cable

- Down Collective Control Type with Call Acceptance Light
- Parking at Main Floor (Doors Closed with Automatic Landing Doors) PAM
- Car Overload Function OLF-C
- Priority Car Calls PRC-K

- Bypass Load Function BLF, LWD-S
- Single Button Collective, Full Collective or Push Button Control System
- Locking of Landing Doors (Automatic Doors only) LLD\*
- Disturbance Alarm RAL
- Fire Detection (whole building or machine room) FID
- **Emergency Power Drive EPD**

- 24V Generic Signalisation
- 1 Car Operating Panel

- O ReVive/LCE Type Car Signalisation in the Shaft or Car
- Car Position Indicator CPI, Main Floor or All Floors
- Direction Arrows DIA/Lanterns LAL, Main Floor or All Floors
- Arrival Gong at Landing GOL, Main Floor or All Floors
- Here Signal Light HSL
- Out of Service Indicator at Landings OSI

- Automatic Landing Door (Driven and Locked by Automatic Car Door)
- Door Open DOB & Door Close Buttons DCB
- AMD1 230V Car Door

- Swing Landing Door, Manual Car Door or No Car Door
- Aljo, P4VR, 24V Closed Command 230V Mains Supply, AMD2 230V, ADV 230V, ADX 230V, Isola 96, Athena 96, 3ph Contactor, 3Ph Starlift, 250W Inverter or other electronic auto car doors
- 24V or 230V Photocell and Curtain of Light Safety Edge (1 Mechnical Switch)
- 1 Retiring Ramp 36-200VDC
- Door Open & Closed Limit Switches

Included as Standard

# **AVAILABLE OPTIONS**

V3F10 Open Loop <= 15kW Inverter</li>  $(\ln \le 26.4A \text{ at } 400V \text{ or } \ln \le 54.4A \text{ at } 230V)$ 

O 2 Speed, In <= 26A

- Standard Document Set in English Language
- 2 Floors included
- Simplex (no group control)
- 400V Mains Supply & 230V Safety Circuit
- Bar Position System
- Overspeed Governor (car only) Generic Type OSG
- Overspeed Governor (car only) in Machine Room (5m cable) OSG
- EN81 Standard
- Governor Tension Weight Switch in Pit TWS
- No Alarm Bell
- Recall Drive inside the Controller RDF
- **Essential Installation Materials**

- Danish, Dutch, Finnish, French, German, Italian, Spanish or Swedish
- Up to 8 Floors
- Basic Duplex Group Control
- O 230V or 420V Mains Supply
- **48VDC Safety Circuit**
- Magnetic Position Switches\*
- Overspeed Governor OL35 + trip/reset
- Overspeed Governor in Machine Room (10m cable) or Top of the
- O No Overspeed Governor and No Tension Weight Switch
- Alarm Bell + Device at Main Floor or on the Car ABE-M or ABE-C Delayed Alarm with Volt Free Contact

- Full Installation Kit (drills, rag, insulation tape....) Earth Leakage Circuit Breaker for Lightning Supply

## **MACHINE ROOM EQUIPMENT**

- Machine Room at the Top (PT)
- Control Panel fixed to the Wall
- Retain existing Mains Switch Brake 200V DC <2A
- Lift Motor Protection by Thermistors MOP-T
- No Motor Cooling Fan

- Bottom Drive (PU) & Stop Switch in Pulley Room Control and Drive Cabinet Floor Stands 800mm or 400mm high
- New Mains Switch in the Controller or External to the Controller
- ♦ Additional Brake Voltages
   ♦ Lift Motor Protection by Current Relay MOP-I (and MOP-T)
- 1 Phase Motor Fan (230V), 2 Phase Motor Fan or 3 Phase Motor Fan (supply voltage only)
- Machine Room Temperature Sensor
- **Emergency Stop Switch by Machine**
- Rope Gripper
- Mechanical Cable Protection (Trunking)
- Three Phase Final Limit Switch in Machine Room
- Thermal Mains Switch in Machine Room
- **Brake Supervision**

# **SHAFT EQUIPMENT**

- Standard Travelling Cables (25m)
- Retain Existing Parallel Shaft Wiring
- No Trunking for Shaft Wiring
- T-Guide (T70-T125) Fixings for Ramps & Position Equipment Wall Fixing for Travelling Cables
- Service Drive Limited Top & Bottom (77:U/N + Magnetic 68:U)
- **Full Shaft Lighting**
- Total Travelling Cable <=60m
- New Parallel Shaft Wiring\*
  Wall Fixings for Ramps & Position Equipment
- T-Guide(T70-T125) Fixings for Travelling Cables
- Service Drive Limited Top & Bottom (77:U/N + Mechanical 68:U)
- 10m Pack of Flexible Plastic Conduit

## **CAR EQUIPMENT**

- Cable for Konexion Socket on Car Top Connection Box CCBS Sling Fixing for Car Top Connection Box LCECCBS
- Car Light Permanent or Automatic OCL
- Car Fan Permanent or Automatic OCV Car Light Supervision CLS
- Cable for Emergency Light CEL
- Emergency Stop Switch in Car (Manual or No Car Door Only) EMC
- Buffer Switch on Car with 7m Cable BFS-C
- EBRA Guide Rail Brake ASC-G
- Car Light Switch OCL-M
- Car Fan Switch OCV-M
- Car Extension Door CED
- Door Opening with Extended Door Time DOE-B
- Slack Rope Switch on Car with 5m cable

- Down Collective Control Type with Call Acceptance Light
- Parking at Main Floor (Doors Closed with Automatic Landing Doors) PAM
- Car Overload Function OLF-C
- Priority Car Calls PRC-K

- Bypass Load Function BLF
- Single Button Collective, Full Collective or Push Button Control System
- Locking of Landing Doors (Automatic Doors only) LLD'
- Disturbance Alarm RAL
- Fire Detection (whole building or machine room) FID
- ♦ Emergency Power Drive EPD

# **SIGNALISATION & FLOORS**

- Standard Old Parallel Shaft Wiring with 24V Generic Signalisation
- 24V Generic Signalisation in Shaft and Car
- 1 Car Operating Panel

