

Quality People. Building Solutions.

Comfort Systems USA (Arkansas), Inc. P.O. Box 16620 Little Rock, AR 72231 Phone 501-834-3320 Fax 501-834-5416

Date: 1/13/2025

Return Request: 1/23/2025

Project: HSU – Reynolds Hall Lap Renovation

Supplier: Airetech Manufacturer: IEC

Submittal: Fan Coil Units (FC-6) **Submittal Number:** 23 00 00-03

Drawing # and Installation: Mechanical Drawings

ARCHITECT

SCM Architects 1400 Kirk Road, Suite 220 Little Rock, AR 72223 501-224-3055

GENERAL CONTRACTOR

Nabholz 612 Garland St. Conway, AR 72032 501-505-5800

ENGINEER

Pettit & Pettit 201 E. Markham, Suite 400 Little Rock, AR 72201 501-374-3731

MECHANICAL SUBCONTRACTOR

Comfort Systems USA (Arkansas), Inc. 9924 Landers Rd. N. Little Rock, AR 72117 501-834-3320

Notes:		

CSUSA PROJECT NO. 22-6091

sean@comfortar.com



SUBMITTAL DATA

EQUIPMENT: IEC Fan Coil Units

TAGS: FC-6 (Qty 3)

PROJECT: HSU Reynolds Hall Lab Renovation

LOCATION: Arkadelphia, Arkansas

ENGINEER: pettitpetti

CONTRACTOR: A R K A N S A S

DATE: 1/6/2025

SUBMITTED BY: Forrest Moseley

forrest@airetechcorp.com



Project Name: HSU Reynolds Lab 304_310

Project Location:

Created by: Forrest Moseley Printed Date: 1/5/2025 5:09 PM Selection Date: 10/18/2024 9:15 AM

Last Revision: 1/5/2025 5:09 PM

INTERNATIONAL ENVIRONMENTAL CORPORATION

5000 I-40 West Service Road Oklahoma City, OK 73128 PH: 405-605-5000 Quote #: QT191653-0

LH

0.50 in

Unit Tag:	FC-6	Qty: 3	Model: CXB10	System:	4-Pipe Hydronic Heat/ Hydronic Cool
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Unit Data Motor Type:

Unit MFS:

PSC Standard Motor HP: Motor FLA: Motor Watts: Unit MCA:

0.08 3.16 284.23 3.555 15

Amps W Amps Amps

Weight (Wet): Fan Speed: Filter Size: Filter Face Area:

Weight (Dry):

10 x 54.5 x 1 in 3.78 ft^2

212 lbs

222 lbs

1" Pleated (MERV 8) Filter

Coil Face Area: 3.16 ft^2 Cooling Coil Connection: 0.50 in Heating Coil Connection: 0.50 in

CXB - Cabinet (Quick Ship

Unit Volt: 115/1/60 Filter Type: Performance Data **Unit Configuration**

Altitude: O Ft Air Flow Rate: 929 CFM ESP: InWC O Coil Face Velocity: 294 Ft/Min Cooling Performance

Fluid: Water EAT DB/WB: 76 / 63 F LAT DB/WB: 58.3 / 55.8 **Total Capacity:** 19808 **BTUH** 18097 Sensible Capacity: **BTUH** EWT/LWT: 45 / 54.8 F Fluid FLow: 4 **GPM** Fluid P.D.: FtWC 1.6

Rows / FPI / Circuits: 3/10/4 Heating Performance

Fluid: Water EAT DB/WB: 70 F LAT DB/WB: 97.1 **Total Capacity: BTUH** 27763 EWT/LWT: 180 / 123.8 F Fluid FLow: **GPM** Fluid P.D.: **FtWC** 1.5 Rows / FPI / Circuits: 1/10/1

Unit & Size-CXB Unit Size 10

Coil-3 Row Cooling/1 Row Heating (4 Pipe) OE Conn

Coil Hand:

Coil Tube Dia:

Coil Options-Tube Wall Thickness 0.016"

Coil Circuit - Standard 4/1 Coil Options - Standard Coil Hand-Left Hand Coil CoilTestPressure-350 PSIG Coil Drains-None

Coil Option-Union Conn at Coil (4 Pipe) at 1/2" C and H

Coil Options - Aluminum Fins

Motor-Standard PSC Blower Motor 115/1/60 Arrangement-Bottom Return/Front Supply Outside Air-No Outside Air Accessories

Tstat-3 Speed Thermostat By Others Cntrl Pkg-4 Pipe H/C (24V 3Spd)

Cntrl Option-20 amp Serv Switch (Non Fused) Ctrl Option-Condensate Overflow Sw

Primary Valve Package - 1/2"

Cntrl VIv-2-Way Modulating Non-Spring Return (0-10VDC, 35 psi)

Flow Cntrl VIv-Fixed 4.0 GPM at 1/2" Isolation VIv-2 Ball VIvs at 1/2"

VIv Option-PT Port (Coil Supply and Return)

VIv Option-Y Strainer w/ Blowdown at 1/2"

Secondary Valve Package - 1/2"

Cntrl VIv-2-Way Modulating Non-Spring Return (0-10VDC, 35 psi)

Flow Cntrl VIv-Fixed 1.0 GPM at 1/2"

Isolation VIv-2 Ball VIvs at 1/2"

VIv Option-PT Port (Coil Supply and Return) VIv Option-Y Strainer w/ Blowdown at 1/2"

Piping and Controls-Opposite Side Piping and Controls

Return Air-Stamped Return

Supply Air-DD Core Assembly (F and I)-Painted to match unit color

Sound Power								
Octave Band (dB Re 1012Watts)								
Frequency:	125	250	500	1K	2K	4K	8K]
Casing:	69	68	68	66	60	55	50	
Discharge:	0	0	0	0	0	0	0	

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PROJECT SUBMITTAL

1/5/2025

IEC International Environmental Project Name: HSU Reynolds Lab 304_310

Project Location:

Created by: Forrest Moseley
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INTERNATIONAL ENVIRONMENTAL CORPORATION

5000 I-40 West Service Road Oklahoma City, OK 73128 PH: 405-605-5000 Quote #: QT191653-0

Unit Tag: FC-6 Qty: 3 Model: CXB10 System: 4-Pipe Hydronic Heat/ Hydronic Cool

Filter-1" Pleated (MERV 8) filter

Removable Drain Pan, Stainless Steel, External Insulation

Drain Pan-Furnish Only Drip Lip Paint-Bright White Powder Coat Cabinet Ins-1/2" Standard Fiberglass Packaging-Box and Palletize Units

PROJECT SUBMITTAL

1/5/2025



Project Name: HSU Reynolds Lab 304_310

Project Location:

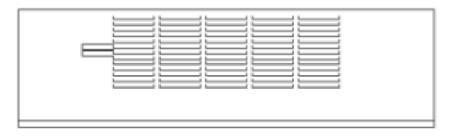
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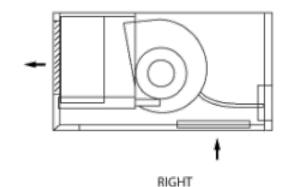
INTERNATIONAL ENVIRONMENTAL CORPORATION

5000 I-40 West Service Road Oklahoma City, OK 73128 PH: 405-605-5000 Quote #: QT191653-0

Unit Tag: FC-6 Qty: 3 Model: CXB10 System: 4-Pipe Hydronic Heat/ Hydronic Cool

Unit Connections Configuration





FRONT

Supply: Supply Air-DD Core Assembly (F and I)

Stamped Return

Coil Hand: LH Electrical Box: RH

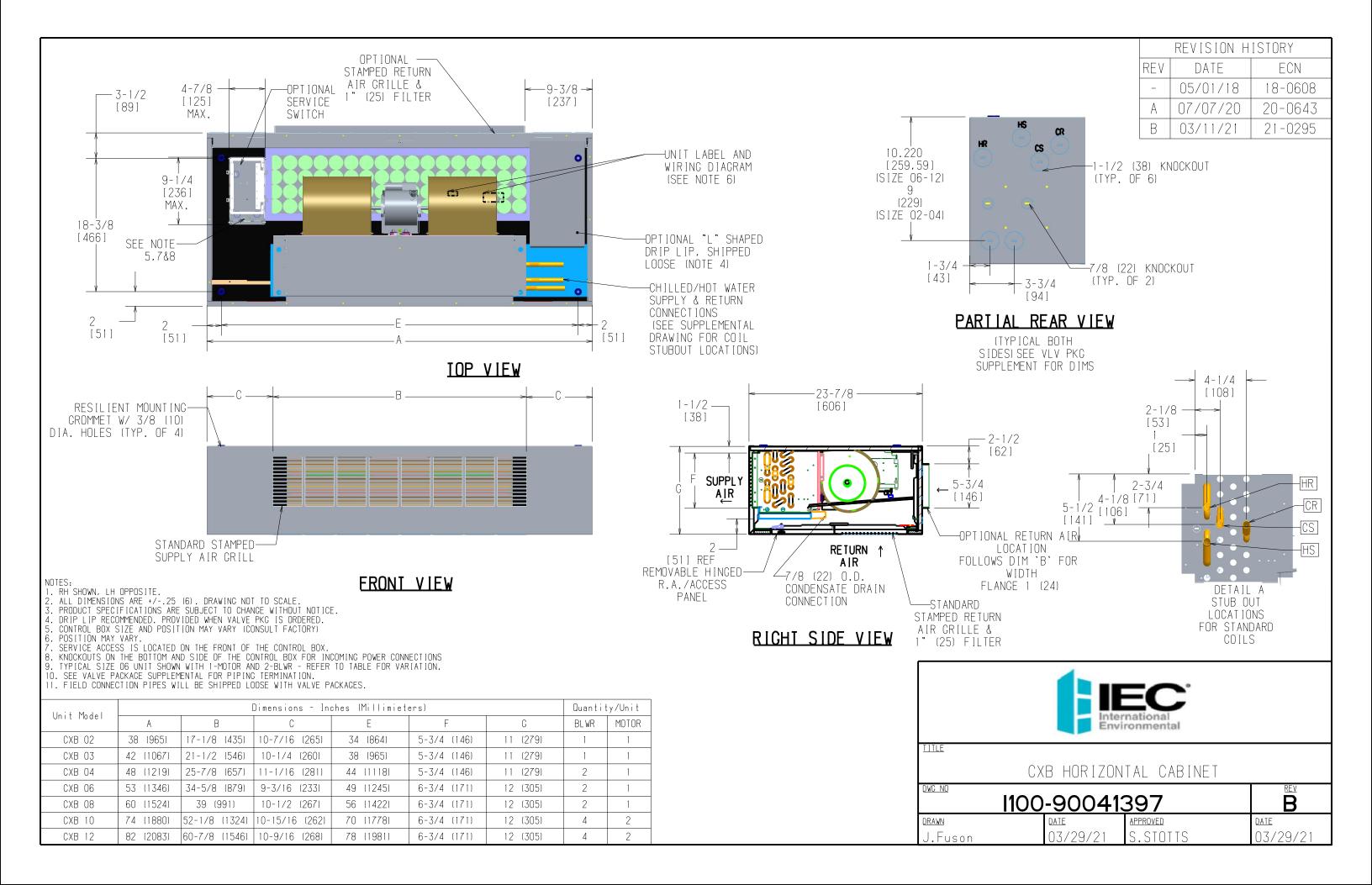
Unit Typical ISO View

Return:



Unit Tag

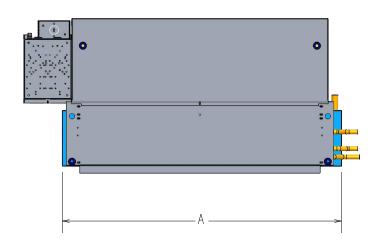
FC-6



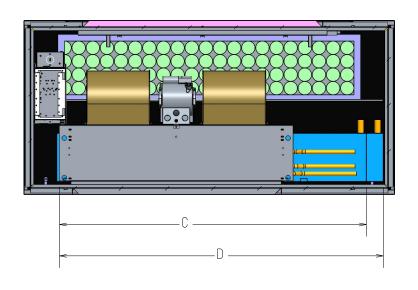
REVISION HISTORY							
REV	DATE	ECN					
-	05/01/18	18-0608					

	Dimensions - Inches (Millimieters)						
	A	В	C	D	Е		
Unit Model	STANDARD CHY/CPY	EXTENDED CHY/CPY (+10")	STANDARD CBY	STANDARD CXB(7.25°) STANDARD CPY W/VLV PKG	CPY SAME SIDE PIPING/CNTRL W/VLV PKG (+12.75")		
C** 02	21 1/4 (540)	31 1/4 (794)	30 1/2 (775)	28 1/2 (724)	34 (864)		
C** 03	25 1/4 (641)	35 1/4 (895)	30 1/2 (775)	32 1/2 (826)	38 (965)		
C** 04	31 1/4 (794)	41 1/4 (1048)	36 1/2 (927)	38 1/2 (826)	44 (1118)		
C** 06	36 1/4 (921)	46 1/4 (1175)	48 1/2 (1232)	43 1/2 (1105)	49 (1245)		
C** 08	43 1/4 (1099)	53 1/4 (1353)	48 1/2 (1232)	50 1/2 (1283)	56 (1422)		
C** 10	57-1/4 (1454)	67 1/4 (1708)	70 1/2 (1790)	64 1/2 (1638)	70 (1778)		
C** 12	65-1/4 (1657)	75 1/4 (1911)	70 1/2 (1790)	72 1/2 (1842)	78 (1981)		

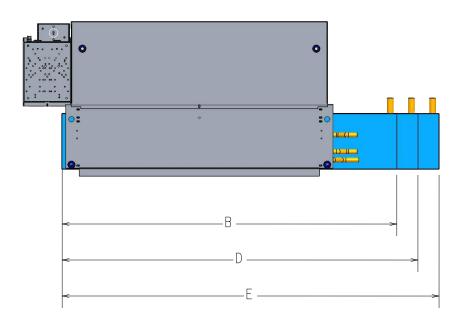
STANDARD CHY/CPY

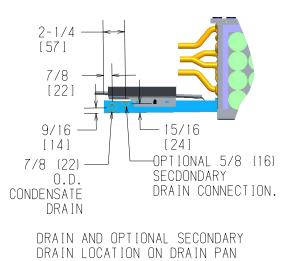


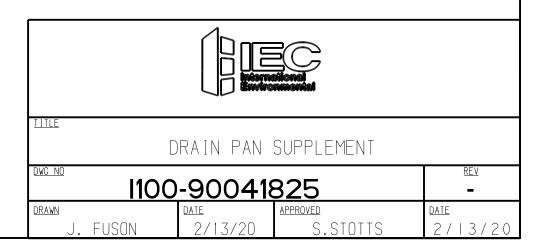
STANDARD CBY/CXB

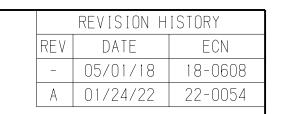


EXTENDED CHY/CPY (B)
CPY WITH VALVE PACKAGE (D)
CPY WITY SAME SIDE PIPING AND CONTROLS (E)

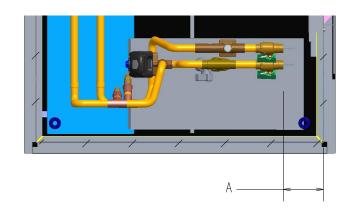




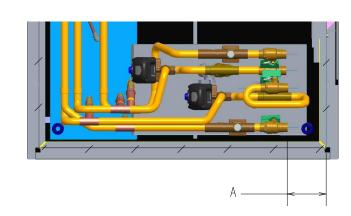


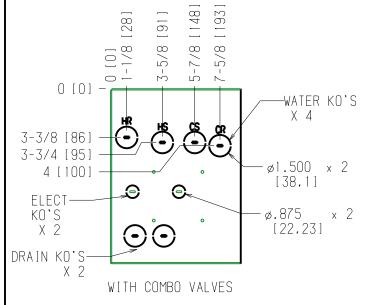




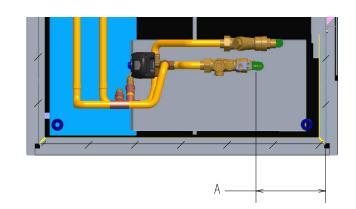


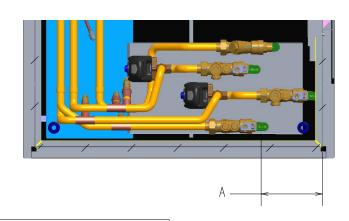
4 PIPE HEATING/COOLING





INDIVDUAL COMPONENTS
(WITHOUT COMBO VALVES)





PARTIAL REAR VIEWS OF CB/CX UNITS

LH SIDE SHOWN RH OPPOSITE

NOTES:

0 [0] 1-3/4 [44] 2-3/8 [59] 3-3/8 [86]

