

I. MODELS (CONT.)	CFM56-7B20	CFM56-7B22	CFM56-7B24	
FUEL SYSTEM	See NOTE 7 for approved fuels.			
Fuel pump / SNECMA part number (P/N) (Combined boost and single element gear-type pump)	340-402-104 340-402-105	--	--	
Hydromechanical unit / GE P/N	1853M56-	--	--	
Electronic control unit / GE P/N - Hardware	1851M50 1853M33 2042M67 2044M16	-- -- -- --	-- -- -- --	
- Software	1853M78 2044M25	-- --	-- --	
Identification plugs / SNECMA P/N	340-131-712 340-131-717 340-203-201 340-198-850 340-198-950	340-131-732 340-131-737 340-203-401 340-200-050 340-200-150	340-131-721 340-131-726 340-203-301 340-199-250 340-199-350	
OIL	Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFMI Service Bulletin CFM56-7B 79-001 list approved brand oils.			
IGNITION SYSTEM	GE P/N			
Two ignition units Unison Simmonds	9238M66 1538M69	-- --	-- --	
Two igniter plugs Unison Champion	1374M12 1374M13	-- --	-- --	
PRINCIPAL DIMENSIONS	INCHES / MILLIMETERS			
Length (fan case forward flange to LPT frame aft flange)	98.7/2507.5	--	--	
Width (maximum envelope)	83.4/2118.0	--	--	
Height (fan case forward flange outer diameter)	72.0/1829.0 -- --	-- -- --	-- -- --	
WEIGHT (dry)	Includes basic engine accessories and optional equipment as listed in manufacturer's engine specification, including engine mounted portions of the condition monitoring instrumentation.			
Pounds	5260.0	--	--	
Kilograms	2385.9	--	--	
CENTER OF GRAVITY LOCATIONS	STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
Inches	207.4± 1.0	--	--	
Millimeters	5269± 25	--	--	

II. MODELS	CFM56-7B26	CFM56-7B27	CFM56-7B27A	CFM56-7B20/2	CFM56-7B22/2
TYPE	High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine CFM56-7B series: single annular combustor CFM56-7B/2 series: double annular combustor CFM56-7B/3 series: improved emissions single annular combustor CFM56-7B/3F series: improved emissions single annular combustor and increased EGT				
RATINGS (See NOTE 4)					
Takeoff (5 min. see NOTE 13), sea level, static thrust, lb.	26,300/ 11,699 daN	27,300/ 12,143 daN	-- --	20,600/ 9,163 daN	22,700/ 10,097 daN
Maximum continuous, sea level static thrust, lb.	25,900/ 11,521 daN	25,900/ 11,521 daN	-- --	19,400/ 8,630 daN	22,300/ 9,920 daN
Flat rating	AMBIENT TEMPERATURE				
Takeoff	86°F / 30°C	--	--	--	--
Maximum continuous	77°F / 25°C	--	--	--	--
FUEL SYSTEM	See NOTE 7 for approved fuels.				
Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	340-402-104	--	--	--	--
Hydromechanical unit / GE P/N	1853M56	--	--	--	--
Electronic control unit / GE P/N					
- Hardware	1851M50 1853M33 2042M67 2044M16	-- -- -- --	--- -- -- --	1851M50 -- -- --	-- -- -- --
- Software	1853M78 2044M25	-- --	-- --	-- --	-- --
Identification plugs / SNECMA P/N	340-131-742 340-131-747 340-203-501 340-200-850 340-200-950	340-131-752 340-131-757 340-203-601 340-201-450 340-201-550	340-203-701 --- --- --- ---	340-138-710 340-138-715 340-203-201 --- ---	340-138-720 340-138-725 340-203-301 --- ---
OIL	Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFMI Service Bulletin CFM56-7B 79-001 list approved brand oils.				
IGNITION SYSTEM	GE P/N				
Two ignition units					
Unison	9238M66	--	--	--	--
Simmonds	1538M69	--	--	--	--
Two igniter plugs					
Unison	1374M12	--	--	--	--
Champion	1374M13	--	--	--	--
PRINCIPAL DIMENSIONS	INCHES / MILLIMETERS				
Length (fan case forward flange to LPT frame aft flange)	98.7/2507.5	--	--	--	--
Width (maximum envelope)	83.4/2118.0	--	--	--	--
Height (fan case forward flange outer diameter)	72.0/1829.0	--	--	--	--

II. MODELS (CONT.)	CFM56-7B26	CFM56-7B27	CFM56-7B27A	CFM56-7B20/2	CFM56-7B22/2
WEIGHT (dry)	Includes basic engine accessories and optional equipment as listed in manufacturer's engine specification, including engine mounted portions of the condition monitoring instrumentation.				
Pounds	5260	--	5282	5360	--
Kilograms	2385.9	--	2395.9	2431.3	--
CENTER OF GRAVITY LOCATIONS	STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)				
Inches	207.4 ± 1.0	--	--	--	--
Millimeters	5269 ± 25	--	--	--	--

III. MODELS	CFM56-7B24/2	CFM56-7B26/2	CFM56-7B27/2	CFM56-7B26/B1
TYPE	High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine CFM56-7B series: single annular combustor CFM56-7B/2 series: double annular combustor CFM56-7B/3 series: improved emissions single annular combustor CFM56-7B/3F series: improved emissions single annular combustor and increased EGT			
RATINGS (See NOTE 4)				
Takeoff (5 min. see NOTE 13), sea level, static thrust, lb.	24,200/ 10,765 daN	26,300/ 11,699 daN	27,300/ 12,143 daN	26,300/ 11,699 daN
Maximum continuous, sea level static thrust, lb.	22,800/ 10,142 daN	25,900/ 11,521 daN	25,900/ 11,521 daN	25,900/ 11,521 daN
Flat rating	AMBIENT TEMPERATURE			
Takeoff	86°F / 30°C	--	--	--
Maximum continuous	77°F / 25°C	--	--	--
FUEL SYSTEM	See NOTE 7 for approved fuels			
Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	340-402-104	--	--	--
Hydromechanical unit / GE P/N	1853M56	--	--	--
Electronic control unit / GE P/N - Hardware	1851M50 1853M33 2042M67 2044M16	-- -- -- --	-- -- -- --	-- -- -- --
- Software	1853M78 2044M25	-- --	-- --	-- --
Identification plugs / SNECMA P/N	340-138-730 340-138-735 340-203-401	340-138-740 340-138-745 340-203-501	340-138-750 340-138-755 340-203-601	340-203-511 340-143-201 340-143-301 340-201-050 340-201-150

