

Detailed Overview of the Large SpaceKeeper Vertical

SKV070-480 (5½ - 40 Tons)



Features of the Bulldog Large SpaceKeeper Vertical Model

SKV Model 070-480

- Small foot print
- Painted Galvanized steel with all interior of cabinet lined with ½” acoustic insulation
- Factory internally trapped
- Belt drive fan motor, three phases with integral thermal overload protection
- Tandem and dual compressor options available
- Standard 2” filter
- Four configuration options

Standard on all Bulldog Units

- Hybrid Heat Pump with no reversing valves
- Hydronic heat
- Unit mounted microprocessor with safeties and diagnostics
- Factory mounted Demand Flow and Auto Flow valves optional
- Optimum efficiency at 2 USgpm/ton
- Quiet operation (Fan Coil sound levels in the heating mode)
- Special compressor isolation prevents 90% of vibration transmission
- Stainless Steel drain pan
- HFC-410A



SKV Heating and Cooling Capacities

Heating Capacities in Btu/h SpaceKeeper Vertical (SKV070-480)

Belt Drive							
Unit Models	SKV070	SKV080	SKV100	SKV120	SKV150	SKV180	SKV240
Nominal Air Flow (CFM)	2400	2800	3200	4000	5000	6000	8000
EWT 100°F	53,259	59,507	66,791	90,796	106,664	136,304	168,289
EWT 105°F	62,136	69,425	77,923	105,928	124,442	159,021	196,337
EWT 110°F	71,012	79,343	89,055	121,061	142,219	181,738	224,386
EWT 120°F	88,765	99,179	111,319	151,326	177,774	227,173	280,482

With EAT of 70°F and 2 USgpm/ton

Belt Drive					
Unit Models	SKV280	SKV320	SKV360	SKV400	SKV480
Nominal Air Flow (CFM)	9200	10,500	12,000	14,000	16,000
EWT 100°F	199,881	220,314	260,575	291,574	320,440
EWT 105°F	233,195	257,033	304,004	340,169	373,847
EWT 110°F	266,508	293,752	347,434	388,765	427,254
EWT 120°F	333,135	367,190	434,292	485,956	534,067

