

# GFS SERIES

## UNCASED CEILING MOUNT HYDRONIC HEAT HIGH EFFICIENCY ECM DX COIL AIR HANDLER

### Product Dimensions & Specifications



#### WARRANTY

One year limited parts warranty

#### OPTIONS

See options menu

#### MANUFACTURED IN THE USA

Representative image only.  
Some models may vary in appearance.  
Due to continuous product improvement,  
specifications are subject to change  
without notice.



Rev. Date: 06/17/121

© 2021 AirMark

#### STANDARD FEATURES

- Factory installed service switch
- Factory installed freeze protection
- Rifled copper tube/enhanced aluminum fins DX and hydronic coils for more efficient heat transfer
- Schrader valve on DX and hydronic coils for "hiss-test" leak check
- Low leak cabinet design\*

#### APPLICATION VERSATILITY

Built-in mounting tabs for ceiling or furdawn mounting. Compatible with most brands of air conditioners and heat pumps. Optional louvered ceiling access panel has separate frame that attached to ceiling joists. Optional solid ceiling panel available for use with ducted return. Less than 2% air leakage (\* when tested in accordance with ASHRAE standard 193 and AirMark installation instructions.)

#### MOTOR

Constant torque ECM speeds and torques are controlled by embedded motor software and factory pre-programmed. Direct drive blowers circulate air quietly and efficiently. Air moving system is plated mounted to allow for easy removal and service.

#### ELECTRONIC CONTROLS

Electronic board controls the functioning of system, increasing system reliability. Standard factory in-

stalled freeze stat wired into circulating pump control circuit. Standard factory installed fan time delay relay for increased efficiency and maximize capacity. Standard factory installed pump cycle timer circulates hot water every four hours to prevent coil freeze during off-cycle.

#### DX/HYDRONIC COILS

High efficiency rifled copper tube and enhanced aluminum fins provide maximum heat transfer. All coils are immersion tested at 500 PSI and nitrogen charged for maximum reliability. Schrader valve allows for "hiss-test" pre-installation pressure test. Available with factory installed orifice or TXV. Primary and secondary DX condensate drain with 3/4" NPT connections. Powder-painted galvanized drain pan. Certified for use with R22 or R410A. Lead free construction. Hydronic coils suitable for potable water applications.

#### LOW LEAKAGE

Less than 2% air leakage from cabinet when installed in enclosure and tested in accordance with ASHRAE 193. Unit must be installed in accordance with AirMark installation instructions. Sturdy, fully insulated galvanized enclosure with ducted return available as option.



## HEATING AND COOLING PERFORMANCE & ELECTRICAL DATA

MODEL	PERFORMANCE DATA						ELECTRICAL DATA	
	NOMINAL COOLING (BTUS)	HEATING GPM	PRESS. DROP (FT. WTR)	BTU (1000) AT ENTERING WATER TEMPERATURE °F			MINIMUM CIRCUIT AMPACITY (MCA)	MAX BREAKER OR FUSE SIZE
				120	140	180		
GFS18	18,000	1.0	0.7	10.3	14.4	22.6	8.7	15
		2.0	2.0	12.0	16.8	26.4		
		3.0	3.3	12.9	18.0	28.3		
GFS19/24	24,000	2.0	2.1	14.7	20.6	32.4	8.7	15
		3.0	4.1	15.9	22.2	34.9		
		4.0	6.6	16.5	23.1	36.3		
GFS25	24,000	2.0	2.2	15.7	22.0	34.6	8.7	15
		3.0	4.3	17.0	23.8	37.4		
		4.0	6.8	17.6	24.7	38.8		
GFS30	30,000	2.0	2.2	17.3	24.2	38.0	17.5	20
		3.0	4.3	18.8	26.3	41.3		
		4.0	6.8	19.6	27.5	43.2		
GFS31/36	36,000	2.0	2.8	19.7	27.6	43.4	17.5	20
		3.0	5.4	21.7	30.4	47.8		
		4.0	8.5	22.8	31.9	50.1		

NOTES: Heat BTUH is at 70 degree EAT. 120 degree and 180 degree data is supplied for boiler applications. Heat BTUH output will not exceed output of water heater.

## BLOWER DATA

UNIT MODEL	SPEED TAP	MOTOR AMPS	MOTOR BHP	MOTOR HP	CFM VS. STATIC PRESSURE				
					0.1	0.2	0.3	0.4	0.5
GFS18	HIGH	2.7	0.20	1/2	770	730	700	670	640
	MEDIUM	2.2	0.17		715	680	640	610	580
	LOW	1.6	0.12		585	540	490	465	415
GFS19/24	HIGH	3.2	0.24		950	915	875	830	800
	MEDIUM	2.6	0.20		820	780	745	710	670
	LOW	2.2	0.17		700	675	630	590	545
GFS25	HIGH	3.9	0.29		1005	965	920	850	780
	MEDIUM	2.7	0.20		845	795	755	720	680
	LOW	2.2	0.17		765	710	665	635	600
GFS30	HIGH	4.7	0.36		1180	1155	1100	1040	980
	MEDIUM	3.4	0.26		1085	1040	995	965	920
	LOW	3.2	0.24		1030	965	935	885	845
GFS31/36	HIGH	5.9	0.45	1/2(2)	1455	1375	1285	1195	1105
	MEDIUM	4.7	0.36		1300	1245	1185	1150	1075
	LOW	3.6	0.27			1030	975	915	860

Units should not be applied to a system with less than 350 CFM/Ton airflow.

Add 0.05 static when enclosure and/or ceiling panel are used.

