

Miller Park Terrace

5075-0463



Creating a better climate for business.

- Environmental Control System
- Facility Management System
- Air and Water System Balancing
- Fire Management System
- Security System
- Lighting Services
- Instrumentation System Installation
- Building Operations Management
- Energy Conservation Control
- Training Programs
- Performance Contracting
- Planned Service Agreements

Air Conditioning
 Heating
 Diagnostic Services
 Coil Cleaning
 Refrigeration
 Automatic Temperature Controls
 Facility Management Systems
 Fire Management
 Security Management
 Building Operations and Management
 Water Treatment
 Electrical Equipment
 Emergency Generator / Lighting Equipment
 Industrial Controls / Recording / Indication Equipment

DWG NUMBER	DRAWING TITLE
1.1-1.3	LEGENDS
2.1	COMMUNICATION BUS
	RTU-5505
3.1	RTU-5505 FLOW
PS-1	POINT SCHEDULE
	ROOM SCHEDULE DETAILS
4.1	DETAIL A: VAV BOX WITH REHEAT
4.2	DETAIL B: RELOCATE EXISTING THERMOSTAT
	MISCELLANEOUS DETAIL
5.1	DETAIL A: 24VAC POWER DISTRIBUTION PANELS
DS-1	DAMPER SCHEDULE
RS-1	ROOM SCHEDULE
VS-1	VALVE SCHEDULE

IN CONSIDERATION OF THE RECEIPT OF THIS DOCUMENT, THE RECIPIENT AGREES NOT TO REPRODUCE, COPY, USE OR TRANSMIT THIS DOCUMENT AND/OR THE INFORMATION THEREIN CONTAINED, IN WHOLE OR IN PART, OR TO SUFFER SUCH ACTION BY OTHERS, FOR ANY PURPOSE, EXCEPT WITH THE ADVANCE WRITTEN PERMISSION OF JOHNSON CONTROLS, INC. AND FURTHER AGREES TO SURRENDER SAME TO JOHNSON CONTROLS, INC. UPON DEMAND.

REVISION INFORMATION
 NUMBER: number
 DATE: 01/14/15
 TIME: 11:43 AM
 extra
 FILE NAME: Title.vsd

COPYRIGHT JOHNSON CONTROLS, INC. 2011

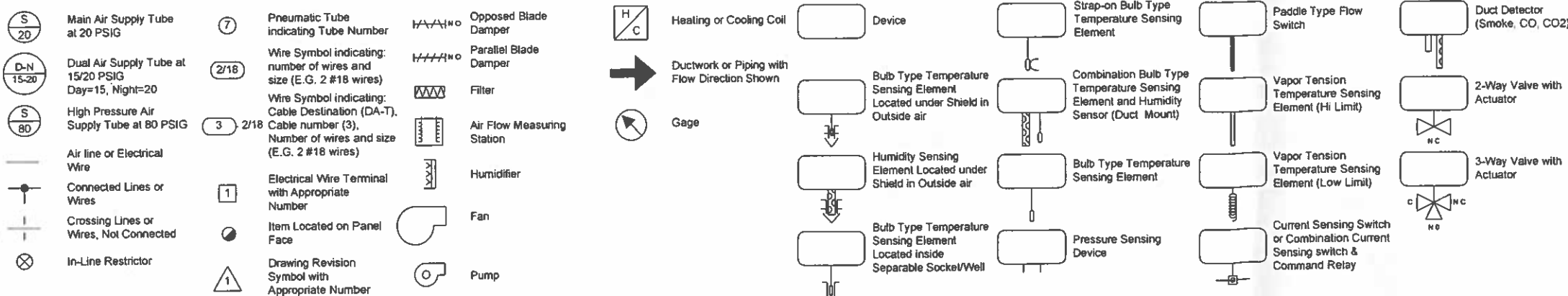
PROJECT TITLE
Miller Park Terrace
1 Brewers Way
Milwaukee, WI 53214

ARCHITECT: _____ ENGINEER: _____
 Phone: _____ Phone: _____

MECHANICAL CONTRACTOR: _____ ELECTRICAL CONTRACTOR: _____

Illingworth-Kilgust Mechanical
 11217 W Becher St
 Milwaukee, WI 53227
 Phone: (414) 476-8790

LEGEND



REFERENCE DRAWING	NO.	REVISION-LOCATION	ECK	DATE	BY
1		RECORD DRAWING		1/14/2015	JJB

SALES ENGINEER: KFC PROJECT MANAGER: SDC APPLICATION ENGINEER: JJB DATE: 10/28/2014 CONTRACT NUMBER: 5075-0463

Johnson Controls

Branch Information:
 Milwaukee Branch
 10201 Innovation Dr Ste 300
 Milwaukee, WI 53226
 Phone: (414) 259-2800
 Fax: (414) 259-2775

TABLE 2	DRAIN CABLE		
	I/O GROUNDING		COMMENTS
TERMINALS	ENCLOSURE	NO ENCLOSURE	
I/O	HARD GROUND @ EACH PANEL. TAPE BACK @ EACH DEVICE	TAPE BACK @ EACH END	SEE FIGURE A
BO (NOISY INDUCTIVE LOADS)	TAPE BACK @ EACH END	TAPE BACK @ EACH END	ADD MOV-1 @ CONTROLLER TERMINALS
BO (GAS IGNITION)	TAPE BACK @ EACH END	TAPE BACK @ EACH END	ADD FILTER-1 @ CONTROLLER TERMINALS. HARD GROUND CASE