With EAT of 70°F and 2 USgpm/ton

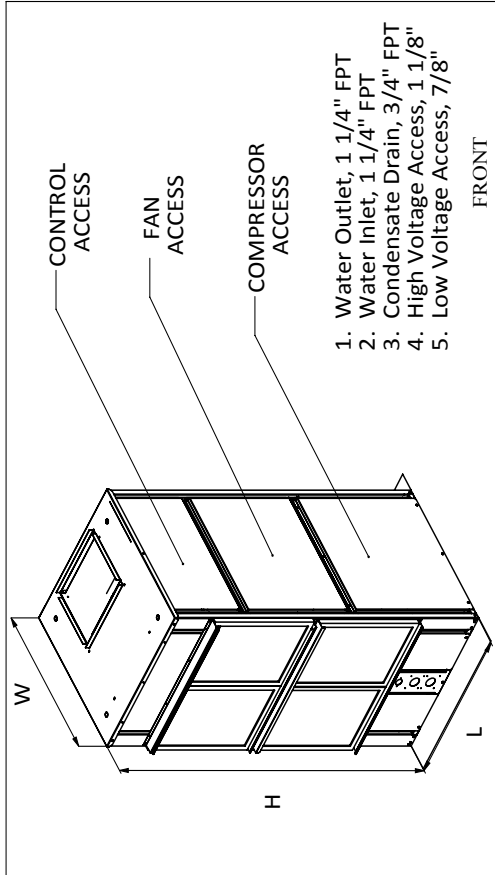
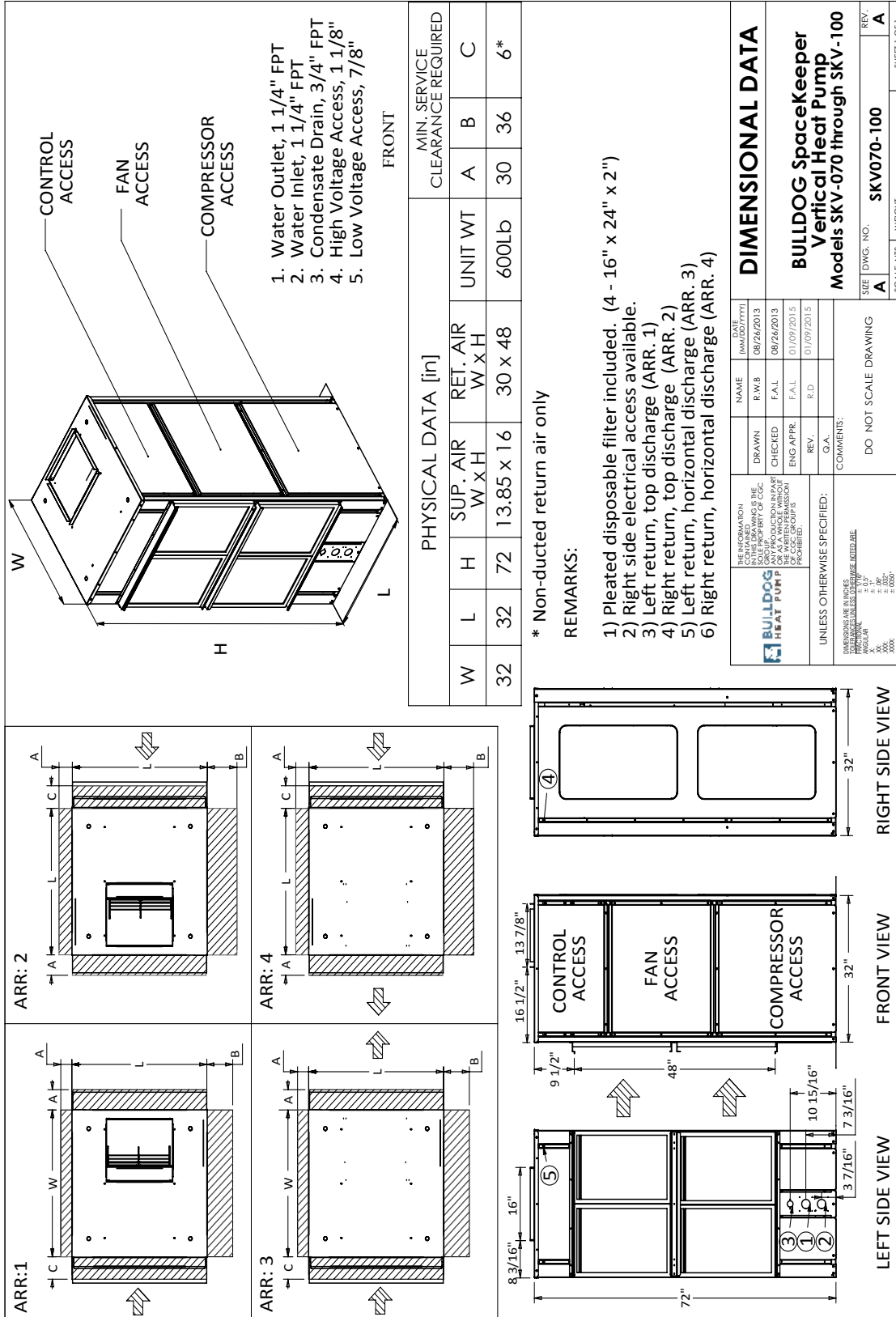
	Model	Water Loop Heat Pump	
		Cooling EWT 86°F	
		Capacity (Btuh)	(EER Btuh/W)
Large SpaceKeeper Vertical (SKV)	SKV070	71,041	15.6
	SKV080	80,691	14.7
	SKV100	94,923	13.7
	SKV120	114,732	12.9
	SKV150	131,096	12.0
	SKV180	195,994	13.9
	SKV240	219,976	13.3
	SKV280	259,966	14.3
	SKV320	301,090	14.1
	SKV360	325,200	12.5
	SKV400	364,891	11.9
	SKV480	423,601	11.5

Cooling capacities based upon EAT 80.6°F (26°C) DB / 66.2°F (19°C) WB, and EWT 86°F (30°C)



SpaceKeeper Vertical Dimensional Drawing

SKV070-100



1. Water Outlet, 1 1/4" FPT
2. Water Inlet, 1 1/4" FPT
3. Condensate Drain, 3/4" FPT
4. High Voltage Access, 1 1/8"
5. Low Voltage Access, 7/8"