III. MODELS (CONT.)	CFM56-7B24/2	CFM56-7B26/2	CFM56-7B27/2	CFM56-7B26/B1
OIL	Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFMI Service Bulletin CFM56-7B 79-001 list approved brand oils.			
IGNITION SYSTEM	GE P/N			
Two ignition units				
Unison	9238M66	--	--	--
Simmonds	1538M69	--	--	--
Two igniter plugs				
Unison	1374M12	--	--	--
Champion	1374M13	--	--	--
PRINCIPAL DIMENSIONS	INCHES / MILLIMETERS			
Length (fan case forward flange to LPT frame aft flange)	98.7/2507.5	--	--	--
Width (maximum envelope)	83.4/2118.0	--	--	--
Height (fan case forward flange outer diameter)	72.0/1829.0	--	--	--
WEIGHT (dry)	Includes basic engine accessories and optional equipment as listed in manufacturer's engine specification, including engine mounted portions of the condition monitoring instrumentation.			
Pounds	5360	--	--	5260
Kilograms	2431.3	--	--	2385.9
CENTER OF GRAVITY LOCATIONS	STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
Inches	207.4 ± 1.0	--	--	--
Millimeters	5269 ± 25	--	--	--

IV. MODELS	CFM56-7B27/B1	CFM56-7B27/B3	CFM56-7B22/B1	CFM56-7B24/B1
TYPE	High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine CFM56-7B series: single annular combustor CFM56-7B/2 series: double annular combustor CFM56-7B/3 series: improved emissions single annular combustor CFM56-7B/3F series: improved emissions single annular combustor and increased EGT			
RATINGS (See NOTE 4)				
Takeoff (5 min. see NOTE 13), sea level, static thrust, lb.	27,300/ 12,143 daN	--	22,700/ 10,097 daN	24,200/ 10,765 daN
Maximum continuous, sea level static thrust, lb.	25,900/ 11,521 daN	--	22,300/ 9,920 daN	22,800/ 10,142 daN
Flat rating	AMBIENT TEMPERATURE			
Takeoff	86°F / 30°C	--	96.8°F / 36°C	105.8°F / 41°C
Maximum continuous	77°F / 25°C	--	--	--

IV. MODELS (CONT.)	CFM56-7B27/B1	CFM56-7B27/B3	CFM56-7B22/B1	CFM56-7B24/B1
FUEL SYSTEM	See NOTE 7 for approved fuels.			
Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	340-402-104 340-400-105	--	--	--
Hydromechanical unit / GE P/N	1853M56	--	--	--
Electronic control unit / GE P/N - Hardware	1851M50 1853M33 2042M67 2044M16	-- -- -- --	-- -- -- --	-- -- -- --
- Software	1853M78 2044M25	-- --	-- --	-- --
Identification plugs / SNECMA P/N	340-142-801 340-142-901 340-203-611 340-201-650 340-201-750	340-143-441 340-143-451 340-203-631 340-202-050 340-202-150	340-142-001 340-142-101 340-203-311 340-199-450 340-199-550	340-142-201 340-142-301 340-203-411 340-200-250 340-200-350
OIL	Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFMI Service Bulletin CFM56-7B 79-001 list approved brand oils.			
IGNITION SYSTEM	GE P/N			
Two ignition units Unison Simmonds	9238M66 1538M69	-- --	-- --	-- --
Two igniter plugs Unison Champion	1374M12 1374M13	-- --	-- --	-- --
PRINCIPAL DIMENSIONS	INCHES / MILLIMETERS			
Length (fan case forward flange to LPT frame aft flange)	98.7/2507.5	--	--	--
Width (maximum envelope)	83.4/2118.0	--	--	--
Height (fan case forward flange outer diameter)	72.0/1829.0	--	--	--
WEIGHT (dry)	Includes basic engine accessories and optional equipment as listed in manufacturer's engine specification, including engine mounted portions of the condition monitoring instrumentation.			
Pounds Kilograms	5260 2385.9	-- --	-- --	-- --
CENTER OF GRAVITY LOCATIONS	STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
Inches Millimeters	207.4 ± 1.0 5269 ± 25	-- --	-- --	-- --

V. MODELS	CFM56-7B26/B2	CFM56-7B26/3B2		
TYPE	High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine CFM56-7B series: single annular combustor CFM56-7B/2 series: double annular combustor CFM56-7B/3 series: improved emissions single annular combustor CFM56-7B/3F series: improved emissions single annular combustor and increased EGT			
RATINGS (See NOTE 4)				
Takeoff (5 min. See NOTE 13), sea level, static thrust, lb.	26,300/ 11,699 daN	26,300/ 11,699 daN		
Maximum continuous, sea level static thrust, lb.	22,800/ 10,142 daN	22,800/ 10,142 daN		
Flat rating	AMBIENT TEMPERATURE			
Takeoff	95°F / 35°C	--		
Maximum continuous	77°F / 25°C	- --		
FUEL SYSTEM	See NOTE 7 for approved fuels.			
Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	340-402-104 340-400-105	340-402-105		
Hydromechanical unit / GE P/N	1853M56	--		
Electronic control unit / GE P/N - Hardware	1851M50 1853M33 2042M67 2044M16	-- -- -- --		
- Software	1853M78 2044M25	-- --		
Identification plugs / SNECMA P/N	340-203-521	340-203-521		
OIL	Synthetic type conforming to GE Specification D50TFI, Type I and Type II. CFMI Service Bulletin CFM56-7B 79-001 list approved brand oils.			
IGNITION SYSTEM	GE P/N			
Two ignition units				
Unison	9238M66	--		
Simmonds	1538M69	--		
Two igniter plugs				
Unison	1374M12	--		
Champion	1374M13	--		
PRINCIPLE DIMENSIONS	INCHES / MILLIMETERS			
Length (fan case forward flange to LPT frame aft flange)	98.7 / 2507.5	--		
Width (maximum envelope)	83.4 / 2118.0	--		
Height (fan case forward flange outer diameter)	72.0 / 1829.0	--		

