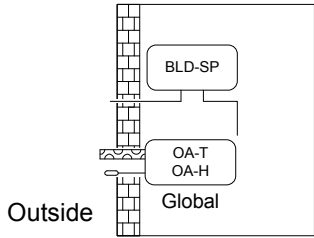
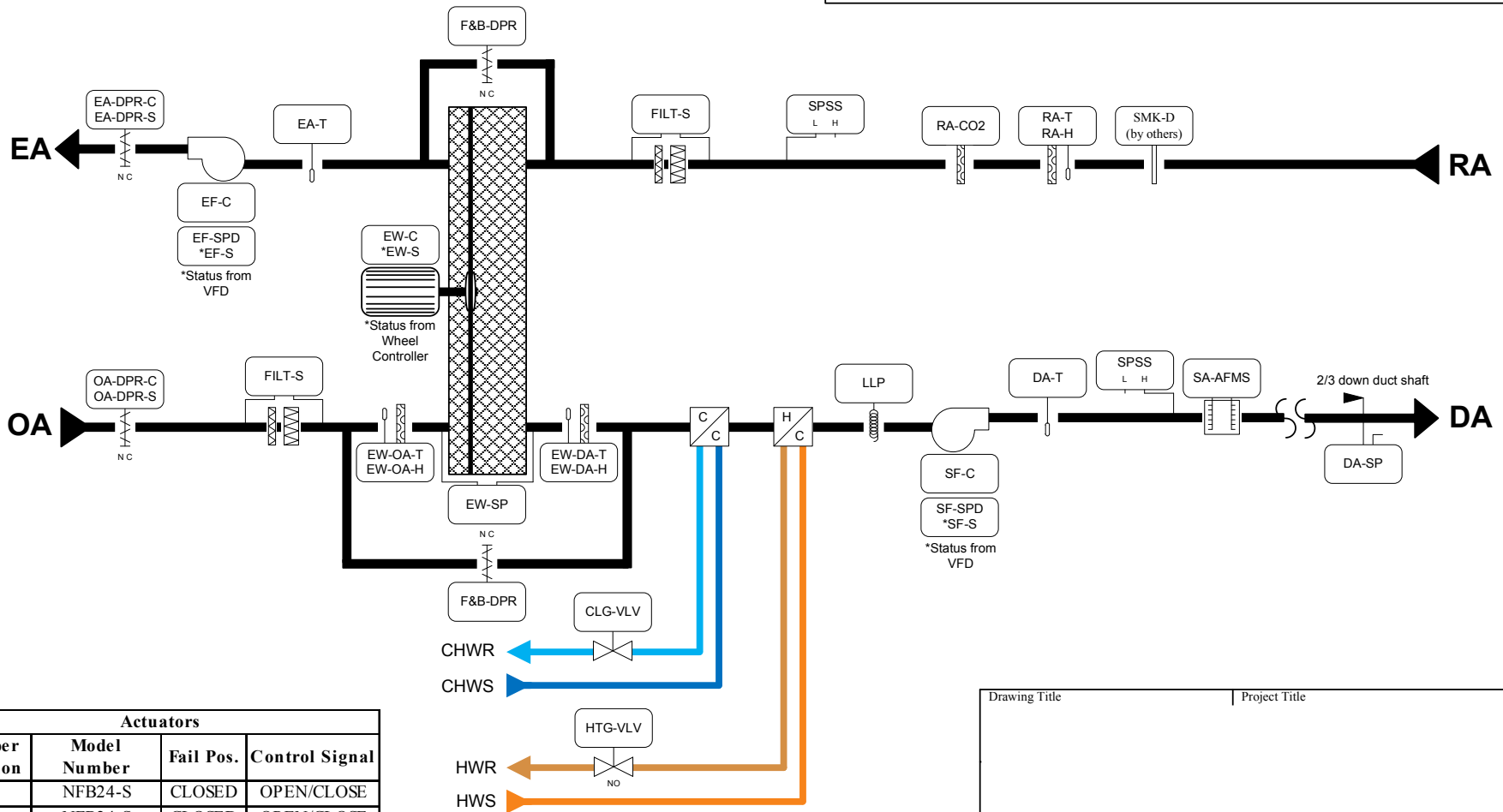


RTU-601 Diagram

(100% Outdoor Air, Hot Water Heat, Chilled Water Cooling, Energy Recovery)