- Car Position Indicator CPI, Main Floor or All Floors
- Direction Arrows DIA/Lanterns LAL, Main Floor or All Floors
- ◆ Arrival Gong at Landing GOL, Main Floor or All Floors

- Automatic Landing Door (Driven and Locked by Automatic Car Door)
- Door Open DOB & Door Close Buttons DCB
- AMD1 230V Car Door

- Swing Landing Door, Manual Car Door or No Car Door
- Aljo, P4VR, 24V Closed Command 230V Mains Supply, AMD2 230V, ADV 230V, ADX 230V, Isola 96, Athena 96, 3ph Contactor, 3Ph Starlift, 250W Inverter or other electronic auto car doors
- 24V or 230V Photocell and Curtain of Light
- Safety Edge (1 Mechnical Switch)
- 1 Retiring Ramp 36-200VDC
- Door Open & Closed Limit Switches

Included as Standard

# **AVAILABLE OPTIONS**

V3F10 Open Loop <= 15kW Inverter</li>  $(\ln \le 26.4A \text{ at } 400V \text{ or } \ln \le 54.4A \text{ at } 230V)$  O 2 Speed, In <= 26A

# **GENERAL EQUIPMENT**

- Standard Document Set in English Language
- 2 Floors included
- Simplex (no group control)
- 400V Mains Supply & 230V Safety Circuit
- Magnetic Position Switches
- Overspeed Governor (car only) Generic Type OSG
- Overspeed Governor (car only) in Machine Room (5m cable) OSG
- EN81 Standard
- Governor Tension Weight Switch in Pit TWS
- No Alarm Bell (shown at main floor on drawings)
- Recall Drive inside the Controller RDF
- **Essential Installation Materials**

- O Danish, Dutch, Finnish, French, German, Italian, Spanish or Swedish
- Up to 8 Floors
- Basic Duplex Group Control
- 230V or 420V Mains Supply 48VDC Safety Circuit
- Overspeed Governor OL35 + trip/reset
- Overspeed Governor in Machine Room or Top of the Shaft
- O No Overspeed Governor and No Tension Weight Switch
- Alarm Bell on the Car ABE-C
- Delayed Alarm with Volt Free Contact
- Earth Leakage Circuit Breaker for Lightning Supply

### **MACHINE ROOM EQUIPMENT**

- Machine Room at the Top (PT)
- Control Panel fixed to the Wall Retain existing Mains Switch
- Brake 200V DC <2A
- Lift Motor Protection by Thermistors MOP-T
- No Motor Cooling Fan

- O Bottom Drive (PU) & Stop Switch in Pulley Room
- Control and Drive Cabinet Floor Stands 800mm or 400mm high
- New Mains Switch in the Controller
- Additional Brake Voltages
- Lift Motor Protection by Current Relay MOP-I
   1 Phase Motor Fan (230V), 2 Phase Motor Fan or 3 Phase Motor Fan (supply voltage only)
- O Machine Room Temperature Sensor
- O Emergency Stop Switch by Machine
- Rope Gripper
- Three Phase Final Limit Switch in Machine Room
- O Thermal Mains Switch in Machine Room
- **Brake Supervision**

# **SHAFT EQUIPMENT**

Service Drive Limited Top & Bottom (77:U/N + Magnetic 68:U)

# **CAR EQUIPMENT**

- Car Light Permanent or Automatic OCL
- Car Fan Permanent or Automatic OCV
- Car Light Supervision CLS

- Buffer Switch on Car with 7m Cable BFS-C
- EBRA Guide Rail Brake ASC-G
- Car Light Switch OCL-M
- Car Fan Switch OCV-M
- Car Extension Door CED
- Door Opening with Extended Door Time DOE-B
- Slack Rope Switch on Car

# **FEATURES**

- Down Collective Control Type with Call Acceptance Light
- Parking at Main Floor (Doors Closed with Automatic Landing Doors) PAM
- Car Overload Function OLF-C
- Priority Car Calls PRC-K

- Bypass Load Function BLF, LWD-S
- O Single Button Collective, Full Collective or Push Button Control System
- Locking of Landing Doors (Automatic Doors only) LLD
- Disturbance Alarm RAL
- Fire Detection (whole building or machine room) FID
- ♦ Emergency Power Drive EPD

## SIGNALISATION & FLOORS

- 24V Generic Signalisation in Shaft and Car
- 1 Car Operating Panel

- ◆ Car Position Indicator CPI, Direction Arrows DIA & Gong in the Car
- Car Position Indicator CPI, Main Floor or All Floors
- Direction Arrows DIA/Lanterns LAL, Main Floor or All Floors
- Arrival Gong at Landing GOL, Main Floor or All Floors
  - Here Signal Light HSL
- Out of Service Indicator at Landings OSI

- Automatic Landing Door (Driven and Locked by Automatic Car Door)
- Door Open DOB & Door Close Buttons DCB
- AMD1 230V Car Door

- Swing Landing Door, Manual Car Door or No Car Door
- Aljo, P4VR, 24V Closed Command 230V Mains Supply, AMD2 230V, ADV 230V, ADX 230V, Isola 96, Athena 96, 3ph Contactor, 3Ph Starlift or other electronic auto car doors
- 24V or 230V Photocell and Curtain of Light Safety Edge (1 Mechnical Switch)
- 1 Retiring Ramp 36-200VDC
- ♦ Door Open & Closed Limit Switches

Included as Standard

# ReSolve 10 > Model 11

# Commercial, ReVive (LCE) Signalisation, C-Side Door Option

# **INCLUDED AS STANDARD**

V3F10 Open Loop <= 15kW Inverter (<=26.4A at 400V or <= 54.5A</li> at 230V)

# **GENERAL EQUIPMENT**

- Standard Document Set in English Language
- 2 Floors included
- Simplex (no group control) 400V Mains Supply
- 230V Safety Circuit
- **BAR Position System**
- Overspeed Governor OSG (car only) Generic Type Overspeed Governor OSG (car only) in Machine Room (5m cable)
- EN81 Standard
- Governor Tension Weight Switch TWS in Pit (5m cable)
- Alarm Bell & Device at Main Floor ABE-M
- **Essential Installation Materials**
- Recall Drive inside the Controller RDF

