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**Motion Control Engineering  
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User Guide  
BMS Link  
With Analog Values v1.0

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## Important Precautions and Useful Information

This preface contains information that will help you understand and safely maintain MCE equipment. We strongly recommend you review this preface and read this manual before installing, adjusting, or maintaining Motion Control Engineering equipment. This preface discusses:

- Safety and Other Symbol Meanings
- Safety Precautions
- Environmental Considerations

## Safety and Other Symbol Meanings

**Danger**

This manual symbol is used to alert you to procedures, instructions, or situations which, if not done properly, might result in personal injury or substantial equipment damage.

**Caution**

This manual symbol is used to alert you to procedures, instructions, or situations which, if not done properly, might result in equipment damage.

**Note**

This manual symbol is used to alert you to instructions or other immediately helpful information.

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**Nidec MCE**

## MCE BMS Link User Guide



### Introduction

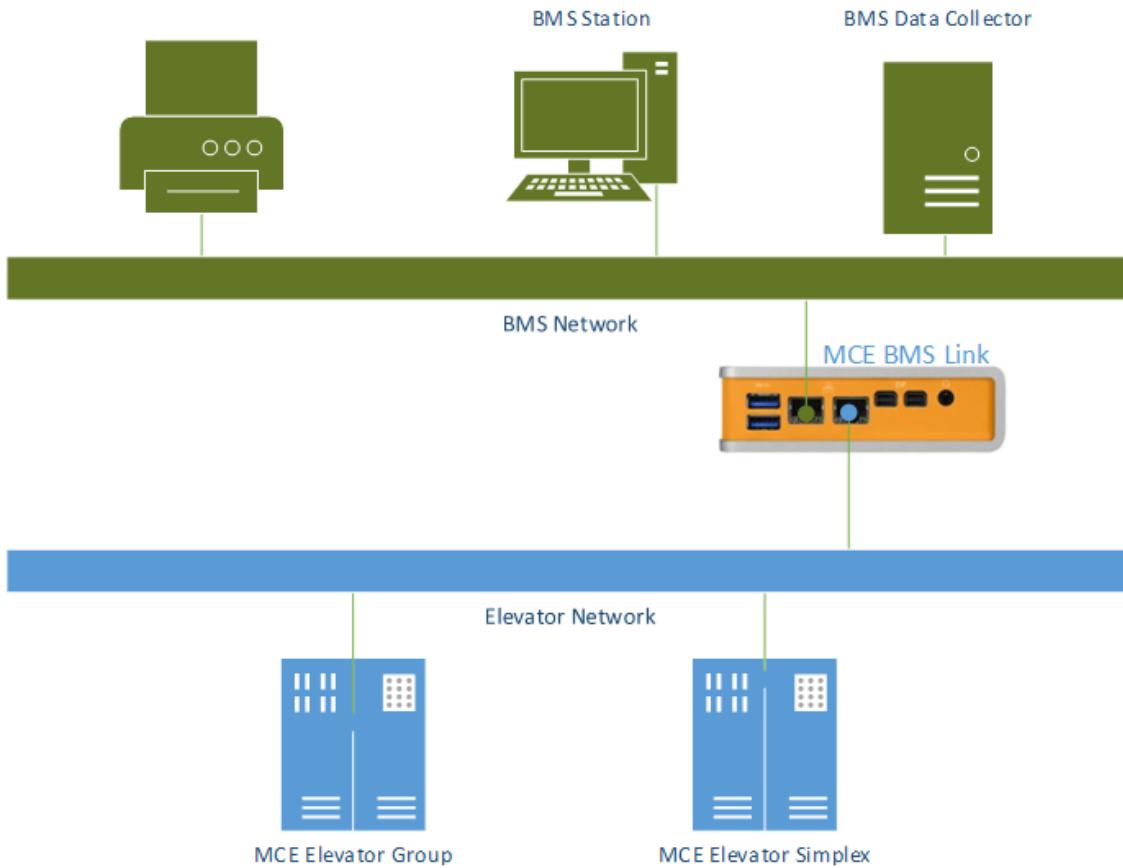
The MCE BMS Link is a BACnet™\* IP gateway that converts MCE elevator monitoring data into standard BACnet™ points. This unit is:

- Designed to be installed between the elevator network and the BMS network.
- Starts up out of the box.
- Preconfigured to auto-start upon power up and connect to elevators without any user interaction.

\*BACnet™ and its logo are Registered Trademarks of ASHRAE

 **BACnet**

Figure 1: BMS Link Configuration

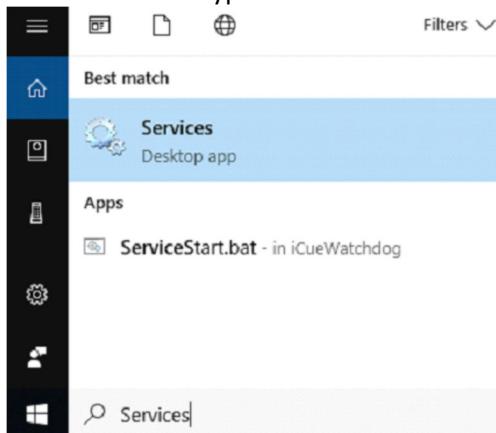


### MCE BMS LINK Quick Start User Guide

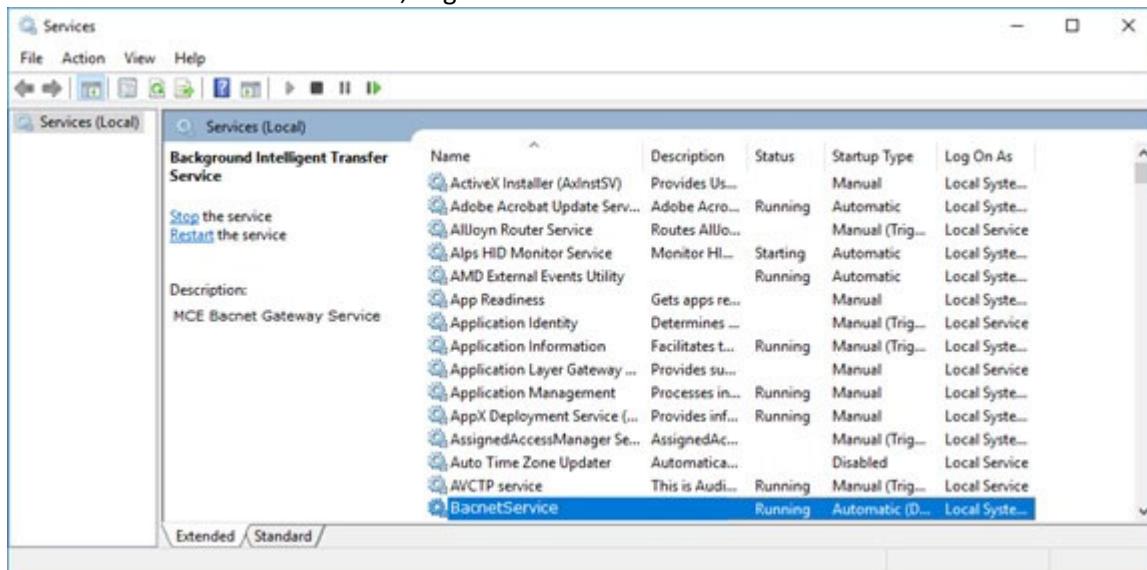
1. Find a suitable place to install the MCE BMS Link.
  - The area should have access to both networks and be protected from excessive moisture and temperature.
2. Connect BMS Network to MCE BMS Link.
  - RJ45 cable from building network connects to port on left labeled "BACNET."
3. Connect Elevator Network to MCE BMS Link.
  - RJ45 cable from elevator network connects to port on right labeled "ELEVATORS."
4. Power up the MCE BMS Link.
  - Connect 120 VAC to 12 VDC adapter to standard wall socket.
  - Connect barrel plug into MCE BMS Link unit and the system will auto-power ON.
  - Within 3 minutes, the MCE BMS Link establishes communication with the elevator system and is ready for BACnet™ clients to connect to it. At this point, it should be sending data between systems.

## Log In and User Interface

1. Human Interface
  - The MCE BMS Link is not intended to need user interaction.
  - To log in, connect a USB keyboard, mouse, and monitor. A monitor with a display port can be used directly. If the monitor has HDMI or VGA, use the display port to HDMI/VGA cable provided.
2. Login information (This info is also on the bottom of the MCE BMS Link)
  - The MCE BMS Link runs on a Windows 10 x64 operating system.
  - User = MCE
  - Password= Mce12345678!
3. Application
  - The BACnet™ Service should start running automatically after 3 minutes.
  - To manually start the service:
    - a. Type **Services** in the Windows "Type here to search box" next to the Start button:



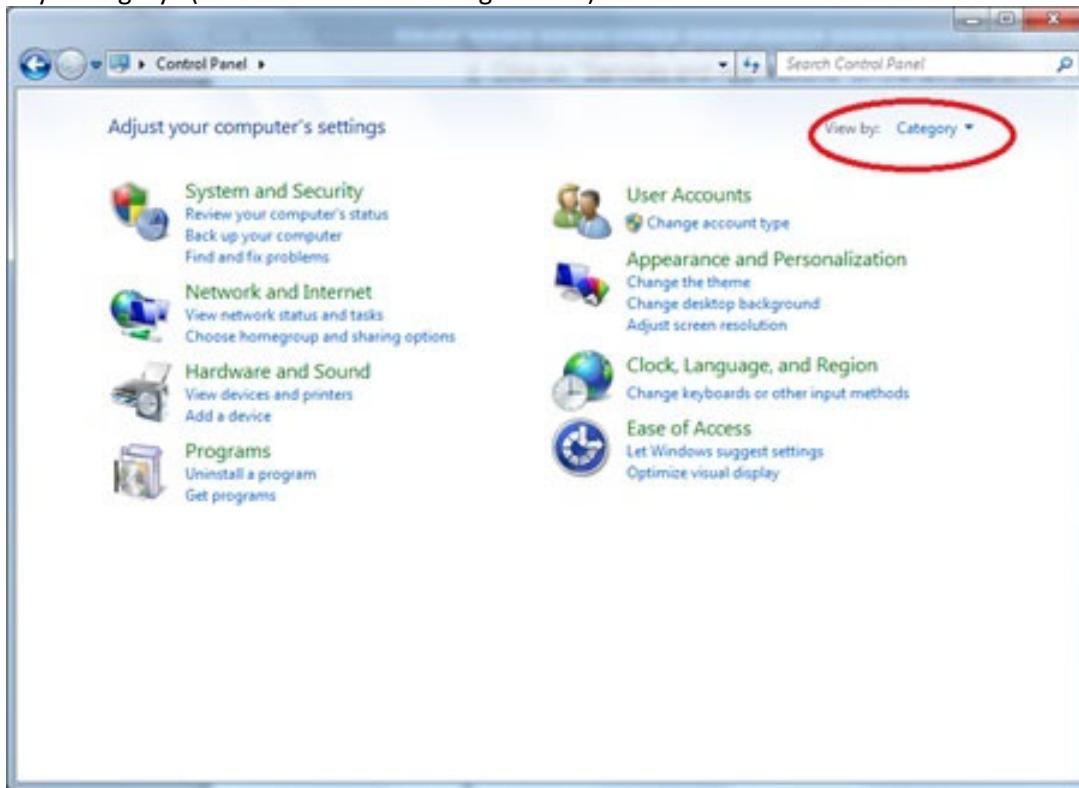
- b. Find "BACnet Service," right click on it and select **Start**.



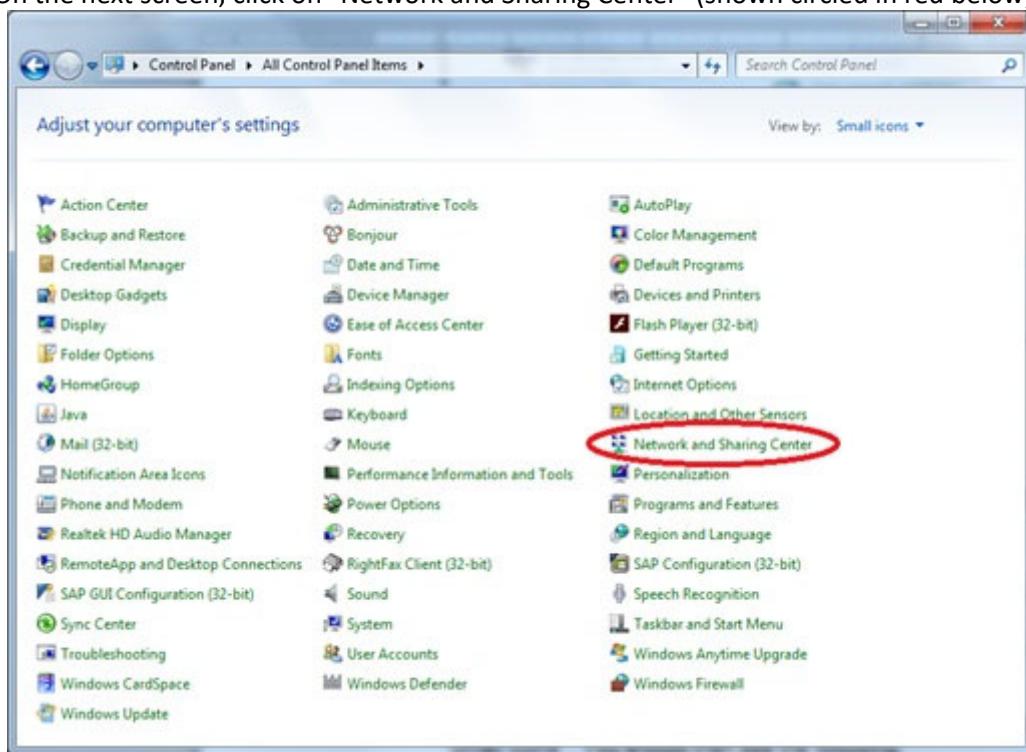
## Changing MCE BMS LINK IP Addresses

An MCE BMS Link contains 2 Network cards, one to connect to the elevator network, and the other to connect to the BACnet™ network. To change the IP address on these network cards, use the following steps:

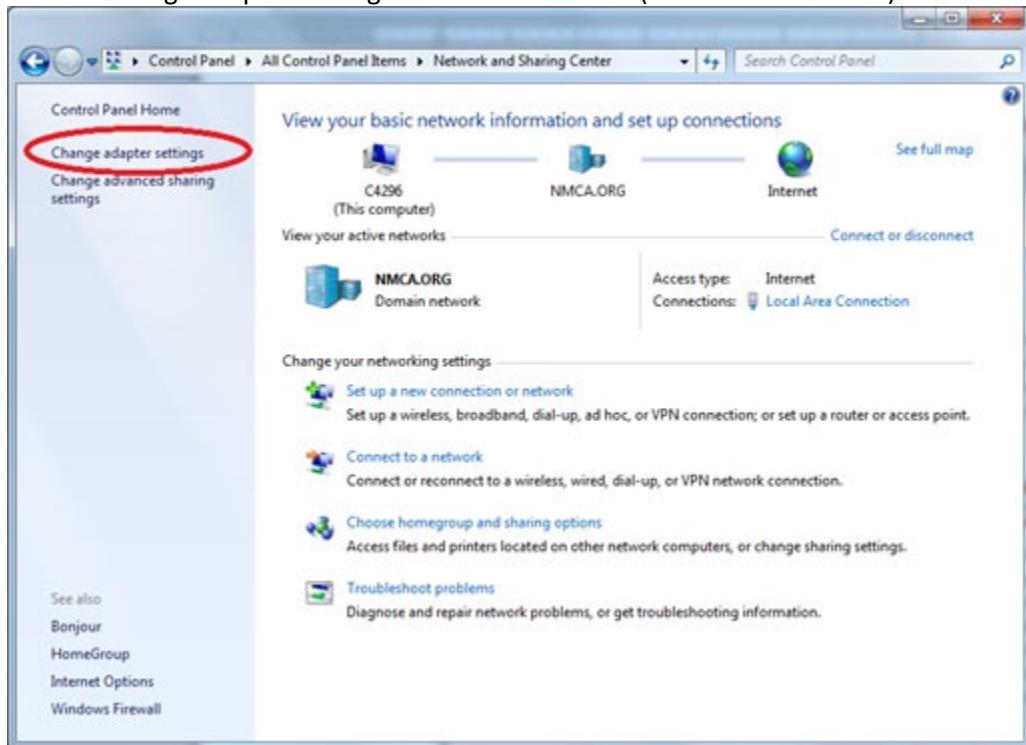
1. Open the Control Panel. If the Control Panel opens up in the view shown below, click the "View by: Category" (circled in red in the image below) and choose "Small Icons."