V. MODELS (CONT.)	CFM56-7B26/B2	CFM56-7B26/3B2		
WEIGHT (dry)	Includes basic engine accessories and optional equipment as listed in manufacturer's engine specification, including engine mounted portions of the condition monitoring instrumentation.			
Pounds	5260	--		
Kilograms	2385.9	--		
CENTER OF GRAVITY LOCATIONS	STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
Inches	207.4 ± 1.0	--		
Millimeters	5269 ± 25	--		

VI. MODELS	CFM56-7B20/3	CFM56-7B22/3	CFM56-7B24/3	
TYPE	High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine CFM56-7B series: single annular combustor CFM56-7B/2 series: double annular combustor CFM56-7B/3 series: improved emissions single annular combustor CFM56-7B/3F series: improved emissions single annular combustor and increased EGT			
RATINGS (See NOTE 4)				
Takeoff (5 min. see NOTE 13), sea level, static thrust, lb.	20,600/ 9,163 daN	22,700/ 10,097 daN	24,200/ 10,765 daN	
Maximum continuous, sea level static thrust, lb.	19,400/ 8,630 daN	22,300/ 9,920 daN	22,800/ 10,142 daN	
Flat rating	AMBIENT TEMPERATURE			
Takeoff	86°F / 30°C	--	--	
Maximum continuous	77°F / 25°C	--	--	
FUEL SYSTEM	See NOTE 7 for approved fuels.			
Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	340-402-104	--	--	
Hydromechanical unit / GE P/N	1853M56	--	--	
Electronic control unit / GE P/N - Hardware	1851M50 1853M33 2042M67 2044M16	-- -- -- --	-- -- -- --	
- Software	1853M78 2044M25	-- --	-- --	
Identification plugs / SNECMA P/N	340-203-201	340-203-301	340-203-401	
OIL	Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFMI Service Bulletin CFM56-7B 79-001 list approved brand oils.			

VI. MODELS (CONT.)	CFM56-7B20/3	CFM56-7B22/3	CFM56-7B24/3	
IGNITION SYSTEM	GE P/N			
Two ignition units				
Unison	9238M66	--	--	
Simmonds	1538M69	--	--	
Two igniter plugs				
Unison	1374M12	--	--	
Champion	1374M13	--	--	
PRINCIPAL DIMENSIONS	INCHES / MILLIMETERS			
Length (fan case forward flange to LPT frame aft flange)	98.7/2507.5	--	--	
Width (maximum envelope)	83.4/2118.0	--	--	
Height (fan case forward flange outer diameter)	72.0/1829.0	--	--	
WEIGHT (dry)	Includes basic engine accessories and optional equipment as listed in manufacturer's engine specification, including engine mounted portions of the condition monitoring instrumentation.			
Pounds	5260.0	--	--	
Kilograms	2385.9	--	--	
CENTER OF GRAVITY LOCATIONS	STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
Inches	207.4± 1.0	--	--	
Millimeters	5269± 25	--	--	

VII. MODELS	CFM56-7B26/3	CFM56-7B27/3	CFM56-7B26/3B1	CFM56-7B27A/3
TYPE	High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine CFM56-7B series: single annular combustor CFM56-7B/2 series: double annular combustor CFM56-7B/3 series: improved emissions single annular combustor CFM56-7B/3F series: improved emissions single annular combustor and increased EGT			
RATINGS (See NOTE 4)				
Takeoff (5 min. see NOTE 13), sea level, static thrust, lb.	26,300/ 11,699 daN	27,300/ 12,143 daN	26,300/ 11,699 daN	27,300/ 12,143 daN
Maximum continuous, sea level static thrust, lb.	25,900/ 11,521 daN	25,900/ 11,521 daN	25,900/ 11,521 daN	25,900/ 11,521 daN
Flat rating	AMBIENT TEMPERATURE			
Takeoff	86°F / 30°C	--	--	--
Maximum continuous	77°F / 25°C	--	--	--

VII. MODELS (CONT.)	CFM56-7B26/3	CFM56-7B27/3	CFM56-7B26/3B1	CFM56-7B27A/3
FUEL SYSTEM	See NOTE 7 for approved fuels.			
Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	340-402-104	--	--	--
Hydromechanical unit / GE P/N	1853M56	--	--	--
Electronic control unit / GE P/N				
- Hardware	1851M50	--	--	--
	1853M33	--	--	--
	2042M67	--	--	--
	2044M16	--	--	--
- Software	1853M78	--	--	--
	2044M25	--	--	--
Identification plugs / SNECMA P/N	340-203-501	340-203-601	340-203-511	340-203-701
OIL	Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFMI Service Bulletin CFM56-7B 79-001 list approved brand oils.			
IGNITION SYSTEM	GE P/N			
Two ignition units				
Unison	9238M66	--	--	--
Simmonds	1538M69	--	--	--
Two igniter plugs				
Unison	1374M12	--	--	--
Champion	1374M13	--	--	--
PRINCIPAL DIMENSIONS	INCHES / MILLIMETERS			
Length (fan case forward flange to LPT frame aft flange)	98.7/2507.5	--	--	98.7/2507.5
Width (maximum envelope)	83.4/2118.0	--	--	83.4/2118.0
Height (fan case forward flange outer diameter)	72.0/1829.0	--	--	72.0/1829.0
WEIGHT (dry)	Includes basic engine accessories and optional equipment as listed in manufacturer's engine specification, including engine mounted portions of the condition monitoring instrumentation.			
Pounds	5260	--	--	5282
Kilograms	2385.9	--	--	2395.9
CENTER OF GRAVITY LOCATIONS	STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
Inches	207.4 ± 1.0	--	--	--
Millimeters	5269 ± 25	--	--	--