PHYSICAL DATA [in]				MIN. SERVICE CLEARANCE REQUIRED		
W	L	H	SUP. AIR W x H	RET. AIR W x H	UNIT WT	A B C
32	32	72	13.85 x 16	30 x 48	600lb	30 36 6*

* Non-ducted return air only

REMARKS:

- 1) Pleated disposable filter included. (4 - 16" x 24" x 2")
- 2) Right side electrical access available.
- 3) Left return, top discharge (ARR. 1)
- 4) Right return, top discharge (ARR. 2)
- 5) Left return, horizontal discharge (ARR. 3)
- 6) Right return, horizontal discharge (ARR. 4)

DIMENSIONAL DATA			
BULLDOG SpaceKeeper Vertical Heat Pump Models SKV-070 through SKV-100			
SIZE DWG. NO.	SKV070-100	REV.	A
SCALE NTS	WEIGHT:	SHEET 1 OF 1	

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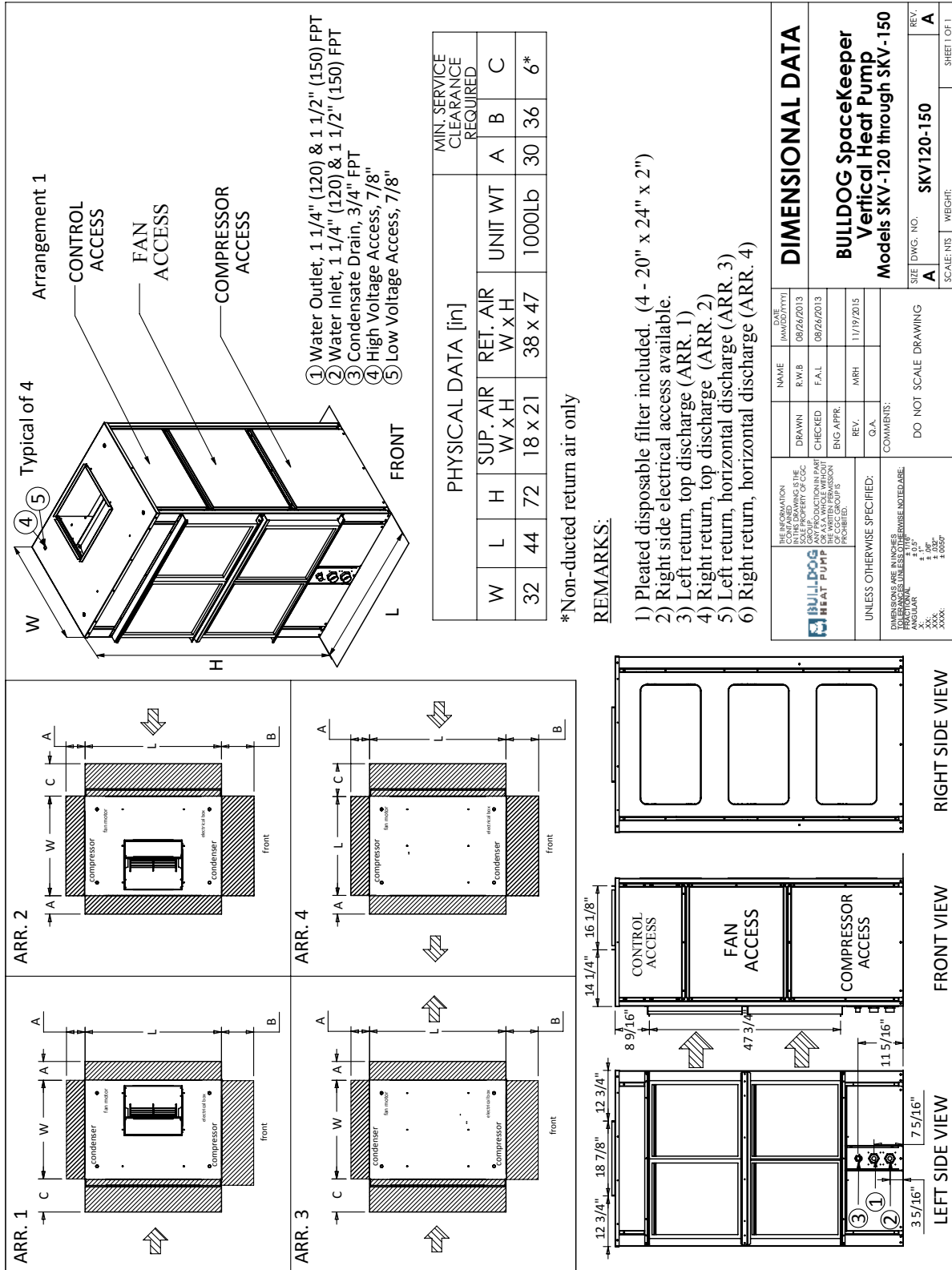
UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES
 FINISHES ARE UNLESS OTHERWISE NOTED
 TOLERANCES:
 F. 0.01"
 M. 0.005"
 H. 0.002"
 XXX. 0.000"