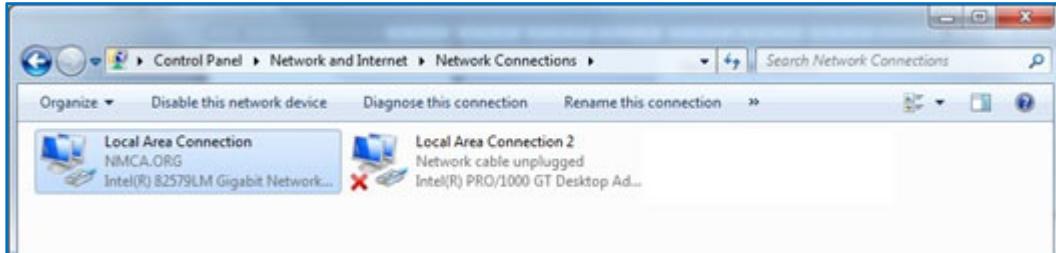
2. On the next screen, click on "Network and Sharing Center" (shown circled in red below)



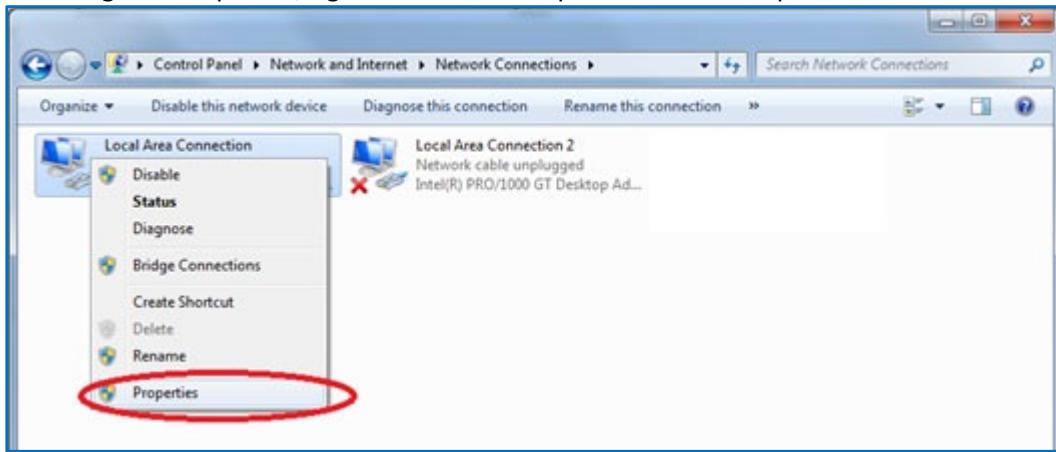
3. Click on "Change adapter settings" on the next screen (shown circled in red).



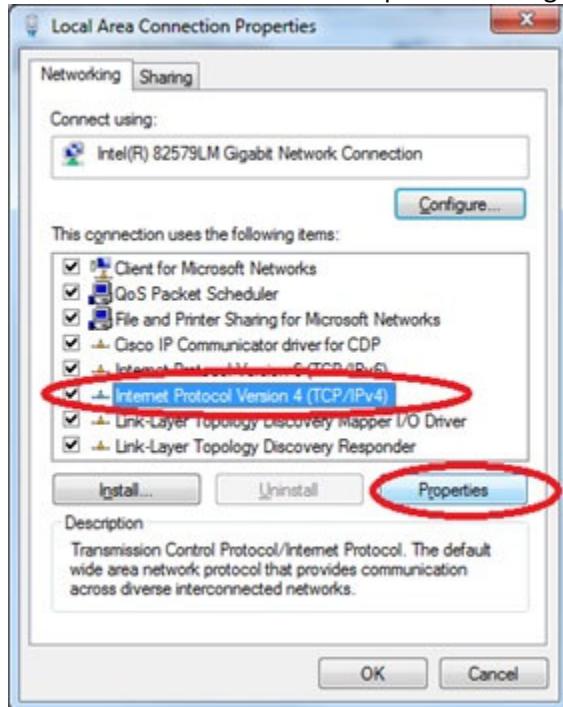
4. A list of network adapters installed in your system should appear. (Example shown below.)



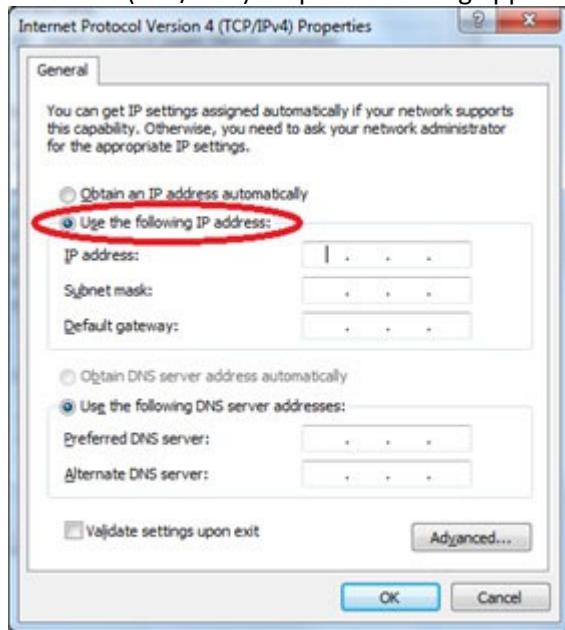
5. To change an adapter IP, right click on the adapter and click "Properties."



6. The "Local Area Connection Properties" dialog appears:



7. Click on "Internet Protocol Version 4 (TCP/IPv4)" then "Properties." The "Internet protocol Version 4 (TCP/IPv4) Properties" dialog appears:

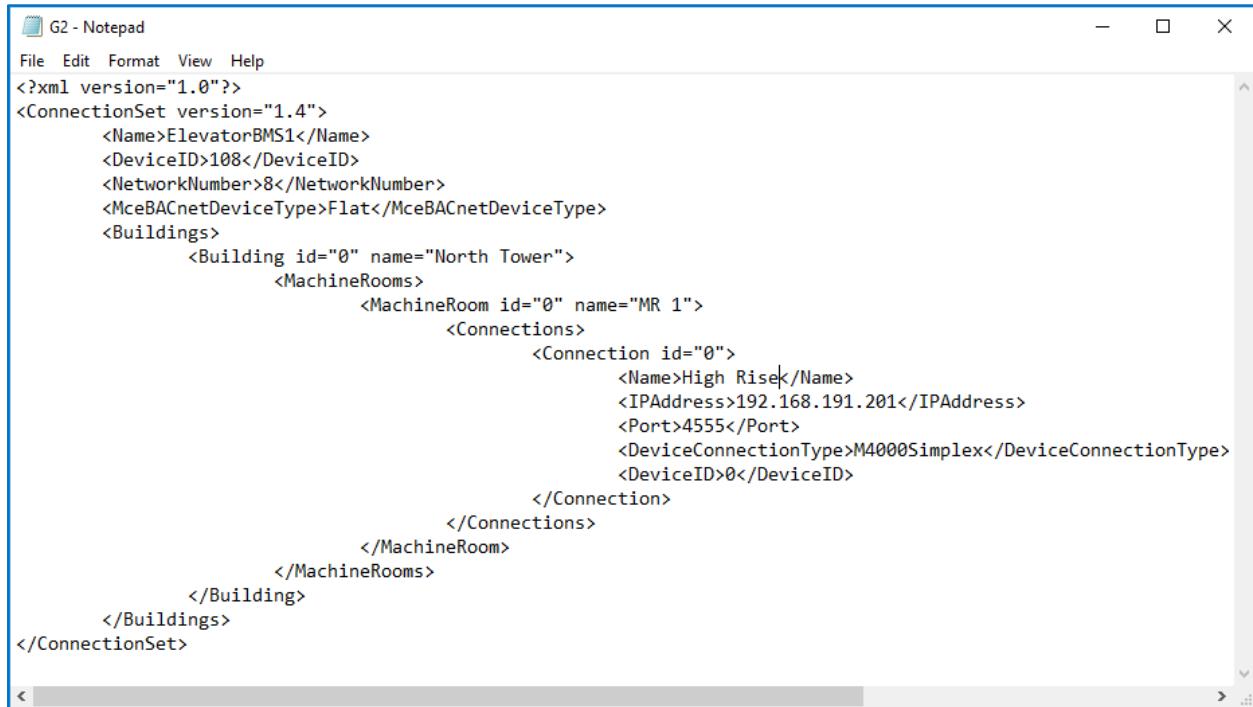


8. Click on "Use the following IP address."
9. Type the desired IP address in the "IP address" box and the desired "Subnet mask," then click OK to close the dialog.
10. Click OK to close the "Local Area Connection Properties" dialog.
11. Restart the MCE BMS Link after changing the IP addresses.

## Changing the Connection Set

MCE BACnet™ uses a file called “MCEBMSConfig.xml” which lists all of the connections it can connect to and expose via the BACnet™ protocol. This file resides in "C:\ProgramData\Motion Control Engineering\Bacnet\config."

1. DO NOT CHANGE THIS FILE unless directed to by MCE Support Staff. Right click on Notepad and Run as Administrator.



The screenshot shows a Windows Notepad window titled "G2 - Notepad". The window contains an XML document named "MCEBMSConfig.xml". The XML code defines a connection set for an elevator system. It includes details such as device ID, network number, and specific connection parameters for a building named "North Tower" with a machine room "MR 1" connected to a "High Rise" device at IP address 192.168.191.201 on port 4555.

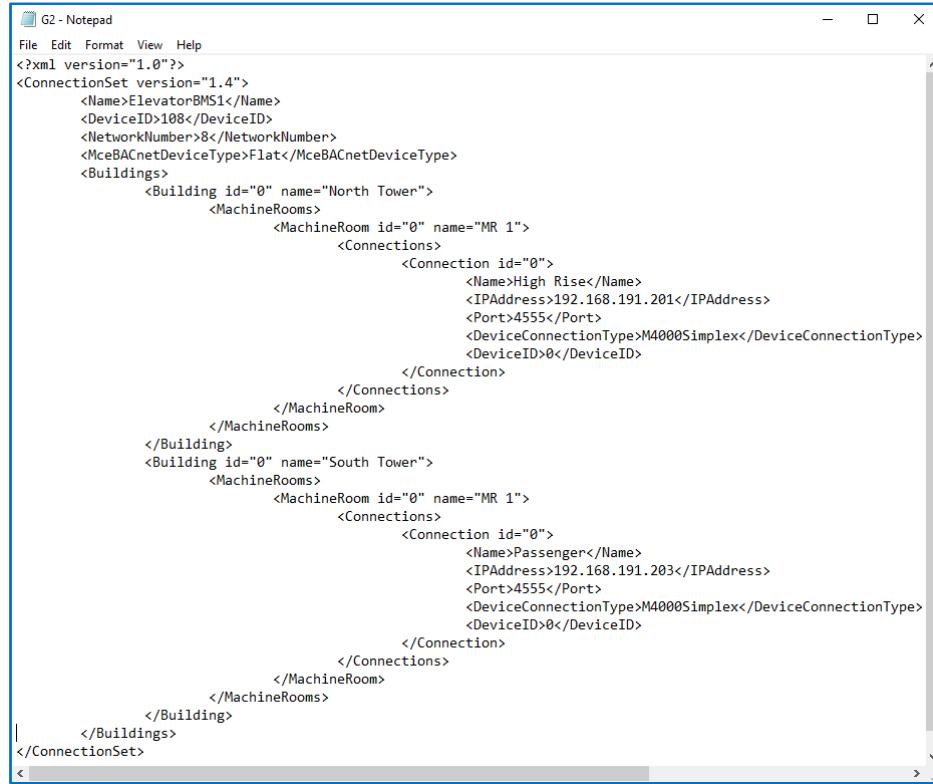
```
<?xml version="1.0"?>
<ConnectionSet version="1.4">
    <Name>ElevatorBMS1</Name>
    <DeviceID>108</DeviceID>
    <NetworkNumber>8</NetworkNumber>
    <MceBACnetDeviceType>Flat</MceBACnetDeviceType>
    <Buildings>
        <Building id="0" name="North Tower">
            <MachineRooms>
                <MachineRoom id="0" name="MR 1">
                    <Connections>
                        <Connection id="0">
                            <Name>High Rise</Name>
                            <IPAddress>192.168.191.201</IPAddress>
                            <Port>4555</Port>
                            <DeviceConnectionType>M4000Simplex</DeviceConnectionType>
                            <DeviceID>0</DeviceID>
                        </Connection>
                    </Connections>
                </MachineRoom>
            </MachineRooms>
        </Building>
    </Buildings>
</ConnectionSet>
```

2. Go to File -> Open
3. Clear the address bar and type in %ProgramData%
4. Navigate to the MCEBMSConfig.xml file and open the file.

The connection set has properties specific to BACnet™ Device.