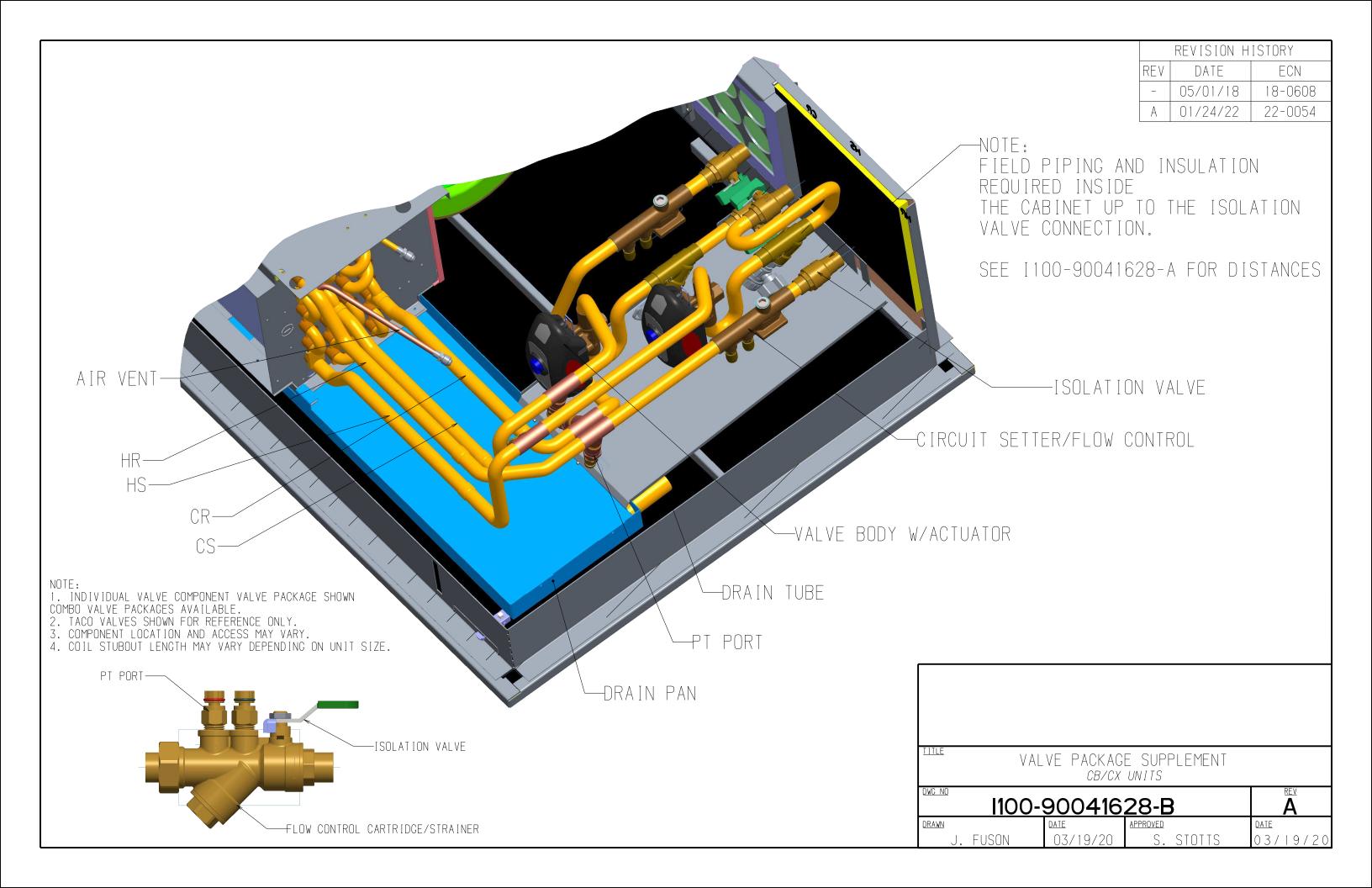
3-3/4 [95]

HR-

- 1. ALL DIMENSIONS ARE ± 1/4" (6.3 MM)
- 2. TACO VALVES SHOWN FOR REFERENCE ONLY
- 3. COMPONENT LOCATION AND ACCESS MAY VARY
- 4. COIL STUBOUT LENGTH MAY VARY DEPENDING ON UNIT SIZE

DIMENSIONS - II	NCHES AND (MILLIM	1ETERS)
	ļ.	1
NO COMBO VALVES	SUPPLY	RET
3 WAY TACO/ERIE COOL	3 5/16 (84)	3 5/16 (84)
3 WAY TACO/ERIE HEAT	3 3/16 (81)	3 3/16 (81)
3 WAY MODULATING COOL	3 5/16 (84)	3 5/16 (84)
3 WAY MODULATING HEAT	3 1/8 (79)	1 5/8 (41)
2 WAY TACO/ERIE COOL	3 1/4 (83)	3 1/4 (83)
2 WAY TACO/ERIE HEAT	3 1/4 (83)	3 1/4 (83)
2 WAY MODULATING COOL	3 3/8 (86)	3 3/8 (86)
2 WAY MODULATING HEAT	3 3/16 (81)	1 1/4 (32)
COMBO VALVES		
3 WAY TACO/ERIE COOL	5 1/8 (130)	6 1/4 (159)
3 WAY TACO/ERIE HEAT	1 1/2 (38)	3 3/16 (81)
3 WAY MODULATING COOL	3 1/4 (83)	4 7/16 (113)
3 WAY MODULATING HEAT	1 9/16 (40)	1 9/16 (40)
2 WAY TACO/ERIE COOL	4 1/8 (105)	5 3/4 (146)
2 WAY TACO/ERIE HEAT	13/16 (21)	5 1/8 (130)
2 WAY MODULATING COOL	4 3/8 (111)	3 1/4 (83)
2 WAY MODULATING HEAT	6 (152)	3 5/8 (92)





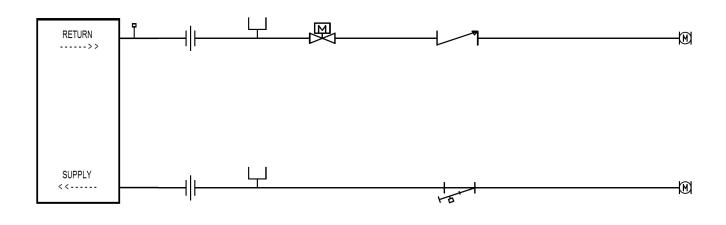
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Project: HSU Reynolds Lab 304_310