BILL OF MATERIALS			
Designation	Qty	Part Number	Description
Field Devices:			
DA-T/EA-T	2	TS-2008-GD-10	10K Duct, 8" probe, galv. encl., term
RA-T/H	1	RH-153P-NA-DC-HT	3%;duct tempRHCombo;0-5v;0-10vdc;10k
RA-CO2	1	CDE	CO2 Duct Sensor, 0-2000 ppm, 4-20mA/0-10VDC
SF/EF/EW-C	3	V-645	Command Relay
DA-SP	1	A/DLP-010-W-U-D-A0	0-10"Diff Pressure, Panel mount
BLD-SP	1	A/DLP-001-W-U-D-A0	0-1"Diff Pressure, Panel mount
SPSS	2	AFS-460	AIR FLOW SW,SPST,NC RESET 0.05-12IN
LLP	1	FS1A	STAT,LO TEMP,SPDT,AUTO,14/54F,20FT ELEMNT
FILT-S	2	A/DLP-010-W-U-D-A0	0-10"Diff Pressure, Panel mount
EW-T/H	2	RH-153P-NA-DC-HT	3%;duct tempRHCombo;0-5v;0-10vdc;10k
EW-SP	1	A/DLP-010-W-U-D-A0	0-10"Diff Pressure, Panel mount
HTG/CLG-VLV		See Valve Schedule	See Valve Schedule
AFMS		See AFMS Schedule	See AFMS Schedule
Panel Devices:			
VLC	1	VLC-1188	BACTALK VLC-1188 CONTROLLER
VLC	1	VLC-1600	BACTALK VLC-1600 CONTROLLER
TX	1	X100CBE	XFMR,120-208-277-480/24,96VA,PLATE,8IN LEADS



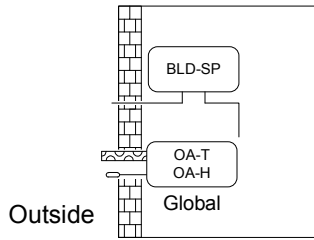
Actuators			
Damper Function	Model Number	Fail Pos.	Control Signal
OA	NFB24-S	CLOSED	OPEN/CLOSE
EA	NFB24-S	CLOSED	OPEN/CLOSE
F&B(2)	NFB24-SR	CLOSED	2-10VDC

AVV105

Drawing Title	Project Title

RTU-602 Diagram

(100% Outdoor Air, Hot Water Heat, Chilled Water Cooling, Energy Recovery)



BILL OF MATERIALS			
Designation	Qty	Part Number	Description
Field Devices:			
DA-T/EA-T	2	TS-2008-GD-10	10K Duct, 8" probe, galv. encl., term
RA-T/H	1	RH-153P-NA-DC-HT	3%;duct tempRHcombo;0-5v;0-10vdc;10k
RA-CO2	1	CDE	CO2 Duct Sensor, 0-2000 ppm, 4-20mA/0-10VDC
SF/EF/EW-C	3	V-645	Command Relay
DA-SP	1	A/DLP-010-W-U-D-A0	0-10"Diff Pressure, Panel mount
BLD-SP	1	A/DLP-001-W-U-D-A0	0-1"Diff Pressure, Panel mount
SPSS	2	AFS-460	AIR FLOW SW,SPST,NC RESET 0.05-12IN
LLP	1	FS1A	STAT,LO TEMP,SPDT,AUTO,14/54F,20FT ELEMNT
FILT-S	2	A/DLP-010-W-U-D-A0	0-10"Diff Pressure, Panel mount
EW-T/H	2	RH-153P-NA-DC-HT	3%;duct tempRHcombo;0-5v;0-10vdc;10k
EW-SP	1	A/DLP-010-W-U-D-A0	0-10"Diff Pressure, Panel mount
HTG/CLG-VLV		See Valve Schedule	See Valve Schedule
AFMS		See AFMS Schedule	See AFMS Schedule
Panel Devices:			
VLC	1	VLC-1188	BACTALK VLC-1188 CONTROLLER
VLC	1	VLC-1600	BACTALK VLC-1600 CONTROLLER
TX	1	X100CBE	XFMR,120-208-277-480/24,96VA,PLATE,8IN LEADS



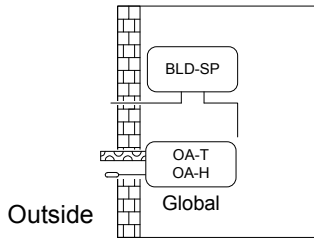
Actuators			
Damper Function	Model Number	Fail Pos.	Control Signal
OA	AFB24-S	CLOSED	OPEN/CLOSE
EA	AFB24-S	CLOSED	OPEN/CLOSE
F&B(2)	NFB24-SR	CLOSED	2-10VDC

