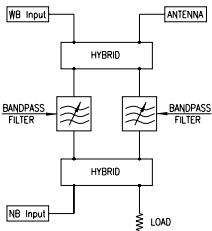


# UC/FM/LB3-40

## FM DIRECTIONAL FILTER TYPE COMBINER

### FEATURES

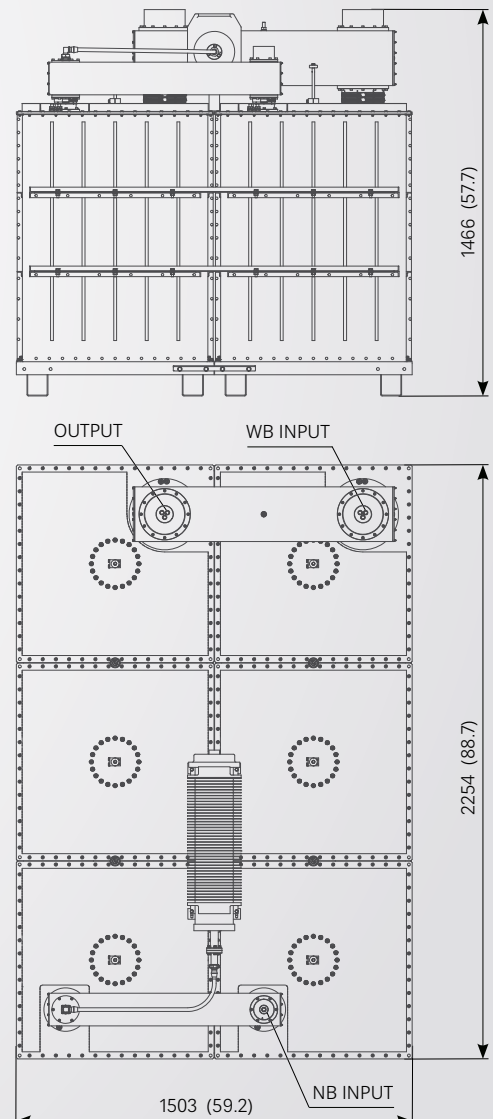
- FM double bridge channel combiner
- 3 pole / 750 mm (29.5 in)
- adjustable selectivity
- temperature compensated



### ELECTRICAL AND MECHANICAL DATA

COMBINER TYPE	UC/FM/LB3-40		
FREQUENCY RANGE	87.5 ÷ 108 MHz		
- wideband input	87.5 ÷ 108 MHz		
- narrowband input	Tunable over entire FM range		
INPUTS AND OUTPUT IMPEDANCE	50 ohm		
RETURN LOSS			
- wideband input	≥ 26 dB		
- narrowband input (at carrier fo)	≥ 32 dB		
INSERTION LOSS (at carrier fo)			
NB input with freq. spacing ±1.6 MHz	≤ 0.14 dB		
NB input with freq. spacing ±1.2 MHz	≤ 0.17 dB		
NB input with freq. spacing ±0.8 MHz	≤ 0.22 dB		
WB input	≤ 0.10 dB		
WB input with freq. spacing ±0.8 MHz	≤ 0.15 dB		
ISOLATION (at carrier fo)			
- Narrowband input to wideband input	≥ 35 dB (typical)		
- Wideband input to narrowband input	≥ 50 dB		
GROUP DELAY	≤ 40 ns at fo ±100 kHz		
(With 0.8 MHz frequency spacing)	≤ 80 ns at fo ±150 kHz		
MAX POWER RATINGS / freq. spacing (MHz)	±1.6	±1.2	±0.8
- Narrowband input **	50 kW	50 kW	40 kW
- Wideband input **	160 kW	160 kW	160 kW
- Total output **	160 kW	160 kW	160 kW
OPERATING TEMPERATURE RANGE	-10 to + 45°C (+14 to +113°F)		
OVER TEMPERATURE*	typical 30 K at max NB input power		
INPUT PORTS			
- Narrowband input ***	3-1/8" Unfl.		
- Wideband input	6-1/8" Unfl.		
OUTPUT PORT	6-1/8" Unfl.		
WEIGHT (approx)	570 kg (1257 lb)		

\* referred to ambient temperature. Recommended: [AmbientTemp. + OverTemp.] ≤ 70°C (158°F)  
 \*\* increased power on request  
 \*\*\* other connectors on request



All dimensions are in millimeters (inches)