### **MACHINE ROOM EQUIPMENT**

- Machine Room at the Top (PT)
- Control Panel fixed to the Wall
- Retain existing Mains Switch Brake 200V DC <2A
- Lift Motor Protection by Thermistors MOP-T 1 Phase Motor Cooling Fan (230V)
- Emergency Stop Switch by Machine
- Cables from the Controller to the Machine (10m)
- Cables from the Controller to the Main Switch (10m)

# **AVAILABLE OPTIONS**

- ◆ 2 Speed, In <=40A or V3F10 Closed Loop <=22kW Inverter (18KW)</p> 230V) (<= 41A at 400V or <= 68A 230V)
- Danish, Dutch, Finnish, French, German, Italian, Spanish or Swedish
- Up to 16 Floors
- 2 to 3 Car Group Advanced 230V or 420V Mains Supply 48VDC Safety Circuit
- Overspeed Governor OL35 + trip/reset
- Overspeed Governor in Machine Room (10m cable) or Top of the Shaft
- No Overspeed Governor and No Tension Weight Switch Alarm Bell + Device on Car ABE-C
- Delayed Alarm Volt Free Contacy RAL
- Earth Leakage Circuit Breaker for Lightning Supply Full Installation Kit (drills, rag, insulation tape....)
- Bottom Drive (PU) & Stop Switch in Pulley Room (5m cable)
- Control and Drive Cabinet Floor Stands 800mm or 400mm high New Mains Switch in the Controller or External to the Controller
- Additional Brake Voltages
- Lift Motor Protection by Current Relay MOP-I (and MOP-T)

  2 Phase Motor Fan or 3 Phase Motor Fan (supply voltage only)

  External Recall Drive & Emergency Stop Switch
- Machine Room Temperature Sensor
- **Mechanical Cable Protection**
- Three Phase Final Limit Switch in Machine Room
- **Brake Supervision**

## **SHAFT EQUIPMENT**

- Standard Travelling Cables (25m)
- New Shaft Wiring with 100mm Wide Shaft Trunking T-Guide (T70-T125) Fixings for Ramps & Position Equipment
- Wall Fixings for Travelling Cables
- Service Drive Limited Top & Bottom SED-B (77:U/N + Magnetic 68:U)
- 3m Landing Branch Cables (door locks) for Side A (7m for Side C)
- Buffer Switch in Pit

- Total Travelling Cable Length <=80m
- Full Shaft Lighting SHL (1ph 230V only)
- Wall Fixings for Ramps & Position Equipment
- T-Guide (T70-T125) for Travelling Cables Service Drive Limited Top & Bottom SED-B (77:U/N + Mechanical 68:U)
- 10m Packs of Flexible Plastic Conduit

- Cable for Konexion Socket on Car Top Connection Box CCBS
- Sling Fixing for Car Top Extension Box LCECCBS
- Car Light Permanent or Automatic OCL
- Car Fan Permanent or Automatic OCV
- Car Light Supervision CLS Cable for Emergency Light CEL

- Metal Trunking on Car Roof\* Buffer Switch on Car with 7m Cable
  - EBRA Guide Rail Brake ASC-G
- Car Light Switch OCL-M/Out of Service Switch OSS-C Car Fan Switch OCV-M
- Car Extension Door CED
- **Emergency Exit in Car Roof EEC**

- Down Collective Control Type with Call Acceptance Light Parking at Main Floor (Doors Closed with Automatic Landing Doors) PAM
- Car Overload Function OLF
- Priority Car Calls PRC-K

- Bypass Load Function BLF
- Single Button Collective, Full Collective or Push Button Control System
- Locking of Landing Doors LLD (Automatic Doors only)
  Disturbance Alarm DAL-GP
- Fire Detection (whole building or machine room) FID-B/M; Alternate Floor Emergency Power Drive EPD
- Floor Extension Top/Bottom FEB/FET\*
- Fire Protection Doors FPD/Corridor Illumination Control CIC
- Advance Door Opening ADO/Accurate Relevelling ACL (V3F10CL only)
  Locking of Landing or Car Calls LOC/LOL/Out of Service Switch OSS-L
- Fireman's Drive FRD/Earthquake Control EAQ/Interface Link LIL
- Emergency Exit in the Shaft or Pit

# SIGNALISATION & FLOORS

- ReVive or LCE Compatible Signalisation in Shaft and Car
- 1 Car Operating Panel

- Car Position Indicator CPI & Direction Arrows DIA in the Car
- Car Position Indicator CPI, Main Floor or All Floors
- Direction Arrows DIA/Lanterns LAL, Main Floor or All Floors
- Arrival Gong at Landing GOL, Main Floor or All Floors Here Signal Light HSL
- Out of Service Indicator at Landings OSI
- Car Attendant Control Service ATS

- Automatic Landing Door (Driven and Locked by Automatic Car Door)
- Door Open DOB & Door Close DCB Buttons (Automatic Doors only)

O No Cost Option

- AMD1 230V Car Door
- Button for Extended Door Open Time DOE-B Emergency Stop Switch in Car (No Car Door only)
- Safety Edge (1 Mechnical Switch)
- Wiring for Door Open & Closed Limit Switches

- Swing Landing Door, Manual Car Door or No Car Door
   Aljo, P4VR, 24V Closed Command 230V Mains Supply, AMD2 230V, ADV 230V, ADX 230V, Isola 96, Athena 96, 3ph Contactor, 3Ph Starlift, 250W Inverter or other electronic auto car doors, DC-2000 DC Door Control Interface or KOF Western Auto Car Doors
- Door Nudging NUD
  24V or 230V Photocell and Curtain of Light
  1 Retiring Ramp 36-200VDC

V3F10 Open Loop <= 15kW Inverter (<=26.4A at 400V or <= 54.5A</li> at 230V)

## **GENERAL EQUIPMENT**

- Standard Document Set in English Language
- 2 Floors included
- Simplex (no group control) 400V Mains Supply