COMMENTS:
 DO NOT SCALE DRAWING

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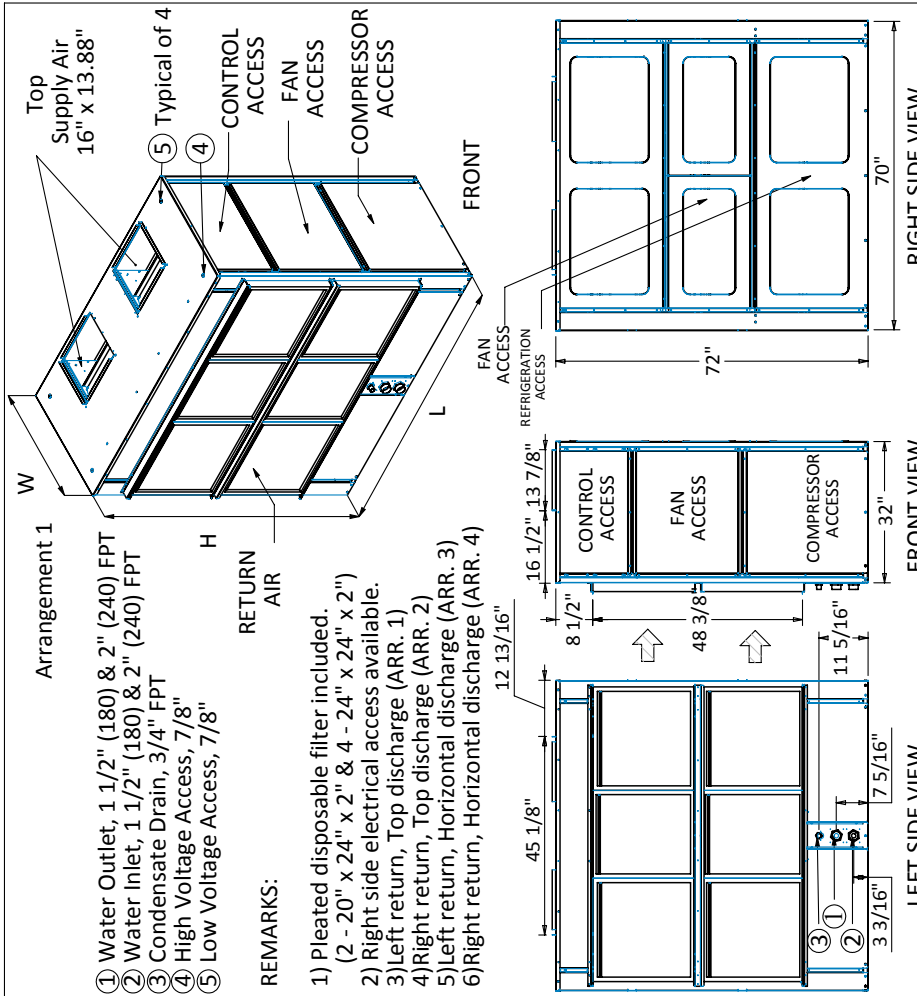
SpaceKeeper Vertical Dimensional Drawing