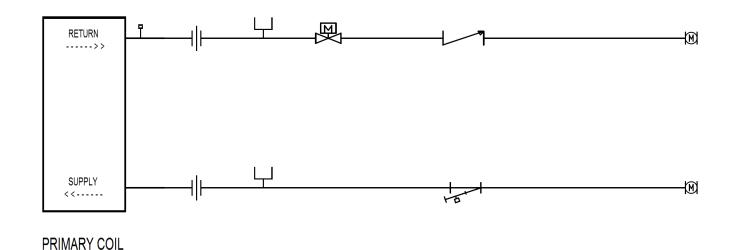
SECONDARY COIL

Date Generated: 1/5/2025 5:09 PM

LEGEND						
	PIPE					
	AIR VENT					
	UNION					
-0-	SWAGE					
ᆛ	PT PORT					
<u>IŞ</u> J	PETE'S PLUG					
	2-WAY MOTORIZED VALVE					
-\R	3-WAY MOTORIZED VALVE					
<u></u>	BALANCE VALVE					
\\[\tau\]	CIRCUIT SETTER					
 	FIXED FLOW VALVE					
+	STRAINER					
18	STRAINER W/BLOWDOWN					
<u> </u>	AQUASTAT					
	CHANGE OVER					
	THREADED ADAPTER					
—®—	BALL VALVE					
{ \$\$}	BALL VALVE ON THE RISER					
	HOSEKIT					
- II -	COMBINATION SUPPLY					
—⊲ #21:51—	COMBINATION RETURN					
-0-	SUREFLOW PUMP					



Applies to Lines: 1



- THIS DOCUMENT IS FOR REFERENCE ONLY AND NOT AN AS BUILT DRAWING.
 VALVE PACKAGE MAY BE FIELD OR FACTORY INSTALLED
- 3. SOME COMPONENTS MAY BE PRESENT IN ANOTHER ASSEMBLY AND SHOWN FOR CLARIFICATION ONLY.
- 4. AIR VENTS AND OPTIONAL COIL DRAIN (WHEN SPECIFIED) MOUNTED ON COIL.



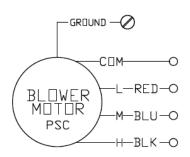
Applies to Lines: 1

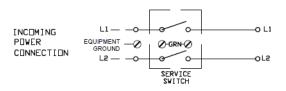
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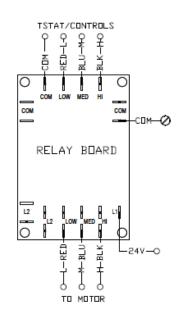
Project: HSU Reynolds Lab 304_310

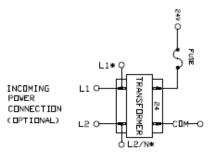
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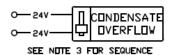
Tstat by Others

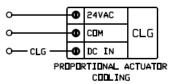


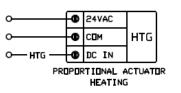




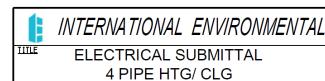








PRODUCT SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.
 NOT AS BUILT DRAWING, CONTACT FACTORY FOR ACTUAL WIRING CONFIGURATION.
 CONDENSATE OVERFLOW SWITCH TO INTERRUPT 24V POWER TO UNIT UNLESS SPECIFIED OTHERWISE.



1" Pleated MERV 8 Filter

Filter Information		
Manufacturer	FilterTec	
Туре	Glasfloss Z-Line	X = X = X
Customer	No	
Furnished		
Factory Furnished	Yes	
Factory Installed	Yes	

Specifications	
Color	White
MERV Rating	8
Average Arrestance	84%
Efficiency (1.0 µm)	46.7%
Pleats per Foot	16

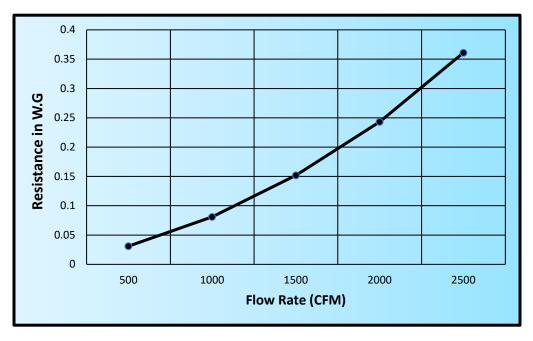
UNIT SIZE	ARRANGEMENT	FILTER DIMENSIONS IN.	FILTER SIZE	RATED VELOCITY FPM	INITIAL RESIST. IN. W.G.	RATED VELOCITY (M/H)	INITIAL RESIST. PASCAL
	Ceiling Rece	essed Hideaway	Series Fan	Coils and C	abinet Hea	aters	
2	Bottom Return	10 X 28	1"	300	0.24	5490	59.7
3	Bottom Return	10 X 28	1"	300	0.24	5490	59.7
4	Bottom Return	10 X 33	1"	300	0.24	5490	59.7
6	Bottom Return	10 X 45	1"	300	0.24	5490	59.7
8	Bottom Return	10 X 45	1"	300	0.24	5490	59.7
10	Bottom Return	10 X 62	1"	300	0.24	5490	59.7
12	Bottom Return	10 X 62	1"	300	0.24	5490	59.7
2	Rear Return	7 X 21	1"	300	0.24	5490	59.7
3	Rear Return	7 X 21	1"	300	0.24	5490	59.7
4	Rear Return	7 X 27	1"	300	0.24	5490	59.7
6	Rear Return	7 X 38	1"	300	0.24	5490	59.7
8	Rear Return	7 X 38	1"	300	0.24	5490	59.7
10	Rear Return	7 X 52	1"	300	0.24	5490	59.7
12	Rear Return	7 X 52	1"	300	0.24	5490	59.7