- 230V Safety Circuit
- BAR Position System
- Overspeed Governor OSG (car only) Generic Type
- Overspeed Governor OSG (car only) in Machine Room (5m cable)
- Governor Tension Weight Switch TWS in Pit (5m cable) Alarm Bell & Device at Main Floor ABE-M
- **Essential Installation Materials**
- Recall Drive inside the Controller RDF

- Machine Room at the Top (PT)
- Control Panel fixed to the Wall

- Retain existing Mains Switch
  Brake 200V DC <2A
  Lift Motor Protection by Thermistors MOP-T
  1 Phase Motor Cooling Fan (230V)
- Emergency Stop Switch by Machine
- Cables from the Controller to the Machine (10m)
- Cables from the Controller to the Main Switch (10m)

Danish, Dutch, Finnish, French, German, Italian, Spanish or Swedish

◆ 2 Speed, In <=40A or V3F10 Closed Loop <=22kW Inverter (18KW)</p>

- Up to 16 Floors
- 2 to 3 Car Group Advanced

**AVAILABLE OPTIONS** 

- 230V or 420V Mains Supply 48VDC Safety Circuit
- Overspeed Governor OL35 + trip/reset

230V) (<= 41A at 400V or <= 68A 230V)

- Overspeed Governor in Machine Room (10m cable) or Top of the Shaft
- No Overspeed Governor and No Tension Weight Switch Alarm Bell + Device on Car ABE-C
- Delayed Alarm Volt Free Contacy
- Earth Leakage Circuit Breaker for Lightning Supply
- Full Installation Kit (drills, rag, insulation tape....)
- Bottom Drive (PU) & Stop Switch in Pulley Room (5m cable)
- Control and Drive Cabinet Floor Stands 800mm or 400mm high New Mains Switch in the Controller or External to the Controller
- Additional Brake Voltages
- Lift Motor Protection by Current Relay MOP-I (and MOP-T)
  2 Phase Motor Fan or 3 Phase Motor Fan (supply voltage only)
- External Recall Drive & Emergency Stop Switch
- Machine Room Temperature Sensor
- Rope Gripper
- Mechanical Cable Protection
- Three Phase Final Limit Switch in Machine Room
- **Brake Supervision**

# **SHAFT EQUIPMENT**

- Standard Travelling Cables (25m)
- New Shaft Wiring with 100mm Wide Shaft Trunking
  T-Guide (T70-T125) Fixings for Ramps & Position Equipment
  Wall Fixings for Travelling Cables
- Service Drive Limited Top & Bottom SED-B (77:U/N + Magnetic 68:U)
- 3m Landing Branch Cables (door locks) for Side A (7m for Side C)
- Buffer Switch in Pit

- Cable for Konexion Socket on Car Top Connection Box CCBS Sling Fixing for Car Top Extension Box LCECCBS
- Car Light Permanent or Automatic OCL
- Car Fan Permanent or Automatic OCV

- Total Travelling Cable Length <=80m Full Shaft Lighting SHL (1ph 230V only) Wall Fixings for Ramps & Position Equipment
- T-Guide (T70-T125) for Travelling Cables
  Service Drive Limited Top & Bottom SED-B (77:U/N + Mechanical 68:U)
  10m Packs of Flexible Plastic Conduit

- Car Light Supervision CLS
- Cable for Emergency Light CEL

- Metal Trunking on Car Roof\* Slack Rope Switch on Car with 5m Cable Buffer Switch on Car with 7m Cable
- EBRA Guide Rail Brake ASC-G
- Car Light Switch OCL-M/Out of Service Switch OSS-C
- Car Fan Switch OCV-M
- Car Extension Door CED
- **Emergency Exit in Car Roof EEC**

- Down Collective Control Type with Call Acceptance Light
- Parking at Main Floor (Doors Closed with Automatic Landing Doors) PAM Car Overload Function OLF
- Priority Car Calls PRC-K

- Bypass Load Function BLF
- Single Button Collective, Full Collective or Push Button Control System
- Locking of Landing Doors LLD (Automatic Doors only)
- Disturbance Alarm DAL-GP
  Fire Detection (whole building or machine room) FID-B/M; Alternate Floor
  Emergency Power Drive EPD

- Floor Extension Top/Bottom FEB/FET\*
  Fire Protection Doors FPD/Corridor Illumination Control CIC
  Advance Door Opening ADO/Accurate Relevelling ACL (V3F10CL only)
  Locking of Landing or Car Calls LOC/LOL/Out of Service Switch OSS-L
- Fireman's Drive FRD/Earthquake Control EAQ/Interface Link LIL
- Emergency Exit in the Shaft or Pit

## SIGNALISATION & FLOORS

- 24V Generic Signalisation in Shaft and Car includes: Position Indicator CPI, Direction Arrows DIA & Arrival Gong at Main Floor GOL and in the Car
- 1 Car Operating Panel

- ReVive/LCE Car Signalisation/Additional Car Operating Panel
- Car Position Indicator CPI, Main Floor or All Floors
- Direction Arrows DIA/Lanterns LAL, Main Floor or All Floors Arrival Gong at Landing GOL, All Floors
- Here Signal Light HSL
- Out of Service Indicator at Landings OSI
- Car Attendant Control Service ATS

- Automatic Landing Door (Driven and Locked by Automatic Car Door) Door Open DOB & Door Close DCB Buttons (Automatic Doors only)
- AMD1 230V Car Door
- Button for Extended Door Open Time DOE-B
- Emergency Stop Switch in Car (No Car Door only) Safety Edge (1 Mechnical Switch)
- Wiring for Door Open & Closed Limit Switches

- Swing Landing Door, Manual Car Door or No Car Door
   Aljo, P4VR, 24V Closed Command 230V Mains Supply, AMD2 230V, ADV 230V, ADX 230V, Isola 96, Athena 96, 3ph Contactor, 3Ph Starlift, 250W Inverter or other electronic auto car doors, DC-2000 DC Door Control Interface or KOF Western Auto Car Doors
- Door Nudging NUD 24V or 230V Photocell and Curtain of Light
- 1 Retiring Ramp 36-200VDC

# Commercial, 24V Signalisation, C-Side Door Option

# **INCLUDED AS STANDARD**

V3F10 Open Loop <= 15kW Inverter (<=26.4A at 400V or <= 54.5A</li> at 230V)