SKV120-150



SpaceKeeper Vertical Dimensional Drawing

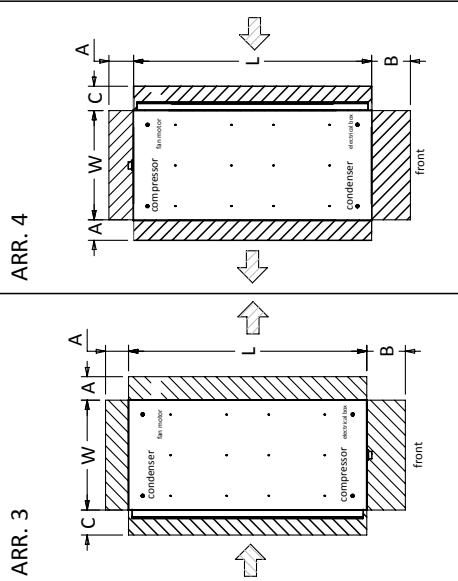
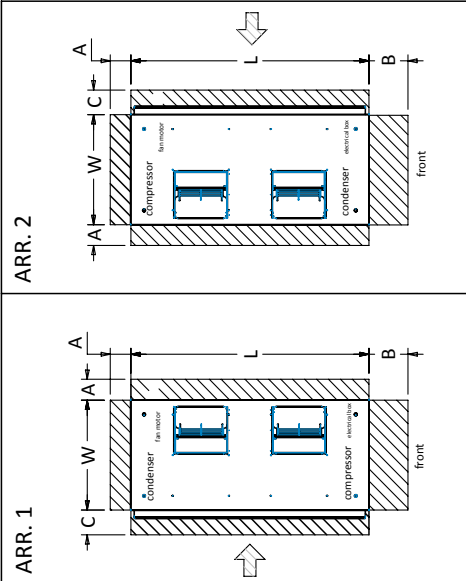
SKV180-240



- 1) Water Outlet, 1 1/2" (180) & 2" (240) FPT
 2) Water Inlet, 1 1/2" (180) & 2" (240) FPT
 3) Condensate Drain, 3/4" FPT
 4) High Voltage Access, 7/8"
 5) Low Voltage Access, 7/8"
- REMARKS:**
- 1) Pleated disposable filter included.
 (2 - 20" x 24" x 2" & 4 - 24" x 24" x 2")
 2) Right side electrical access available.
 3) Left return, Top discharge (ARR. 1)
 4) Right return, Top discharge (ARR. 2)
 5) Left return, Horizontal discharge (ARR. 3)
 6) Right return, Horizontal discharge (ARR. 4)

DIMENSIONAL DATA			
DATE	NAME	REV.	Q.A.
08/26/2013	R.W.B.	08/26/2013	
08/26/2013	F.A.L.	08/26/2013	
11/19/2015	MRH	11/19/2015	
COMMENTS:			
DO NOT SCALE DRAWING			
REV.	DWG. NO.	SKV180-240	SHEET 1 OF 1
A	SCALE:	NIS	WEIGHT:

PHYSICAL DATA [in]			
MIN. SERVICE CLEARANCE REQUIRED			
	A	B	C
	30	36	6*
	32	70	72
	(2) 16 x 13.88	--	1100lb
			36
			6*