AVV105

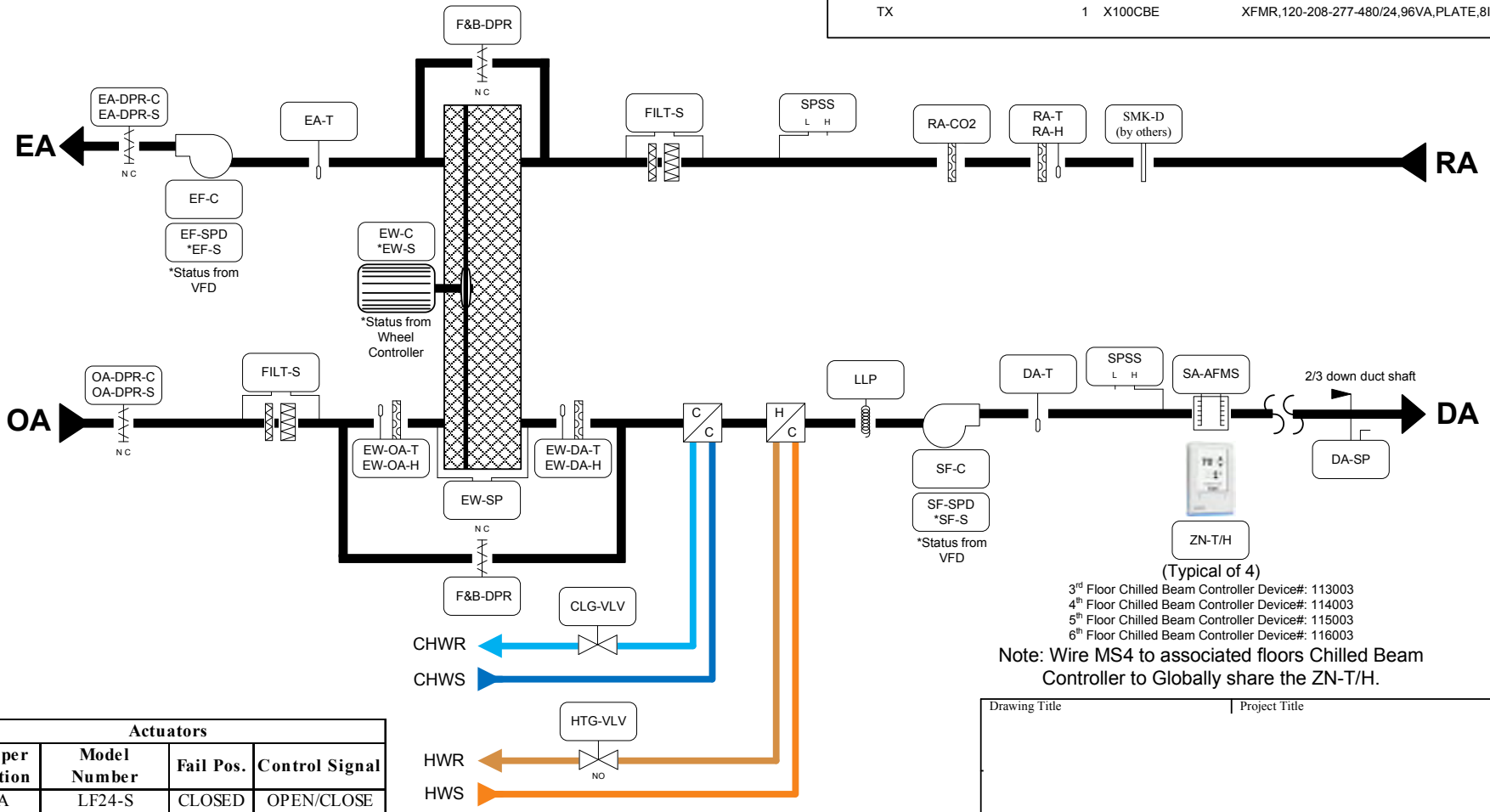
Drawing Title	Project Title

RTU-603 Diagram

(100% Outdoor Air, Hot Water Heat, Chilled Water Cooling, Energy Recovery)



