



# WindowMaster NV Systems and BMS Integration

The WindowMaster range provides Natural Ventilation solutions that can be tailored to suit your project needs. The systems operate independently, partially or fully controlled by a BMS. A number of the options are outlined below.

## **Simple System**

#### Operating independent of a BMS

- The simplest form of window automation can occur when the actuators operate in two wire mode, and simply open or close as signalled by an occupant pressing a button.
- If you require additional features such as precise position control and feedback, early indication and online parameter set up, MotorLink™ MotorControllers and MotorLink™ Actuators should be selected.

## **Controlled System**

#### **Integrated with BACnet**

- There can be direct communication from the BMS to the MotorControllers that are controlling the actuators, signalling them to either open or close the windows according to when the BMS sees appropriate. This may be when temperature or CO2 set points and exceeded for example or they may be manually operated.
- To make integration possible with BACnet the following products will be required:
  - FlexiSmoke™ BACnet Controller (WSC 520
  - MotorController BACnet (WBC 16M)
  - The appropriate actuators to operate your win dows or louvres
  - Batteries (if you require fail-safe battery backup)

#### Integrated with KNX

- There can be direct communication from the BMS to the MotorControllers that are controlling the actuators.
- To make integration possible the following products will be required:
  - FlexiSmoke™ KNX Controller (WSC 520)
  - Motor Controller KNX (WEC 16M)
  - The appropriate actuators to operate your windows or louvres
  - Batteries (if you provide fail-safe battery back-up

## **Automatic System**

### **Incorporating NV Comfort**

- The NV Comfort is a bus-based solution that is KNX compatible. Operation with BACnet is possible using a gateway.
- It can integrate with a BMS. This means that the NV Comfort will control the natural ventilation, heating, cooling and shading of the building to provide the occupant with a higher level of thermal comfort.
- The NV Comfort can also act as the BMS and control the natural ventilation, heating, cooling and shading, as well as having inputs available for communication with other systems, such as security.
- It can report back to the BMS to provide information on the status of all the systems that it is controlling.
- The NV Comfort must be used in conjunction with WindowMaster MotorLink™ Window Actuators and
  MotorControllers. This means it will receive precise
  position control and feedback, three speed operation
  and all the additional MotorLink features that allow finer
  ventilation control.