FIGURE A

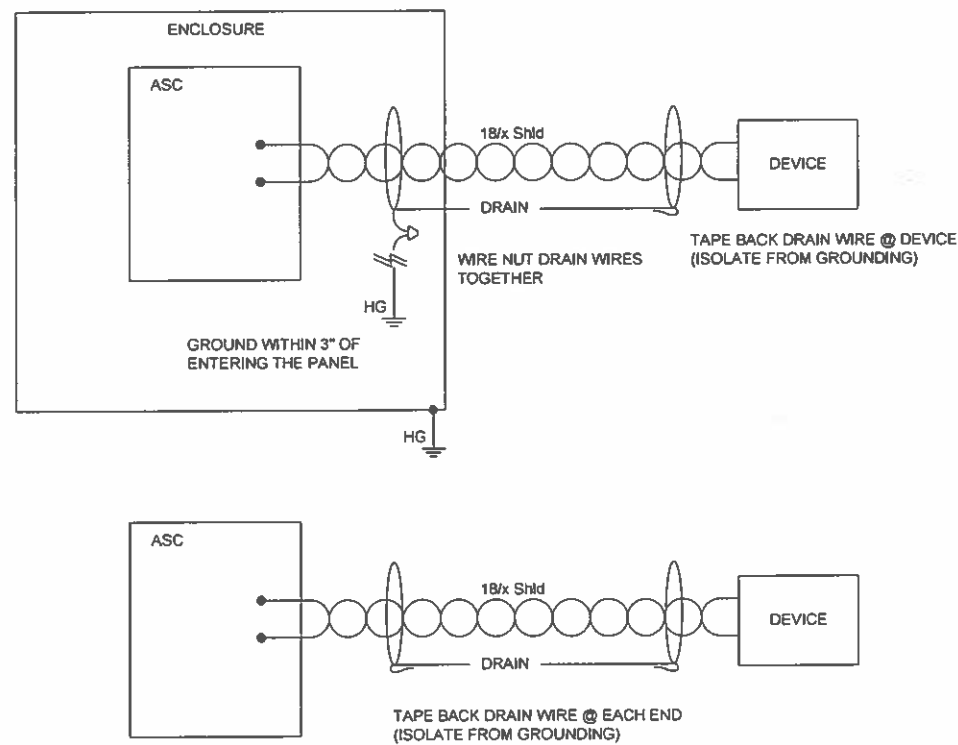
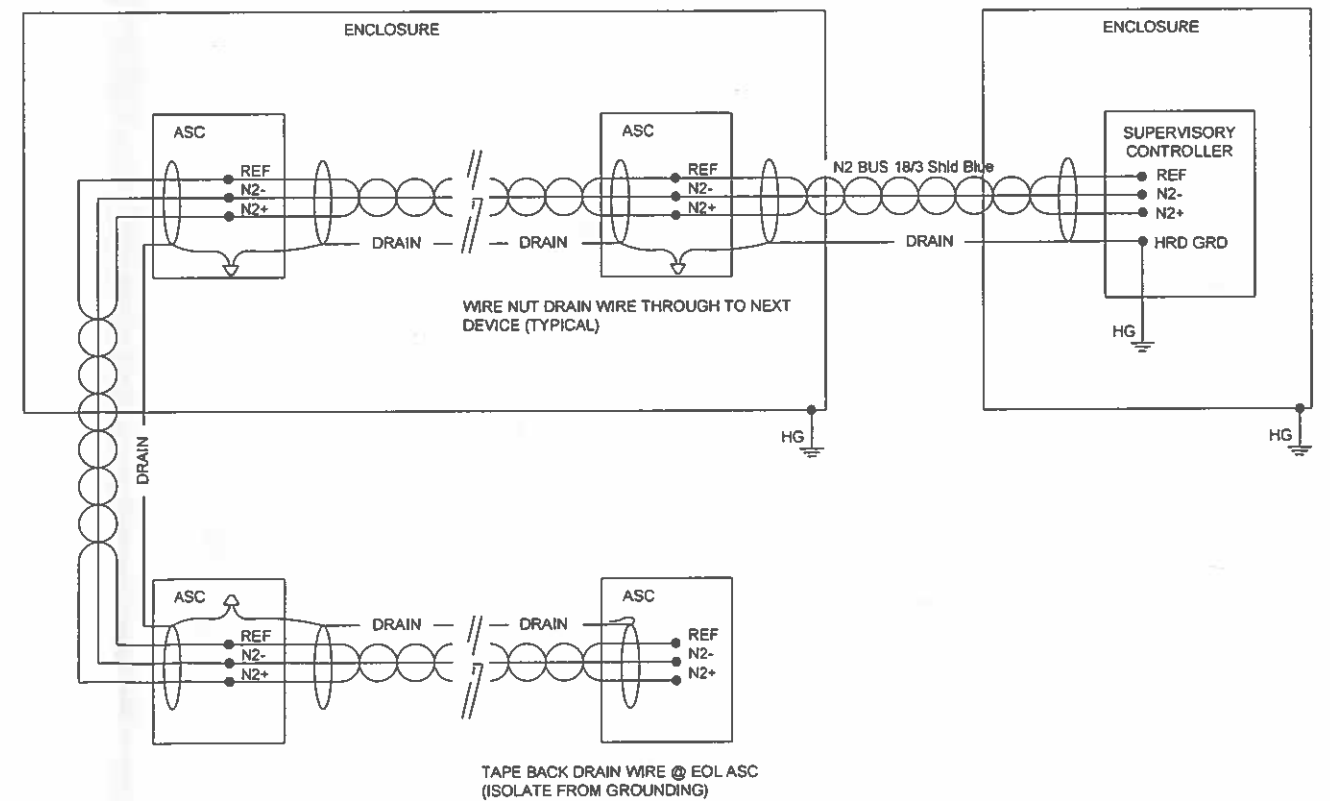


TABLE 3	DRAIN CABLE		
	N2 GROUNDING		COMMENTS
TERMINALS	ENCLOSURE	NO ENCLOSURE	
SUPERVISORY CONTROLLER	HARD GROUND TO BACK PLANE	NA	SEE FIGURE B
ASC	STRAIGHT THROUGH TO NEXT DEVICE	STRAIGHT THROUGH TO NEXT DEVICE	
ASC (EOL)	TAPE BACK @ ASC	TAPE BACK @ ASC	
ASC (NOISY)	SOFT GROUND ONCE PER ENCLOSURE	TAPE BACK @ ASC	ADD CAP-1 @ ENCLOSURE

FIGURE B



REVISION INFORMATION	Drawing Title				
NUMBER	LEGEND				
DATE		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN
01/14/15		Sales Engineer	Project Manager	Application Engineer	DRAWN
TIME	Project Title	KFC	SDC	JJB	APPROVED
11:44 AM	Miller Park Terrace 1 Brewers Way Milwaukee, WI 53214	BY		DATE	BY
extra		Branch Information		DATE	CONTRACT NUMBER
FILE NAME	LegB.vsd	Johnson Controls		Milwaukee Branch 10201 Innovation Dr Ste 300 Milwaukee WI 53226 Phone: (414) 259-2800 Fax: (414) 259-2775	5075-0463
					DRAWING NUMBER
					1.2

TE-6700 SERIES

PHONE JACK PIN NO.	SIGNAL DESIGNATION	COLOR
1	HEATING SETPOINT OR LED AND MANUAL OVERRIDE	WHT / GRN
2	SETPOINT (COOLING)	WHT / BLU
3	TEMPERATURE SENSOR	WHT / BRN
4	TEMPERATURE SENSOR COMMON	ORN / WHT
5	15 VDC POWER (VMA) 24 VAC POWER (AHU, UNT, VAV)	BLU / WHT
6	POWER COMMON OR ZONE BUS COMMON	GRN / WHT
7	SETPOINT COMMON	BRN / WHT
8	ZONE BUS	WHT / ORN

TERMINAL NO.	SIGNAL DESIGNATION	COLOR
1	TEMPERATURE SENSOR AND MANUAL OVERRIDE	WHT / BLU
2	TEMPERATURE SENSOR COMMON	BLU / WHT
3	SETPOINT COMMON	WHT / ORN
4	SETPOINT	ORN / WHT
5	15 VDC POWER (VMA) 24 VAC POWER (AHU, UNT, VAV)	WHT / GRN
6	COMMON FOR POWER, ZONE BUS, OR MANUAL OVERRIDE AND LED	GRN / WHT
7	ZONE BUS	WHT / BRN
8	LED AND MANUAL OVERRIDE	BRN / WHT

NOTE: MANUAL OVERRIDE IS SELECTED FOR EITHER TERMINALS 1 AND 2 OR 6 AND 8 WITH THE LED ENABLED. TERMINAL 6 IS COMMON FOR TERMINAL 7.
A DUAL (HEATING/COOLING SETPOINT IS NOT AVAILABLE WITH A TERMINAL BLOCK.