BILL OF MATERIALS			
Designation	Qty	Part Number	Description
Field Devices:			
ZN-T/H	4	MS4	10K T2, 3% RH Digital Wall Sensor
DA-T/EA-T	2	TS-2008-GD-10	10K Duct, 8" probe, galv. encl., term
RA-T/H	1	RH-153P-NA-DC-HT	3%; duct tempRHCombo; 0-5v; 0-10vdc; 10k
RA-CO2	1	CDE	CO2 Duct Sensor, 0-2000 ppm, 4-20mA/0-10VDC
SF/EF/EW-C	3	V-645	Command Relay
DA-SP	1	A/DLP-010-W-U-D-A0	0-10"Diff Pressure, Panel mount
BLD-SP	1	A/DLP-001-W-U-D-A0	0-1"Diff Pressure, Panel mount
SPSS	2	AFS-460	AIR FLOW SW, SPST, NC RESET 0.05-12IN
LLP	1	FS1A	STAT, LO TEMP, SPDT, AUTO, 14/54F, 20FT ELEMNT
FILT-S	2	A/DLP-010-W-U-D-A0	0-10"Diff Pressure, Panel mount
EW-T/H	2	RH-153P-NA-DC-HT	3%; duct tempRHCombo; 0-5v; 0-10vdc; 10k
EW-SP	1	A/DLP-010-W-U-D-A-0	0-10"Diff Pressure, Panel mount
HTG/CLG-VLV		See Valve Schedule	See Valve Schedule
AFMS		See AFMS Schedule	See AFMS Schedule
Panel Devices:			
VLC	1	VLC-1188	BACTALK VLC-1188 CONTROLLER
VLC	1	VLC-1600	BACTALK VLC-1600 CONTROLLER
TX	1	X100CBE	XFMR, 120-208-277-480/24, 96VA, PLATE, 8IN LEADS



(Typical of 4)
 3rd Floor Chilled Beam Controller Device#: 113003
 4th Floor Chilled Beam Controller Device#: 114003
 5th Floor Chilled Beam Controller Device#: 115003
 6th Floor Chilled Beam Controller Device#: 116003

Note: Wire MS4 to associated floors Chilled Beam Controller to Globally share the ZN-T/H.

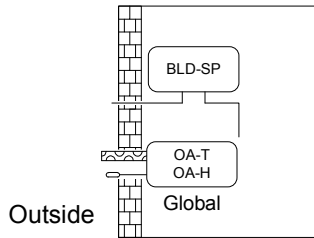
Actuators			
Damper Function	Model Number	Fail Pos.	Control Signal
OA	LF24-S	CLOSED	OPEN/CLOSE
EA	TFB24-S	CLOSED	OPEN/CLOSE
F&B(2)	TFB24-SR	CLOSED	2-10VDC