- **Name:** Set the name for the physical device on the BACnet™ network.
- **Device ID:** Set an ID for the device on the BACnet™ network.
- **Network Number:** Set an ID for the BACnet™ network being used.
- **MCE BACnet™ Device Type:** Set how the BACnet™ points should be formatted.
  - Structured - Elevator Structure Points based on ASHRAE 135 addenda 2012aq objects
  - Flat – Generic BACnet points will be sent as unstructured analog values. See page 14 for the list of points

5. Buildings can be added within the "Buildings" node. For example, the following image shows an additional building called "South Tower:"

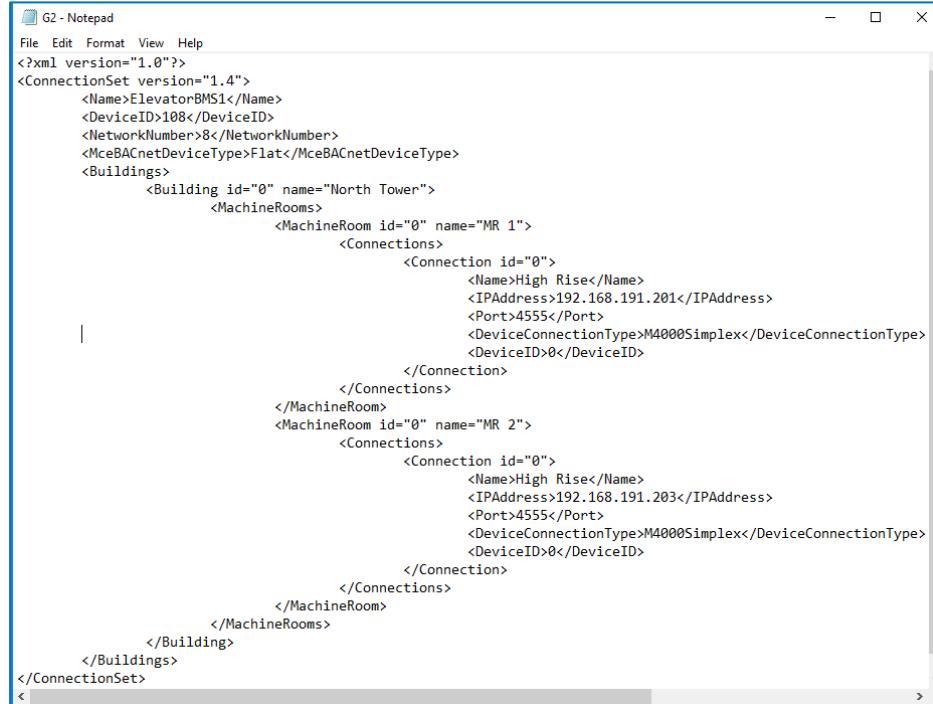


```

G2 - Notepad
File Edit Format View Help
<?xml version="1.0"?>
<ConnectionSet version="1.4">
    <Name>ElevatorBMS1</Name>
    <DeviceID>108</DeviceID>
    <NetworkNumber>8</NetworkNumber>
    <MceBACnetDeviceType>Flat</MceBACnetDeviceType>
    <Buildings>
        <Building id="0" name="North Tower">
            <MachineRooms>
                <MachineRoom id="0" name="MR 1">
                    <Connections>
                        <Connection id="0">
                            <Name>High Rise</Name>
                            <IPAddress>192.168.191.201</IPAddress>
                            <Port>4555</Port>
                            <DeviceConnectionType>M4000Simplex</DeviceConnectionType>
                            <DeviceID>0</DeviceID>
                        </Connection>
                    </Connections>
                </MachineRoom>
            </MachineRooms>
        </Building>
        <Building id="0" name="South Tower">
            <MachineRooms>
                <MachineRoom id="0" name="MR 1">
                    <Connections>
                        <Connection id="0">
                            <Name>Passenger</Name>
                            <IPAddress>192.168.191.203</IPAddress>
                            <Port>4555</Port>
                            <DeviceConnectionType>M4000Simplex</DeviceConnectionType>
                            <DeviceID>0</DeviceID>
                        </Connection>
                    </Connections>
                </MachineRoom>
            </MachineRooms>
        </Building>
    </Buildings>
</ConnectionSet>

```

6. Machine rooms can be added within the "MachineRooms" node:



```

G2 - Notepad
File Edit Format View Help
<?xml version="1.0"?>
<ConnectionSet version="1.4">
    <Name>ElevatorBMS1</Name>
    <DeviceID>108</DeviceID>
    <NetworkNumber>8</NetworkNumber>
    <MceBACnetDeviceType>Flat</MceBACnetDeviceType>
    <Buildings>
        <Building id="0" name="North Tower">
            <MachineRooms>
                <MachineRoom id="0" name="MR 1">
                    <Connections>
                        <Connection id="0">
                            <Name>High Rise</Name>
                            <IPAddress>192.168.191.201</IPAddress>
                            <Port>4555</Port>
                            <DeviceConnectionType>M4000Simplex</DeviceConnectionType>
                            <DeviceID>0</DeviceID>
                        </Connection>
                    </Connections>
                </MachineRoom>
                <MachineRoom id="0" name="MR 2">
                    <Connections>
                        <Connection id="0">
                            <Name>High Rise</Name>
                            <IPAddress>192.168.191.203</IPAddress>
                            <Port>4555</Port>
                            <DeviceConnectionType>M4000Simplex</DeviceConnectionType>
                            <DeviceID>0</DeviceID>
                        </Connection>
                    </Connections>
                </MachineRoom>
            </MachineRooms>
        </Building>
        <Building id="0" name="South Tower">
            <MachineRooms>
                <MachineRoom id="0" name="MR 1">
                    <Connections>
                        <Connection id="0">
                            <Name>Passenger</Name>
                            <IPAddress>192.168.191.203</IPAddress>
                            <Port>4555</Port>
                            <DeviceConnectionType>M4000Simplex</DeviceConnectionType>
                            <DeviceID>0</DeviceID>
                        </Connection>
                    </Connections>
                </MachineRoom>
                <MachineRoom id="0" name="MR 2">
                    <Connections>
                        <Connection id="0">
                            <Name>Passenger</Name>
                            <IPAddress>192.168.191.205</IPAddress>
                            <Port>4555</Port>
                            <DeviceConnectionType>M4000Simplex</DeviceConnectionType>
                            <DeviceID>0</DeviceID>
                        </Connection>
                    </Connections>
                </MachineRoom>
            </MachineRooms>
        </Building>
    </Buildings>
</ConnectionSet>

```

7. Connections are added within the “Connections” node:

```

G2 - Notepad
File Edit Format View Help
<?xml version="1.0"?>
<ConnectionSet version="1.4">
    <Name>ElevatorBMS1</Name>
    <DeviceID>108</DeviceID>
    <NetworkNumber>8</NetworkNumber>
    <MceBACnetDeviceType>Flat</MceBACnetDeviceType>
    <Buildings>
        <Building id="0" name="North Tower">
            <MachineRooms>
                <MachineRoom id="0" name="MR 1">
                    <Connections>
                        <Connection id="0">
                            <Name>High Rise</Name>
                            <IPAddress>192.168.191.201</IPAddress>
                            <Port>4555</Port>
                            <DeviceConnectionType>M4000Simplex</DeviceConnectionType>
                            <DeviceID>0</DeviceID>
                        </Connection>
                        <Connection id="1">
                            <Name>Low Rise</Name>
                            <IPAddress>192.168.191.203</IPAddress>
                            <Port>4555</Port>
                            <DeviceConnectionType>M4000Simplex</DeviceConnectionType>
                            <DeviceID>0</DeviceID>
                        </Connection>
                    </Connections>
                </MachineRoom>
            </MachineRooms>
        </Building>
    </Buildings>
</ConnectionSet>
<

```

8. A connection node defines a connection point to one of MCE's device controllers:

```

<Connection id="0">
    <Name>Dispatcher0</Name>
    <IPAddress>10.113.33.97</IPAddress>
    <Port>4555</Port>
    <DeviceConnectionType>M4000Simplex</DeviceConnectionType>
    <DeviceID>0</DeviceID>
</Connection>

```

9. "Connection id" within a "Connections" node starts at "0" and is incremented by one for every new "Connection" node.

10. The following "Connection" node sub nodes must be defined:

- Name.** A meaningful name to identify a particular controller in the elevator system.
- IPAddress.** The IP address where the controller is running.
- Port.** This value must be 5555 for iControl simplexes and iControl roaming dispatchers and 4555 for everything else.

- d. **DeviceConnectiontype.** Defines the controller type; Can be one of the following values (value must be exactly as shown in this list):
  - IceGroup
  - IceSimplex
  - IceAgc
  - ProgrammableHydroDuplex
  - ProgrammableHydroSimplex
  - ProgrammableTractionDuplex
  - ProgrammableTractionSimplex
  - SwingPanelGroup
  - SwingPanelSimplex
  - Ec1
  - M2000Simplex
  - M2000Duplex
  - M2000Tssa
  - M4000Simplex
  - M4000Duplex
  - M4000Tssa
  - MGroup
  - ThirdPartyEscalator
  - OMI
  - OMI2
- e. **DeviceID.** Starts at 0 and is incremented by 1 for every "Connection" node that is added. This value will be the same as the "Connection" node id value.

NOTE: A total maximum of four connections are supported on the MCE BACnet™ Client. DO NOT change connection configuration without the direction of MCE support staff.

### MCE BACNET™ Information

1. BACnet™ Vendor Identifier
  - MCE has been assigned a BACnet™ Vendor Identifier of 705 from ASHRAE.
2. BACnet™ Connection Port
  - MCE BACnet™ Service Listens on port number 0xBAC0 = decimal 47808.



## DEVICE TYPE: STRUCTURED – ASHRAR-135 Format

MCE BMS-Link Structured exposes the elevator data according to ASHRAE 135 addenda 135 2012aq. Format is published at <https://bacnet.org/wp-content/uploads/sites/4/2022/08/Add-135-2012aq.pdf> [www.bacnet.org/Addenda/Add-135-2012aq.pdf](http://www.bacnet.org/Addenda/Add-135-2012aq.pdf)

### MCE BACNET™ Identifiers

*Table 1: Elevator Group Object Type Elevator Group Object Type*

Property	Property Identifier
Object_Identifier	75
Object_Name	77
Object_Type	79
Description	28
Machine_Room_ID	474
Group_ID	465
Group_members	515
Group_Mode	467
Landing_Calls	470
Landing_Call_Control	471
Property_List	519
Profile_Name	168

*Table 2:Lift Object Type*

Property	Property Identifier
Object_Identifier	75
Object_Name	77
Object_Type	79
Description	28
Status_Flags	111
Elevator_Group	459
Group_ID	465
Installation_ID	469
Floor_Text	464
Car_Door_Text	451
Assigned_Landing_Calls	447
Making_Car_Call	475

Property	Property Identifier
Registered_Car_Call	480
Car_Position	458
Car_Moving_Direction	457
Car_Assigned_Direction	448
Car_Door_Status	450
Car_Door_Zone	452
Car_Mode	456
Car_Load	454
Car_Load_Units	455
Next_Stopping_Floor	476
Passenger_Alarm	478
Reliability	103
Out_Of_Service	81
Car_Drive_Status	453
Fault_Signals	463
Event_Time_Stamps	130
Event_Message_Texts	351
Property_List	519
Profile_Name	168

Table 3: Escalator Object Type

Property	Property Identifier
Object_Identifier	75
Object_Name	77
Object_Type	79
Description	28
Elevator_Group	459
Group_ID	465
Installation_ID	469
Operation_Direction	477
Passenger_Alarm	478
Power_Mode	479

## Troubleshooting

1. MCE BMS Link will not connect to iCue or iControl.
  - a. Verify the iCue or iControl has the authorization key for MCE BACNET™
    - If not, contact MCE to get authorization key.
  - b. Verify MCE BMS Link PC can PING the elevator IP address.
    - If not, check cables, any switches between the unit and firewalls.
  - c. Verify Connection file "G2.set" has correct settings in MCE BMS Link.
    - If not, contact MCE to make changes to "G2.set" file.
2. BACnet™ Client cannot connect to the MCE BMS Link
  - a. Verify Client PC can PING MCE BMS Link
    - If not, check cables and network switches.
    - Check if BACnet™ service is running.
  - b. Verify BACnet™ Service is started and running on MCE BMS Link

- If not, start service manually.



---

**Nidec MCE**

## DEVICE TYPE: FLAT - Analog Value Format

MCE BMS-Link flat exposes ASHRAE's elevator interface in a flat structure via ANALOG VALUES. The IDs used for these ANALOG VALUES is formatted as follows:

XYYZZZ

X represent the elevator group the BMS-Link is connected to and can have values 1 to 4 (MCE DMS-Link supports up to 4 elevator groups)

YY represents a lift that is connected to the elevator group and can have values 1 to 12 (a max of 12 cars per elevator group is supported). Value 00 is reserved for group or system points.

ZZZ the last part represents the different points of interest within the elevator system such as position indicator, hall calls, car calls, etc. and can have values 1 to 999. If YY is 00 then ZZZ represents elevator group related points (system wide points). If the YY part is non 00 then the 000 ids represent lift specific points.

## Elevator Group Analog Values

### Group Mode

#### **ID: 100001**

Description: Current Operational Mode of the Dispatcher

Present Value:

unknown = 0 (The current operating mode of the lift group is unknown)

normal = 1 (The lift group is in normal operating mode, and no special operating mode is in place)

downPeak = 2 (Most passengers want to leave the building. This usually happens before lunch break or at close of business)

twoWay = 3 (Not applicable)

fourWay = 4 (Not applicable)

emergencyPower = 5 (Not applicable)

upPeak = 6 (Most passengers gather at the main terminal, usually the ground floor, to get to different floors of the building. This situation usually happens in the morning right before office hours or right after lunch)

### Job Number

#### **ID: 100002**

Description: an MCE specific unique number identifying a job

Present Value:

- 4-byte integer

### Job Name

#### **ID: 100003 - 100012**

Description: an MCE specific name identifying a job

Present Value:

- 40-byte hex string representation of the job name

### Number of Cars

#### **ID: 100013**

Description: number of lifts associated with this elevator group

Present Value:

- Integer value

## Number of Floors

### **ID: 100014**

Description: number of floors served by this elevator group

Present Value:

- Integer value

## Front Up Hall Calls

### **ID: 100015**

Description: Front hall calls in the up direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents front up hall call that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at front floors 4, 5, 6, 7, and 8)

### **ID: 100016**

Description: Front hall calls in the up direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents front up hall call that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at front floors 36, 37, 38, 39, and 40)

### **ID: 100017**

Description: Front hall calls in the up direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents front up hall call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at front floors 68, 69, 70, 71, and 72)

### **ID: 100018**

Description: Front hall calls in the up direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents front up hall call that are latched at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at front floors 100, 101, 102, 103, and 104)

## Front Down Hall Calls

### **ID: 100019**

Description: Front hall calls in the down direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents front down hall call that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at front floors 4, 5, 6, 7, and 8)

**ID: 100020**

Description: Front hall calls in the down direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents front down hall call that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at front floors 36, 37, 38, 39, and 40)

**ID: 100021**

Description: Front hall calls in the down direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents front down hall call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at front floors 68, 69, 70, 71, and 72)

**ID: 100022**

Description: Front hall calls in the down direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents front down hall call that are latched at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at front floors 100, 101, 102, 103, and 104)

## Rear Up Hall Calls

**ID: 100023**

Description: Rear hall calls in the up direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents rear up hall call that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at rear floors 4, 5, 6, 7, and 8)

**ID: 100024**

Description: Rear all calls in the up direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents rear up hall call that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at rear floors 36, 37, 38, 39, and 40)

**ID: 100025**

Description: Rear hall calls in the up direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents rear up hall call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at rear floors 68, 69, 70, 71, and 72)

**ID: 100026**

Description: Rear hall calls in the up direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents rear up hall call that are latched at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at rear floors 100, 101, 102, 103, and 104)

## Rear Down Hall Calls

**ID: 100027**

Description: Rear hall calls in the down direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents rear down hall call that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at rear floors 4, 5, 6, 7, and 8)

**ID: 100028**

Description: Rear all calls in the down direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents rear down hall call that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at rear floors 36, 37, 38, 39, and 40)

**ID: 100029**

Description: Rear hall calls in the down direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents rear down hall call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at rear floors 68, 69, 70, 71, and 72)

**ID: 100030**

Description: Rear hall calls in the down direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents rear down hall call that are latched at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at rear floors 100, 101, 102, 103, and 104)

## Front Up Auxiliary Calls

**ID: 100031**

Description: Front auxiliary calls in the up direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents front up auxiliary call that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at front floors 4, 5, 6, 7, and 8)

**ID: 100032**

Description: Front auxiliary calls in the up direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents front up auxiliary call that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at front floors 36, 37, 38, 39, and 40)

**ID: 100033**

Description: Front auxiliary calls in the up direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents front up auxiliary call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at front floors 68, 69, 70, 71, and 72)

**ID: 100034**

Description: Front auxiliary calls in the up direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents front up auxiliary call that are latched at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at front floors 100, 101, 102, 103, and 104)

## Front Down Auxiliary Calls

**ID: 100035**

Description: Front auxiliary calls in the down direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents front down auxiliary call that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at front floors 4, 5, 6, 7, and 8)