HE-6700 SERIES

TERMINAL NO.	SIGNAL DESIGNATION	COLOR
1	TEMPERATURE SENSOR COMMON	WHT / BLU
2	TEMPERATURE SENSOR AND MANUAL OVERRIDE	BLU / WHT
3	SETPOINT (WARMER/COOLER)	WHT / ORN
4	SETPOINT COMMON	ORN / WHT
5	COMMON (FOR POWER, ZONE BUS, OR MANUAL OVERRIDE AND LED)	WHT / GRN
6	15 VDC POWER (VMA) 24 VAC POWER (AHU, UNT, VAV)	GRN / WHT
7	RH OUTPUT	WHT / BRN
8	ZONE BUS	BRN / WHT
9	LED AND MANUAL OVERRIDE	

NOTE: MANUAL OVERRIDE IS SELECTED FOR EITHER TERMINALS 1 AND 2 OR 5 AND 9 WITH THE LED ENABLED. TERMINAL 5 IS COMMON FOR TERMINAL 7.

ETHERNET PATCH CABLE

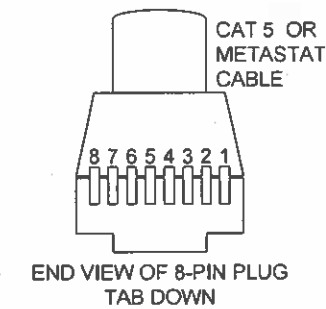
TABLE 7	STANDARD EA/TIA T568B
PIN NO.	COLOR
1	WHT / ORN
2	ORN / WHT
3	WHT / GRN
4	BLU / WHT
5	WHT / BLU
6	GRN / WHT
7	WHT / BRN
8	BRN / WHT

NOTE: A PATCH CABLE HAS BOTH ENDS CONFIGURED AS A PATCH CABLE.

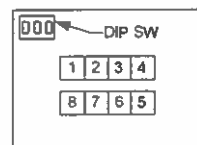
ETHERNET CROSSOVER CABLE

TABLE 8	STANDARD EA/TIA T568B
PIN NO.	COLOR
1	WHT / GRN
2	GRN / WHT
3	WHT / ORN
4	BLU / WHT
5	WHT / BLU
6	ORN / WHT
7	WHT / BRN
8	BRN / WHT

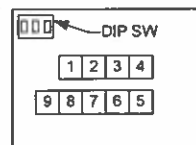
NOTE: A CROSSOVER CABLE HAS ONE END CONFIGURED AS A CROSSOVER CABLE AND THE OPPOSITE END CONFIGURED AS A PATCH CABLE.



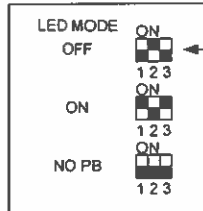
TERMINALS ON BACK OF TE-6700 SERIES SEE TABLE 5



TERMINALS ON BACK OF HE-6700 SERIES SEE TABLE 6



DIP SW



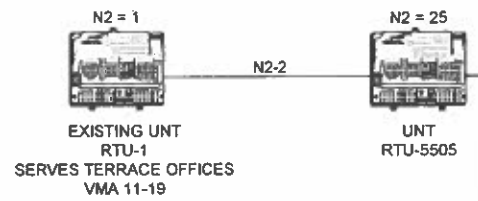
DIP SWITCH IN THE DEFAULT

KEY:
 SWITCH IS IN THE UP POSITION (ON)
 SWITCH IS IN THE DOWN POSITION (OFF)

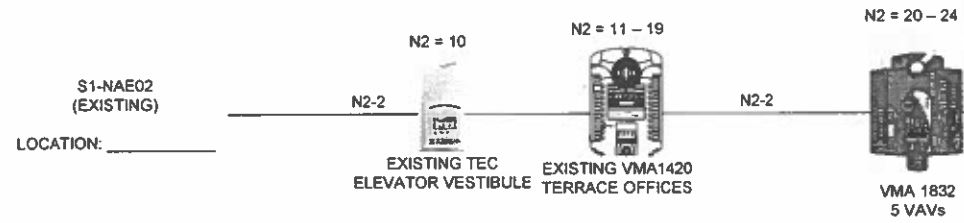
NOTE: SENSOR WILL CAUSE ERRORS IF DIP SWITCHES ARE SET ANY OTHER WAY BUT THOSE SHOWN ABOVE.

REVISION INFORMATION	Drawing Title	REFERENCE DRAWING				REVISION LOCATION				ECK	DATE	BY
NUMBER	LEGEND											
DATE		Sales Engineer	Project Manager	Application Engineer	BY	DATE	BY	DATE	BY	DATE	BY	
01/14/15		KFC	SDC	JJB								
TIME	Project Title	Branch Information				CONTRACT NUMBER						
11:44 AM	Miller Park Terrace 1 Brewers Way Milwaukee, WI 53214	Milwaukee Branch 10201 Innovation Dr Ste 300 Milwaukee WI 53226 Phone: (414) 259-2800 Fax: (414) 259-2775				5075-0463						
extra						DRAWING NUMBER						
FILE NAME	LegC.vsd					1.3						