VIII. MODELS	CFM56-7B27/3F	CFM56-7B27/3B1F	CFM56-7B26/3F	CFM56-7B26/3B2F
TYPE	High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine CFM56-7B series: single annular combustor CFM56-7B/2 series: double annular combustor CFM56-7B/3 series: improved emissions single annular combustor CFM56-7B/3F series: improved emissions single annular combustor and increased EGT			
RATINGS (See NOTE 4)				
Takeoff (5 min. see NOTE 13), sea level, static thrust, lb.	27,300/ 12,143 daN	-- --	26,300/ 11,699 daN	-- --
Maximum continuous, sea level static thrust, lb.	25,900/ 11,521 daN	-- --	25,900/ 11,521 daN	-- --
Flat rating	AMBIENT TEMPERATURE			
Takeoff	86°F / 30°C	--	--	--
Maximum continuous	77°F / 25°C	--	--	--
FUEL SYSTEM	See NOTE 7 for approved fuels.			
Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	340-402-104	--	--	--
Hydromechanical unit / GE P/N	1853M56	--	--	--
Electronic control unit / GE P/N - Hardware	1851M50 1853M33 2042M67 2044M16	-- -- -- --	-- -- -- --	-- -- -- --
- Software	1853M78 2044M25	-- --	-- --	-- --
Identification plugs / SNECMA P/N	340-205-001	340-205-021	340-205-101	340-205-111
OIL	Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFMI Service Bulletin CFM56-7B 79-001 list approved brand oils.			
IGNITION SYSTEM	GE P/N			
Two ignition units				
Unison	9238M66	--	--	--
Simmonds	1538M69	--	--	--
Two igniter plugs				
Unison	1374M12	--	--	--
Champion	1374M13	--	--	--
PRINCIPAL DIMENSIONS	INCHES / MILLIMETERS			
Length (fan case forward flange to LPT frame aft flange)	98.7/2507.5	--	--	--
Width (maximum envelope)	83.4/2118.0	--	--	--
Height (fan case forward flange outer diameter)	72.0/1829.0	--	--	--

VIII. MODELS (CONT.)	CFM56-7B27/3F	CFM56-7B27/3B1F	CFM56-7B26/3F	CFM56-7B26/3B1F
WEIGHT (dry)	Includes basic engine accessories and optional equipment as listed in manufacturer's engine specification, including engine mounted portions of the condition monitoring instrumentation.			
Pounds	5260	--	--	--
Kilograms	2385.9	--	--	--
CENTER OF GRAVITY LOCATIONS	STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
Inches	207.4 ± 1.0	--	--	--
Millimeters	5269 ± 25	--	--	--

IX. MODELS	CFM56-7B27/3B1	CFM56-7B27/3B3	CFM56-7B22/3B1	CFM56-7B24/3B1
TYPE	High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine CFM56-7B series: single annular combustor CFM56-7B/2 series: double annular combustor CFM56-7B/3 series: improved emissions single annular combustor CFM56-7B/3F series: improved emissions single annular combustor and increased EGT			
RATINGS (See NOTE 4)				
Takeoff (5 min. see NOTE 13), sea level, static thrust, lb.	27,300/ 12,143 daN	--	22,700/ 10,097 daN	24,200/ 10,765 daN
Maximum continuous, sea level static thrust, lb.	25,900/ 11,521 daN	--	22,300/ 9,920 daN	22,800/ 10,142 daN
Flat rating	AMBIENT TEMPERATURE			
Takeoff	86°F / 30°C	--	96.8°F / 36°C	105.8°F / 41°C
Maximum continuous	77°F / 25°C	--	--	--
FUEL SYSTEM	See NOTE 7 for approved fuels.			
Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	340-402-104	--	--	--
Hydromechanical unit / GE P/N	1853M56	--	--	--
Electronic control unit / GE P/N - Hardware	1851M50 1853M33 2042M67 2044M16	-- -- -- --	-- -- -- --	-- -- -- --
- Software	1853M78 2044M25	-- --	-- --	-- --
Identification plugs / SNECMA P/N	340-203-611	340-203-631	340-203-311	340-203-411
OIL	Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFMI Service Bulletin CFM56-7B 79-001 list approved brand oils.			
IGNITION SYSTEM	GE P/N			
Two ignition units				
Unison	9238M66	--	--	--
Simmonds	1538M69	--	--	--
Two igniter plugs				
Unison	1374M12	--	--	--
Champion	1374M13	--	--	--

IX. MODELS (CONT.)	CFM56-7B27/3B1	CFM56-7B27/3B3	CFM56-7B22/3B1	CFM56-7B24/3B1
PRINCIPAL DIMENSIONS	INCHES / MILLIMETERS			
Length (fan case forward flange to LPT frame aft flange)	98.7/2507.5	--	--	--
Width (maximum envelope)	83.4/2118.0	--	--	--
Height (fan case forward flange outer diameter)	72.0/1829.0	--	--	--
WEIGHT (dry)	Includes basic engine accessories and optional equipment as listed in manufacturer's engine specification, including engine mounted portions of the condition monitoring instrumentation.			
Pounds	5260	--	--	--
Kilograms	2385.9	--	--	--
CENTER OF GRAVITY LOCATIONS	STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
Inches	207.4 ± 1.0	--	--	--
Millimeters	5269 ± 25	--	--	--

CERTIFICATION BASIS

1. 14 CFR Part 33 effective February 1, 1965, with Amendments 33-1 through 33-15 thereto.
2. See NOTE 22 for emissions certification basis.