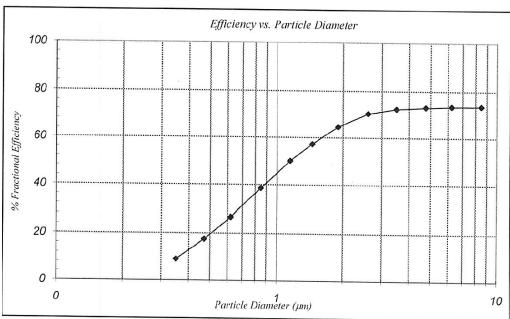
UNIT SIZE	ARRANGEMENT	FILTER DIMENSIONS IN.	FILTER SIZE	RATED VELOCITY FPM	INITIAL RESIST. IN. W.G.	RATED VELOCITY (M/H)	INITIAL RESIST. PASCAL		
	Ceiling Hideaway Series with Plenum Fan Coils								
2	All	10 X 18	1"	300	0.24	5490	59.7		
3	All	10 X 22	1"	300	0.24	5490	59.7		
4	All	10 X 28	1"	300	0.24	5490	59.7		
6	All	10 X 33	1"	300	0.24	5490	59.7		
8	All	10 X 40	1"	300	0.24	5490	59.7		
10	All	10 X 54	1"	300	0.24	5490	59.7		
12	All	10 X 62	1"	300	0.24	5490	59.7		
	Ceilin	g Cabinet Series	Fan Coils a	nd Cabine	t Heaters				
2	Bottom Return	10 X 23.5	1"	300	0.24	5490	59.7		
3	Bottom Return	10 X 28	1"	300	0.24	5490	59.7		
4	Bottom Return	10 X 32.5	1"	300	0.24	5490	59.7		
6	Bottom Return	10 X 37	1"	300	0.24	5490	59.7		
8	Bottom Return	10 X 41	1"	300	0.24	5490	59.7		
10	Bottom Return	10 X 54.5	1"	300	0.24	5490	59.7		
12	Bottom Return	10 X 63	1"	300	0.24	5490	59.7		
2	Rear Return	8.75 X 23.5	1"	300	0.24	5490	59.7		
3	Rear Return	8.75 X 26.5	1"	300	0.24	5490	59.7		
4	Rear Return	8.75 X 32.5	1"	300	0.24	5490	59.7		
6	Rear Return	8.75 X 37	1"	300	0.24	5490	59.7		
8	Rear Return	8.75 X 41	1"	300	0.24	5490	59.7		
10	Rear Return	8.75 X 54.5	1"	300	0.24	5490	59.7		
12	Rear Return	8.75 X 63	1"	300	0.24	5490	59.7		
	V	ertical Floor Fan	Coils and (Cabinet He	aters				
2	All	7.75 X 21.75	1"	300	0.24	5490	59.7		
3	All	7.75 X 25.75	1"	300	0.24	5490	59.7		
4	All	7.75 X 31.75	1"	300	0.24	5490	59.7		
6	All	7.75 X 41.75	1"	300	0.24	5490	59.7		
8	All	7.75 X 43.75	1"	300	0.24	5490	59.7		
10	All	7.75 X 57.75	1"	300	0.24	5490	59.7		
12	All	7.75 X 65.75	1"	300	0.24	5490	59.7		

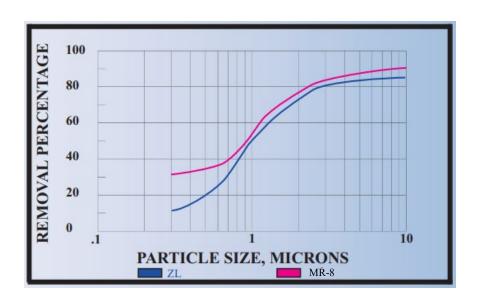
UNIT SIZE	ARRANGEMENT	FILTER DIMENSIONS IN.	FILTER SIZE	RATED VELOCITY FPM	INITIAL RESIST. IN. W.G.	RATED VELOCITY (M/H)	INITIAL RESIST. PASCAL		
	Ceiling Belt and Direct Drive Blower Coil Series								
6	Rear Return	16.5 X 24	1"	300	0.24	5490	59.7		
8	Rear Return	16.5 X 24	1"	300	0.24	5490	59.7		
10	Rear Return	18.25 X 33	1"	300	0.24	5490	59.7		
12	Rear Return	18.25 X 33	1"	300	0.24	5490	59.7		
16	Rear Return	18.25 X 21.5	1"	300	0.24	5490	59.7		
20	Rear Return	20.5 X 22	1"	300	0.24	5490	59.7		
30	Rear Return	29 X 22	1"	300	0.24	5490	59.7		
40	Rear Return	29 X 29	1"	300	0.24	5490	59.7		
	Ceiling Hi-F	Performance Hid	eaway with	n Plenum S	eries Fan (Coils			
6	All	14 X 21	1"	300	0.24	5490	59.7		
8	All	14 X 26	1"	300	0.24	5490	59.7		
10	All	14 X 24	1"	300	0.24	5490	59.7		
12	All	14 X 35	1"	300	0.24	5490	59.7		
14	All	14 X 40	1"	300	0.24	5490	59.7		
16	All	14 X 45	1"	300	0.24	5490	59.7		
18	All	14 X 50	1"	300	0.24	5490	59.7		
20	All	14 X 54	1"	300	0.24	5490	59.7		
Ce	iling Hi-Performan	ce Cased (non-p	ainted) and	d Cabinet (painted) Se	eries Fan Co	oils		
6	Rear Return	14 X 14.75	1"	300	0.24	5490	59.7		
8	Rear Return	14 X 19.75	1"	300	0.24	5490	59.7		
10	Rear Return	14 X 23.75	1"	300	0.24	5490	59.7		
12	Rear Return	14 X 28	1"	300	0.24	5490	59.7		
14	Rear Return	14 X 34	1"	300	0.24	5490	59.7		
16	Rear Return	14 X 38	1"	300	0.24	5490	59.7		
18	Rear Return	14 X 44	1"	300	0.24	5490	59.7		
20	Rear Return	14 X 48	1"	300	0.24	5490	59.7		
	Vertical F	oor Lowboy Hide	eaway and	Cabinet Se	eries Fan Co	oils			
2	All	7 X 21.75	1"	300	0.24	5490	59.7		
3	All	7 X 26.75	1"	300	0.24	5490	59.7		
4	All	7 X 34.75	1"	300	0.24	5490	59.7		
6	All	7 X 48.75	1"	300	0.24	5490	59.7		