ROOF



TERRACE LEVEL

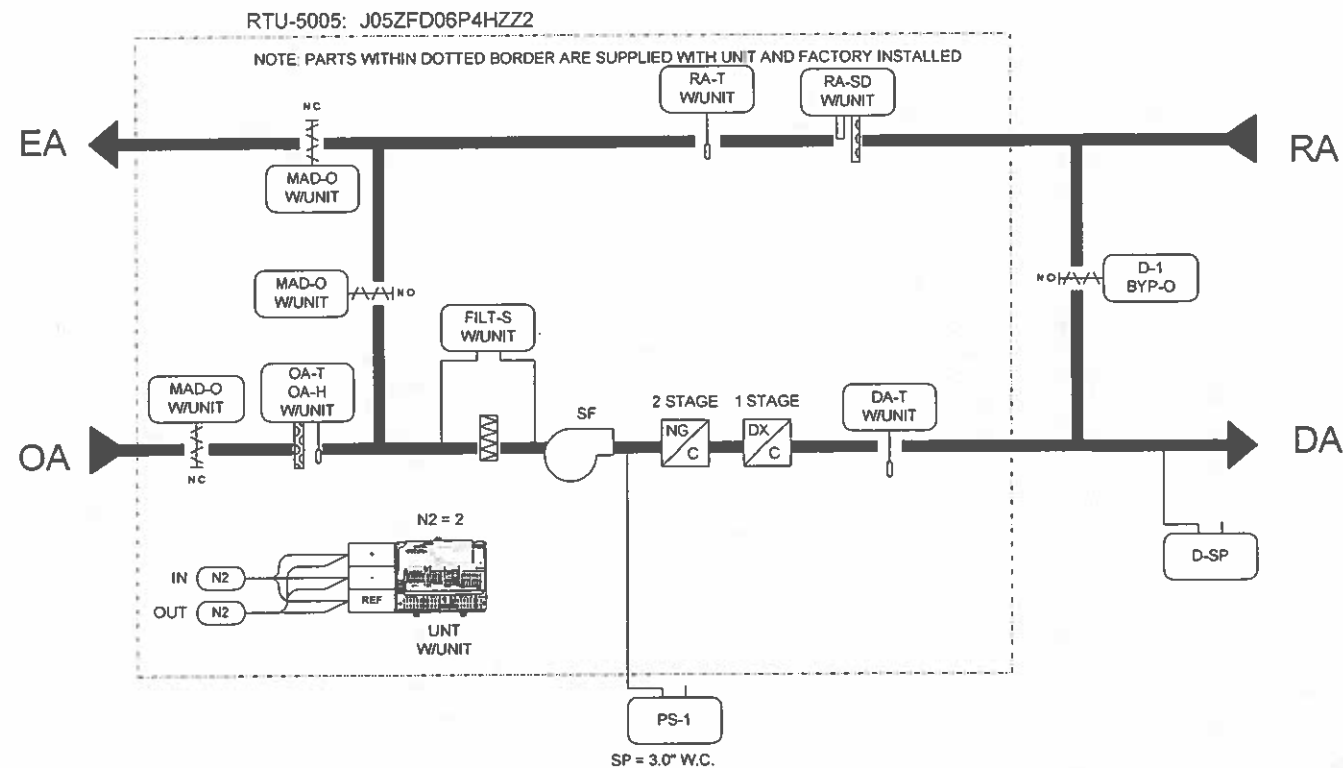


TRUNK SCHEMATIC LEGEND

N1-A	N1 ARCNET BUS	R	RS232 CABLE
N1-E	N1 ETHERNET BUS	M	MODEM CABLE - RS232
N1-F	N1 FIBER BUS	P	PARALLEL PRINTER CABLE
BAC	BACNET BUS (CAT-5 CABLE)	XT	XT BUS
N2	N2 BUS	*	N2 BUS END OF LINE
NT	NT BUS	#	LON BUS END OF LINE
N2/NT	N2 AND NT BUS	+	N1 BUS END OF LINE
LON	LON BUS		

ETHERNET ADDRESSES		
NAE # / NC #	TYPE	ADDRESS
S1-NAE02	IP ADDRESS	192.168.55.71
S1-NAE02	SUBNET MASK	255.255.255.0
S1-NAE02	DEFAULT GATEWAY	
S1-NAE02	DHCP (True / False)	FALSE
S1-NAE02	DEVICE NETWORK NAME	S1-NAE02

REVISION INFORMATION	Drawing Title								
NUMBER	COMMUNICATION BUS								
DATE		REFERENCE DRAWING	NO	REVISION-LOCATION	ECN	DATE	BY		
01/15/15		Sales Engineer	KFC	Project Manager	SDC	Application Engineer	JJB	DRAWN	APPROVED
TIME	Project Title							BY	DATE
08:57 AM	Miller Park Terrace 1 Brewers Way Milwaukee, WI 53214								
FILE NAME	trunk.vsd			Milwaukee Branch 10201 Innovation Drive Suite 300, Milwaukee, WI 53226 Phone: (414) 259-2800 Fax: (414) 259-2775		CONTRACT NUMBER 5075-0463		DRAWING NUMBER 2.1	



BILL OF MATERIALS

Designation	Qty	Part Number	Description
Field Devices:			
D-SP	1	A-302-K	STATIC PRESSURE TIP 1/4"
	1	A-345-K	FLANGE MOUNTING KIT
	1	DPT260-MS2	DPT MR/OUTPUT1-10WC LCD
D-x	0		SEE DAMPER SCHEDULE
PS-1	1	AFS-460	DIF. 0.4 - 12 INWC, DIF=MR, NC
	1	FTG18A-600R	REMOTE MTD PROBE
R-1 (A & B)	1	RIB24P	DPDT, 20A, HC=24 VAC/DC, W/LED

SEQUENCE OF OPERATION

RTU-5005:

UPON A CALL FOR OCCUPIED MODE, THE ECONOMIZER DAMPER WILL MOVE TO ITS MINIMUM POSITION AND THE SUPPLY FAN WILL BE ENERGIZED.

THE SUPPLY AIR VOLUME IS MODULATED VIA A FACE/BYPASS DAMPER BASED ON A STATIC PRESSURE SENSOR LOCATED IN THE SUPPLY AIR DUCTWORK. THE DAMPER WILL MODULATE TO MAINTAIN THE DUCT STATIC PRESSURE SETPOINT. A MANUAL-RESET HIGH STATIC PRESSURE CONTROLLER IS ALSO ELECTRICALLY INTERLOCKED WITH THE SUPPLY FAN TO SHUTDOWN IF DUCT STATIC PRESSURE REACHES 3.0" W.C.

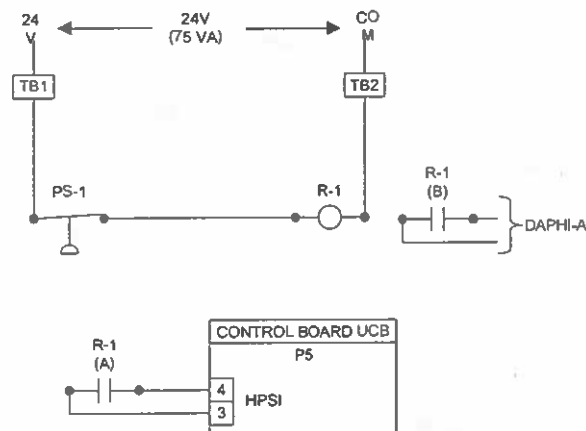
HEATING AND COOLING ARE STAGED IN SEQUENCE TO PREVENT SIMULTANEOUS HEATING AND COOLING, AND TO MAINTAIN ZONE TEMPERATURE SETPOINT. ZONE TEMPERATURE IS A RESULT OF CALCULATING THE AVERAGE OF THE FIVE VAV ZONES FED BY THE RTU.

UPON A CALL FOR COOLING, THE MODE OF COOLING OPERATION WILL BE DETERMINED. IF OUTSIDE AIR TEMPERATURE IS LOWER THAN THE DRY BULB SWITCHOVER SETPOINT, THE ECONOMIZER DAMPERS WILL BE POSITIONED FOR MAXIMUM FREE COOLING USING OUTSIDE AIR TO MEET THE COOLING DEMAND. ONCE THE OUTSIDE AIR TEMPERATURE IS GREATER THAN THE DRY BULB SWITCHOVER SETPOINT, AND OUTSIDE AIR TEMPERATURE IS ABOVE THE COOLING LOCKOUT SETPOINT, THE ECONOMIZER DAMPER WILL MOVE TO ITS MINIMUM POSITION, AND MECHANICAL COOLING WILL STAGE ON AND OFF TO MAINTAIN THE DESIRED ZONE TEMPERATURE SETPOINT.

UPON A CALL FOR HEATING, AND OUTSIDE AIR TEMPERATURE IS BELOW THE HEATING LOCKOUT SETPOINT, THE ECONOMIZER DAMPER WILL MOVE TO ITS MINIMUM POSITION, AND THE GAS-FIRED HEATING WILL STAGE ON AND OFF TO MAINTAIN THE DESIRED ZONE TEMPERATURE SETPOINT.

DURING THE UNOCCUPIED MODE, THE SUPPLY FAN AND HEATING AND COOLING STAGES WILL OPERATE INTERMITTENTLY TO MAINTAIN SPACE TEMPERATURE OF 60°F, AND A MAXIMUM SPACE TEMPERATURE OF 80°F.