MODEL	APPLICATION DATE	TYPE CERTIFICATE ISSUED/AMENDED	TYPE CERTIFICATE WITHDRAWN
CFM56-7B18	NOV 28, 1995	DEC 17, 1996	October 17, 2008(*)
CFM56-7B20	NOV 28, 1995	DEC 17, 1996	
CFM56-7B22	NOV 28, 1995	DEC 17, 1996	
CFM56-7B24	NOV 28, 1995	DEC 17, 1996	
CFM56-7B26	NOV 28, 1995	DEC 17, 1996	
CFM56-7B27	NOV 28, 1995	DEC 17, 1996	
CFM56-7B20/2	NOV 28, 1995	NOV 14, 1997	
CFM56-7B22/2	NOV 28, 1995	NOV 14, 1997	
CFM56-7B24/2	NOV 28, 1995	NOV 14, 1997	
CFM56-7B26/2	NOV 28, 1995	NOV 14, 1997	
CFM56-7B27/2	NOV 28, 1995	NOV 14, 1997	
CFM56-7B26/B1	MAR 4, 1998	OCT 30, 1998	
CFM56-7B27/B1	MAR 4, 1998	OCT 30, 1998	
CFM56-7B27/B3	JUL 30, 1998	OCT 30, 1998	
CFM56-7B22/B1	JUN 11, 1997	MAY 9, 2000	
CFM56-7B24/B1	JUN 11, 1997	MAY 9, 2000	
CFM56-7B27A	SEPT 8, 1999	APR 27, 2001	
CFM56-7B22/B2	AUG 20, 2001	APR 25, 2003	October 17, 2008(*)
CFM56-7B26/B2	AUG 20, 2001	APR 25, 2003	
CFM56-7B18/3	APR 23, 2004	JUN 14, 2006	October 17, 2008(*)
CFM56-7B20/3	APR 23, 2004	JUN 14, 2006	
CFM56-7B22/3	APR 23, 2004	JUN 14, 2006	
CFM56-7B22/3B1	APR 23, 2004	JUN 14, 2006	
CFM56-7B22/3B2	APR 23, 2004	JUN 14, 2006	October 17, 2008(*)
CFM56-7B24/3	APR 23, 2004	JUN 14, 2006	
CFM56-7B24/3B1	APR 23, 2004	JUN 14, 2006	
CFM56-7B26/3	APR 23, 2004	JUN 14, 2006	
CFM56-7B26/3B1	APR 12, 2006	JUN 14, 2006	
CFM56-7B26/3B2	APR 12, 2006	JUN 14, 2006	
CFM56-7B26/3F	DEC 15, 2005	JUN 14, 2006	
CFM56-7B26/3B2F	DEC 15, 2005	JUN 14, 2006	
CFM56-7B27/3	APR 23, 2004	JUN 14, 2006	
CFM56-7B27/3B1	APR 23, 2004	JUN 14, 2006	
CFM56-7B27/3B3	APR 23, 2004	JUN 14, 2006	
CFM56-7B27/3F	APR 23, 2004	JUN 14, 2006	
CFM56-7B27/3B1F	APR 23, 2004	JUN 14, 2006	
CFM56-7B27A/3	April 23, 2004	October 17, 2008	

(*) Effective October 17, 2008 the models designation CFM56-7B18, CFN56-7B22/B2, CFM56-7B18/3 and CFM56-7B22/3B2 were withdrawn at the request of the manufacturer. None of the models were released to revenue service.

CERTIFICATION BASIS (CONT.) The Direction Generale de L'Aviation Civile (DGAC) originally type certificated these engine models under DGAC Certificate de Type Moteur M21. The FAA validated these products under Type Certificate Number E00056EN. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of these products on behalf of France. EASA Type Certificate Number EASA.E.004 was issued June 14, 2006.

PRODUCTION BASIS The original production basis was French "Agreement de Production" No. F.G.007 or P03 issued by Direction Generale de L'Aviation Civile (DGAC) for engines produced in France by SNECMA under license from CFM International, S.A. Effective September 28, 2004, these engine models were produced under European Aviation Safety Agency (EASA) Production Certificate FR.21G.0007. (See NOTE 10).

IMPORT REQUIREMENTS To be considered for installation on aircraft registered in the United States, each individually imported engine must be accompanied by an EASA airworthiness approval certificate (EASA Form 1 – Authorized Release Certificate) or JAA Form 1 issued by SNECMA on behalf of EASA under EASA Production Certificate FR.21G.0007. The EASA Form 1 – Authorized Release Certificate, or JAA Form 1, should contain the following statement: 'The engine covered by this certificate has been examined, tested, and found to conform to U.S. Type Certificate E00056EN and is in a condition for safe operation.'

NOTES

NOTE 1.

TURBINE EXHAUST GAS (T495) (See NOTE 14)

Takeoff (5 min.)

Maximum continuous

Starting

Time temperature envelope

Refer to model's S.O.I.

FUEL PUMP INLET

OIL SUPPLY (See NOTE 18)

Continuous operation

Transient (45 minutes)

MAXIMUM PERMISSIBLE TEMPERATURES (ALL MODELS)

As measured by a harness of eight thermocouples located at the second stage low pressure turbine vane:

950°C

925°C

725°C

CFMI-TP.01.14

REFER TO THE APPROPRIATE INSTALLATION MANUAL.