## ◆ 2 Speed, In <=40A or V3F10 Closed Loop <=22kW Inverter (18KW)</p> 230V) (<= 41A at 400V or <= 68A 230V)

### GENERAL EQUIPMENT

- Standard Document Set in English Language
- 2 Floors included
- Simplex (no group control) 400V Mains Supply 230V Safety Circuit

- BAR Position System
- Overspeed Governor OSG (car only) Generic Type
- Overspeed Governor OSG (car only) in Machine Room (5m cable)
- Governor Tension Weight Switch TWS in Pit (5m cable)
- Alarm Bell at Main Floor ABE-M
- **Essential Installation Materials**
- Recall Drive inside the Controller RDF

- O Danish, Dutch, Finnish, French, German, Italian, Spanish or Swedish
- Up to 16 Floors

**AVAILABLE OPTIONS** 

- 2 to 3 Car Group Advanced230V or 420V Mains Supply
- **48VDC Safety Circuit**
- Overspeed Governor OL35 + trip/reset
- Overspeed Governor in Machine Room (10m cable) or Top of the Shaft
- No Overspeed Governor and No Tension Weight Switch
- Alarm Bell + Device on Car ABE-C
- Delayed Alarm Volt Free Contacy
- Earth Leakage Circuit Breaker for Lightning Supply
- Full Installation Kit (drills, rag, insulation tape....)

## **MACHINE ROOM EQUIPMENT**

- Machine Room at the Top (PT) Control Panel fixed to the Wall
- Retain existing Mains Switch
- Brake 200V DC <2A Lift Motor Protection by Thermistors MOP-T
- 1 Phase Motor Cooling Fan (230V)
- Emergency Stop Switch by Machine
- Cables from the Controller to the Machine (10m)
  Cables from the Controller to the Main Switch (10m)

- Bottom Drive (PU) & Stop Switch in Pulley Room Control and Drive Cabinet Floor Stands 800mm or 400mm high
- New Mains Switch in the Controller or External to the Controller
- Additional Brake Voltages
- Lift Motor Protection by Current Relay MOP-I (and MOP-T)
  2 Phase Motor Fan or 3 Phase Motor Fan (supply voltage only)
- External Recall Drive & Emergency Stop Switch
- Machine Room Temperature Sensor

- Mechanical Cable Protection
  Three Phase Final Limit Switch in Machine Room
- **Brake Supervision**

# **SHAFT EQUIPMENT**

- Standard Travelling Cables (25m)
- T-Guide (T70-T125) Fixings for Ramps & Position Equipment
- Wall Fixings for Travelling Cables
- Service Drive Limited Top & Bottom SED-B (77:U/N + Magnetic 68:U)
- Buffer Switch in Pit

- Total Travelling Cable Length <=80m
- Full Shaft Lighting SHL (1ph 230V only)
  Wall Fixings for Ramps & Position Equipment
  T-Guide (T70-T125) for Travelling Cables
- Service Drive Limited Top & Bottom SED-B(77:U/N + Mechanical 68:U)
- 10m Packs of Flexible Plastic Conduit

# **CAR EQUIPMENT**

- Cable for Konexion Socket on Car Top Connection Box CCBS
- Sling Fixing for Car Top Extension Box LCECCBS
- Car Light Permanent or Automatic OCL Car Fan Permanent or Automatic OCV
- Car Light Supervision CLS
- Cable for Emergency Light CEL

- Metal Trunking on Car Roof\*
- Slack Rope Switch on Car with 5m cable
- Buffer Switch on Car with 7m Cable
- EBRA Guide Rail Brake ASC-G
- Car Light Switch OCL-M/Out of Service Switch OSS-C
- Car Fan Switch OCV-M
- Car Extension Door CED
- **Emergency Exit in Car Roof EEC**

- Down Collective Control Type with Call Acceptance Light
- Parking at Main Floor (Doors Closed with Automatic Landing Doors) PAM
- Car Overload Function OLF
- Priority Car Calls PRC-K

- Bypass Load Function BLF
- Single Button Collective, Full Collective or Push Button Control System
- Locking of Landing Doors LLD (Automatic Doors only)\*
- Disturbance Alarm DAL-GP
- Fire Detection (whole building or machine room) FID-B/M; Alternate Floor
- **Emergency Power Drive EPD**
- Floor Extension Top/Bottom FEB/FET\*
- Fire Protection Doors FPD/Corridor Illumination Control CIC
- Advance Door Opening ADO/Accurate Relevelling ACL (V3F10CL only) Locking of Landing or Car Calls LOC/LOL/Out of Service Switch OSS-L
- Fireman's Drive FRD/Earthquake Control EAQ/Interface Link LIL
- Emergency Exit in the Shaft or Pit

### SIGNALISATION & FLOORS

- 24V Generic Signalisation
- Retain Existing Shaft Wiring 1 Car Operating Panel

- ReVive/LCE Car Signalisation/Additional Car Operating Panel COP
- Car Position Indicator CPI, Main Floor or All Floors
- Direction Arrows DIA/Lanterns LAL, Main Floor or All Floors Arrival Gong at Landing GOL, Main Floor or All Floors
- Car Attendant Control Service ATS

- Automatic Landing Door (Driven and Locked by Automatic Car Door)
   Door Open DOB & Door Close DCB Buttons (Automatic Doors only)

O No Cost Option

♦ Cost Option

- AMD1 230V Car Door
- Button for Extended Door Open Time DOE-B
- Emergency Stop Switch in Car (No Car Door only)
- Safety Edge (1 Mechnical Switch)
  Wiring for Door Open & Closed Limit Switches

- Swing Landing Door, Manual Car Door or No Car Door
- Aljo, P4VR, 24V Closed Command 230V Mains Supply, AMD2 230V, ADV 230V, ADX 230V, Isola 96, Athena 96, 3ph Contactor, 3Ph Starlift, 250W Inverter or other electronic auto car doors, DC-2000 DC Door Control Interface or KOF Western Auto Car Doors
- Door Nudging NUD 24V or 230V Photocell and Curtain of Light ♦ 1 Retiring Ramp 36-200VDC