**ID: 100036**

Description: Front auxiliary calls in the down direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents front down auxiliary call that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at front floors 36, 37, 38, 39, and 40)

**ID: 100037**

Description: Front auxiliary calls in the down direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents front down auxiliary call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at front floors 68, 69, 70, 71, and 72)

**ID: 100038**

Description: Front auxiliary calls in the down direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents front down auxiliary call that are latched at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at front floors 100, 101, 102, 103, and 104)

**Rear Up Auxiliary Calls****ID: 100039**

Description: Rear auxiliary calls in the up direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents rear up auxiliary call that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at rear floors 4, 5, 6, 7, and 8)

**ID: 100040**

Description: Rear auxiliary calls in the up direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents rear up auxiliary call that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at rear floors 36, 37, 38, 39, and 40)

**ID: 100041**

Description: Rear auxiliary calls in the up direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents rear up auxiliary call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at rear floors 68, 69, 70, 71, and 72)

**ID: 100042**

Description: Rear auxiliary calls in the up direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents rear up auxiliary call that are latched at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at rear floors 100, 101, 102, 103, and 104)

**Rear Down Auxiliary Calls****ID: 100043**

Description: Rear auxiliary calls in the down direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents rear down auxiliary call that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at rear floors 4, 5, 6, 7, and 8)

**ID: 100044**

Description: Rear auxiliary calls in the down direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents rear down auxiliary call that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at rear floors 36, 37, 38, 39, and 40)

**ID: 100045**

Description: Rear auxiliary calls in the down direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents rear down auxiliary call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at rear floors 68, 69, 70, 71, and 72)

**ID: 100046**

Description: Rear auxiliary calls in the down direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents rear down auxiliary call that are latched at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at rear floors 100, 101, 102, 103, and 104)

## Front Up Hall Call Commands

**ID: 100047**

Description: Latch front hall calls in the up direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents front up hall call that are you want to latch at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch up hall calls at front floors 4, 5, 6, 7, and 8)

**ID: 100048**

Description: Latch front hall calls in the up direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents front up hall call that you want to latch at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch up hall calls at front floors 36, 37, 38, 39, and 40)

**ID: 100049**

Description: Latch front hall calls in the up direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents front up hall call that you want to latch at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch up hall calls at front floors 68, 69, 70, 71, and 72)

**ID: 100050**

Description: Latch front hall calls in the up direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents front up hall call that you want to latch at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch up hall calls at front floors 100, 101, 102, 103, and 104)

### Front Down Hall Call Commands

**ID: 100051**

Description: Latch front hall calls in the down direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents front down hall call that are you want to latch at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch down hall calls at front floors 4, 5, 6, 7, and 8)

**ID: 100052**

Description: Latch front hall calls in the down direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents front down hall call that you want to latch at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch down hall calls at front floors 36, 37, 38, 39, and 40)

**ID: 100053**

Description: Latch front hall calls in the down direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents front down hall call that you want to latch at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch down hall calls at front floors 68, 69, 70, 71, and 72)

**ID: 100054**

Description: Latch front hall calls in the down direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents front down hall call that you want to latch at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch down hall calls at front floors 100, 101, 102, 103, and 104)

### Rear Up Hall Call Commands

**ID: 100055**

Description: Latch rear hall calls in the up direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents rear up hall call that are you want to latch at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch up hall calls at rear floors 4, 5, 6, 7, and 8)

**ID: 100056**

Description: Latch rear hall calls in the up direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents rear up hall call that you want to latch at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (latch up hall calls at rear floors 36, 37, 38, 39, and 40)

**ID: 100057**

Description: Latch rear hall calls in the up direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents rear up hall call that you want to latch at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (latch up hall calls at rear floors 68, 69, 70, 71, and 72)

**ID: 100058**

Description: Latch rear hall calls in the up direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents rear up hall call that you want to latch at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (latch up hall calls at rear floors 100, 101, 102, 103, and 104)

## Rear Down Hall Call Commands

**ID: 100059**

Description: Latch rear hall calls in the down direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents rear down hall call that are you want to latch at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (latch down hall calls at rear floors 4, 5, 6, 7, and 8)

**ID: 100060**

Description: Latch rear hall calls in the down direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents rear down hall call that you want to latch at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (latch down hall calls at rear floors 36, 37, 38, 39, and 40)

**ID: 100061**

Description: Latch rear hall calls in the down direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents rear down hall call that you want to latch at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (latch down hall calls at rear floors 68, 69, 70, 71, and 72)

**ID: 100062**

Description: Latch rear hall calls in the down direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents rear down hall call that you want to latch at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch down hall calls at rear floors 100, 101, 102, 103, and 104)

### Front Up Auxiliary Call Commands

**ID: 100063**

Description: Latch front auxiliary calls in the up direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents front up auxiliary call that are you want to latch at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch up auxiliary calls at front floors 4, 5, 6, 7, and 8)

**ID: 100064**

Description: Latch front auxiliary calls in the up direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents front up auxiliary call that you want to latch at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch up auxiliary calls at front floors 36, 37, 38, 39, and 40)

**ID: 100065**

Description: Latch front auxiliary calls in the up direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents front up auxiliary call that you want to latch at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch up auxiliary calls at front floors 68, 69, 70, 71, and 72)

**ID: 100066**

Description: Latch front auxiliary calls in the up direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents front up auxiliary call that you want to latch at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch up auxiliary calls at front floors 100, 101, 102, 103, and 104)

## Front Down Auxiliary Call Commands

### **ID: 100067**

Description: Latch front auxiliary calls in the down direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents front down auxiliary call that are you want to latch at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (latch down auxiliary calls at front floors 4, 5, 6, 7, and 8)

### **ID: 100068**

Description: Latch front auxiliary calls in the down direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents front down auxiliary call that you want to latch at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (latch down auxiliary calls at front floors 36, 37, 38, 39, and 40)

### **ID: 100069**

Description: Latch front auxiliary calls in the down direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents front down auxiliary call that you want to latch at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (latch down auxiliary calls at front floors 68, 69, 70, 71, and 72)

### **ID: 100070**

Description: Latch front auxiliary calls in the down direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents front down auxiliary call that you want to latch at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (latch down auxiliary calls at front floors 100, 101, 102, 103, and 104)

## Rear Up Auxiliary Call Commands

### **ID: 100071**

Description: Latch rear auxiliary calls in the up direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents rear up auxiliary call that are you want to latch at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (latch up auxiliary calls at rear floors 4, 5, 6, 7, and 8)

**ID: 100072**

Description: Latch rear auxiliary calls in the up direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents rear up auxiliary call that you want to latch at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch up auxiliary calls at rear floors 36, 37, 38, 39, and 40)

**ID: 100073**

Description: Latch rear auxiliary calls in the up direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents rear up auxiliary call that you want to latch at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch up auxiliary calls at rear floors 68, 69, 70, 71, and 72)

**ID: 100074**

Description: Latch rear auxiliary calls in the up direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents rear up auxiliary call that you want to latch at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch up auxiliary calls at rear floors 100, 101, 102, 103, and 104)

## Rear Down Auxiliary Call Commands

**ID: 100075**

Description: Latch rear auxiliary calls in the down direction for floors 1 - 32

Present Value:

- 4-byte hex value that represents rear down auxiliary call that are you want to latch at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch down auxiliary calls at rear floors 4, 5, 6, 7, and 8)

**ID: 100076**

Description: Latch rear auxiliary calls in the down direction for floors 33 - 64

Present Value:

- 4-byte hex value that represents rear down auxiliary call that you want to latch at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch down auxiliary calls at rear floors 36, 37, 38, 39, and 40)

**ID: 100077**

Description: Latch rear auxiliary calls in the down direction for floors 65 - 96

Present Value:

- 4-byte hex value that represents rear down auxiliary call that you want to latch at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch down auxiliary calls at rear floors 68, 69, 70, 71, and 72)

**ID: 100078**

Description: Latch rear auxiliary calls in the down direction for floors 97 - 128

Present Value:

- 4-byte hex value that represents rear down auxiliary call that you want to latch at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch down auxiliary calls at rear floors 100, 101, 102, 103, and 104)

## Lift Analog Values

### Position Indicator

**ID: 101001, 102001,... 112001 (1 to 12 cars per group)**

Description: Floor at which elevator is within the building

Present Value:

- An integer 1 based value (1 = bottom floor) of floor where elevator is at.

### Car Load

**ID: 101002, 102002,... 112002 (1 to 12 cars per group)**

Description: Car load percentage

Present Value:

- 10 – Light load
- 20 – Normal load
- 30 – Dispatch load
- 40 – Heavy load
- 50 – Over load

### Car Mode

**ID: 101003, 102003,... 112003 (1 to 12 cars per group)**

Description: Current operational mode of elevator

Present Value:

- 0 – Unknown
- 1 – Normal
- 2 – VIP
- 3 – Homing (Not applicable in MCE equipment)
- 4 – Parking (Not applicable in MCE equipment)
- 5 – Attendant
- 6 – Fire fighter (Not applicable in MCE equipment)
- 7 – Emergency power
- 8 – Inspection
- 9 – cabinet recall (Not applicable in MCE equipment)
- 10 – Earthquake operation (Not applicable in MCE equipment)

- 11 – Fire operation
- 12 – Out of service (Not applicable in MCE equipment)
- 13 – Occupant evacuation (Not applicable in MCE equipment)
- 14 – Capture
- 15 – Cartop inspection
- 16 – Car panel inspection
- 17 – Hoistway access inspection
- 18 – Machine room inspection
- 19 – Test
- 20 – Independent
- 21 – CFSS0 phase I
- 22 – CFSS0 transition
- 23 – CFSS0 phase II
- 24 – CFSS1 phase I
- 25 – CFSS1 transition
- 26 – CFSS1 phase II
- 27 – Sabbath
- 28 – Shuttle service
- 29 – Jail master
- 30 – Jail secure
- 31 – CFSS2 phase I
- 32 – CFSS2 transition
- 33 – CFSS2 phase II
- 34 – CFSS3 phase I
- 35 – CFSS3 transition
- 36 – CFSS3 phase II

### Car Status Flags

**ID: 101004, 102004,... 112004 (1 to 12 cars per group)**

Description: Whether the elevator is in Alarm, Fault, Overridden, Out of status

Status Flags (array of Booleans [inAlarm, fault, overridden, outOfService]):

- inAlarm – true / false (emergency alarm active / inactive)
- fault – true / false (true if a fault exists in the elevator system)
- Overridden – true / false (if elevator is not in normal operation then overridden is true otherwise it's false)
- outOfService – true / false (elevator is out of service or in service)

## Elevator Reliability

**ID: 101005, 102005,... 112005 (1 to 12 cars per group)**

Description: Whether or not the elevator system is connected to BMS-Link

Reliability:

- 0 – No fault detected
- 12 – Communication failure

## Out of Service

**ID: 101006 – 112006 (1 to 12 cars per group)**

Description: Whether the elevator system is out of service

Reliability:

- 0 – Out of service
- 12 – In service

## Moving Direction

**ID: 101007, 102007,... 112007 (1 to 12 cars per group)**

Description: Direction in which the elevator is currently moving

Present Value:

- 0 – Unknown (Not applicable in MCE equipment)
- 1 – None
- 2 – Stopped
- 3 – Up
- 4 – Down
- 5 – Up and down (Not applicable in MCE equipment)

## Next Stopping Floor

**ID: 101008, 102008,... 112008 (1 to 12 cars per group)**

Description: Elevator next destination

Present Value:

- Integer 1 based value indicating the elevator's next destination

## Car Assigned Direction

**ID: 101009, 102009,... 112009 (1 to 12 cars per group)**

Description: Elevator preferred direction of travel

Present Value:

- 0 – Unknown
- 1 – None
- 2 – Stopped
- 3 – Up
- 4 – Down
- 5 – Up and down (Not applicable in MCE equipment)

## Car Front Door Status

**ID: 101010, 102010,... 112010 (1 to 12 cars per group)**

Description: Elevator front door status

Present Value:

- 0 – Closed
- 1 – Open
- 2 – Unknown
- 3 – Door fault (Not applicable in MCE equipment)
- 4 – Unused (Not applicable in MCE equipment)
- 5 – None (Not applicable in MCE equipment)
- 6 – Closing
- 7 – Opening
- 8 – Safety locked (Not applicable in MCE equipment)
- 9 – Limited opened (Not applicable in MCE equipment)

## Car Rear Door Status

**ID: 101011 – 112011 (1 to 12 cars per group)**

Description: Elevator rear door status

Present Value:

- 0 – Closed
- 1 – Open
- 2 – Unknown
- 3 – Door fault (Not applicable in MCE equipment)
- 4 – Unused (Not applicable in MCE equipment)
- 5 – None (Not applicable in MCE equipment)
- 6 – Closing
- 7 – Opening

## Passenger Alarm

**ID: 101012, 102012,... 112012 (1 to 12 cars per group)**

Description: Whether or not there's an emergency alarm active in the elevator

Present Value:

- 0 – No alarm is active
- 1 – An alarm is active

### Car Label

**ID: 101013, 102013,... 112013 (1 to 12 cars per group)**

Description: Label text given to elevator car

Present Value:

- 4-byte hex string representation of car label

### Installation ID

**ID: 101014, 102014,... 112014 (1 to 12 cars per group)**

Description: Elevator car ID

Present Value:

- Integer 0 based representing the elevator car ID

### Floor Labels

**ID: [101015 – 101110], [102015 – 102110],... [112015 – 112110] (96 floors, 1 to 12 cars per group)**

Description: Floor label

Present Value:

- Each id (15 – 110) is a 4-byte hex string representation of the floor label

### Front Car Calls

**ID: 101111, 102111,... 112111 (1 to 12 cars per group)**

Description: Front car calls for floors 1 - 32

Present Value:

- 4-byte hex value that represents front car calls that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (car calls exist at front floors 4, 5, 6, 7, and 8)

**ID: 101112, 102112,... 112112 (1 to 12 cars per group)**

Description: Front car calls for floors 33 - 64

Present Value:

- 4-byte hex value that represents front car calls that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (car calls exist at front floors 36, 37, 38, 39, and 40)

**ID: 101113, 102113,... 112113 (1 to 12 cars per group)**

Description: Front car calls for floors 65 - 96

Present Value:

- 4-byte hex value that represents front car call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (car calls exist at front floors 68, 69, 70, 71, and 72)

**ID: 101114, 102114,... 112114 (1 to 12 cars per group)**

Description: Front car calls for floors 97 - 128

Present Value:

- 4-byte hex value that represents front car call that are latched at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (car calls exist at front floors 100, 101, 102, 103, and 104)

**Rear Car Calls****ID: 101115, 102115,... 112115 (1 to 12 cars per group)**

Description: Rear car calls for floors 1 - 32

Present Value:

- 4-byte hex value that represents rear car calls that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (car calls exist at rear floors 4, 5, 6, 7, and 8)

**ID: 101116, 102116,... 112116 (1 to 12 cars per group)**

Description: Rear car calls for floors 33 - 64

Present Value:

- 4-byte hex value that represents rear car calls that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (car calls exist at rear floors 36, 37, 38, 39, and 40)

**ID: 101117, 102117,... 112117 (1 to 12 cars per group)**

Description: Rear car calls for floors 65 - 96

Present Value:

- 4-byte hex value that represents rear car call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (car calls exist at rear floors 68, 69, 70, 71, and 72)

**ID: 101118, 102118,... 112118 (1 to 12 cars per group)**

Description: Rear car calls for floors 97 - 128

Present Value:

- 4-byte hex value that represents rear car call that are latched at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (car calls exist at rear floors 100, 101, 102, 103, and 104)

**Front Up Hall Calls****ID: 101119, 102119,... 112119 (1 to 12 cars per group)**

Description: Front up hall calls at floors 1 - 32

Present Value:

- 4-byte hex value that represents front up hall calls that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at front floors 4, 5, 6, 7, and 8)

**ID: 101120, 102120,... 112120 (1 to 12 cars per group)**

Description: Front up hall calls at floors 33 - 64

Present Value:

- 4-byte hex value that represents front up hall calls that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at front floors 36, 37, 38, 39, and 40)

**ID: 101121, 102121,... 112121 (1 to 12 cars per group)**

Description: Front up hall calls at floors 65 - 96

Present Value:

- 4-byte hex value that represents front up hall call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at front floors 68, 69, 70, 71, and 72)

**ID: 101122, 102122,... 112122 (1 to 12 cars per group)**

Description: Front up hall calls at floors 97 - 128

Present Value:

- 4-byte hex value that represents front up hall call that are latched at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at front floors 100, 101, 102, 103, and 104)

## Front Down Hall Calls

**ID: 101123, 102123,... 112123 (1 to 12 cars per group)**

Description: Front down hall calls at floors 1 - 32

Present Value:

- 4-byte hex value that represents front down hall calls that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at front floors 4, 5, 6, 7, and 8)

**ID: 11124, 12124,... 18124 (1 to 8 cars per group)**

Description: Front down hall calls at floors 33 - 64

Present Value:

- 4-byte hex value that represents front down hall calls that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at front floors 36, 37, 38, 39, and 40)

**ID: 101125, 102125,... 112125 (1 to 12 cars per group)**

Description: Front down hall calls at floors 65 - 96

Present Value:

- 4-byte hex value that represents front down hall call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at front floors 68, 69, 70, 71, and 72)

**ID: 101126, 102126,... 112126 (1 to 12 cars per group)**

Description: Front down hall calls at floors 97 - 128

Present Value:

- 4-byte hex value that represents front down hall call that are latched at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at front floors 100, 101, 102, 103, and 104)

**Rear Up Hall Calls****ID: 101127, 102127,... 112127 (1 to 12 cars per group)**

Description: Rear up hall calls at floors 1 - 32

Present Value:

- 4-byte hex value that represents rear up hall calls that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at rear floors 4, 5, 6, 7, and 8)

**ID: 101128, 102128,... 112128 (1 to 12 cars per group)**

Description: Rear up hall calls at floors 33 - 64

Present Value:

- 4-byte hex value that represents rear up hall calls that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at rear floors 36, 37, 38, 39, and 40)

**ID: 101128, 102128,... 112128 (1 to 12 cars per group)**

Description: Rear up hall calls at floors 65 - 96

Present Value:

- 4-byte hex value that represents rear up hall call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at rear floors 68, 69, 70, 71, and 72)

**ID: 101130, 102130,... 112130 (1 to 12 cars per group)**

Description: Rear up hall calls at floors 97 - 128

Present Value:

- 4-byte hex value that represents rear up hall call that are latched at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up hall calls exist at rear floors 100, 101, 102, 103, and 104)

**Rear Down Hall Calls****ID: 101131, 102131,... 112131 (1 to 12 cars per group)**

Description: Rear down hall calls at floors 1 - 32

Present Value:

- 4-byte hex value that represents rear down hall calls that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at rear floors 4, 5, 6, 7, and 8)

**ID: 101132, 102132,... 112132 (1 to 12 cars per group)**

Description: Rear down hall calls at floors 33 - 64

Present Value:

- 4-byte hex value that represents rear down hall calls that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at rear floors 36, 37, 38, 39, and 40)

**ID: 101133, 102133,... 112133 (1 to 12 cars per group)**

Description: Rear down hall calls at floors 65 - 96

Present Value:

- 4-byte hex value that represents rear down hall call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at rear floors 68, 69, 70, 71, and 72)

**ID: 101134, 102134,... 112134 (1 to 12 cars per group)**

Description: Rear down hall calls at floors 97 - 128

Present Value:

- 4-byte hex value that represents rear down hall call that are latched at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (down hall calls exist at rear floors 100, 101, 102, 103, and 104)

### Front Up Auxiliary Calls

**ID: 101135, 102135,... 112135 (1 to 12 cars per group)**

Description: Front up auxiliary calls at floors 1 - 32

Present Value:

- 4-byte hex value that represents front up auxiliary calls that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at front floors 4, 5, 6, 7, and 8)

**ID: 101136, 102136,... 112136 (1 to 12 cars per group)**

Description: Front up auxiliary calls at floors 33 - 64

Present Value:

- 4-byte hex value that represents front up auxiliary calls that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at front floors 36, 37, 38, 39, and 40)

**ID: 101137, 102137,... 112137 (1 to 12 cars per group)**

Description: Front up auxiliary calls at floors 65 - 96

Present Value:

- 4-byte hex value that represents front up auxiliary call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at front floors 68, 69, 70, 71, and 72)

**ID: 101138, 102138,... 112138 (1 to 12 cars per group)**

Description: Front up auxiliary calls at floors 97 - 128

Present Value:

- 4-byte hex value that represents front up auxiliary call that are latched at floors 97 – 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at front floors 100, 101, 102, 103, and 104)

**Front Down Auxiliary Calls****ID: 101139, 102139,... 112139 (1 to 12 cars per group)**

Description: Front down auxiliary calls at floors 1 - 32

Present Value:

- 4-byte hex value that represents front down auxiliary calls that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at front floors 4, 5, 6, 7, and 8)

**ID: 101140, 102140,... 112140 (1 to 12 cars per group)**

Description: Front down auxiliary calls at floors 33 - 64

Present Value:

- 4-byte hex value that represents front down auxiliary calls that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at front floors 36, 37, 38, 39, and 40)

**ID: 101141, 102141,... 112141 (1 to 12 cars per group)**

Description: Front down auxiliary calls at floors 65 - 96

Present Value:

- 4-byte hex value that represents front down auxiliary call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at front floors 68, 69, 70, 71, and 72)

**ID: 101142, 102142,... 112142 (1 to 12 cars per group)**

Description: Front down auxiliary calls at floors 97 - 128

Present Value:

- 4-byte hex value that represents front down auxiliary call that are latched at floors 97 – 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at front floors 100, 101, 102, 103, and 104)

**Rear Up Auxiliary Calls****ID: 101143, 102143,... 112143 (1 to 12 cars per group)**

Description: Rear up auxiliary calls at floors 1 - 32

Present Value:

- 4-byte hex value that represents rear up auxiliary calls that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at rear floors 4, 5, 6, 7, and 8)

**ID: 101144, 102144,... 112144 (1 to 12 cars per group)**

Description: Rear up auxiliary calls at floors 33 - 64

Present Value:

- 4-byte hex value that represents rear up auxiliary calls that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at rear floors 36, 37, 38, 39, and 40)

**ID: 101145, 102145,... 112145 (1 to 12 cars per group)**

Description: Rear up auxiliary calls at floors 65 - 96

Present Value:

- 4-byte hex value that represents rear up auxiliary call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at rear floors 68, 69, 70, 71, and 72)

**ID: 101146, 102146,... 112146 (1 to 12 cars per group)**

Description: Rear up auxiliary calls at floors 97 - 128

Present Value:

- 4-byte hex value that represents rear up auxiliary call that are latched at floors 97 – 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (up auxiliary calls exist at rear floors 100, 101, 102, 103, and 104)

## Rear Down Auxiliary Calls

**ID: 101147, 102147,... 112147 (1 to 12 cars per group)**

Description: Rear down auxiliary calls at floors 1 - 32

Present Value:

- 4-byte hex value that represents rear down auxiliary calls that are latched at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at rear floors 4, 5, 6, 7, and 8)

**ID: 101148, 102148,... 112148 (1 to 12 cars per group)**

Description: Rear down auxiliary calls at floors 33 - 64

Present Value:

- 4-byte hex value that represents rear down auxiliary calls that are latched at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at rear floors 36, 37, 38, 39, and 40)

**ID: 101149, 102149,... 112149 (1 to 12 cars per group)**

Description: Rear down auxiliary calls at floors 65 - 96

Present Value:

- 4-byte hex value that represents rear down auxiliary call that are latched at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at rear floors 68, 69, 70, 71, and 72)

**ID: 101150, 102150,... 112150 (1 to 12 cars per group)**

Description: Rear down auxiliary calls at floors 97 - 128

Present Value:

- 4-byte hex value that represents rear down auxiliary call that are latched at floors 97 – 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (down auxiliary calls exist at rear floors 100, 101, 102, 103, and 104)

**Front Car Call Commands****ID: 101151, 102151,... 112151 (1 to 12 cars per group)**

Description: Latch front car calls at floors 1 - 32

Present Value:

- 4-byte hex value that represents front car calls that are you wish to latch at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch car calls at front floors 4, 5, 6, 7, and 8)

**ID: 101152, 102152,... 112152 (1 to 12 cars per group)**

Description: Latch front car calls at floors 33 - 64

Present Value:

- 4-byte hex value that represents front car calls that you wish to latch at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch car calls at front floors 36, 37, 38, 39, and 40)

**ID: 101153, 102153,... 112153 (1 to 12 cars per group)**

Description: Latch front car calls at floors 65 - 96

Present Value:

- 4-byte hex value that represents front car calls that you wish to latch at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch car calls at front floors 68, 69, 70, 71, and 72)

**ID: 101154, 102154,... 112154 (1 to 12 cars per group)**

Description: Latch front car calls at floors 97 - 128

Present Value:

- 4-byte hex value that represents front car calls that you wish to latch at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch car calls at front floors 100, 101, 102, 103, and 104)

**Rear Car Call Commands****ID: 101155, 102155,... 112155 (1 to 12 cars per group)**

Description: Latch rear car calls at floors 1 - 32

Present Value:

- 4-byte hex value that represents rear car calls that are you wish to latch at floors 1 - 32
  - E.g. 00000 000 0000 0000 0000 1111 1000 = 0xF8 (latch car calls at rear floors 4, 5, 6, 7, and 8)

**ID: 101156, 102156,... 112156 (1 to 12 cars per group)**

Description: Latch rear car calls at floors 33 - 64

Present Value:

- 4-byte hex value that represents rear car calls that you wish to latch at floors 33 – 64
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (latch car calls at rear floors 36, 37, 38, 39, and 40)

**ID: 101157, 102157,... 112157 (1 to 12 cars per group)**

Description: Latch rear car calls at floors 65 - 96

Present Value:

- 4-byte hex value that represents rear car calls that you wish to latch at floors 65 – 96
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (latch car calls at rear floors 68, 69, 70, 71, and 72)

**ID: 101158, 102158,... 112158 (1 to 12 cars per group)**

Description: Latch rear car calls at floors 97 - 128

Present Value:

- 4-byte hex value that represents rear car calls that you wish to latch at floors 97 - 128
  - E.g. 00000 000 0000 0000 0000 0000 1111 1000 = 0xF8 (latch car calls at rear floors 100, 101, 102, 103, and 104)

## Controller Faults

**ID: [101159, 102159,... 112159] – [101259, 102259,... 112259] (100 faults, 1 to 12 cars per group)**

Event Time Stamp:

- Time stamp when fault occurred

Description: Descriptive text of fault

Present Value:

- Integer value specifying the BACnet ID that corresponds to this fault

## Car Door Zone

**ID: 101300 – 112300 – (1 to 12 cars per group)**

Description: Describes whether lift is at, below, or above door zone.

Present Value:

- .0 - if lift is either above or below door zone
- .1 - if lift is at the door zone

## BACnet Fault IDs

FAULT	ID
controllerFault	0
driveAndMotorFault	1
governorAndSafetyGearFault	2
liftShaftDeviceFault	3
powerSupplyFault	4
safetyInterlockFault	5
doorClosingFault	6
doorOpeningFault	7
carStoppedOutsideLandingZone	8
callButtonStuck	9
startFailure	10
controllerSupplyFault	11
selfTestFailure	12
runtimeLimitExceeded	13
positionLost	14
driveTemperatureExceeded	15
loadMeasurementFault	16

//...up to value 1023 are reserved by ASHRAE

//iCue events 61000 - 63999

carLightLoad	61000
carHeavyLoad	61001
carOverLoad	61002
upDirectionLimit	61003
downDirectionLimit	61004
safetyContractOverspeedFault	61005

FAULT	ID
safetyInspectionOverspeedFault	61006
safetyLevelingOverspeedFault	61007
unt1Level1Fault	61008
unt2Level1Fault	61009
unt3Level1Fault	61010
unt4Level1Fault	61011
unt5Level1Fault	61012
dnt1Level1Fault	61013
dnt2Level1Fault	61014
dnt3Level1Fault	61015
dnt4Level1Fault	61016
dnt5Level1Fault	61017
unt1Level2Fault	61018
unt2Level2Fault	61019
unt3Level2Fault	61020
unt4Level2Fault	61021
unt5Level2Fault	61022
dnt1Level2Fault	61023
dnt2Level2Fault	61024
dnt3Level2Fault	61025
dnt4Level2Fault	61026
dnt5Level2Fault	61027
upperEmergencyTerminalStopFault	61028
lowerEmergencyTerminalStopFault	61029
iomapCompareFault	61030
iomapToggleCompareFault	61031
safetyBypassJumperTimedOut	61032

FAULT	ID
vectorChecksumFault	61033
configurationChecksumFault	61034
config_VectorCrosscheckFault	61035
limitSwitchesChecksumFault	61036
learnSwitchTimedOut	61037
faultBypassSwitchTimedOut	61038
spasibDeviceFault	61039
apbsibDeviceFault	61040
ImpSPAConfigurationMismatch	61041
vectorLearnFault	61042
configLearnFault	61043
limitSwitchesLearnFault	61044
qramDeviceError	61045
eepromDeviceError	61046
singleChannelQUADFault	61047
lossOfPosorSpdIndicators	61048
vectorComparisonFault	61049
vectorCreationFault	61050
toggleTestMotionDisabled	61051
driveIOSFault	61052
tachError	61053
driveEnableFeedbackFault	61054
droFault	61055
driveAtSpeedFault	61056
driveFault	61057
driveReadyFault	61058
brakeVoltageNotOnFault	61059

FAULT	ID
bspFault	61060
faultBypassSwitchInd	61061
excessiveFaultShutdown	61062
unintendedMotionFault	61063
ascendingCarOverspeedFault	61064
doorCloseFaultFront	61065
doorCloseFaultRear	61066
doorOpenFaultFront	61067
doorOpenFaultRear	61068
earthquakeOperation	61069
elevatorRecallSwitchNumber	61070
emergencyPowerOperation	61071
doorContactFaultFront	61072
doorContactFaultRear	61073
carDelayed	61074
carOutOfService	61075
NudgingFront	61076
NudgingRear	61077
FrontPhotoEyeBypassed	61078
RearPhotoEyeBypassed	61079
FrontPhotoEyeFailure	61080
RearPhotoEyeFailure	61081
FrontSafeEdgeBypassed	61082
RearSafeEdgeBypassed	61083
FrontSafeEdgeFailure	61084
RearSafeEdgeFailure	61085
FrontDoorOpenButtonBypasse	61086