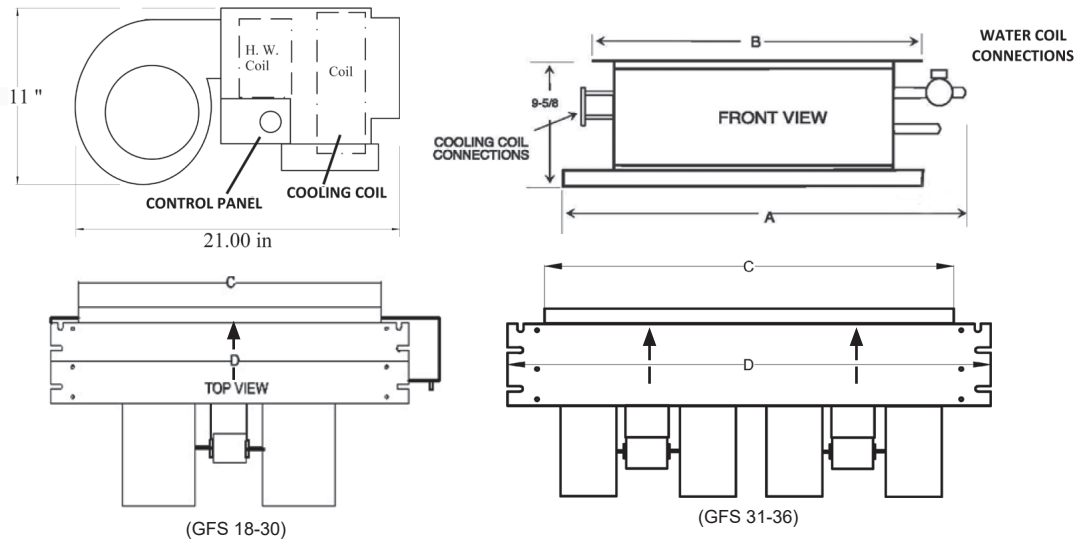
GFS 31 and GFS 36 have two motors and four blowers.

## AIR HANDLER CHASSIS NOMENCLATURE

G	F	S	18	G	-001
AirMark Air Handler	F=120V Constant Torque ECM Motor	Configuration S= Uncased Ceiling Mount	Nominal Tonnage (KBTUH)	<u>Metering Device</u> 4 = R410A non-bleed A/C or H/P TXV 6 = R410A 20% bleed A/C or H/P TXV B = R22 20% bleed A/C or H/P TXV F = R22 Flo-rater G = R410A Flo-rater X = R22 non-bleed A/C or H/P TXV	Option Code

HYDRONIC HEAT KIT NOMENCLATURE				
Z	T	2	S	P
Water Heat Hydronic	Terminal Block	2 = 2 Row Hydronic Coil	GFS 18 - X GFS 19/24 - S GFS - 25/30 - M GFS 31/36 - L	P = Taco 006 Bronze Pump 8 = Taco 008 Bronze Pump L = Less Pump

PHYSICAL DIMENSIONS						
UNIT MODEL	A"	B"	C"	D"	Weight (lbs)	Skid Qty.
GFS 18	42	37	30	37	86	8
GFS 19-24	48	43	36	43	97	8
GFS 25	55	50	42	50	105	8
GFS 30	55	50	42	50	125	8
GFS 31-36	62	56	48	56	135	8



## Access Door

### VERSATILITY

Equipped with hidden frame feature. Fastens to the outside wall surface and does not have to perfectly match the hole opening. Frame screws are not visible after installation. Available in either solid (S) or louvered (L) style.

### MATERIALS

Galvanized steel construction with smooth powder paint finish.

### FILTER

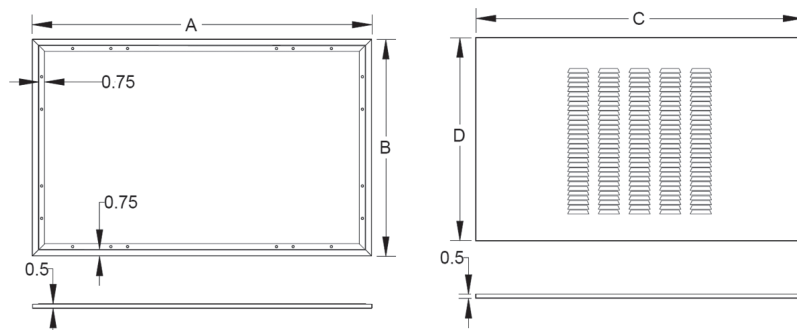
20" x 20" x 1" field supplied.

### WARRANTY

One-year limited parts warranty.

Copper stub out diameter: DX - Suction: 3/4", Liquid: 3/8";  
Hydronic – Water In/Out: 7/8"

ACCESS DOOR DIMENSIONS						
FOR USE WITH	PANEL MODEL	GFS ACCESS DOOR AND FRAME				FILTERS (QTY)
		A"	B"	C"	D"	
GFS 18	GAD-7(S/L)	49 1/2	27 1/2	47 1/2	26	1
GFS 19/24	GAD-3(S/L)	55 1/2	27 1/2	53 1/2	26	1
GFS 25/30	GAD-6(S/L)	63-1/2	27 1/2	61-1/2	26	2
GFS 31/36	GAD-4(S/L)	70-1/2	27 1/2	68-1/2	26	2



373 Atascocita Rd  
Humble, TX 77396  
Phone 800.423.9007  
Fax 281.441.6510  
[www.airmark-ac.com](http://www.airmark-ac.com)

**WARNING**  
Cancer and  
Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)