140°C/284°F

155°C/311°F

NOTE 2.

Fuel limits

Oil limits

FUEL AND OIL PRESSURE LIMITS

Fuel system pressure limits required to meet all engine operating conditions extend from a minimum fuel pressure of not less than 5 psia (0.35 bar absolute) above the true fuel vapor pressure to a maximum fuel pressure of 148 psia (10.2 bar absolute) with a fuel vapor/liquid ratio < 0.45 at all conditions. For specific installation limits, see Installation Manual, CFM7B01, Part A, Section 5, Figures A2 and A3.

The minimum pressure limit is 13 psid (90 kPa differential). The maximum pressure limit during cold starts is 305 psid (2102 kPa differential), limited by a pressure-relief valve. See NOTE 12.

NOTE 3.

ELECTRICAL

Rotation (1)
 Speed ratio to core (2)
 Pad Rating (kW)
 Shear Torque (in-lb)
 Maximum overhung moment (in-lb)

HYDRAULIC PUMP

Rotation (1)
 Speed ratio to core (2)
 Pad Rating (in-lb)
 Shear Torque (in-lb)
 Maximum overhung moment (in-lb)

ACCESSORY DRIVE PROVISIONS		
	ALL MODELS, EXCEPT -7B27A	-7B27A *(3)
	CW	CW
	0.565	.565
	135	239.4*(3)
	9,000	17,500
	950	1,540
	CW	CW
	0.256	0.256
	1,550	1,550
	4,400	4,400
	500	500
(1)	CW = CLOCKWISE FACING PAD / CCW = COUNTERCLOCKWISE FACING PAD	
(2)	100% CORE ENGINE SPEED = 14,460 RPM	
*(3)	FOR 7B27A, UNDER CERTAIN BLEED CONDITIONS, MAXMUM PAD RATING IS NOT AVAILABLE. REFER TO INSTALLATION MANUAL CFM-7B01 FOR MAX PERMISSIBLE EXTRACTION LOADS UNDER THESE CONDITIONS.	

NOTE 4.

Engine ratings are based on calibrated stand performance (sea level static) under the following conditions:

Takeoff thrust is nominally independent of ambient temperature (flat rated) up to ambient temperature of:

- Std + 15° C (30° C, 86° F) for all models except 7B22/B1 and 7B24/B1
- Std + 21° C (36° C, 96.8° F) for 7B22/B1 and 7B22/3B1
- Std + 26° C (41° C, 105.8° F) for 7B24/B1 and 7B24/3B1
- Std + 20° C (35° C, 95° F) for 7B26/B2 and 7B26/3B2
- Std + 35° C (50° C, 122° F) for 7B22/B2 and 7B22/3B2

Maximum continuous is nominally independent of ambient temperature (flat rated) up to ambient temperature of Std. + 10° C (25° C, 77° F) for all models.

Zero customer bleed and horsepower extraction.

100% inlet recovery.

Based on the production flight exhaust system.

NOTE 5.

Low pressure rotor (N1)
 High pressure rotor (N2)

MAXIMUM PERMISSIBLE ENGINE ROTOR SPEEDS (ALL MODELS)	
RPM	%
5,382	104
15,183	105
100% N1 = 5,175 RPM, 100% N2= 14,460 RPM	

MAXIMUM PERMISSIBLE AIR BLEED EXTRACTION (ALL MODELS)*		
LOCATION	FAN CORRECTED SPEED	FLOW LIMIT
Fan Discharge	All speeds above minimum idle	2% fan airflow
HPC Stage 5 only	All speeds above minimum idle	10% core airflow (up to 5.92 lbm/sec)
Compressor discharge only	Minimum idle to 61% N1K 61% to 82.5% N1K Above 82.5% N1K	12% core airflow Linear variation from 12% to 7% core airflow 7% core airflow
HPC Stage 5 and compressor discharge combined	Minimum idle to 61% N1K 61% to 82.5% N1K Above 82.5% N1K	13% core airflow Linear variation from 13% to 10% core airflow 10% core airflow

* FOR THE 7B27A ENGINE, UNDER CERTAIN GEARBOX LOAD CONDITIONS, THIS BLEED SCHEDULE WILL NOT BE AVAILABLE. FOR PERMITTED BLEED SCHEDULES UNDER THESE CONDITIONS, REFER TO CFM56-7B27A INSTALLATION MANUAL CFM7B01.

- NOTE 7.** Approved fuel conforming to GE Specification D50TF2. MIL-T-5624, Grades JP-4 or JP-5, ASTM D 1655, Jet A, A1 and B are consistent with this GE Specification. Primary fuel is Jet A, with other fuels listed being acceptable alternates. No fuel control adjustment is required when changing from primary to alternate fuels. Use of aviation gasoline is not authorized. Consult Specific Operating Instructions, CFMI-TP.01.14, Section 3, for additive usage.
- NOTE 8.** Life limits established for critical rotating components are published in Chapter 5 of the CFM56-7B Engine Shop Manual, CFM-TP.SM.10.
- NOTE 9.** Power setting, power checks and control of engine thrust output in all operations is to be based on CFM engine charts referring to fan speed. Fan speed sensors are included in the engine assembly for this purpose.
- NOTE 10.** The type certificate holder, CFM International, S.A., is a company established and jointly owned by Societe Nationale l'Etude et de Construction de Moteurs d'Aviation (SNECMA) of France and the General Electric Company for the certification, sale, and support of CFM56 series engines. With respect to the benefits of type certification for production, General Electric and SNECMA function as licensees of CFM International, S.A.
- This type certificate applies only to engines produced in France under EASA Type Certificate E.004. Engines of the same model designation produced in the United States under Type Certificate No. E00055EN are identical to and fully interchangeable with engines produced under this type certificate. Similarly, modules, assemblies, or parts produced in the United States under Production Certificate No. 108 are eligible for use in engines produced under this type certificate.
- These engines, when produced by General Electric, are identified by an even numbered serial number prefix (i.e., "874", "876", "888", "890", "892", or "654").
- All engines identified by an odd numbered prefix (i.e., "875", "877", "889", "891", "893", or "655") will be produced by SNECMA under Production Certificate No. F.G.007. Engine serial number 875-214 was the first engine produced by SNECMA under Production Certificate No. F.G.007.
- Effective September 28, 2004, engines produced by SNECMA were produced under EASA Production Certificate FR.21G.0007. Engine serial number 893-133 was the first engine produced by SNECMA under the EASA Production Certificate.
- NOTE 11.** The minimum permissible idle in flight corresponds to N2=64.7% (9,350 rpm) below 25°F. Between 25°F (-3.8°C) and 40°F (4.4°C), the idle speed varies from 64.7% (9,350 rpm) to 58.8% (8,500 rpm). Above 40°F (4.4°C), the minimum permissible idle speed is 58.8% (8,500 rpm). Other EEC schedule limitations, such as minimum fuel flow and minimum PS3 (including Mach No. bias for 7B27A only), may result in minimum N2 speed limitations in flight that are higher than the N2 limits listed above. All limits are non-adjustable and are preset into the EEC schedules.