LOW VOLTAGE WIRING DIAGRAM



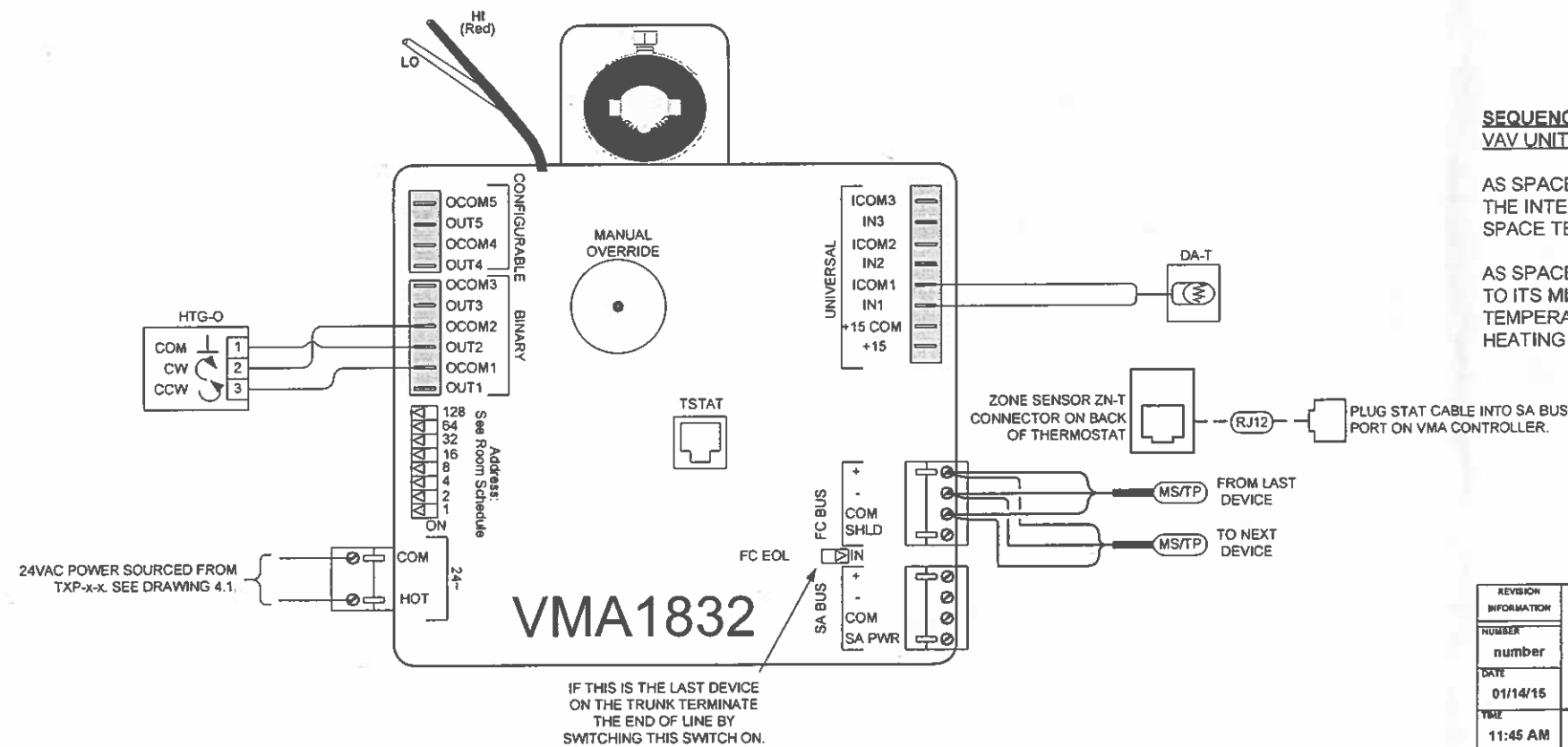
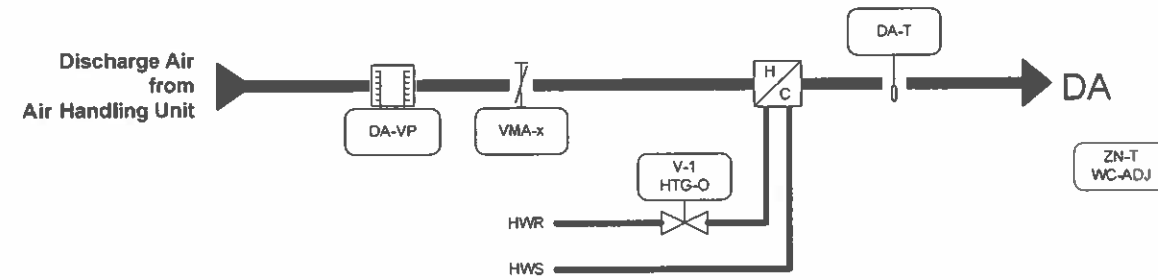
REVISION INFORMATION	Drawing Title						
NUMBER	RTU-5505 FLOW	1		RECORD DRAWING		1/14/2015 JJB	
DATE	01/14/15	REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
TIME	11:45 AM	Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED	
extra	1 Brewers Way	KFC	SDC	JJB			
FILE NAME	rtux.vsd	Project Title		Branch Information		CONTRACT NUMBER	
	Miller Park Terrace	1 Brewers Way		Milwaukee Branch		5075-0463	
	Milwaukee, WI 53214	Milwaukee, WI 53226		10201 Innovation Dr Ste 300		DRAWING NUMBER	
		Milwaukee, WI 53226		Milwaukee, WI 53226		3.1	
		Phone: (414) 259-2800		Phone: (414) 259-2800			
		Fax: (414) 259-2775		Fax: (414) 259-2775			