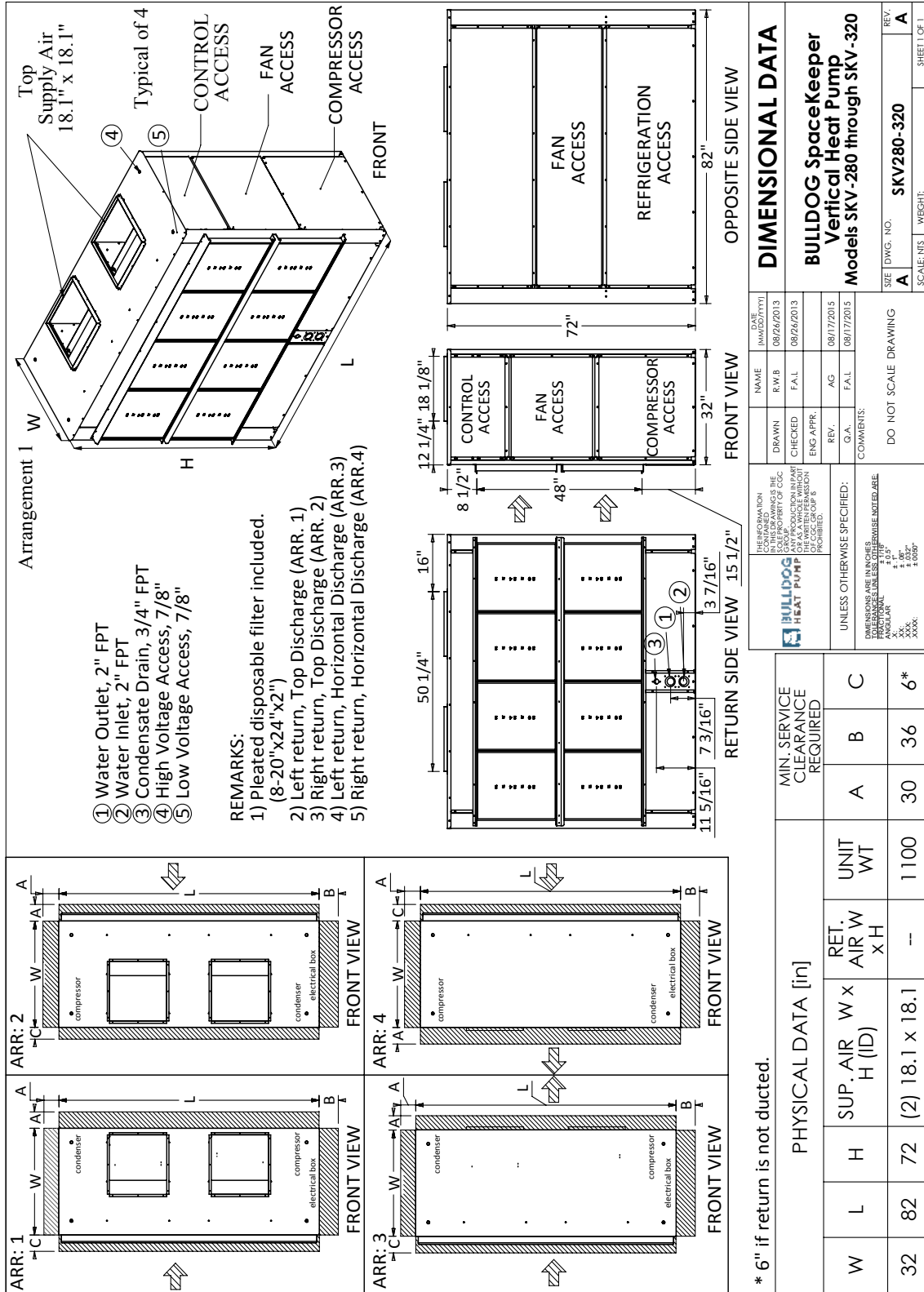


* Non-ducted return air only

IN THE INTEREST OF CONTINUOUS IMPROVEMENT, DRAWING SUBJECT TO CHANGE WITHOUT NOTICE.

SpaceKeeper Vertical Dimensional Drawing

SKV280-320



- ① Water Outlet, 2" FPT
- ② Water Inlet, 2" FPT
- ③ Condensate Drain, 3/4" FPT
- ④ High Voltage Access, 7/8"
- ⑤ Low Voltage Access, 7/8"

REMARKS:
 1) Pleated disposable filter included.
 2) Left return, Top Discharge (ARR. 1)
 3) Right return, Top Discharge (ARR. 2)
 4) Left return, Horizontal Discharge (ARR.3)
 5) Right return, Horizontal Discharge (ARR.4)

DIMENSIONAL DATA	
BULLDOG SpaceKeeper Vertical Heat Pump	
Models SKV-280 through SKV-320	
SIZE	DWG. NO. SKV280-320
SCALE:	NETS 1 WEIGHT:
REV. A	SHEET 1 OF 1

NAME	DATE	DESCRIPTION
NAME	DATE	DESCRIPTION
R.W.B.	08/26/2013	DESIGNED BY
F.A.L.	08/26/2013	CHECKED BY
AG	08/17/2015	ENG. APPR. BY
F.A.L.	08/17/2015	Q.A. BY