NOTE 12. During negative-g operation only, it is permissible to operate below minimum oil pressure (13 psid) for a maximum of 10 seconds. See Specific Operating Instructions, CFMI-TP.01.14, Section 6.

NOTE 13. The normal 5 minute takeoff rating may be extended to 10 minutes for engine out contingency.

NOTE 14 (a). The indicated maximum permissible takeoff exhaust gas temperature (EGT) is 950°C. These indicated takeoff EGT redlines are accomplished via an EGT shunt and an EGT trim in the ECU software as noted below.

The effect on EGT (units °C) with respect to the indicated takeoff EGT redline value of 950°C for each of the models is summarized below:

NOTE 14 (a) (CONT).

Model	Actual Measured Takeoff Redline Value	Indicated Takeoff EGT level with 30°C Shunt Only*	Maximum EGT Trim Level**	Indicated Takeoff EGT Redline
7B18, 7B18/3	857	887	63	950
7B20, 7B20/3	884	914	36	950
7B22, 7B22/B1, 7B22/3, 7B22/3B1	886	916	34	950
7B22/B2, 7B22/3B2	920	950	0	950
7B24, 7B24/B1, 7B24/3, 7B24/3B1	908	938	12	950
7B26, 7B26/B1, 7B26/B2, 7B26/2, 7B26/3B1, 7B26/3B2	920	950	0	950
7B27, 7B27A, 7B27/B1, 7B27/B3, 7B27/3, 7B27/3B1, 7B27/3B3	920	950	0	950
7B20/2	894	914	36	950
7B22/2	896	916	34	950
7B24/2	918	938	12	950
7B26/2	930	950	0	950
7B27/2	930	950	0	950
7B26/3F, 7B26/3B2F, 7B27/3F, 7B27/3B1F	940	950	0	950

* EGT shunt adds 30°C to actual measured engine EGT on CFM56-7B and 7B/3 series engines, 10°C to actual measured engine EGT on CFM56-7B/3F series engines, and 20°C to the actual measured engine EGT on CFM56-7B/2 series engines to provide an indicated EGT level. This EGT shunt is triggered above 8,500 RPM core speed for all CFM56 series engines.

** The EGT trim function adds the values noted above to the indicated EGT levels. This EGT trim is only triggered at mach numbers from 0 to 0.40 and when the core speed is greater than 11,200 RPM. This function is only applicable for the engine models indicated.

NOTE 14 (b). The indicated maximum permissible maximum continuous EGT is 925°C corresponding to an actual measured EGT of 895°C on CFM56-7B and 7B/3 series engines, 915°C on 7B/3F series engines, and 905°C on CFM56-7B/2 series engines. EGT shunt adds 30°C to actual measured engine EGT on CFM56-7B series engines, 10°C to actual measured engine EGT on CFM56-7B/3F series engines, and 20°C to the actual measured engine EGT on CFM56-7B/2 series engines to provide an indicated EGT level. This EGT shunt is triggered above 8,500 RPM core speed for all CFM56 series engines.

NOTE 14 (c). All CFM56-7B, -7B/2, -7B/3, and -7B/3F series engines are certified with an indicated maximum permissible takeoff EGT transient allowance of 960°C for 20 seconds. This equates to a 10°C increase above the maximum permissible indicated value of 950°C.