FAULT	ID
RearDoorOpenButtonBypassed	61087
FrontDoorOpenButtonFailure	61088
RearDoorOpenButtonFailure	61089
EmergencyDispatch	61090
hallCallBus1Failure	61091
hallCallBus2Failure	61092
hallCallBus3Failure	61093
hallCallBus4Failure	61094
CartopCommFault	61095
SPBIOSFault	61096
SPBLOSFault	61097
SPBCOSFault	61098
SPBUETSFault	61099
SPBDETSFault	61100
cartopInspectionUnintendedMotionFault	61101
cartopAutomaticUnintendedMotionFault	61102
motorLimitTimedOut	61103
iomcLongTermFault	61104
brakeModuleOverTempFault	61105
brakeModuleIGBTFault	61106
unt1PositionFault	61107
unt2PositionFault	61108
unt3PositionFault	61109
unt4PositionFault	61110
unt5PositionFault	61111
uetSPositionFault	61112
dnt1PositionFault	61113

FAULT	ID
dnt2PositionFault	61114
dnt3PositionFault	61115
dnt4PositionFault	61116
dnt5PositionFault	61117
detSPositionFault	61118
PositionLocationErrorFault	61119
PositionCartopOffsetFault	61120
PositionReversedFault	61121
MotionStartFault	61122
PositionSpeedDeviationFault	61123
PositionSpeedThresholdFault	61124
PositionSpeedQuadratureFault	61125
UNTDPositionFault	61126
DNTDPositionFault	61127
CNPMDFault	61128
CNPMFault	61128
CNPBDFault	61130
CNPBFault	61131
FloorLocationFault	61132
FloorSensorFault	61133
ExcessiveRelevelsFault	61134
ExcessiveRestartsFault	61135
powerTransfer	61136
invalidFrontDoorPosition	61137
invalidRearDoorPosition	61138
invalidConfigInput	61139
invalidConfigINPUTD	61140

FAULT	ID
invalidConfigINPUTDLAT	61141
invalidConfigINPUTDLAB	61142
invalidConfigINPUTDCMS	61143
invalidConfigINPUTDCAT	61144
invalidConfigINPUTDCAB	61145
invalidConfigINPUTDPM	61146
invalidConfigINPUTCTEX	61147
invalidConfigINPUTDLMSR	61148
invalidConfigINPUTDCMSR	61149
invalidConfigINPUTDPM_R	61150
invalidConfigTALRQ	61151
invalidConfigBALRQ	61152
invalidCVXCRGBOARD	61153
invalidCVXCRDBOARD	61154
invalidCVXCRGOPT	61155
invalidCVXCRDOPT	61156
invalidCVXCNMSR	61157
invalidCVXCTALRQ	61158
invalidCVXCBALRQ	61159
invalidCVXCDCCOR	61160
dlkCLIPPEDL200	61161
dlkCLIPPEDG200	61162
scrPSFLT	61163
scrACPFLT	61164
scrCONFUSEFLT	61165
scrPLLFLT	61166
scrDYNBRKFLT	61167

FAULT	ID
scrLOCFLT	61168
scrARMVON	61169
scrHITFLT	61170
scrLOCFLT	61171
scrINSUFFICIENTARMCURRENT	61172
scrEXCARMCURRENT	61173
scrEXCCURRENTCOMMANDDRIVEENABLED	61174
scrEXCCURRENTCOMMANDDRIVEDISABLED	61175
insufficientFieldVoltage	61176
fieldFailure	61177
swingOperation	61178
empNoComFreezeON	61179
opFieldModuleOverTempFault	61180
sabbathOperation	61181
ropeBrakeTripped	61182
landingSystemSensorFault	61183
rgLeg1ShortFault	61184
rgLeg2ShortFault	61185
bpsc	61186
bpsh	61187
auxiliarySpeedProfile1	61188
auxiliarySpeedProfile2	61189
fieldForcingTimedOut	61190
opEmergAlarmActive	61191
ropeGripperOKopen	61192
carTopExitOpen	61193
govOpen	61194

FAULT	ID
safhStringOpen	61195
safcStringOpen	61196
machRoomStopSwOpen	61197
carRoomStopSwOpen	61198
uetsShutdown	61199
detsShutdown	61200
invalidDestination	61201
frontDPMOpenGSClosed	61202
rearDPMOpenGSClosed	61203
upDownTerminalSwitchesSpeedsNotLearned	61204
upDownTerminalSwitchesPositionsNotLearned	61205
excessiveFieldVoltage	61206
brakeOutputCircuitFailure	61207
automaticStopStatus	61208
stuckRGUIMResetButton	61209
exerciseOperation	61210
scrLowLineFault	61211
scrLowLineCaution	61212
govSpeedReductionSwitchFault	61213
scrDriveReadyFault	61214
retiringCamDoorLockFault	61215
retiringCamProtectionFault	61216
bus2FuseOpen	61217
bus2DFuseOpen	61218
bus2MCFuseOpen	61219
bus2PIFuseOpen	61220
bus3FuseOpen	61221

<b>FAULT</b>	<b>ID</b>
bus3HAFuseOpen	61222
cartopExitnoCounterweightConfigurationError	61223
doorCloseFaultRecoveryFailureFront	61224
doorCloseFaultRecoveryFailureRear	61225
sheaveBrakePickFault	61226
sheaveBrakeDropFault	61227
globalParamChgFlt	61228
cartopFWUMode	61229
copCommFltBus0	61230
copCommFltBus1	61231
copCommFltBus2	61232
copCommFltBus3	61233
copInventoryFltBus0	61234
copInventoryFltBus1	61235
copInventoryFltBus2	61236
copInventoryFltBus3	61237
userDefinedEventFault	61238
userDefinedEvent1Fault	61239
userDefinedEvent2Fault	61240
userDefinedEvent3Fault	61241
userDefinedEvent4Fault	61242
userDefinedEvent5Fault	61243
userDefinedEvent6Fault	61244
userDefinedEvent7Fault	61245
userDefinedEvent8Fault	61246
userDefinedEvent9Fault	61247
userDefinedEvent10Fault	61248

FAULT	ID
brakeDropSwitchFault	61249
macAddressError	61250
spbUIMFLT	61251
lcdFault	61252
impSwitchFailureEmergencyStop	61253
impSwitchFailureFaultBypass	61254
impSwitchFailureInspectionDown	61255
impSwitchFailureInspectionEnable	61256
impSwitchFailureInspectionUp	61257
impSwitchFailureInspection	61258
impSwitchFailureLearn	61259
impSwitchFailureTest	61260
impSwitchFailureWriteEnable	61261
impSwitchFailureHDoorBypass	61262
impSwitchFailureCDoorBypass	61263
excessiveFaultsWarning	61264
stuckCTInspectionInput	61265
stuckCPIInspectionInput	61266
inspectionCTDisabled	61267
inspectionHoistwayAccessDisabled	61268
inspectionCPDisabled	61269
inspectionMRDisabled	61270
stuckInspectionInputFault	61271
hallCallBypassInput	61272
brakeVoltageNotOffFault	61273
alternateFireSwitchOn	61274
zeroCalibrationRecall	61275

<b>FAULT</b>	<b>ID</b>
zeroCalibrationRecallPending	61276
frontPhotoEye2Bypassed	61277
frontPhotoEye2Failure	61278
rearPhotoEye2Bypassed	61279
rearPhotoEye2Failure	61280
frontPhotoEyeTestFail	61281
rearPhotoEyeTestFail	61282
suspensionMembersShutdown	61283
frontDoorsStopped	61284
rearDoorsStopped	61285

//M2000 events 58000 - 60999

M2KConfigurationErrorchangeSettingsBeforeInstallation	58000
M2KSafetyCircuitIsOpen	58001
M2KUpAndDownTerminalSpeedReducingLimitsOpen	58002
M2KMotorLimitTimerElapsed	58003
M2KValveLimitTimerElapsed	58004
M2KSynchronizationOperation	58005
M2KBottomFloorOrTopFloorDemand	58006
M2KFireServicePhase1Alternate	58007
M2KFireServicePhase1Main	58008
M2KFireServicePhase2	58009
M2KInspectionOperation	58010
M2KIndependentServiceOperation	58011
M2KFrontDOLandDLKAreBothActive	58012
M2KTimeOutOfService	58013
M2KViscosityControlFunction	58014

FAULT	ID
M2KCarCallBusIsDisconnected	58015
M2KHallCallBusIsDisconnected	58016
M2KLevelingUp	58017
M2KLevelingDown	58018
M2KDriveFailedToRespond	58019
M2KPressureSwitchActivated	58020
M2KHallandCarCallBusesDisconnected	58021
M2KCarToFloorFunction	58022
M2KEmergencyPowerOperation	58023
M2KHeavyLoadWeigherCondition	58024
M2KLightLoadWeigherCondition	58025
M2KEarthquakeOperation	58026
M2KEarthquakeReducedSpeedOperation	58027
M2KPowerUpShutdownDueToEarthquake	58028
M2KPowerTransferInputActive	58029
M2KShutdownOperation	58030
M2KBrakePickFailure	58031
M2KDirectionRelayRedundancyFailure	58032
M2KContactorProofingRedundancyFailure	58033
M2KLandingSystemRedundancyFailure	58034
M2KElevatorShutdownSwitchActive	58035
M2KFrontGateSwitchFailure	58036
M2KFrontDoorLockSwitchFailure	58037
M2KFrontDoorOpenLimitFailure	58038
M2KLevelingSensorFailure	58039
M2KEmergencyMedicalService	58040
M2KDoorCloseProtectionTimerElapsed	58041

FAULT	ID
M2KRedundancyFrontGateSwitchFailure	58042
M2KRedundancyRearGateSwitchFailure	58043
M2KOverloadCondition	58044
M2KRearGateSwitchFailure	58045
M2KRearDoorLockSwitchFailure	58046
M2KRearDoorOpenLimitFailure	58047
M2KAttendantServiceOperation	58048
M2KInCarStopSwitchActivated	58049
M2KCarSafetyDeviceOpen	58050
M2KHoistwaySafetyDeviceOpen	58051
M2KGovernorSwitchOpen	58052
M2KDriveFault	58053
M2KCarToLobbyOperation	58054
M2KEnterSecurityCode	58055
M2KHospitalPhase2Operation	58056
M2KHospitalPhase1Operation	58057
M2KRedundancyDoorLockRelayFailure	58058
M2KCaptureForTest	58059
M2KDoorZoneSensorFailedOnPosition	58060
M2KLevelingSensorFailedOnPosition	58061
M2KLevelingSensorFailedOffPosition	58062
M2KCarinTestMode	58063
M2KSabbathOperationActive	58064
M2KPasscodeRequest	58065
M2KRearDOLandDLKareBothActive	58066
M2KFinalLimitSwitchOpenNYCHA	58067
M2KGovernorSwitchOpenNYCHA	58068

FAULT	ID
M2KBufferSwitchOpenNYCHA	58069
M2KCompSheaveSwitchOpenNYCHA	58070
M2KPitStopSwitchOpenNYCHA	58071
M2KEmergencyExitSwitchesOpenNYCHA	58072
M2KSafetyClampSwitchOpenNYCHA	58073
M2KCarTopEmergencyStopSwitchOpenNYCHA	58074
M2KInCarEmergencyStopSwitchOpenNYCHA	58075
M2KFinalLimitSwitchRelayFailureNYCHA	58076
M2KHoistwaySafetyCircuitRelayFailureNYCHA	58077
M2KCarSafetyCircuiRelayFailureNYCHA	58078
M2KMotorOverloadNYCHA	58079
M2KDoorMotorOverloadNYCHA	58080
M2KUpNormalLimitFailureNYCHA	58081
M2KDownNormalLimitFailureNYCHA	58082
M2KRedundancyUpNormalLimitFailureNYCHA	58083
M2KRedundancyDownNormalLimitFailureNYCHA	58084
M2KUpSlowdownLimitFailureNYCHA	58085
M2KDownSlowdownLimitFailureNYCHA	58086
M2KRedundancyUpSlowdownLimitFailureNYCHA	58087
M2KRedundancyDownSlowdownLimitFailureNYCHA	58088
M2KRedundancyUpSlowdownLimit2failureNYCHA	58089
M2KRedundancyDownSlowdownLimit2FailureNYCHA	58090
M2KRedundancyDoorLockStringFailureNYCHA	58091
M2KFrontDoorIsLockedButNotFullyClosed	58092
M2KRearDoorIsLockedButNotFullyClosed	58093
M2KLowOilSwitchInputIsActivated	58094
M2KEXMLTInputIsActivated	58095

FAULT	ID
M2KCarTopInspectionInputIsActivatedNYCHA	58096
M2KHallCallCommonFuseBlownNYCHA	58097
M2KLobbyHallCallCommonFuseBlownNYCHA	58098
M2KHallCallIndicatorLightFuseBlownNYCHA	58099
M2KCarCallCommonFuseBlownNYCHA	58100
M2KLobbyCarCallCommonFuseBlownNYCHA	58101
M2KSafetyEdgeObstructionFaultNYCHA	58102
M2KTopFinalLimitOpenNYCHA	58103
M2KBottomFinalLimitOpenNYCHA	58104
M2KSwingDoorCloseContactFailureNYCHA	58105
M2KCarStoppedOutOfDoorZoneNYCHA	58106
M2KFaultBypassIsActiveAutomatic	58107
M2KFaultBbypassIsActiveInspection	58108
M2KTopFinalLimitOpen	58109
M2KGroupToCarCommunicationLoss	58110
M2KNormalPitFloodOperation	58111
M2KLossOfDoorLockOutOfDoorZone	58112
M2KWPSecurityActivated	58113
M2KHoistwayAccess	58114
M2KEmergencyBrakeActivated	58115
M2KCycleTest	58116
M2KContactorFailureToPick	58117
M2KDoorZoneSensorFailureOffPosition	58118
M2KFrontDoorFailedToClose	58119
M2KRearDoorFailedToClose	58120
M2KCPUAisOffline	58121
M2KStartingUp	58122

<b>FAULT</b>	<b>ID</b>
M2KBatteryPowerCarRecallActivated	58123
M2KBatteryBackupPowerSystemFault	58124
M2KMGSIInputFailure	58125
M2KMABBInputFailure	58126
M2KCarTopInspection	58127
M2KInCarInspection	58128
M2KAccessEnabled	58128
M2KMSAFS1InputFailure	58130
M2KDCABInputFailure	58131
M2KSAFCInputFailure	58132
M2KMCSBInputFailure	58133
M2KHoistwayDoorBypassAWFailure	58134
M2KCarDoorBypassSWFailure	58135
M2KMachineRoomInspection	58136
M2KMGBInputFailure	58137
M2KINCPInputFailure	58138
M2KINAInputFailure	58139
M2KINCTInputFailure	58140
M2KSPBIsOffline	58141
M2KSPCIsOffline	58142
M2KDVR1IsOffline	58143
M2KMTMInputFailure	58144
M2KMTYInputFailure	58145
M2KMTDInputFailure	58146
M2KRestoringSafety	58147
M2KMUSEInputIsLow	58148
M2KMDSEInputIsLow	58149

FAULT	ID
M2KRSVInputFailedToActivate	58150
M2KRFVInputFailedToActivate	58151
M2KMPISPAisOffline	58152
M2KMPISPClisOffline	58153
M2KDVR2MSSDFailedActive	58154
M2KR2LInputFailure	58155
M2KMSAFL1InputFailure	58156
M2KICPDInputFailure	58157
M2KICPUIInputFailure	58158
M2KICTDInputFailure	58159
M2KICTUInputFailure	58160
M2KDOLInputFailure	58161
M2KMABGFIInputFailure	58162
M2KGSIInputFailure	58163
M2KMDZLVInputFailure	58164
M2KMHDBIInputFailure	58165
M2KDLInputFailure	58166
M2KMBABIInputFailure	58167
M2KMTABIInputFailure	58168
M2KMABTIInputFailure	58169
M2KInspectionDirectionSWFailure	58170
M2KATUInputFailure	58171
M2KATDInputFailure	58172
M2KABUInputFailure	58173
M2KABDIInputFailure	58174
M2KTopAccessSWFailure	58175
M2KBottomAccessSWFailure	58176