UNIT SIZE	ARRANGEMENT	FILTER DIMENSIONS IN.	FILTER SIZE	RATED VELOCITY FPM	INITIAL RESIST. IN. W.G.	RATED VELOCITY (M/H)	INITIAL RESIST. PASCAL
		al Floor Stud Red		1		I	I
1	ALL	9 X 14.5	1"	300	0.24	5490	59.7
3	ALL	9 X 28	1"	300	0.24	5490	59.7
	Floor Hi-	Performance Cas	sed (non-pa	ainted) Ser	ies Fan Coi	ils	
6	Front Return	12.75 X 21	1"	300	0.24	5490	59.7
8	Front Return	12.75 X 26	1"	300	0.24	5490	59.7
10	Front Return	12.75 X 30	1"	300	0.24	5490	59.7
12	Front Return	12.75 X 35	1"	300	0.24	5490	59.7
14	Front Return	12.75 X 40	1"	300	0.24	5490	59.7
16	Front Return	12.75 X 45	1"	300	0.24	5490	59.7
18	Front Return	12.75 X 50	1"	300	0.24	5490	59.7
20	Front Return	12.75 X 54	1"	300	0.24	5490	59.7
6	Bottom Return	12.75 X 20	1"	300	0.24	5490	59.7
8	Bottom Return	12.75 X 25	1"	300	0.24	5490	59.7
10	Bottom Return	12.75 X 29	1"	300	0.24	5490	59.7
12	Bottom Return	12.75 X 34	1"	300	0.24	5490	59.7
14	Bottom Return	12.75 X 39	1"	300	0.24	5490	59.7
16	Bottom Return	12.75 X 44	1"	300	0.24	5490	59.7
18	Bottom Return	12.75 X 49	1"	300	0.24	5490	59.7
20	Bottom Return	12.75 X 53	1"	300	0.24	5490	59.7
	Vei	tical Belt and Di	rect Drive E	Blower Coi	l Series		
6	Rear Return	16.5 X 24	1"	300	0.24	5490	59.7
8	Rear Return	16.5 X 24	1"	300	0.24	5490	59.7
10	Rear Return	18.25 X 33	1"	300	0.24	5490	59.7
12	Rear Return	18.25 X 33	1"	300	0.24	5490	59.7
16	Rear Return	18.25 X 21.5	1"	300	0.24	5490	59.7
20	Rear Return	20.5 X 22	1"	300	0.24	5490	59.7
30	Rear Return	29 X 22	1"	300	0.24	5490	59.7
40	Rear Return	29 X 29	1"	300	0.24	5490	59.7
		Vertical Stack	(MOD) Far	n Coil Serie	s		
3-4	ALL	12.5 X 24.25	1"	300	0.24	5490	59.7
6-8	ALL	16.25 X 26.75	1"	300	0.24	5490	59.7
10-12	ALL	20.5 X 29.25	1"	300	0.24	5490	59.7
3-4	ALL	11 X 24.5 X 1	1"	300	0.24	5490	59.7

Standard Pressure Drop Test Filter Size: 24" x 24" x 2"







Revision History			
REV	Date	ECN	Description
-	8/30/22	21-1076	Initial Release
Α	7/12/22	22-0638	Add Vertical Cabinet Fan Coil
			Units and Vertical/Horizontal
			Cabinet Heater Units

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1/2", 3/4" Ball Valve, Sweat

Valve Information		
Manufacturer	Nexus	F—F
Type, Model	Ultra NX, NXS-0XXS	½" or ¾" SWT "2" or ¾" SWT
Customer Furnished	No	
Factory Furnished	Yes	
Factory Packaged for Field Mounting	Yes	В————

Materials		Dimensions - see d	rawing above
Body, End Pieces	Hot Forged Brass ASTM, 600 WOG, 325°F	B (in)	2.3 (1/2") 3.0 (3/4")
Handle & Nut	Aluminum	E (in)	1.5 (1/2") 1.7 (3/4")
Ball	Chrome Plated Brass	F (in)	1.6 (1/2") 1.6 (3/4')
Ball Seals	Teflon	Ball I.D.	0.5 (1/2") 0.8 (3/4")
Shaft Seals	Dual Viton/ EPDM O- Rings	Cv	17 (1/2") 40 (3/4")
Memory Stop	Stainless Steel	WT (lbs)	0.3 (1/2") 0.6 (3/4")
Size	1/2", 3/4"		
Sweat	Yes		
Threaded	No		

Revision History				
REV	Date	ECN	Description	
-	8/30/21	21-1076	Initial Release	

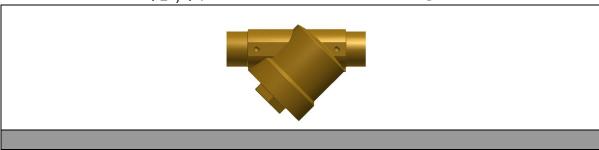
1/2", 3/4" Union

Valve Information	1	
Manufacturer	Nibco	
Type, Model	733, B255400 (½") B255500 (¾")	
Customer Furnished	No	
Factory Furnished	Yes	
Factory Installed	Yes	