Electrician/Filter		Controller Information										Field Device			Ref Detail Shape	Comment			
Tag	Point Type	System Name	Object Name	Expanded ID	Controller Details	Trunk Type	Trunk Nbr	Trunk Addr.	Cable Destination Bay/Terminal	Termination Out	Panel	Panel Location	Reference Drawing	Cable Number	Wiring /Tubing	Termination In	Device	Ref Detail Shape	Comment
		RTU-5005			UNT 1126						N/A	N/A	3.1						Power to Controller
		RTU-5005			UNT 1126	N2	2	2			N/A	N/A	3.1						N2 Trunk
AI-1		RTU-5005	RA-T	Return Air Temperature	UNT 1126	N2	2	2	AI-1	AI1,AICM	N/A	N/A	3.1	N/A-2-AI-1	2/18	2-Wire	TE	UC131	
AI-2		RTU-5005	ZN-T	Zone Temperature (Shared)	UNT 1126	N2	2	2	AI-2		N/A	N/A	3.1	N/A-2-AI-2					
AI-3		RTU-5005	DA-SP	Discharge Static Pressure	UNT 1126	N2	2	2	AI-3	AI3,AICM,+15VDC	N/A	N/A	3.1	N/A-2-AI-3	3/18	OUT,COM,EXC	DPT2xxx (Vdc)	UC102	
AI-4		RTU-5005	DA-T	Discharge Air Temperature	UNT 1126	N2	2	2	AI-4	AI4,AICM	N/A	N/A	3.1	N/A-2-AI-4	2/18	2-Wire	TE	UC131	
AI-5		RTU-5005	OA-T	Outdoor Air Temperature	UNT 1126	N2	2	2	AI-5	AI5,AICM	N/A	N/A	3.1	N/A-2-AI-5	2/18	TEMP, TEMP	HE-6700(Duct Mnt) - TE	UC153	
AI-6		RTU-5005	OA-H	Outdoor Air Humidity	UNT 1126	N2	2	2	AI-6	AI6,AICM,+15VDC	N/A	N/A	3.1	N/A-2-AI-6	3/18	OUT,GND,PWR	HE-6700(Duct Mnt) - HE	UC153	
BI-1		RTU-5005	OCC-S	Occupancy Status	UNT 1126	N2	2	2	BI-1	BI1, BI SRC	N/A	N/A	3.1	N/A-2-BI-1	2/18	See wiring detail	Dry Contact	UC301	
BI-2		RTU-5005	FILT-S	Filter Status	UNT 1126	N2	2	2	BI-2	BI2, BI SRC	N/A	N/A	3.1	N/A-2-BI-2	2/18	See wiring detail	Dry Contact	UC301	
BI-3		RTU-5005	COMP-LO	Compressor Lockout	UNT 1126	N2	2	2	BI-3	BI3, BI SRC	N/A	N/A	3.1	N/A-2-BI-3	2/18	See wiring detail	Dry Contact	UC301	
BI-4		RTU-5005	SF-S	Supply Fan Status	UNT 1126	N2	2	2	BI-4	BI4, BI SRC	N/A	N/A	3.1	N/A-2-BI-4	2/18	See wiring detail	Dry Contact	UC301	
BI-6		RTU-5005			UNT 1126	N2	2	2	BI-6		N/A	N/A	3.1	N/A-2-BI-6					
BI-7		RTU-5005	DAPHI-A	Discharge High Static Alarm	UNT 1126	N2	2	2	BI-7	BI7, BI SRC	N/A	N/A	3.1	N/A-2-BI-7	2/18	See wiring detail	Dry Contact	UC301	
AO-1		RTU-5005	DPR-O	Mixed Air Damper Output	UNT 1126	N2	2	2	AO-1	AO1,AOCM	N/A	N/A	3.1	N/A-2-AO-1	2/18	AI#,AICM	0-10V (Output to Input)	UC203	
AO-2		RTU-5005	BYP-O	Bypass Damper Output	UNT 1126	N2	2	2	AO-2	AO2,AOCM	N/A	N/A	3.1	N/A-2-AO-2	2/18	AI#,AICM	0-10V (Output to Input)	UC203	
BO-1		RTU-5005	HTG1-C	Heating Stage 1 Command	UNT 1126	N2	2	2	BO-1	BO1(NO),24V Com	N/A	N/A	3.1	N/A-2-BO-1	2/18	BI#, BI SRC	24V (Output to Input)	UC403	
BO-2		RTU-5005	HTG2-C	Heating Stage 2 Command	UNT 1126	N2	2	2	BO-2	BO2(NO),24V Com	N/A	N/A	3.1	N/A-2-BO-2	2/18	BI#, BI SRC	24V (Output to Input)	UC403	
BO-3		RTU-5005	CLG1-C	Cooling Stage 1 Command	UNT 1126	N2	2	2	BO-3	BO3(NO),24V Com	N/A	N/A	3.1	N/A-2-BO-3	2/18	BI#, BI SRC	24V (Output to Input)	UC403	
BO-4		RTU-5005	CLG2-C	Cooling Stage 2 Command	UNT 1126	N2	2	2	BO-4	BO4(NO),24V Com	N/A	N/A	3.1	N/A-2-BO-4	2/18	BI#, BI SRC	24V (Output to Input)	UC403	
BO-5		RTU-5005			UNT 1126	N2	2	2	BO-5		N/A	N/A	3.1	N/A-2-BO-5					
BO-6		RTU-5005			UNT 1126	N2	2	2	BO-6		N/A	N/A	3.1	N/A-2-BO-6					

BILL OF MATERIALS

Designation	Qty	Part Number	Description
Field Devices:			
DA-T	1	TE-631GV-2	NICKEL DUCT PROB, 4 INCHES
V-x	0	VALVE	SEE VALVE SCHEDULE
VMA-x	3	AP-TBK1002-0	SCREW TERM KIT, 2-POSN, KIT OF 100
	1	M9000-160	M9000-160 M9100/9216
	1	MS-VMA1832-0	MS-VMA1832-0 ACT COOLING
ZN-T, WC-ADJ	1	NS-ATP7001-0	3X3 ADJ, TEMP OCC PB, PJ

DETAIL A
TYPICAL OF 5



SEQUENCE OF OPERATION
VAV UNITS & REHEAT COILS:

AS SPACE TEMPERATURE RISES ABOVE SETPOINT, THE HEATING VALVE WILL MOVE TO THE CLOSED POSITION AND THE INTEGRATED ACTUATOR WILL MOVE TO THE MINIMUM COOLING FLOW POSITION. ON A FURTHER INCREASE OF SPACE TEMPERATURE, THE INTEGRATED ACTUATOR WILL MOVE TO THE MAXIMUM COOLING FLOW POSITION.

AS SPACE TEMPERATURE DECREASES BELOW SETPOINT, THE INTEGRATED ACTUATOR WILL BEGIN TO MODULATE TO ITS MINIMUM FLOW POSITION AND THE HEATING VALVE MODULATE OPEN. ON A FURTHER DECREASE IN SPACE TEMPERATURE, THE INTEGRATED ACTUATOR WILL MOVE TO THE MAXIMUM HEATING FLOW POSITION, AND THE HEATING VALVE WILL MOVE TO THE FULLY OPEN POSITION.

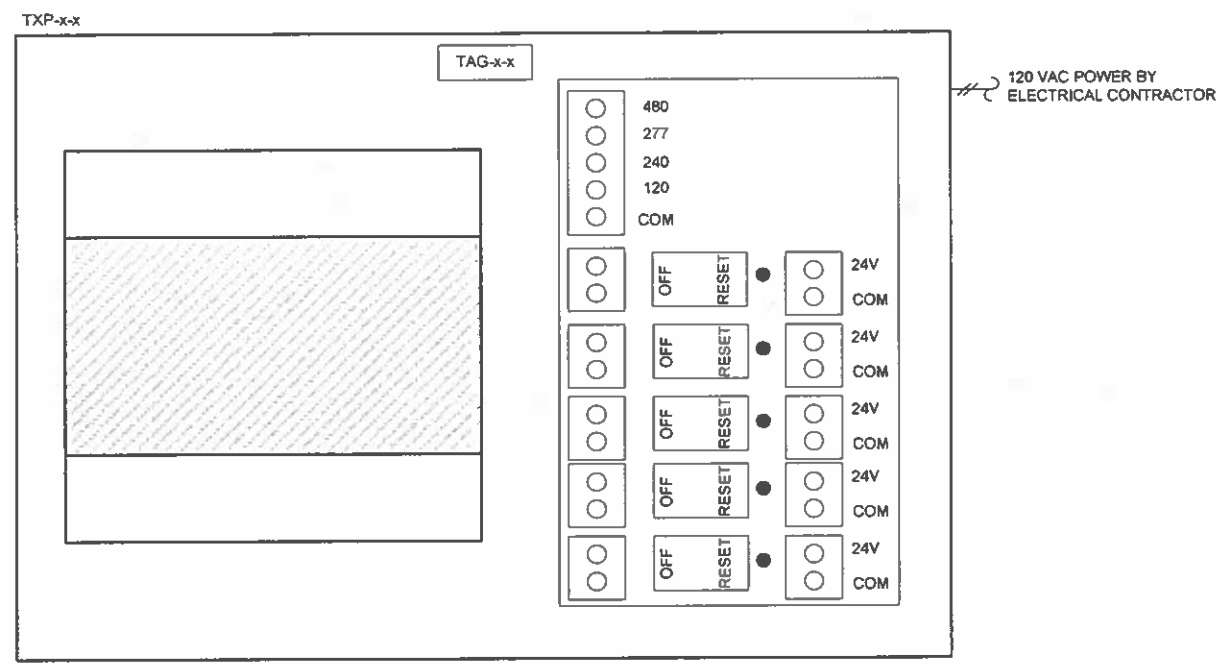
FOR BOX PARAMETERS AND SETTINGS SEE THE ROOM SCHEDULE