# **AVAILABLE OPTIONS**

V3F10 Closed Loop (In <= 81.5A)</li>

### **GENERAL EQUIPMENT**

- Standard Document Set in English Language
- 2 Floors included
- Simplex (no group control) 400V Mains Supply & 230V Safety Circuit
- **BAR Position System**
- Overspeed Governor (car only) OSG Generic Type
- Overspeed Governor (car only) OSG in Machine Room (5m cable)
- Governor Tension Weight Switch TWS in Pit (5m cable) Alarm Bell & Device at Main Floor ABE-M
- **Essential Installation Materials**
- Recall Drive inside the Controller RDF
- Earth Leakage Circuit Breaker for Lightning Supply

- O Danish, Dutch, Finnish, French, German, Italian, Spanish or Swedish
- Up to 16 Floors (32 Floors \*
- 2 to 6 Car Group Advanced
- 230V or 420V Mains Supply Overspeed Governor OL35 + trip/reset
- Overspeed Governor in Machine Room (10m cable) or Top of the Shaft
- No Overspeed Governor and No Tension Weight Switch
- Alarm Bell + Device on Car ABE-C
- Delayed Alarm Volt Free Contact
- Full Installation Kit (drills, rag, insulation tape....)

### **MACHINE ROOM EQUIPMENT**

- Machine Room at the Top (PT)
- Control Panel Floor Standing
- Retain existing Mains Switch
- Brake 200V DC <2A
- Lift Motor Protection by Thermistors MOP-T
- 1 Phase Motor Cooling Fan (230V)
- Emergency Stop Switch by Machine Machine Room Temperature Sensor

- Bottom Drive (PU) & Stop Switch in Pulley Room (5m cable)
- New Mains Switch in the Controller or External to the Controller
- Additional Brake Voltages
- Lift Motor Protection by Current Relay MOP-I (and MOP-T)
  2 Phase Motor Fan or 3 Phase Motor Fan (supply voltage only)
- External Recall Drive & Emergency Stop Switch
- **Mechanical Cable Protection**
- Rope Gripper
- Three Phase Final Limit Switch in Machine Room
- **Brake Supervision**

## **SHAFT EQUIPMENT**

- Standard Travelling Cables (25m)
- T-Guide (T70-T125) Fixings for Kamps & Position Equipment
- Wall Fixings for Travelling Cables
- Service Drive Limited Top & Bottom SED-B (77:U/N + Magnetic 68:U)
- 3m Landing Branch Cables (door locks) for Side A (7m for Side C)
- New Shaft Wiring with 100mm wide Shaft Trunking
- Buffer Switch in Pit

- Total Travelling Cable Length <=80m

- Full Shaft Lighting SHL (1ph 230V only)
  Wall Fixings for Ramps & Position Equipment or T-Guide (T127-T140)
  T-Guide (T70-T125) or (T127-T140) for Travelling Cables
  Service Drive Limited Top & Bottom SED-B (77:U/N + Mechanical 68:U)
  10m Packs of Flexible Plastic Conduit

- Cable for Konexion Socket on Car Top Connection Box CCBS
- Sling Fixing for Car Top Extension Box LCECCBS
- Car Light Permanent or Automatic OCL
- Car Fan Permanent or Automatic OCV Car Light Supervision CLS
- Cable for Emergency Light CEL

- Metal Trunking on Car Roof\* Extra Travelling Cable for Options
- Buffer Switch on Car with 7m Cable
- EBRA Guide Rail Brake ASC-G Car Light Switch OCL-M/Out of Service Switch OSS-C
- Car Fan Switch OCV-M
- Car Extension Door CED
- Slack Rope Switch on Car with 5m cable Emergency Exit in Car Roof EEC-C

- Full Collective Control Type with Call Acceptance Light
- Parking at Main Floor (Doors Closed with Automatic Landing Doors) PAM Car Overload Function OLF Priority Car Calls PRC-K

- Bypass Load Function BLF Disturbance Alarm DAL-GP
- **Emergency Power Drive EPD**
- Fire Detection (whole building or machine room) FID-B/M; Alternate
- Earthquake Control EAQ/Interface Link LIL
- Advance Door Opening ADO/Accurate Relevelling ACL

- Single Button Collective, Down Collective or Push Button Control System
- Floor Extension Top/Bottom FEB/FET\*
  Locking of Landing Doors LLD (Automatic Doors only)\*

- Fireman's Drive with Country Code FRD
  Fire Protection Doors FPD/Corridor Illumination Control CIC
  Locking of Landing or Car Calls LOC/LOL/Out of Service Switch OSS-L
- Emergency Exit in the Shaft or Pit Hospital Emergency Service HEL
- Low Priority Landing Call PRL-L
- High Priority Landing Call PRL-H

- ReVive/LCE Signalisation in Shaft and Car includes: Position IndicatorCPI, Direction Arrows DIA & Arrival Gong GOC at Main Floor and in the Car
- 1 Car Operating Panel

- Car Position Indicator CPI, All Floors Direction Arrows DIA/Lanterns LAL, Main Floor or All Floors
- Arrival Gong at Landing GOL, All Floors
- Here Signal Light HSL
  Out of Service Indicator at Landings OSI
- Car Attendant Control Service ATS

- Automatic Landing Door (Driven and Locked by Automatic Car Door)
- Door Open DOB & Door Close DCB Buttons (Automatic Doors Only)
- AMD1 230V Car Door
- Button for Extended Door Open Time DOE-B
- Emergency Stop Switch in Car/Car Gate Open Indicator CGF (No Car Door)
- Safety Edge (1 Mechnical Switch)
- Wiring for Door Open & Closed Limit Switches
- Door Nudging NUD (where possible)

- ♦ Swing Landing Door, Manual Car Door or No Car Door
- Aljo, P4VR, 24V Closed Command 230V Mains Supply, AMD2 230V, ADV 230V, ADX 230V, Isola 96, Athena 96, 3ph Contactor, 3Ph Starlift, 250W Inverter or other electronic auto car doors, DC-2000 DC Door Control Interface or KOF Western Auto Car Doors
- 24V or 230V Photocell and Curtain of Light
- 1 Retiring Ramp 36-200VDC