FAULT	ID
M2KSafetyDroppedBySPB	58177
M2KSPAisOffline	58178
M2KMSSDFailedActive	58179
M2KMUFEInputIsLow	58180
M2KMDFEInputIsLow	58181
M2KRDRSPAisOffline	58182
M2KRDRSPBisOffline	58183
M2KMPISPPBisOffline	58184
M2KDVR2IsOffline	58185
M2KDVR3IsOffline	58186
M2KTwosInputFailure	58187
M2KTwoBusIsLow	58188
M2K2FSBusIsLow	58189
M2K2HABusIsLow	58190
M2K2MVBusIsLow	58191
M2KRSVInputFailedToDeactivate	58192
M2KRFVInputFailedToDeactivate	58193
M2KFrontDZRelayDiscrepancy	58194
M2KRearDZRelayDiscrepancy	58195
M2KDPMRedundancyFault	58196
M2KDPMRRedundancyFault	58197
M2KFCL1InManualMode	58198
M2KFCL2InManualMode	58199
M2KFCL3InManualMode	58200
M2KFCL4InManualMode	58201
StarterTypeError	58202
MTMFailedToActivate	58203

FAULT	ID
MTMFailedToDeactivate	58204
MTYFailedToActivate	58205
MTYFailedToDeactivate	58206
MTDFailedToActivate	58207
MTDFailedToDeactivate	58208
MUSEFailedToActivate	58209
MUSEFailedToDeactivate	58210
MDSEFailedToActivate	58211
MDFEFailedToDeactivate	58212
MDFEFailedToActivate	58213
MDSEFailedToDeactivate	58214
AuxiliaryStarterTimeout	58215
MSSDFailedToActivate	58216
DRDUpToSpeedFailedToActivate	58217
IN_MUFEFailedToActivate	58218
IN_MUFEFailedToDeactivate	58219
M2LInputFailure	58220
OLMInputFailure	58221
OLMInputIsLow	58222
RPSsensorTripped	58223
MRDInputFailure	58224
YRDInputFailure	58225
DRDInputFailure	58226
StarterFaultContactOpen	58227
ExcessiveNumberOfFailedStartAttempts	58228
MSSDFailedToDdeactivate	58229
UPTerminalLimitFailure	58230

FAULT	ID
DownTerminalLimitFailure	58231
UpNormalLimitOpen	58232
DownNormalLimitOpen	58233
DVR2StarterTypeError	58234
DVR2MTMFailedToActivate	58235
DVR2MTMFailedToDeactivate	58236
DVR2MTYFailedToActivate	58237
DVR2MTYFailedToDeactivate	58238
DVR2MTDFailedToActivate	58239
DVR2MTDFailedToDeactivate	58240
DVR2MUSEFailedToActivate	58241
DVR2MUSEFailedToDdeactivate	58242
DVR2MDSEFailedToActivate	58243
DVR2MDFEFailedToDeactivate	58244
DVR2MDFEFailedToActivate	58245
DVR2MDSEFailedToDeactivate	58246
DVR2AuxiliaryStarterTimeout	58247
DVR2MSSDFailedToActivate	58248
DVR2DRDUpToSpeedFailedToActivate	58249
DVR2IN_MUFEFailedToActivate	58250
DVR2IN_MUFEFailedToDeactivate	58251
DVR2M2LInputFailure	58252
DVR2OLMInputFailure	58253
DVR2OLMInputIsLow	58254
DVR2RPSensorTripped	58255
DVR2MRDInputFailure	58256
DVR2YRDInputFailure	58257

FAULT	ID
DVR2DRDInputFailure	58258
DVR2StarterFaultContactOpen	58259
DVR2ExcessiveNumberOfFailedStartAttempts	58260
DVR2MSSDFailedToDeactivate	58261
DVR2UPTerminalLimitFailure	58262
DVR2DownTerminalLimitFailure	58263
DVR2UpNormalLimitOpen	58264
DVR2DownNormalLimitOpen	58265
DVR3StarterTypeError	58266
DVR3MTMFailedToActivate	58267
DVR3MTMFailedToDeactivate	58268
DVR3MTYFailedToActivate	58269
DVR3MTYFailedToDeactivate	58270
DVR3MTDFailedToActivate	58271
DVR3MTDFailedToDeactivate	58272
DVR3MUSEFailedToActivate	58273
DVR3MUSEFailedToDeactivate	58274
DVR3MDSEFailedToActivate	58275
DVR3MDFEFailedToDeactivate	58276
DVR3MDFEFailedToActivate	58277
DVR3MDSEFailedToDeactivate	58278
DVR3AuxiliaryStarterTimeout	58279
DVR3MSSDFailedToActivate	58280
DVR3DRDUpToSpeedFailedToActivate	58281
DVR3IN_MUFEFailedToActivate	58282
DVR3IN_MUFEFailedToDeactivate	58283
DVR3M2LInputFailure	58284

FAULT	ID
DVR3OLMInputFailure	58285
DVR3OLMInputIsLow	58286
DVR3RPSensorTripped	58287
DVR3MRDInputFailure	58288
DVR3YRDInputFailure	58289
DVR3DRDInputFailure	58290
DVR3StarterFaultContactOpen	58291
DVR3ExcessiveNumberOfFailedStartAttempts	58292
DVR3MSSDFailedToDeactivate	58293
DVR3UPTerminalLimitFailure	58294
DVR3DownTerminalLimitFailure	58295
DVR3UpNormalLimitOpen	58296
DVR3DownNormalLimitOpen	58297
DVR4StarterTypeError	58298
DVR4MTMFailedToActivate	58299
DVR4MTMFailedToDeactivate	58300
DVR4MTYFailedToActivate	58301
DVR4MTYFailedToDeactivate	58302
DVR4MTDFailedToActivate	58303
DVR4MTDFailedToDeactivate	58304
DVR4MUSEFailedToActivate	58305
DVR4MUSEFailedToDeactivate	58306
DVR4MDSEFailedToActivate	58307
DVR4MDFEFailedToDeactivate	58308
DVR4MDFEFailedToActivate	58309
DVR4MDSEFailedToDeactivate	58310
DVR4AuxiliaryStarterTimeout	58311

FAULT	ID
DVR4MSSDFailedToActivate	58312
DVR4DRDUpToSpeedFailedToActivate	58313
DVR4IN_MUFEFailedToActivate	58314
DVR4IN_MUFEFailedToDeactivate	58315
DVR4M2LInputFailure	58316
DVR4OLMInputFailure	58317
DVR4OLMInputIsLow	58318
DVR4RPSensorTripped	58319
DVR4MRDInputFailure	58320
DVR4YRDInputFailure	58321
DVR4DRDInputFailure	58322
DVR4StarterFaultContactOpen	58323
DVR4ExcessiveNumberOfFailedStartAttempts	58324
DVR4MSSDFailedToDeactivate	58325
DVR4UPTerminalLimitFailure	58326
DVR4DownTerminalLimitFailure	58327
DVR4UpNormalLimitOpen	58328
DVR4DownNormalLimitOpen	58329
M2KRDAMGSRInputFailure	58330
M2KRDAMABBRInputFailure	58331
M2KRDADCLCRInputFailure	58332
M2KRDAREARHoistwayDoorBypassSWFailure	58333
M2KRDAREARCarDoorBypassSWFailure	58334
M2KRDAMGBRInputFailure	58335
M2KRDA846MGSRInputFailure	58336
M2KRDA846MABBRInputFailure	58337
M2KRDA846DCLCRInputFailure	58338

FAULT	ID
M2KRDA846REARHoistwayDoorBypassSWFailure	58339
M2KRDA846REARCarDoorBypassSWFailure	58340
M2KRDA846MGBRInputFailure	58341
M2KRDRLDOLRInputFailure	58342
M2KRDRLMABGRInputFailure	58343
M2KRDRLGSRInputFailure	58344
M2KRDRLHDBRInputFailure	58345
M2KRDRLDLRInputFailure	58346
M2KRDRLMBABRInputFailure	58347
M2KRDRLMTABRInputFailure	58348
M2KRDRLMABTRInputFailure	58349
M2KRDRLB846DOLRInputFailure	58350
M2KRDRLB846MABGRInputFailure	58351
M2KRDRLB846GSRInputFailure	58352
M2KRDRLB846MHDBRInputFailure	58353
M2KRDRLB846DLRInputFailure	58354
M2KRDRLB846MBABRInputFailure	58355
M2KRDRLB846MTABRInputFailure	58356
M2KRDRLB846MABTRInputFailure	58357

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M4KConfigurationErrorchangeSettingsBeforeInstallation	55000
M4KSafetyCircuitIsOpen	55001
M4KUpAndDownTerminalSpeedReducingLimitsOpen	55002
M4KMotorLimitTimerElapsed	55003
M4KValveLimitTimerElapsed	55004
M4KSynchronizationOperation	55005

FAULT	ID
M4KBottomFloorOrTopFloorDemand	55006
M4KFireServicePhase1Alternate	55007
M4KFireServicePhase1Main	55008
M4KFireServicePhase2	55009
M4KInspectionOperation	55010
M4KIndependentServiceOperation	55011
M4KFrontDOLandDLKAreBothActive	55012
M4KTimeOutOfService	55013
M4KViscosityControlFunction	55014
M4KCarCallBusIsDisconnected	55015
M4KHallCallBusIsDisconnected	55016
M4KLevelingUp	55017
M4KLevelingDown	55018
M4KDriveFailedToRespond	55019
M4KPressureSwitchActivated	55020
M4KHallAndCarCallBusesDisconnected	55021
M4KCarToFloorFunction	55022
M4KEmergencyPowerOperation	55023
M4KHeavyLoadWeigherCondition	55024
M4KLightLoadWeigherCondition	55025
M4KEarthquakeOperation	55026
M4KEarthquakeReducedSpeedOperation	55027
M4KPowerUpShutdownDueToEarthquake	55028
M4KPowerTransferInputActive	55029
M4KShutdownOperation	55030
M4KBrakePickFailure	55031
M4KDirectionRelayRedundancyFailure	55032

<b>FAULT</b>	<b>ID</b>
M4KContactorProofingRedundancyFailure	55033
M4KLandingSystemRedundancyFailure	55034
M4KElevatorShutdownSwitchActive	55035
M4KFrontGateSwitchFailure	55036
M4KFrontDoorLockSwitchFailure	55037
M4KFrontDoorOpenLimitFailure	55038
M4KLevelingSensorFailure	55039
M4KEmergencyMedicalService	55040
M4KDoorCloseProtectionTimerElapsed	55041
M4KRedundancyFrontGateSwitchFailure	55042
M4KRedundancyRearGateSwitchFailure	55043
M4KOverloadCondition	55044
M4KRearGateSwitchFailure	55045
M4KRearDoorLockSwitchFailure	55046
M4KRearDoorOpenLimitFailure	55047
M4KAttendantServiceOperation	55048
M4KInCarStopSwitchActivated	55049
M4KCarSafetyDeviceOpen	55050
M4KHoistwaySafetyDeviceOpen	55051
M4KGovernorSwitchOpen	55052
M4KDriveFault	55053
M4KCarToLobbyOperation	55054
M4KEnterSecurityCode	55055
M4KHospitalPhase2Operation	55056
M4KHospitalPhase1Operation	55057
M4KRedundancyDoorLockRelayFailure	55058
M4KCaptureForTest	55059

FAULT	ID
M4KDoorZoneSensorFailedOnPosition	55060
M4KLevelingSensorFailedOnPosition	55061
M4KLevelingSensorFailedOffPosition	55062
M4KCarinTestMode	55063
M4KSabbathOperationActive	55064
M4KPasscodeRequest	55065
M4KRearDOLandDLKareBothActive	55066
M4KFinalLimitSwitchOpenNYCHA	55067
M4KGovernorSwitchOpenNYCHA	55068
M4KBufferSwitchOpenNYCHA	55069
M4KCompSheaveSwitchOpenNYCHA	55070
M4KPitStopSwitchOpenNYCHA	55071
M4KEmergencyExitSwitchesOpenNYCHA	55072
M4KSafetyClampSwitchOpenNYCHA	55073
M4KCarTopEmergencyStopSwitchOpenNYCHA	55074
M4KInCarEmergencyStopSwitchOpenNYCHA	55075
M4KFinalLimitSwitchRelayFailureNYCHA	55076
M4KHoistwaySafetyCircuitRelayFailureNYCHA	55077
M4KCarSafetyCircuiRelayFailureNYCHA	55078
M4KMotorOverloadNYCHA	55079
M4KDoorMotorOverloadNYCHA	55080
M4KUpNormalLimitFailureNYCHA	55081
M4KDownNormalLimitFailureNYCHA	55082
M4KRedundancyUpNormalLimitFailureNYCHA	55083
M4KRedundancyDownNormalLimitFailureNYCHA	55084
M4KUpSlowdownLimitFailureNYCHA	55085
M4KDownSlowdownLimitFailureNYCHA	55086

<b>FAULT</b>	<b>ID</b>
M4KRedundancyUpSlowdownLimitFailureNYCHA	55087
M4KRedundancyDownSlowdownLimitFailureNYCHA	55088
M4KRedundancyUpSlowdownLimit2failureNYCHA	55089
M4KRedundancyDownSlowdownLimit2FailureNYCHA	55090
M4KRedundancyDoorLockStringFailureNYCHA	55091
M4KFrontDoorIsLockedButNotFullyClosed	55092
M4KRearDoorIsLockedButNotFullyClosed	55093
M4KLowOilSwitchInputIsActivated	55094
M4KEXMLTInputIsActivated	55095
M4KCarTopInspectionInputIsActivatedNYCHA	55096
M4KHallCallCommonFuseBlownNYCHA	55097
M4KLobbyHallCallCommonFuseBlownNYCHA	55098
M4KHallCallIndicatorLightFuseBlownNYCHA	55099
M4KCarCallCommonFuseBlownNYCHA	55100
M4KLobbyCarCallCommonFuseBlownNYCHA	55101
M4KSafetyEdgeObstructionFaultNYCHA	55102
M4KTopFinalLimitOpenNYCHA	55103
M4KBottomFinalLimitOpenNYCHA	55104
M4KSwingDoorCloseContactFailureNYCHA	55105
M4KCarStoppedOutOfDoorZoneNYCHA	55106
M4KFaultBypassIsActiveAutomatic	55107
M4KFaultBbypassIsActiveInspection	55108
M4KTopFinalLimitOpen	55109
M4KGroupToCarCommunicationLoss	55110
M4KNormalPitFloodOperation	55111
M4KLossOfDoorLockOutOfDoorZone	55112
M4KWPSecurityActivated	55113

FAULT	ID
M4KHoistwayAccess	55114
M4KEmergencyBrakeActivated	55115
M4KCycleTest	55116
M4KContactorFailureToPick	55117
M4KDoorZoneSensorFailureOffPosition	55118
M4KFrontDoorFailedToClose	55119
M4KRearDoorFailedToClose	55120
M4KCPUAisOffline	55121
M4KStartingUp	55122
M4KBatteryPowerCarRecallActivated	55123
M4KBatteryBackupPowerSystemFault	55124
M4KMGSInputFailure	55125
M4KMABBInputFailure	55126
M4KCarTopInspection	55127
M4KInCarInspection	55128
M4KAccessEnabled	55128
M4KMSAFS1InputFailure	55130
M4KDCABInputFailure	55131
M4KSAFCInputFailure	55132
M4KMCSBInputFailure	55133
M4KHoistwayDoorBypassAWFailure	55134
M4KCarDoorBypassSWFailure	55135
M4KMachineRoomInspection	55136
M4KMGBInputFailure	55137
M4KINCPInputFailure	55138
M4KINAInputFailure	55139
M4KINCTInputFailure	55140

