

FM 3-Pole 400 mm Balanced Combiner

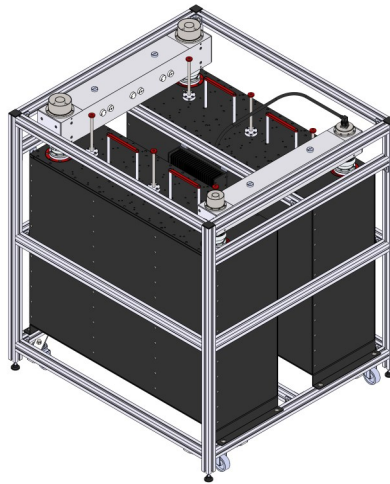
DF3P400F

FEATURES

- Full-Band Tunability
- 0.8 MHz Minimum Frequency Spacing
- Temperature Stabilization
- DC-Short
- Modular Connector System
- Modular Frame System
- 10-Year Warranty

OPTIONS

- Heat Sinks
- Forced Air Cooling
- Liquid Cooling



SPECIFICATIONS

Code / Revision	B-DF3P400F/n / A <i>n: Number of Filtered Inputs</i>					
No. of Poles / Cavity Size	3-Pole / 400 mm					
Frequency Range	87.5-108 MHz					
Frequency Spacing	≥ 0.8 MHz					
Temperature Stability	< 400 Hz/K					
Max Operating Temperature (Body)	65°C (149°F)					
Environmental Conditions	-5 to +55°C (+23 to +131°F), IP60					
Dimensions / Weight ⁽¹⁾	n=1: 1220x1302x1430 mm / 230 kg n≥2: 1220x(1310·n)x1430 mm / 230·n kg					
Operating Position	As shown in drawing only					
Links	1+5/8" Rigid Line					
Connectors (NB Inputs) ⁽²⁾	1x 100 mm D-PC100M 3+1/8" FastLine Socket (Default) D-PC100N 3+1/8" FastLine Flange D-PC100P 4+1/2" FastLine Socket D-PC100Q 4+1/2" FastLine Flange					
Connectors (WB Input; Output) ⁽²⁾	2x 130 mm D-PC130P 4+1/2" FastLine Socket (Default) D-PC130Q 4+1/2" FastLine Flange D-PC130S RL-120 FastLine Socket D-PC130X RL-120 FastLine Flange					
Options ⁽²⁾	O-HCS.14 Heat Sinks O-FTC.00 Forced Air Cooling O-LTC.14 Liquid Cooling O-MTS.01 70 °C (158 °F) N.C. Thermostat					
Liquid Cooling Interface ⁽²⁾ / Coolant	3/8" NPT Male / Water and Antifreeze					
TUNING	2.0		1.5		1.0	
Minimum Frequency Spacing	1.6 MHz		1.2 MHz		0.8 MHz	
Tuning Code	T-3F.10		T-3F.12		T-3F.14	
Max RMS NB Input Power ⁽³⁾	(108 MHz) Default 23.8 kW Heat Sinks 28.6 kW Forced Air Cooling 35.7 kW Liquid Cooling ⁽⁵⁾ 35.7 kW		(108 MHz) Default 18.5 kW Heat Sinks 22.3 kW Forced Air Cooling 27.8 kW Liquid Cooling ⁽⁵⁾ 27.8 kW		(108 MHz) Default 12.9 kW Heat Sinks 15.5 kW Forced Air Cooling 19.4 kW Liquid Cooling ⁽⁵⁾ 19.4 kW	
Max RMS Output Power ⁽³⁾	95.0 kW		95.0 kW		95.0 kW	
NB Insertion Loss	(87.5 MHz) (108 MHz) C.F. < 0.15 dB < 0.17 dB ±150 kHz < 0.16 dB < 0.18 dB + 0.01·(n+1) dB		(87.5 MHz) (108 MHz) C.F. < 0.20 dB < 0.22 dB ±150 kHz < 0.21 dB < 0.23 dB + 0.01·(n+1) dB		(87.5 MHz) (108 MHz) C.F. < 0.29 dB < 0.31 dB ±150 kHz < 0.31 dB < 0.34 dB + 0.01·(n+1) dB	
WB Insertion Loss	< 0.06·n dB		< 0.06·n dB		< 0.06·n dB	
Selectivity	C.F. ± 2.0 MHz > 27 dB		C.F. ± 1.5 MHz > 27 dB		C.F. ± 1.0 MHz > 27 dB	
Harmonic Attenuation ⁽⁶⁾	> 40 dB up to 324 MHz		> 40 dB up to 324 MHz		> 40 dB up to 324 MHz	
NB Return Loss (VSWR)	> 26 dB (1.11)		> 26 dB (1.11)		> 26 dB (1.11)	
WB Return Loss (VSWR)	Single Ch. > 30 dB (1.07) All band > 24 dB (1.14)		Single Ch. > 30 dB (1.07) All band > 24 dB (1.14)		Single Ch. > 30 dB (1.07) All band > 24 dB (1.14)	
Isolation Between Inputs	> 35 dB		> 35 dB		> 35 dB	
Group Delay Variation	< 10 ns		< 30 ns		< 100 ns	

⁽¹⁾ Approximate, default configuration ⁽²⁾ Other Other Connectors, Options, Tunings available ⁽³⁾ Altitude < 1500 m (4,900 ft.), Free air, Ambient temp. < 30 °C (86 °F)

⁽⁶⁾ Up to 3rd harmonic atten. with LP/LC Series Lowpass Filter