ENGINEERING
TOMORROW

Danfoss

AK-SM 800A
Quick Reference Guide

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HVAC
Viewing HVAC status
Main HVAC status screen for a unit:
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "HVAC"

Viewing Cooling status
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "HVAC" and select the right-arrow of the unit to view

Viewing Heating status
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "HVAC" and select the right-arrow of the unit to view

Viewing HVAC settings
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "HVAC" and select right-arrow of the unit to view
4. Go to "Settings" tab

Manual HVAC Override
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "HVAC" and select right-arrow of the unit to view
4. Go to "Service" tab
5. Under "Auto/Manual Relays", select relay to be overridden (auto -> manual on/off)
6. Return "Manual On/Off" to "Auto" to remove override

Miscellaneous / Leak Detectors
Viewing Leak Detectors
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "Misc" and select the right-arrow of leak detector to view

Energy
Viewing Energy Meters
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "Misc" and select the right-arrow of energy meter to view

LIGHTING
Viewing Lighting status
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "Lighting" and select the right-arrow of the lighting zone to view

Viewing Lighting settings
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "Lighting" and select the right-arrow of the lighting zone to view
4. Go to "Settings" tab in between

Manual Lighting Override
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "Lighting" and select the right-arrow of the lighting zone to view
4. Go to "Service" tab
5. Under "Auto/Manual Relays", select relay to be overridden (auto -> manual on/off)
6. Return "Manual On/Off" to "Auto" to remove override

Lights Dimming (if enabled)
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "Lighting" and select the right-arrow of the lighting dimmer to view
4. View Status, Settings, and Service as desired

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BASIC CONTROLLER OPERATION
For a Rack Overview
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "Refrigeration"
   a. Select the down-arrow of the rack to view
   b. Select the down-arrow of the suction group
   to view, or select the right-arrow for more info
   c. Select the right-arrow of the condenser you to view

Other Rack info can be accessed including:
a. Condenser: Indicates number of fans and relevant temperature readings.
b. Compressors: Ability to manual compressors ON/OFF through Suction>Service tab
c. Evaporators: Select the Home icon. Go to Equipment->Refrigeration and select the down- arrow of the suction group to view. If Refrigeration circuit is red, there is an alarm. If yellow, it is in defrost. Select the right-arrow of the circuit for more info (status, settings, service)

Viewing Compressors
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "Refrigeration" and select the down-arrow of the rack you want to view
4. Select the right-arrow, under the alarm column, of the suction group you want to view
5. Go to the "Maintenance" tab to view compressor run times since last clear

Viewing a Circuit
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "Refrigeration" and select the down-arrow of the rack you want to view
4. Select the down-arrow of the suction group to view
5. Select the right-arrow, under the alarm column, of the circuit you want to view.

Current circuit readings and set points are displayed on the Status. Scroll down to view run times and cycles. Relays may be overridden through the service tab directly or by putting a function into Manual ON such as defrost.

Viewing Condensers
1. Press Home-icon at upper-left corner of the screen
2. Select "Equipment"
3. Select "Refrigeration" and select the down-arrow of the rack to view
4. Select the right-arrow of the condenser you want to view

Performing a Manual Defrost (IO Circuit)
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "Refrigeration" and select the down-arrow of the rack to view
4. Select the down-arrow of the suction group to view
5. Select the right-arrow, under the alarm column, of the circuit to view
6. Go to "Service" tab
7. Under "Manual Defrost", change defrost operation from "Auto" to "Manual On"

Performing a Manual Defrost (Case Controller)
1. Press Home-icon at upper-left corner
2. Select "Equipment"
3. Select "Refrigeration" and select the down-arrow of the rack to view
4. Select the down-arrow of the suction group to view
5. Select the right-arrow, under the alarm column, of the circuit to view
6. Go to "Manual Operation" tab
7. Under "Defrost", select "OK" next to "Press to turn on"

Viewing Refrigeration Settings
1. Press 9 dots-icon below the Home-icon, and select "Configuration"
2. Go to "Control" tab
3. Go to "Refrigeration" tab

I/O Communications Checking Board Communications
1. Press 9 dots-icon below the Home-icon, and select "Configuration"
2. Go to "Network Nodes" tab
3. "Node Overview" displays a list of all Configured/Scanned devices
4. "Scan Status" displays more information about the devices
5. Scan Status>IO boards allows you to interrogate communication modules including supply voltage
6. Network Nodes>Config Status displays nodes as Online/Offline

Rescan to Bring Offline Boards Online
1. Press 9 dots-icon below the Home-icon, and select "Configuration"
2. Go to "Network Nodes" tab
3. Typically, channel LONWORKS is enabled. Enable MODBUS-RS485 if Modbus devices are used
4. Select "OK" next to "Press for complete rescan"
5. Wait for scan to complete. When complete, go to "Config Status" tab to check if all nodes are online

AUTHORIZATION Getting Authorized to Make Changes
1. When "Configuration" is selected, you will be prompted to login
2. Enter username and password

VIEWING HISTORY LOGS
1. Press 9 dots-icon below Home-icon, and select "Graph"
2. Press "Select" below "Statistics" tab
3. Select the data types (i.e., relays, sensors, on/off inputs) and the data points to plot
4. Select left arrow next to "Selected"
5. Change the Time and Rate to view history as desired
6. Choose between History (Graph), Trend (Graph), and Statistics to choose how data is displayed