FAULT	ID
M4KSPBIsOffline	55141
M4KSPClIsOffline	55142
M4KDVR1IsOffline	55143
M4KMTMInputFailure	55144
M4KMTYInputFailure	55145
M4KMTDInputFailure	55146
M4KRestoringSafety	55147
M4KMUSEInputIsLow	55148
M4KMDSEInputIsLow	55149
M4KRSVInputFailedToActivate	55150
M4KRFVInputFailedToActivate	55151
M4KMPISPAisOffline	55152
M4KMPISPCLisOffline	55153
M4KDVR2MSSDFailedActive	55154
M4KR2LInputFailure	55155
M4KMSAFL1InputFailure	55156
M4KICPDIInputFailure	55157
M4KICPUInputFailure	55158
M4KICTDInputFailure	55159
M4KICTUInputFailure	55160
M4KDOLInputFailure	55161
M4KMABGFIInputFailure	55162
M4KGSIInputFailure	55163
M4KMDZLVInputFailure	55164
M4KMHDBIInputFailure	55165
M4KDLInputFailure	55166
M4KMBABIInputFailure	55167

FAULT	ID
M4KMTABInputFailure	55168
M4KMABTInputFailure	55169
M4KInspectionDirectionSWFailure	55170
M4KATUInputFailure	55171
M4KATDInputFailure	55172
M4KABUInputFailure	55173
M4KABDInputFailure	55174
M4KTopAccessSWFailure	55175
M4KBottomAccessSWFailure	55176
M4KSafetyDroppedBySPB	55177
M4KSPAisOffline	55178
M4KMSSDFailedActive	55179
M4KMUFEInputIsLow	55180
M4KMDFEInputIsLow	55181
M4KRDRSPAisOffline	55182
M4KRDRSPBisOffline	55183
M4KMPISPBisOffline	55184
M4KDVR2IsOffline	55185
M4KDVR3IsOffline	55186
M4KTwosInputFailure	55187
M4KTwoBusIsLow	55188
M4K2FSBusIsLow	55189
M4K2HABusIsLow	55190
M4K2MVBusIsLow	55191
M4KRSVInputFailedToDeactivate	55192
M4KRFVInputFailedToDeactivate	55193
M4KFrontDZRelayDiscrepancy	55194

FAULT	ID
M4KRearDZRelayDiscrepancy	55195
M4KDPMRedundancyFault	55196
M4KDPMRRedundancyFault	55197
M4KFCL1InManualMode	55198
M4KFCL2InManualMode	55199
M4KFCL3InManualMode	55200
M4KFCL4InManualMode	55201
MPIARelativePositionHigh	55202
MPIARelativePositionLow	55203
MPIALandingSystemFaultEmergencyBrakeDropped	55204
MPIALandingSystemCommLoss	55205
MPIAUintendedMotion	55206
MPIASPCIsOffline	55207
MPIASPBIsOffline	55208
MPIAGovernorOverspeed	55209
MPIAIInspectionOverspeed	55210
MPIAContractOverspeed	55211
MPIALevelingOverspeed	55212
MPIAUpNormalLimitOpen	55213
MPIADownNormalLimitOpen	55214
MPIAETSShutdownFault	55215
MPIAUETSWOverspeed	55216
MPIAUETSWPositionFault	55217
MPIADETSWOverspeed	55218
MPIADETSWPositionFault	55219
MPIAEmergencyBrakeCycleTestFault	55220
MPIAPMDDContactorPickMonitorFault	55221

FAULT	ID
MPIAPMDDContactorDropMonitorFault	55222
MPIA2LBusIsLow	55223
MPIARGOKFailedToActivate	55224
MPIAActualAndRequestedDirectionMismatch	55225
MPIAExcessiveFaultsShutdown	55226
MPIA2MVBusMonitorFault	55227
MPIAEBPSMonitorFault	55228
MPIAUNTSWLowOverspeed	55229
MPIAUNTSWHighOverspeed	55230
MPIAUNTSWPositionError	55231
MPIADNTSWLowOverspeed	55232
MPIADNTSWHighOverspeed	55233
MPIADNTSWPositionError	55234
MPIARGOKFailedToDeactivate	55235
MPIADriveNotReady	55236
MPIADriveFault	55237
MPIADriveONFault	55238
MPIAEEPROMFault	55239
MPIAIIncorrectLandingSystemChannelDetected	55240
MPIARGOKDropped	55241
MPIABrakeModule1IsOffline	55242
MPIABrakeModule2IsOffline	55243
MPIBRelativePositionHigh	55244
MPIBRelativePositionLow	55245
MPIBLandingSystemFaultEmergencyBrakeDropped	55246
MPIBLandingSystemCommLoss	55247
MPIBUintendedMotion	55248

FAULT	ID
MPIBSPCIsOffline	55249
MPIBSPBIsOffline	55250
MPIBGovernorOverspeed	55251
MPIBInspectionOverspeed	55252
MPIBContractOverspeed	55253
MPIBLevelingOverspeed	55254
MPIBUpNormalLimitOpen	55255
MPIBDownNormalLimitOpen	55256
MPIBETSShutdownFault	55257
MPIBUETSWOverspeed	55258
MPIBUETSWPositionFault	55259
MPIBDETSWOverspeed	55260
MPIBDETSWPositionFault	55261
MPIBEmergencyBrakeCycleTestFault	55262
MPIBPMDDContactorPickMonitorFault	55263
MPIBPMDDContactorDropMonitorFault	55264
MPIB2LBusIsLow	55265
MPIBRGOKFailedToActivate	55266
MPIBActualAndRequestedDirectionMismatch	55267
MPIBExcessiveFaultsShutdown	55268
MPIB2MVBusMonitorFault	55269
MPIBEBPSMonitorFault	55270
MPIBUNTSWLowOverspeed	55271
MPIBUNTSWHighOverspeed	55272
MPIBUNTSWPositionError	55273
MPIBDNTSWLowOverspeed	55274
MPIBDNTSWHighOverspeed	55275

FAULT	ID
MPIBDNTSWPositionError	55276
MPIBRGOKFailedToDactivate	55277
MPIBDriveNotReady	55278
MPIBDriveFault	55279
MPIBDriveONFault	55280
MPIBEEPROMFault	55281
MPIBIncorrectLandingSystemChannelDetected	55282
MPIBGOKDropped	55283
MPIBBrakeModule1IsOffline	55284
MPIBBrakeModule2IsOffline	55285
MTPInputFailedToDeactivate	55286
MTPInputFailedToActivate	55287
MTBInputFailedToDeactivate	55288
MTBInputFailedToActivate	55289
PMPInputFailedToDeactivate	55290
PMPInputFailedToActivate	55291
BRPInputFailedToDeactivate	55292
BRPInputFailedToActivate	55293
DRDInputFailedToActivate	55294
DFLInputActive	55295
MPICDriveOnFailedToActivate	55296
MPICDriveOnFailedToDeactivate	55297
DRIERXCommFailure	55298
DRIETXCommFailure	55299
MPICEEPROMCRCError	55300
MPICEEPROMDeviceError	55301
DriePositionModeFault	55302

FAULT	ID
MPICIInspectionOverspeed	55303
MPIContractOverspeed	55304
MPICExcessiveFaultsShutdown	55305
MPICLandingSysAPositionDeviation	55306
MPICLandingSysBPositionDdeviation	55307
MPICFollowingError	55308
MPICLevelingTimeExceeded	55309
MPICUncexpectedDirectionDrop	55310
MPICDriveOfflineStopMode	55311
MPICDriveOnLost	55312
FCL1LoadOverCurrent	55313
FCL1LoadOverVoltage	55314
FCL1AUXIGBTStuckOpen	55315
FCL1AUXIGBTStuckClosed	55316
FCL1MAINIGBTStuckOpen	55317
FCL1MAINIGBTStuckClosed	55318
FCL1ModuleOverheat	55319
FCL1TryingToRunInManualReleaseMode	55320
FCL1BypassButtonStuckClosed	55321
FCL1Unknown	55322
FCL1DiscreteInputWhileInCanMode	55323
FCL1ModuleAddressError	55324
FCL1NotCalibrated	55325
FCL1LoadUndercurrent	55326
FCL1LoadUndervoltage	55327
FCL1CANDisconnected	55328
FCL1LoadExtremeUnderCurrent	55329

<b>FAULT</b>	<b>ID</b>
FCL1LoadExtremeUnderVoltage	55330
FCL2LoadOverCurrent	55331
FCL2LoadOverVoltage	55332
FCL2AUXIGBTStuckOpen	55333
FCL2AUXIGBTStuckClosed	55334
FCL2MAINIGBTStuckOpen	55335
FCL2MAINIGBTStuckClosed	55336
FCL2ModuleOverheat	55337
FCL2TryingToRunInManualReleaseMode	55338
FCL2BypassButtonStuckClosed	55339
FCL2Unknown	55340
FCL2DiscreteInputWhileInCanMode	55341
FCL2ModuleAddressError	55342
FCL2NotCalibrated	55343
FCL2LoadUndercurrent	55344
FCL2LoadUndervoltage	55345
FCL2CANDisconnected	55346
FCL2LoadExtremeUnderCurrent	55347
FCL2LoadExtremeUnderVoltage	55348
FCL3LoadOverCurrent	55349
FCL3LoadOverVoltage	55350
FCL3AUXIGBTStuckOpen	55351
FCL3AUXIGBTStuckClosed	55352
FCL3MAINIGBTStuckOpen	55353
FCL3MAINIGBTStuckClosed	55354
FCL3ModuleOverheat	55355
FCL3TryingToRunInManualReleaseMode	55356

<b>FAULT</b>	<b>ID</b>
FCL3BypassButtonStuckClosed	55357
FCL3Unknown	55358
FCL3DiscreteInputWhileInCanMode	55359
FCL3ModuleAddressError	55360
FCL3NotCalibrated	55361
FCL3LoadUndercurrent	55362
FCL3LoadUndervoltage	55363
FCL3CANDisconnected	55364
FCL3LoadExtremeUnderCurrent	55365
FCL3LoadExtremeUnderVoltage	55366
FCL4LoadOverCurrent	55367
FCL4LoadOverVoltage	55368
FCL4AUXIGBTStuckOpen	55369
FCL4AUXIGBTStuckClosed	55370
FCL4MAINIGBTStuckOpen	55371
FCL4MAINIGBTStuckClosed	55372
FCL4ModuleOverheat	55373
FCL4TryingToRunInManualReleaseMode	55374
FCL4BypassButtonStuckClosed	55375
FCL4Unknown	55376
FCL4DiscreteInputWhileInCanMode	55377
FCL4ModuleAddressError	55378
FCL4NotCalibrated	55379
FCL4LoadUndercurrent	55380
FCL4LoadUndervoltage	55381
FCL4CANDisconnected	55382
FCL4LoadExtremeUnderCurrent	55383

FAULT	ID
FCL4LoadExtremeUnderVoltage	55384
M4KRDAMGSRInputFailure	55385
M4KRDAMABBRInputFailure	55386
M4KRDADCLCRInputFailure	55387
M4KRDAREARHoistwayDoorBypassSWFailure	55388
M4KRDAREARCarDoorBypassSWFailure	55389
M4KRDAMGBRInputFailure	55390
M4KRDA846MGSRInputFailure	55391
M4KRDA846MABBRInputFailure	55392
M4KRDA846DCLCRInputFailure	55393
M4KRDA846REARHoistwayDoorBypassSWFailure	55394
M4KRDA846REARCarDoorBypassSWFailure	55395
M4KRDA846MGBRInputFailure	55396
M4KRDRBDOLRInputFailure	55397
M4KRDRBMABGRInputFailure	55398
M4KRDRBGSRInputFailure	55399
M4KRDRBMHDBRInputFailure	55400
M4KRDRBDLRInputFailure	55401
M4KRDRBMBABRInputFailure	55402
M4KRDRBMTABRInputFailure	55403
M4KRDRBMABTRInputFailure	55404
M4KRDRB846DOLRInputFailure	55405
M4KRDRB846MABGRInputFailure	55406
M4KRDRB846GSRInputFailure	55407
M4KRDRB846MHDBRInputFailure	55408
M4KRDRB846DLRInputFailure	55409
M4KRDRB846MBABRInputFailure	55410

FAULT	ID
M4KRDRB846MTABRInputFailure	55411
M4KRDRB846MABTRInputFailure	55412

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EarthquakeOperationActivated	52000
FireServiceRecallMain	52001
FireServiceRecallAlternate	52002
FireServiceInCarActivated	52003
IndependentService	52004
CarOutOfServiceWithDoorsOpen	52005
CarOutOfServiceWithDoorsClosed	52006
EmergencyPowerActivated	52007
DoorLockClippedGreaterThan200fpm	52008
SafetyStringOpen	52009
MotorLimitTimedOut	52010
InspectionOperation	52011
SwingOperationActivated	52012
CFSSMode1RecallActivated	52013
GovernorOpen	52014
SafetyHStringOpen	52015
SafetyCStringOpen	52016
CarStopSwitchOpen	52017
GroupCommunicationLost	52018
Bus2FuseOpen	52019
FireBusFuseBlown	52020
HallCallBusBlown	52021
SecurityOn	52022

FAULT	ID
HospitalService	52023
TopFloorDemand	52024
BottomFloorDemand	52025
TimedOutOfService	52026
ValveLimitTimer	52027
DoorCloseProtection	52028
USDandDSDOpen	52029
DOLandDLKFault	52030
DoorZoneSteppingFault	52031
RollbackDetected	52032
PhotoEyeFailure	52033
LandingSensorRedundancyFailure	52034
ContactorProofingFailure	52035
UpDirectionRedundancyFailure	52036
GateSwitchRedundancyFailure	52037
DoorLockContactFailure	52038
DoorLockRelayFailure	52039
LevelingFault	52040
SafetyRelayOpen	52041
AlarmBellNoMovement	52042
AlarmBellNoDoorZone	52043
LSAMovementFailure	52044
Releveling	52045
SpeedOutOfLimits	52046
OverTravelDetected	52047
SafetyEdgeFailure	52048

FAULT	ID
//PCS events 54000-54499	
DriveOnFault	54000
BrakePickFault	54001
DriveFault	54002
TestMode	54003
CaptureMode	54004
AttendantService	54005
EarthquakeResetButtonOK	54006
CarOverloadActivated	54007
PowerTransferInputActivated	54008
EarthquakeReduceSpeed	54009
EmergencyMedicalServiceRecallActivatedSwitch1	54010
SabbathOperationActivated	54011
EmergencyBrakeTripped	54012
CFSSMode1InCarActivated	54013
FrontDoorFailedToClose	54014
RearDoorFailedToClose	54015
ViscosityControlFunction	54016
CarCallBusDisconnected	54017
HallCallBusDisconnected	54018
HallAndCarCallBusDisconnected	54019
PressureSwitchActivated	54020
CarToFloorOperation	54021
CarToLobbyOperation	54022
MGSShutdownOperation	54023
ElevatorShutdownSwitchActivated	54024
RedundancyFrontGSFailure	54025

FAULT	ID
RedundancyRearGSFailure	54026
RearDoorOpenLimitFailure	54027
RedundancyDoorLockRelayFailure	54028
LevelingSensorFault	54029
DoorZoneSensorFault	54030
RearDOLAndDLKBothActive	54031
FrontDoorIsLockedButNotFullyClosed	54032
RearDoorIsLockedButNotFullyClosed	54033
LevelingOverspeed	54034
INAXRedundancyFault	54035
BABRedundancyFault	54036
TABRedundancyFault	54037
EXMLTRedundancyFault	54038