COMMENTS:
 DO NOT SCALE DRAWING

PHYSICAL DATA [in]		MIN. SERVICE CLEARANCE REQUIRED		UNIT WT	
W	H	A	B	C	6*
32	72	30	36	1100	6*

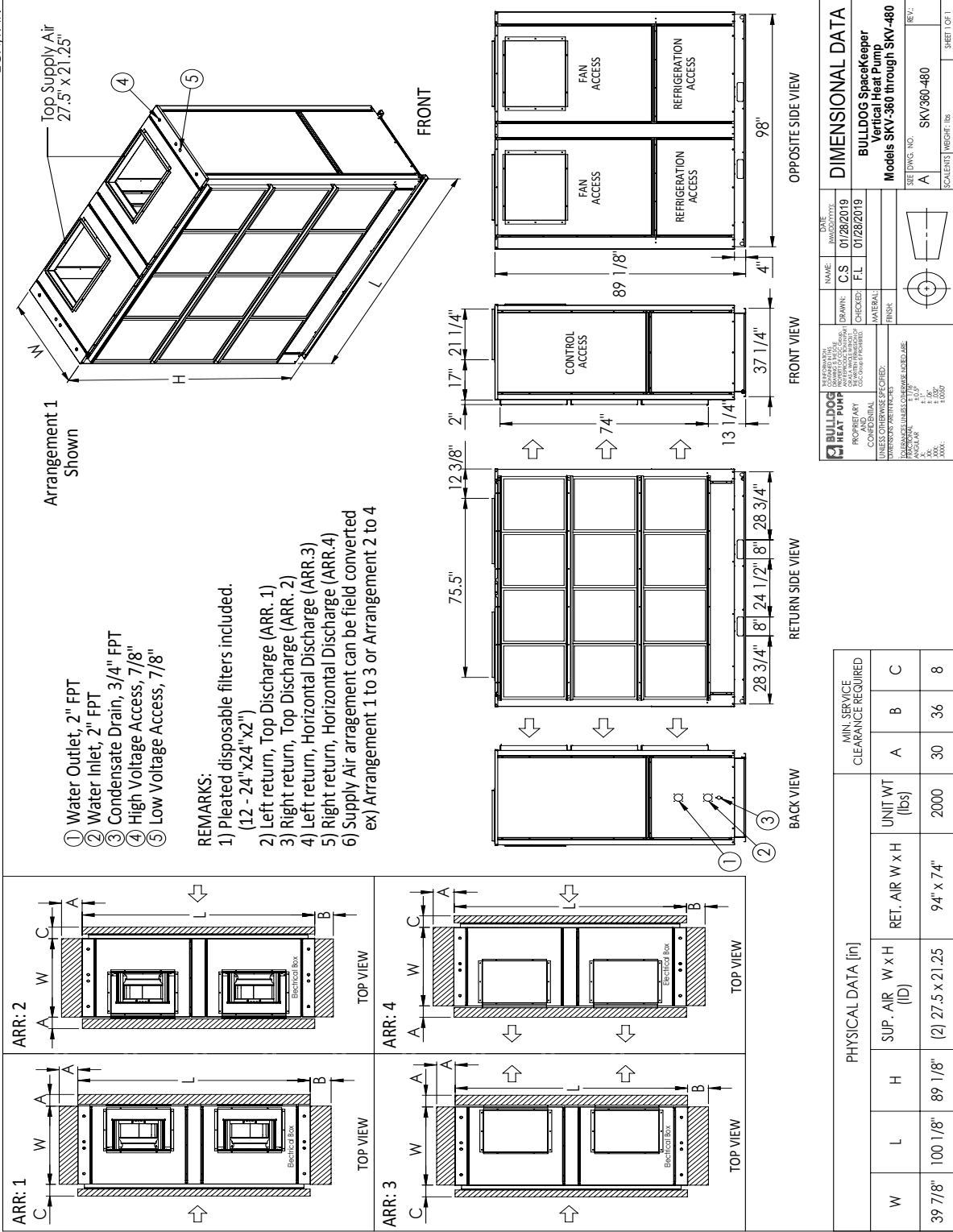
* 6" if return is not ducted.

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SpaceKeeper Vertical Dimensional Drawing

SKV360-480

ECN/R #:



REVISIONS	DATE	BY	DESCRIPTION
1	01/28/2019	CS	INITIAL DRAWING
2	01/28/2019	FL	REVISION

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PHYSICAL DATA [in]		MIN. SERVICE CLEARANCE REQUIRED			
W	L	H	SUP. AIR W x H (ID)	RET. AIR W x H	UNIT WT (lbs)
39 7/8"	100 1/8"	89 1/8"	(2) 27.5 x 21.25	94" x 74"	2000
A	B	C	30	36	8

DIMENSIONAL DATA	SEE DWG. NO.	REV.
BULLDOG SpaceKeeper Vertical Heat Pump	A	A
Models SKV-360 through SKV-480		

SCALE: [] WEIGHT: [] SHEET 1 OF 1

Last saved on: January-28-19; In the interest of continuous improvement, drawing subject to change without notice.