- NOTE 15.** The CFM56-7B27A and CFM56-7B27A/3 variants are designed for military application only. The engine serial number of these variants includes 654, 655, 362 or 363 depending on final assembly location. FAA certified engines used in military service are not necessarily operated or maintained in accordance with FAA regulations. Commercial service use of the CFM56-7B27A and CFM56-7B27A/3 variants, and the installation of used CFM56-7B27A and CFM56-7B27A/3 parts in another CFM56-7B variant, are subject to prior approval of the FAA (Engine Certification Office, ANE-140)
- NOTE 16.** Note deleted.
- NOTE 17.** Criteria pertaining to the dispatch and maintenance requirements for the engine control systems are specified in the airworthiness limitation section of the CFM56-7B Engine Shop Manual (CFM-TP.SM.10), which defines the various configurations and maximum operating intervals.
- NOTE 18.** The actual maximum permissible oil temperature for starting and idle conditions is 10°C higher for continuous operation and 5°C higher for transient operation than the corresponding indicated oil temperatures.
- An indicated oil temperature for continuous operation of 140°C (284°F) corresponds to an actual oil temperature of 150°C (302°F).
- An indicated oil temperature for transient operation of 155°C (311°F) corresponds to an actual oil temperature of 160°C (320°F).
- NOTE 19.** CFM56-7B series includes:CFM56 -7B20, -7B22, -7B22/B1, -7B24, -7B24/B1, -7B26, -7B26/B2, -7B27, -7B27A, -7B26/B1, -7B27/B1, -7B27/B3 and 7B27A/3
CFM56-7B/2 series includes: CFM56-7B20/2, -7B22/2, -7B24/2, -7B26/2, and -7B27/2
CFM56-7B/3 series includes: CFM56-7B20/3, -7B22/3, -7B22/3B1, -7B24/3, -7B24/3B1, -7B26/3, -7B26/3B1, -7B26/3B2, -7B27/3, -7B27/3B1, and -7B27/3B3
CFM56-7B/3F series includes: CFM56-7B26/3F, -7B26/3B2F, -7B27/3F, and -7B27/3B1F.
- NOTE 20.** The models shown on this TCDS have the following general characteristics:
- | MODEL | CHARACTERISTICS |
|---------------|---|
| CFM56-7B18 | Base model (No longer available) |
| CFM56-7B20 | Same as CFM56-7B18 except for increased thrust ratings. |
| CFM56-7B22 | Same as CFM56-7B18 except for increased thrust ratings. |
| CFM56-7B24 | Same as CFM56-7B18 except for increased thrust ratings. |
| CFM56-7B26 | Same as CFM56-7B18 except for increased thrust ratings. |
| CFM56-7B27 | Same as CFM56-7B18 except for increased thrust ratings. |
| CFM56-7B20/2 | Same as CFM56-7B20 except CFM56-7B20/2 has a double annular combustor. |
| CFM56-7B22/2 | Same as CFM56-7B22 except CFM56-7B22/2 has a double annular combustor. |
| CFM56-7B24/2 | Same as CFM56-7B24 except CFM56-7B24/2 has a double annular combustor. |
| CFM56-7B26/2 | Same as CFM56-7B26 except CFM56-7B26/2 has a double annular combustor. |
| CFM56-7B27/2 | Same as CFM56-7B27 except CFM56-7B27/2 has a double annular combustor. |
| CFM56-7B27/B1 | Same as CFM56-7B27 except CFM56-7B27/B1 has optimized power management at takeoff. |
| CFM56-7B26/B1 | Same as CFM56-7B26 except CFM56-7B26/B1 is intended for a business jet application (different mission). |

NOTE 20. (CONT.)

CFM56-7B27B3	Same as CFM56-7B27 except CFM56-7B27/B1 is intended for a business jet application (different mission).
CFM56-7B22/B1	Same as CFM56-7B22 except CFM56-7B22/B1 has an extended flat rated temperature for takeoff.
CFM56-7B24/B1	Same as CFM56-7B24 except CFM56-7B24/B1 has an extended flat rated temperature for takeoff.
CFM56-7B27A	Same as CFM56-7B27, except CFM56-7B27A has increased capability for gearbox power extraction.
CFM56-7B26/B2	Same as CFM56-7B26, except CFM56-7B26/B2 has an extended high altitude and temperature rating above corner point takeoff.
CFM56-7B20/3	Same as CFM56-7B18 except for increased thrust, low emissions combustor and redesigned compressor and HPT rotor.
CFM56-7B22/3	Same as CFM56-7B18 except for increased thrust, low emissions combustor and redesigned compressor and HPT rotor.
CFM56-7B24/3	Same as CFM56-7B18 except for increased thrust, low emissions combustor and redesigned compressor and HPT rotor.
CFM56-7B26/3	Same as CFM56-7B18 except for increased thrust, low emissions combustor and redesigned compressor and HPT rotor.
CFM56-7B27/3	Same as CFM56-7B18 except for increased thrust, low emissions combustor and redesigned compressor and HPT rotor.
CFM56-7B22/3B1	Same as CFM56-7B22/B1 except for low emissions combustor and redesigned compressor and HPT rotor.
CFM56-7B24/3B1	Same as CFM56-7B24/B1 except for low emissions combustor and redesigned compressor and HPT rotor.
CFM56-7B26/3B1	Same as CFM56-7B26/B1 except for low emissions combustor and redesigned compressor and HPT rotor.
CFM56-7B26/3B2	Same as CFM56-7B26/B2 except for low emissions combustor and redesigned compressor and HPT rotor.
CFM56-7B27/3B1	Same as CFM56-7B27/B1 except for low emissions combustor and redesigned compressor and HPT rotor.
CFM56-7B27/3B3	Same as CFM56-7B27/B3 except for low emissions combustor and redesigned compressor and HPT rotor.
CFM56-7B26/3F	Same as CFM56-7B26/3 except for increased EGT limits.
CFM56-7B26/3B2F	Same as CFM56-7B26/3B2 except for increased EGT limits.
CFM56-7B27/3F	Same as CFM56-7B27/3 except for increased EGT limits.
CFM56-7B27/3B1F	Same as CFM56-7B27/3B3 except for increased EGT limits.
CFM56-7B27A/3	Same as CFM56-7B27/A except for low emissions combustor and redesigned compressor and HPT rotor.

NOTE 21.

Installation Manuals, Specific Operating Instructions, Service Bulletins, Overhaul and Maintenance Manuals, Repair Manuals, Vendor Manuals, and Design Changes which contain a statement that the document is EASA approved or approved under authority of DOA No. EASA.21J.086 or for approvals made before September 28, 2003 by DGAC are accepted by the FAA and considered FAA approved. Repair data and related instructions are considered FAA approved or accepted as applicable. These approvals pertain to the type design only.

NOTE 22.

All engine models are in compliance with the emissions requirements in 14 CFR Part 34, effective September 10, 1990, as amended by 34-1 through 34-3. In addition the CFM56-7B/3 and -7B/3F series engines are in compliance with 40 CFR Part 87, effective December 19, 2005 until such time as 14 CFR Part 34 is amended to include such requirements.

---END---