# **AVAILABLE OPTIONS**

V3F10 Closed Loop (In <= 81.5A)</li>

### **GENERAL EQUIPMENT**

- Standard Document Set in English Language
- 2 Floors included
- Simplex (no group control)
- 400V Mains Supply & 230V Safety Circuit
- **BAR Position System**
- Overspeed Governor (car only) OSG Generic Type
- Overspeed Governor (car only) OSG in Machine Room (5m cable)
- EN81 Standard
- Governor Tension Weight Switch TWS in Pit (5m cable)
- Alarm Bell & Device at Main Floor ABE-M
- **Essential Installation Materials**
- Recall Drive inside the Controller RDF
- Earth Leakage Circuit Breaker for Lightning Supply

- Danish, Dutch, Finnish, French, German, Italian, Spanish or Swedish
- Up to 16 Floors (32 Floors
- 2 to 6 Car Group Advanced

- 230V or 420V Mains Supply
  Overspeed Governor in Machine Room (10m cable) or Top of the Shaft
- No Overspeed Governor and No Tension Weight Switch
- Alarm Bell + Device on Car ABE-C
- Delayed Alarm Volt Free Contact
- Full Installation Kit (drills, rag, insulation tape....)

# MACHINE ROOM EQUIPMENT

- Machine Room at the Top (PT)
- Control Panel Floor Standing
- Retain existing Mains Switch
- Brake 200V DC <2A
- Lift Motor Protection by Thermistors MOP-T 1 Phase Motor Cooling Fan (230V)
- **Emergency Stop Switch by Machine**
- Machine Room Temperature Sensor

- Bottom Drive (PU) & Stop Switch in Pulley Room (5m cable)
- New Mains Switch in the Controller or External to the Controller
- Additional Brake Voltages
- Lift Motor Protection by Current Relay MOP-I (and MOP-T) 2 Phase Motor Fan or 3 Phase Motor Fan (supply voltage only) External Recall Drive & Emergency Stop Switch
- **Mechanical Cable Protection**
- Rope Gripper
- Three Phase Final Limit Switch in Machine Room
- **Brake Supervision**

## **SHAFT EQUIPMENT**

- Standard Travelling Cables (25m)
- T-Guide (T70-T125) Fixings for Ramps & Position Equipment Wall Fixings for Travelling Cables
- Service Drive Limited Top & Bottom SED-B (77:U/N + Magnetic 68:U)
- 3m Landing Branch Cables (door locks) for Side A (7m for Side C)
- New Shaft Wiring with 100mm wide Shaft Trunking
- Buffer Switch in Pit

- Total Travelling Cable Length <=80m

- Full Shaft Lighting SHL (1ph 230V only)
  Wall Fixings for Ramps & Position Equipment or T-Guide (T127-T140)
  T-Guide (T70-T125) or (T127-T140) for Travelling Cables
  Service Drive Limited Top & Bottom SED-B (77:U/N + Mechanical 68:U)
  10m Packs of Flexible Plastic Conduit

### CAR EQUIPMENT

- Cable for Konexion Socket on Car Top Connection Box CCBS
- Sling Fixing for Car Top Extension Box LCECCBS
- Car Light Permanent or Automatic OCL
- Car Fan Permanent or Automatic OCV
- Car Light Supervision CLS
- Cable for Emergency Light CEL

- Metal Trunking on Car Roof\*
- Extra Travelling Cable for Options
- Buffer Switch on Car with 7m Cable EBRA Guide Rail Brake ASC-G
- Car Light Switch OCL-M/Out of Service Switch OSS-C
- Car Fan Switch OCV-M
- Car Extension Door CED
- Slack Rope Switch on Car with 5m cable
- Emergency Exit in Car Roof EEC-C

- Full Collective Control Type with Call Acceptance Light
- Parking at Main Floor (Doors Closed with Automatic Landing Doors) PAM
- Car Overload Function OLF
- Priority Car Calls PRC-K Bypass Load Function BLF
- Disturbance Alarm DAL-GP **Emergency Power Drive EPD**
- Fire Detection (whole building or machine room) FID-B/M; Alternate Return
- Earthquake Control EAQ/Interface Link LIL
- Advance Door Opening ADO/Accurate Relevelling ACL

- Single Button Collective, Down Collective or Push Button Control System
- Floor Extension Top/Bottom FEB/FET\*
  Locking of Landing Doors LLD (Automatic Doors only)\*
- Fireman's Drive with Country Code FRD
- Fire Protection Doors FPD/Corridor Illumination Control CIC Locking of Landing or Car Calls LOC/LOL/Out of Service Switch OSS-L
- Emergency Exit in the Shaft or Pit
- Hospital Emergency Service HEL
- Low Priority Landing Call PRL-L
- High Priority Landing Call PRL-H

# IGNALISATION & FLOORS

- 24V Generic Signalisation in Shaft and Car includes: Position Indicator CPI, Direction Arrows DIA & Arrival Gong GOC at Main Floor and in the Car
- 1 Car Operating Panel

- ReVive/LCE Car Signalisation/Additional Car Operating Panel
- Car Position Indicator CPI, All Floors Direction Arrows DIA, All Floors. Lanterns LAL
- Arrival Gong at Landing GOL, All Floors
- Here Signal Light HSL
- Out of Service Indicator at Landings OSI
- Car Attendant Control Service ATS

- Automatic Landing Door (Driven and Locked by Automatic Car Door)
- Door Open DOB & Door Close DCB Buttons (Automatic Doors Only) AMD1 230V Car Door
- Button for Extended Door Open Time DOE-B
- Emergency Stop Switch in Car/Car Gate Open Indicator CGF (No Car Door)
- Safety Edge (1 Mechnical Switch)
- Wiring for Door Open & Closed Limit Switches
  Door Nudging NUD (where possible)

- Swing Landing Door, Manual Car Door or No Car Door
- Aljo, P4VR, 24V Closed Command 230V Mains Supply, AMD2 230V, ADV 230V, ADX 230V, Isola 96, Athena 96, 3ph Contactor, 3Ph Starlift, 250W Inverter or other electronic auto car doors, DC-2000 DC Door Control Interface or KOF Western Auto Car Doors
- 24V or 230V Photocell and Curtain of Light
- 1 Retiring Ramp 36-200VDC