REVISION INFORMATION	Drawing Title				
NUMBER	ROOM SCHEDULE DETAIL				
number		1	RECORD DRAWING	1/14/2015	JJB
DATE					
01/14/15					
YBRZ	Project Title				
11:45 AM	Miller Park Terrace				
extra	1 Brewers Way				
FILE NAME	Milwaukee, WI 53214				
rsdel-a.vsd					
				Milwaukee Branch 10201 Innovation Dr Ste 300 Milwaukee, WI 53226 Phone: (414) 259-2800 Fax: (414) 259-2775	
				CONTRACT NUMBER 5075-0463	
				DRAWING NUMBER 4.1	

BILL OF MATERIALS

Designation	Qty	Part Number	Description
Panel Devices:			
TAG-T-1	1	NAMETAG-CUSTOM	1" X 3" TAG, 3-LINES MAX CUSTOM PNL FACE
TXP-T-1	1	PSH300A	POWER SUPPLY 3-100VA OUT

DETAIL A
TYPICAL FOR 1

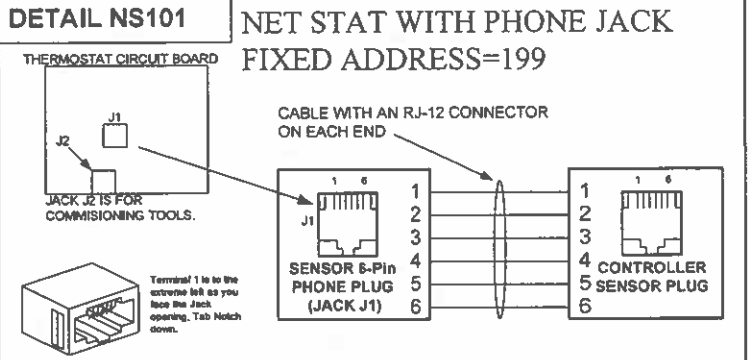
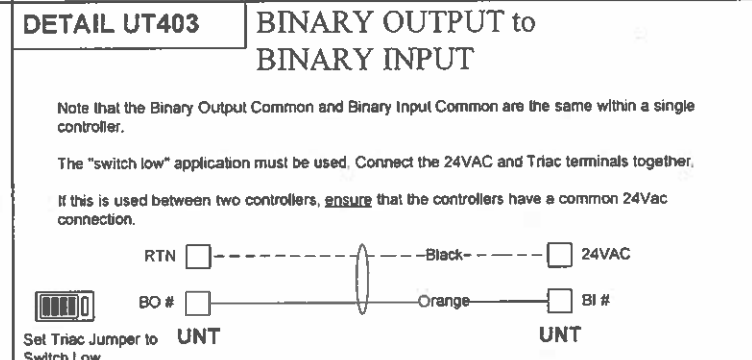
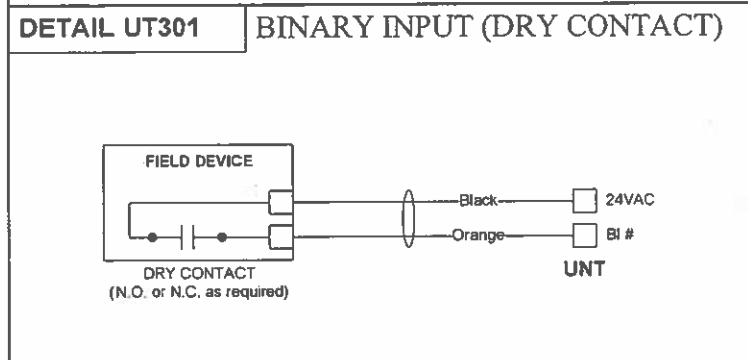
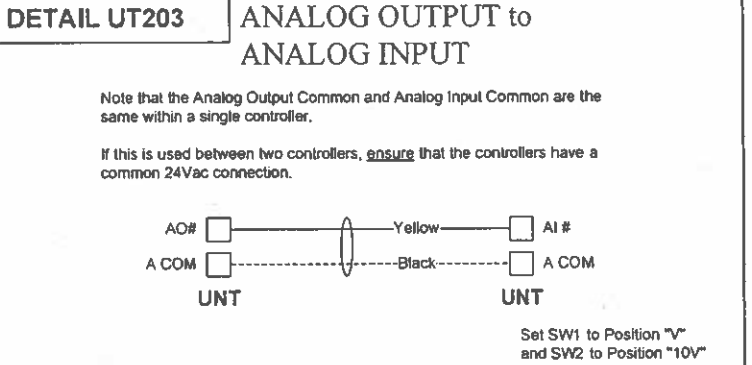
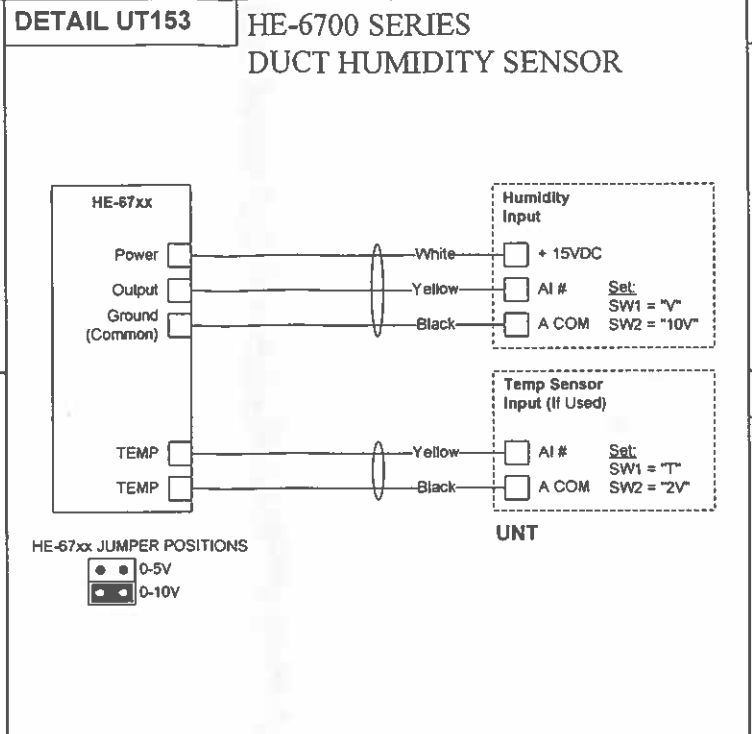
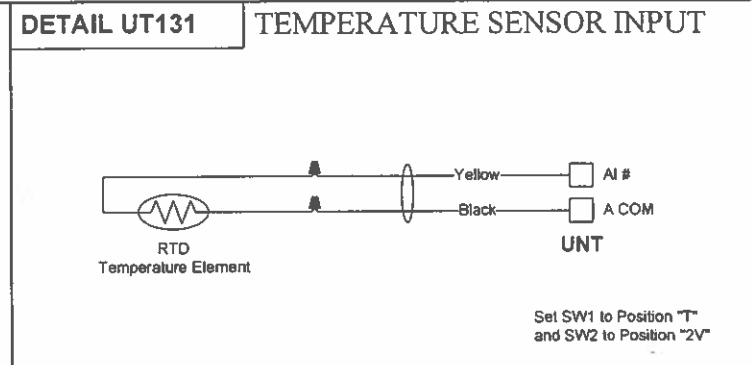
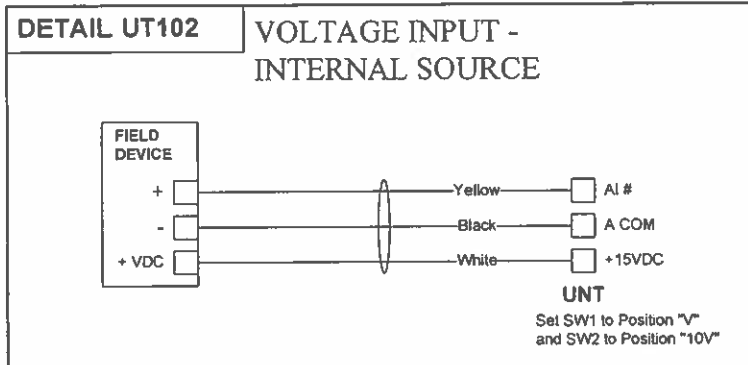