Materials		Specifications	
Tube & Pipe Fitting	Cast Copper	Outside Diameter (in)	25/8"
		Temp. Range (F)	-20° - 400°
		Max Pressure	336 psi @ 100°F
		Weight (lbs)	0.306
Pipe Fitting	CxC		
Connection Type			
Size	1/2", 3/4"		
Sweat	Yes		
Threaded	No		

Revision History			
REV	Date	ECN	Description
-	8/30/21	21-1076	Initial Release

1/2", 3/4" AutoFlow Fixed Flow Control



Valve Information		A
Manufacturer Hays		
Туре	2517	
Customer Furnished	No	В
Factory Furnished	Yes	
Factory Packaged for	Yes	
Field Mounting		

Materials		Dimensions	
Body	Brass	A (in.)	2.04 (½")
_			2.36 (3/4")
O-Rings	EPDM	B (in.)	2.12 (½")
			2.11 (¾")
Diaphragm	EPDM	C (in.)	1.58 (½", ¾")
Orifice	Polyphenylsulfone		
End Cap	Brass		
Size	1/2", 3/4"		
Connection	Female Sweat		
Flow Range	0.50-5.00 GPM		
Pressure Differential	2-80 PSID up to		
	5.00 GPM		
Operating Temperature	32°F – 225°F		
Operating Pressure	600 PSIG		

Revision History			
REV	Date	ECN	Description
-	8/30/21	21-1076	Initial Release

1/4 MNPT P-T ports

Valve Information		CAP w/ O'R ING AVAILABLE IN GREEN, RED or NO O'Rina
Manufacturer	Nexus	(CONSULT FACTORY)
Туре	PT-025	/
Customer	No	
Furnished		
Factory Furnished	Yes	<u> </u>
Factory Packaged	Yes	→ B
for Field Mounting		<u> </u>

Materials		Dimensions – See image above	
Body	DZR Brass	A (in)	1.45
Сар	DZR Brass	B (in)	1/4" MNPT
Plug Seal	Nordel		
Thread Sealant	Loctite 516	Weight (lbs.)	0.06
Size	1/2", 3/4"	Max Operating	1000
		Pressure (psig)	
Sweat	Yes	Max Operating	325
		Temperature (°F)	
Threaded	No (Final Assy will be		
	sweat connection)		

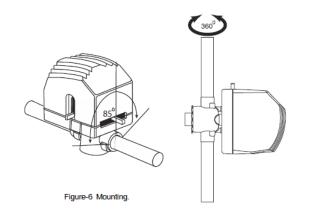
Revision History			
REV	Date	ECN	Description
-	8/30/21	21-1076	Initial Release

Erie 2-Way Proportional Control Valve, 35psi

Valve Information	
Manufacturer	Schneider Electric Erie
Туре	VM Series 3-Wire Proportional
Customer Furnished	No
Factory Furnished	Yes
Factory Packaged for Field Mounting	Yes
Factory Mounted	On Select Models Only

Valve Body		Motor Actuator	
Model	VM2X1XP	Model	AP33A000
Ports	2-Way	Voltage	24 Only
CV	See table below	Normally Closed	No
Valve Size	1/2", 3/4"	Normally Open	No
Sweat	Yes	Spring Return	No
Threaded	No	Powered Return	Yes
Union	No	2-Position	No
Fittings Included	N/A	Modulating	Yes
Material		3-Wire Floating	No
Valve body	Forged brass	0-10 VDC	Yes
Stem	Nickel-plated/chrome- plated brass	4-20 mA	Yes
Seat	Brass	Material	
Plug/paddle	High temperature Thermoplastic/rubber	Actuator	High temperature plastic

Critical Information		
Max Working	400 PSIG	
Pressure		
Temperature	32 to 200°F Fluid @	
Range	125°F Ambient	
Glycol	Up to 50%	
Water Treatment	Required	
Power	1.0 VA	
Consumption		
Open/Close Time	150 Seconds	
Total Weight (Valve	1.90	
& Actuator)(lbs)		



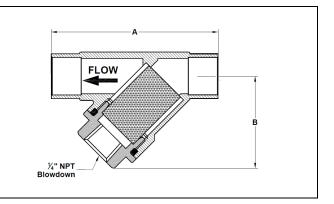
Flow Coefficient & Max Close-Off Differential Pressure			
Valve size (in.) Flow Coefficient Maximum Close-Off DP, PSI		Maximum Close-Off DP, PSI	
1/2	1.0	50	
1/ ₂ 3/ ₄	2.0	50	
1/2	4.0	35	
3/4	4.0	ან	

Revision History				
REV	Date	ECN	Description	
-	08/30/21	21-1076	Initial Release	
Α	08/25/22	22-0832	Model Part Number Update	

½", ¾" Y-Strainer with Blowdown



Valve Information	
Manufacturer	Nexus
Туре	Ultra YSS™
Customer Furnished	No
IEC Furnished	Yes
Factory Packaged for Field Mounting	Yes



Materials		Dimensions	
Body	Forged Brass	A(in)	2.80 (½")
	ASTMB283		3.82 (¾")
Cap Seal	Viton / EPDM O-Ring	B(in)	1.80 (½")
			2.50 (¾")
Filter Screen	20 Mesh 304 Stainless	Weight (lbs.)	0.32 (½")
	Steel		0.70 (¾")
Strainer Cap	Forged Brass ASTM	Filter Area (sq. in.)	2.70 (½")
	B283		7.40 (¾")
O-Ring Seals	600 WOG, 325F		
Blowdown	Υ	Cv ¹	5.5 (½")
			9.0 (¾")
Size	1/2", 3/4"		
Sweat	Yes		
Threaded	No		

Revision History			
REV	Date	ECN	Description
-	8/30/21	21-1076	Initial Release