♦ Cost Option

# **AVAILABLE OPTIONS**

### **DRIVE SIZE**

V3F10 Closed Loop (In <= 81.5A)</li>

## GENERAL EQUIPMENT

- Standard Document Set in English Language
- 2 Floors included
- Simplex (no group control) 400V Mains Supply & 230V Safety Circuit
- **BAR Position System**
- Overspeed Governor (car only) OSG Generic Type
- Overspeed Governor (car only) OSG in Machine Room (5m cable)
- Governor Tension Weight Switch TWS in Pit
- Alarm Bell & Device at Main Floor ABE-M
- **Essential Installation Materials**
- Recall Drive inside the Controller RDF
- Earth Leakage Circuit Breaker for Lightning Supply

- Danish, Dutch, Finnish, French, German, Italian, Spanish or Swedish
- Up to 16 Floors (32 Floors \*
- 2 to 6 Car Group Advanced
- 230V or 420V Mains Supply Overspeed Governor OL35 + trip/reset
- Overspeed Governor in Machine Room (10m cable) or Top of the Shaft
- No Overspeed Governor and No Tension Weight Switch Alarm Bell + Device on Car ABE-C
- **Delayed Alarm Volt Free Contact**
- Full Installation Kit (drills, rag, insulation tape....)

# **MACHINE ROOM EQUIPMENT**

- Machine Room at the Top (PT)
- Control Panel Floor Standing Retain existing Mains Switch
- Brake 200V DC <2A
- Lift Motor Protection by Thermistors MOP-T 1 Phase Motor Cooling Fan (230V)
- Emergency Stop Switch by Machine
- Machine Room Temperature Sensor

- Bottom Drive (PU) & Stop Switch in Pulley Room New Mains Switch in the Controller or External to the Controller
- Additional Brake Voltages
- Lift Motor Protection by Current Relay MOP-I (and MOP-T)
  2 Phase Motor Fan or 3 Phase Motor Fan (supply voltage only)
  External Recall Drive & Emergency Stop Switch
- **Mechanical Cable Protection**
- Rope Gripper
- Three Phase Final Limit Switch in Machine Room
- **Brake Supervision**

## **SHAFT EQUIPMENT**

- Standard Travelling Cables (25m)
- T-Guide (T70-T125) Fixings for Ramps & Position Equipment
- Wall Fixings for Travelling Cables
- Service Drive Limited SED-B Top & Bottom (77:U/N + Magnetic 68:U)
- Buffer Switch in Pit

- Total Travelling Cable Length <=80m

- Full Shaft Lighting SHL (1ph 230V only)
  Wall Fixings for Ramps & Position Equipment or T-Guide (T127-T140)
  T-Guide (T70-T125) or (T127-T140) for Travelling Cables
  Service Daive (Fixible Date Section SED-B (77:U/N + Mechanical 68:U)
- 10m Packs of Flexible Plastic Conduit

# **CAR EQUIPMENT**

- Cable for Konexion Socket on Car Top Connection Box CCBS
- Sling Fixing for Car Top Extension Box LCECCBS
- Car Light Permanent or Automatic OCL
- Car Fan Permanent or Automatic OCV
- Car Light Supervision CLS
- Cable for Emergency Light CEL

- Metal Trunking on Car Roof\* Extra Travelling Cable for Options

- Buffer Switch on Car with 7m Cable
  EBRA Guide Rail Brake ASC-G
  Car Light Switch OCL-M/Out of Service Switch OSS-C
- Car Fan Switch OCV-M
- Car Extension Door CED
- Slack Rope Switch on Car with 5m cable
- Emergency Exit in Car Roof EEC-C

- Full Collective Control Type with Call Acceptance Light
- Parking at Main Floor (Doors Closed with Automatic Landing Doors) PAM
- Car Overload Function OLF Priority Car Calls PRC-K
- Bypass Load Function BLF
- Disturbance Alarm DAL-GP
- **Emergency Power Drive EPD**
- Fire Detection (whole building or machine room) FID-B/M; Alternate Return
- Earthquake Control EAQ/Interface Link LIL
- Advance Door Opening ADO/Accurate Relevelling ACL

- O Single Button Collective, Down Collective or Push Button Control System
- Floor Extension Top/Bottom FEB/FET
- Locking of Landing Doors LLD (Automatic Doors only)\*
  Fireman's Drive with Country Code FRD
- Fire Protection Doors FPD/Corridor Illumination Control CIC
- Locking of Landing or Car Calls LOC/LOL/Out of Service Switch OSS-L
- Emergency Exit in the Shaft or Pit

# **SIGNALISATION & FLOORS**

- **Retain Existing Shaft Wiring**
- 24V Generic Signalisation in Car includes: Position Indicator CPI, Direction Arrows DIA & Arrival Gong GOC
- 1 Car Operating Panel COP

- ReVive/LCE Car Signalisation/Additional Car Operating Panel
- Car Position Indicator CPI, All Floors
- Direction Arrows DIA/Lanterns LAL, Main Floor or All Floors
- Arrival Gong at Landing GOL, All Floors
- Car Attendant Control Service ATS

- Automatic Landing Door (Driven and Locked by Automatic Car Door)
- Door Open DOB & Door Close DCB Buttons (Automatic Doors Only)
- AMD1 230V Car Door
- Button for Extended Door Open Time DOE-B
- Emergency Stop Switch in Car/Car Gate Open Indicator CGF (No Car Door)
- Safety Edge (1 Mechnical Switch)
- Wiring for Door Open & Closed Limit Switches
- Door Nudging NUD (where possible)

- Swing Landing Door, Manual Car Door or No Car Door
- Aljo, P4VR, 24V Closed Command 230V Mains Supply, AMD2 230V, ADV 230V, ADX 230V, Isola 96, Athena 96, 3ph Contactor, 3Ph Starlift, 250W Inverter or other electronic auto car doors, DC-2000 DC Door Control Interface or KOF Western Auto Car Doors
- 24V or 230V Photocell and Curtain of Light
- 1 Retiring Ramp 36-200VDC

♦ Cost Option