NOTE: CIRCUIT DESIGNATIONS MUST BE FOLLOWED DUE TO VOLT-AMP REQUIREMENTS. DO NOT DEVIATE FROM CIRCUIT DESIGNATION.

TXP-T-1 LOCATION: TERRACE LEVEL		
24VAC-1	24VAC-2	24VAC-3
VAV-11	D-1 (BYP-O)	
VAV-12		
VAV-13		
VAV-14		
VAV-15		

PANEL FACE TAGS:
TAG-x PANEL TXP-T-1
VAV BOX POWER
JCI 5075-0463

REVISION INFORMATION	Drawing Title						
NUMBER	MISCELLANEOUS DETAIL						
number		1	RECORD DRAWING	1/14/2015	JJB		
DATE		NO	REVISION-LOCATION	ECH	DATE	BY	
01/14/15		KFC	SDC	JJB			
TIME	Project Title	Branch Information		CONTRACT NUMBER			
11:45 AM	Miller Park Terrace 1 Brewers Way Milwaukee, WI 53214	Milwaukee Branch 10201 Innovation Dr Ste 300 Milwaukee, WI 53226 Phone: (414) 259-2800 Fax: (414) 259-2775		5075-0463			
extra				DRAWING NUMBER			
FILE NAME				5.1			
msdel-a.vsd							



REVISION INFORMATION	Drawing Title						
NUMBER	WIRING DETAILS						
DATE	01/14/16	NO.	1	RECORD DRAWING	17/14/2015	JJB	
TIME	11:46 AM	REFERENCE DRAWING		NO.		BY	DATE
extra		Project Manager	KFC	Project Manager	SDC	Application Engineer	JJB
FILE NAME	wd-1.vsd	Branch Information	Milwaukee Branch 10201 Innovation Dr Ste 300 Milwaukee, WI 53226 Phone: (414) 259-2800 Fax: (414) 259-2775		CONTRACT NUMBER		5075-0463
		Johnson Controls		DRAWING NUMBER		WD-1	

Damper Schedule

Tag					Damper Information										Actuator Information			Comments		
Item	System	Service	Ref. Dwg.	Qty.	Code Number	Type	Shape/Blade	Fall Position	Duct Size		Damper Size			Blade/Frame Type	Bearing/Seals	Qty.	Code No.		Actuator Control	Field Mtd Actuator
									Diameter or W (in)	H (in)	Diameter or W (in.)	H (in.)	Area (ft²)							
1	RA	RTU-5005 Bypass (BYP-O)	3.1	1	VOPSN-018X012	Class II - Low Leakage	Rectangular Opposed	Normally Closed; Normally Open			18	12	1.50	Double Piece/Galvanized	Acetal / Santoprene	1	M9208-GGA-3	0-10VDC PROP	Yes	

Room Schedule

Box Location								Controller Information					Reheat Valve					Box Information					Comments					
Room								Controller					Sensor	Valve					Box Config									
Bldg./Flr.	No.	Name	System Name	Mech. Dwg.	System Serving this Box	Box Mfgr.	Mfgr Box Type	JCI Ctrl Dwg No.	Controller Part No.	NC/ NAE Addr	Trunk ID	Device Addr	CSModel or Template	Code No.	Box Heat	Device Code	Body Style	Valve Size In.	Valve Cv	Flow GPM lb/hr	Delta P psi	Config File Name		Inlet Size (Inches)	Inlet Area (Sq. Ft.)	K Factor	Cfg Min Flow	Cfg Max Flow
Miller Park / Terrace Offices	100	Office 1	VAV-11	H100	RTU-5005	JCI	TSS	4.1	MS-VMA1832-0	S1-NAE02	2	20	RSDET-A	NS-BTF7001-0	Yes	VG1245AD+9T4AGA	2-WAY	0.5	1.2	2	2.78		8	0.333	2.515	105	300	
Miller Park / Terrace Offices	101	Office 1	VAV-12	H100	RTU-5005	JCI	TSS	4.1	MS-VMA1832-0	S1-NAE02	2	21	RSDET-A	NS-BTF7001-0	Yes	VG1245AD+9T4AGA	2-WAY	0.5	1.2	2	2.78		6	0.184	2.896	60	200	
Miller Park / Terrace Offices	102	Open Office	VAV-13	H100	RTU-5005	JCI	TSS	4.1	MS-VMA1832-0	S1-NAE02	2	22	RSDET-A	NS-BTF7001-0	Yes	VG1245AD+9T4AGA	2-WAY	0.5	1.2	2	2.78		10	0.525	2.406	165	600	
Miller Park / Terrace Offices	102	Open Office	VAV-14	H100	RTU-5005	JCI	TSS	4.1	MS-VMA1832-0	S1-NAE02	2	23	RSDET-A	NS-BTF7001-0	Yes	VG1245AD+9T4AGA	2-WAY	0.5	1.2	0.5	0.17		8	0.333	2.515	105	330	
Miller Park / Terrace Offices	102	Open Office	VAV-15	H100	RTU-5005	JCI	TSS	4.1	MS-VMA1832-0	S1-NAE02	2	24	RSDET-A	NS-BTF7001-0	Yes	VG1245AD+9T4AGA	2-WAY	0.5	1.2	0.7	0.34		10	0.525	2.406	200	660	
Miller Park / Club Level		Executive Office	EXISTING	H101				4.2	EXISTING				RSDET-B	EXISTING TE-68NT-0NN0S	Yes	EXISTING												
Miller Park / Club Level		Executive Office	EXISTING	H101				4.2	EXISTING				RSDET-B	EXISTING TE-68NT-0NN0S	Yes	EXISTING												

Valve Schedule

Tag					Valve Information													Actuator Information		Comments		
Item	System	Service	Qty.	Ref. Dwg.	Code Number	Valve Family	Configuration	Fall Position	Inlet Pipe Size (in)	Valve Size (in)	Medium	Flow (gpm or lbs/hr)	Design Delta P (psi)	Valve Delta P (psi)	Design Coefficient (Cv)	Valve Coefficient (Cv)	Valve Close Off (psi)	Trim Material	Connection		Code Number	Actuator Control
1	Hot Water	VAV RH (HTG-O)	5	4.1	VG1245AD+9T4AGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	2.0	5.0	2.8	0.9	1.2	200.0	Stainless Steel	Threaded	VA9104-AGA-3S	24VAC INC	