AMZ017

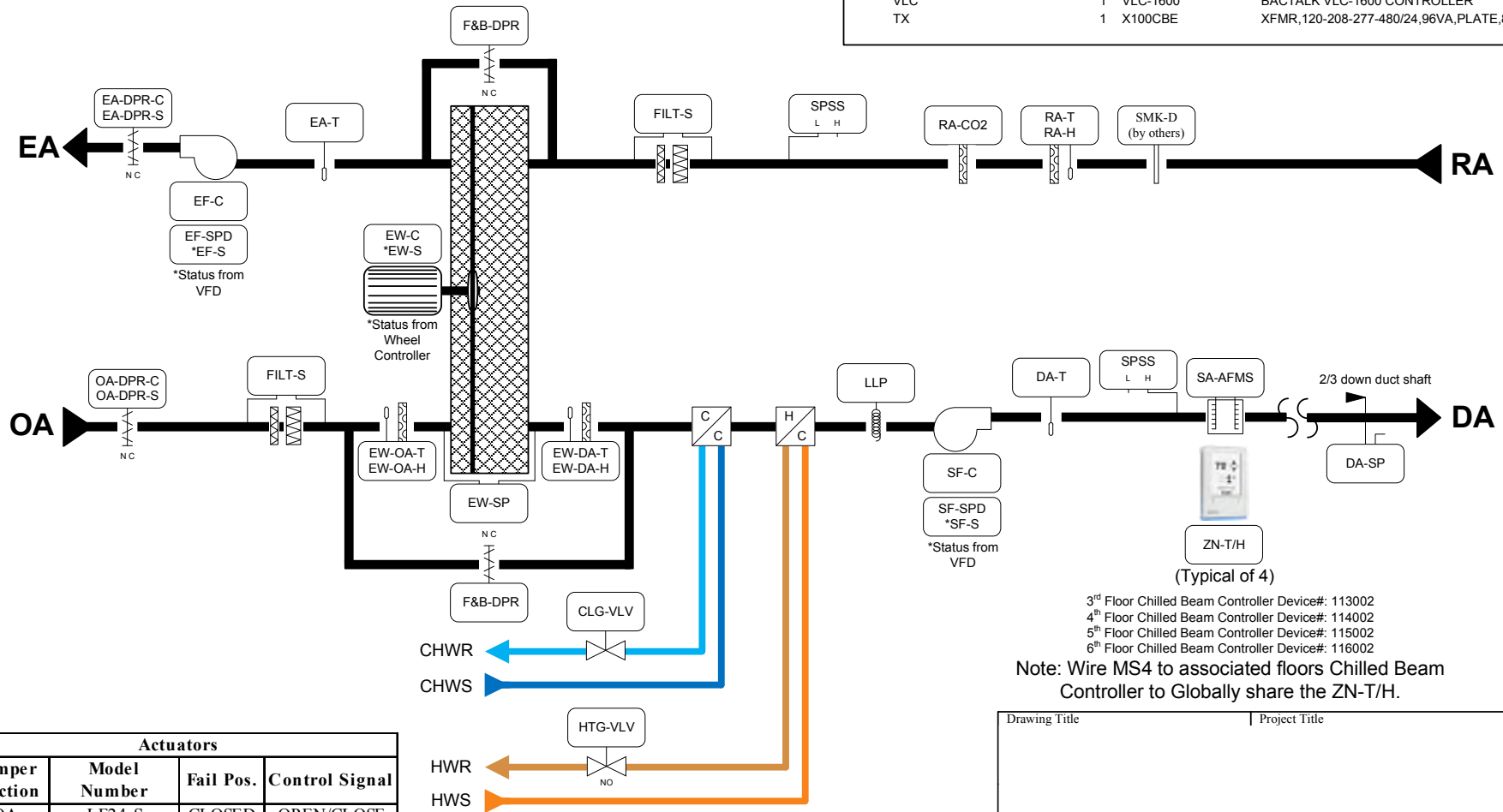
Drawing Title	Project Title

RTU-604 Diagram

(100% Outdoor Air, Hot Water Heat, Chilled Water Cooling, Energy Recovery)



BILL OF MATERIALS			
Designation	Qty	Part Number	Description
Field Devices:			
ZN-T/H	4	MS4	10K T2, 3% RH Digital Wall Sensor
DA-T/EA-T	2	TS-2008-GD-10	10K Duct, 8" probe, galv. encl., term
RA-T/H	1	RH-153P-NA-DC-HT	3%;duct tempRHCombo;0-5v;0-10vdc;10k
RA-CO2	1	CDE	CO2 Duct Sensor, 0-2000 ppm, 4-20mA/0-10VDC
SF/EF/EW-C	3	V-645	Command Relay
DA-SP	1	A/DLP-010-W-U-D-A-0	0-10"Diff Pressure, Panel mount
BLD-SP	1	A/DLP-001-W-U-D-A-0	0-1"Diff Pressure, Panel mount
SPSS	2	AFS-460	AIR FLOW SW,SPST,NC RESET 0.05-12IN
LLP	1	FS1A	STAT,LO TEMP,SPDT,AUTO,14/54F,20FT ELEMNT
FILT-S	2	A/DLP-010-W-U-D-A-0	0-10"Diff Pressure, Panel mount
EW-T/H	2	RH-153P-NA-DC-HT	3%;duct tempRHCombo;0-5v;0-10vdc;10k
EW-SP	1	A/DLP-010-W-U-D-A-0	0-10"Diff Pressure, Panel mount
HTG/CLG-VLV		See Valve Schedule	See Valve Schedule
AFMS		See AFMS Schedule	See AFMS Schedule
Panel Devices:			
VLC	1	VLC-1188	BACTALK VLC-1188 CONTROLLER
VLC	1	VLC-1600	BACTALK VLC-1600 CONTROLLER
TX	1	X100CBE	XFMR,120-208-277-480/24,96VA,PLATE,8IN LEADS



- 3rd Floor Chilled Beam Controller Device#: 113002
- 4th Floor Chilled Beam Controller Device#: 114002
- 5th Floor Chilled Beam Controller Device#: 115002
- 6th Floor Chilled Beam Controller Device#: 116002

Note: Wire MS4 to associated floors Chilled Beam Controller to Globally share the ZN-T/H.

Actuators			
Damper Function	Model Number	Fail Pos.	Control Signal
OA	LF24-S	CLOSED	OPEN/CLOSE
EA	TFB24-S	CLOSED	OPEN/CLOSE
F&B(2)	TFB24-SR	CLOSED	2-10VDC

AMZ017

Drawing Title	Project Title