

Master Hot Gas Valve Configuration with **AK-IO** and **AK-CC550A Case Controllers**

1. Import the defrost state from each case controller to the System Manager.

Location: Configuration Control Refrigeration Circuits		
Type	Setup	Copy Upload Download Import SI Import OI Ext Cfg Alarms
A01a RIC	Summary	Import OI
Import #1		001:1 --- Defrost State
Name		001:1 --- Defrost St
Type		Normal

2. Create a calculation for each circuit that is true if any of the case controllers go into defrost.

Calculation		
Ca-04		Ca-04
Units		OI
Style		Generic
Description		A01 Def Enable
Datapoint type		OI1 (Off)
Input		001:1 001:1 --- Defrost St
Datapoint type		OI2 (Off)
Input		002:1 A01b Def State
***** Press to insert new line *****		
if (first True line)	Result	Value
OI1 or OI2	On	(false)
True	Off	Off
Current Value		Off

3. Program the default AK-IO Master Defrost Valve as a virtual point.

Location: Configuration Control Refrigeration Addresses	
Controllers Relays Sensors On/Off Inputs Variable Outputs VLT	
Rack (A)	Page 1
Relays	
Sort by	Address
Mstr Defr Vlv A	Mstr Defr Vlv A
Broadcast	No
Address	99-1.1
Type	N-Open

4. Create a master defrost calculation that is true if any IO or Case Controller goes into Hot Gas defrost.

Ca-15	Ca-15	
Units	OI	
Style	Generic	
Description	Def Test	
Datapoint type	OI1 (Off)	
Input	Ca-04 A01 Def Enable	
Datapoint type	OI2 (Off)	
Input	Ca-05 A02 Def Enable	
Datapoint type	OI3 (Off)	
Input	Ca-08 A04 Def Enable	
Datapoint type	RO4 (Off)	
Output	99-1.1 Mstr Defr Vlv A	
Datapoint type	Log5	
OI1 or OI2 or OI3	Off	
***** Press to insert new line *****		
if (first True line)	Result	Value
Log5 or RO4	On	(false)
True	Off	Off
Current Value	Off	

5. Link the master defrost calculation to control the physical Master Defrost Relay which is programmed as a miscellaneous relay.

Location: Configuration Control Misc

Relays Sensors On/Off Inputs Variable Outputs Conv Factors Calculations

MDFR Relays

Name	MDFR
Bd-Pt	02-5
Broadcast	No
Type	N-Open
Control Input	Ca-15 Any HG Defrost
Minimum OFF	0 min
Pre delay	0 min
Minimum ON	0 min
Post delay	0 min
Load Shed Level	0
Number of alarms	0

