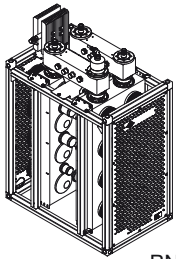
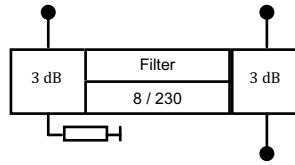
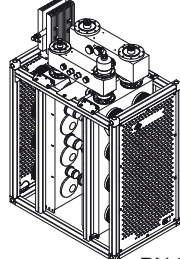


## CCS UHF CIB COMBINERS

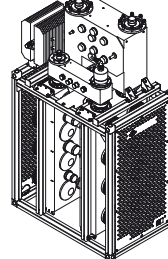
- **CCS** compact design
- integrated mask filters for DTV
- adjacent channel operation
- for 6, 7 and 8 MHz channel bandwidth
- temperature compensated
- tuneable within the whole UHF range
- liquid cooled filters and couplers



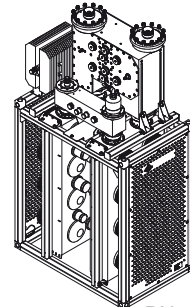
BN 57 55 45 A0080



BN 57 55 46 A0080



BN 57 55 47 A0080



BN 57 55 48 A0080

Part number Cooling	BN 57 55 45 A0080 liquid cooling	BN 57 55 46 A0080 liquid cooling	BN 57 55 47 A0080 liquid cooling	BN 57 55 48 A0080 liquid cooling
Frequency range	470 - 800 MHz			
Channel spacing	≥ 0			
<b>Narrow band input</b>	3 1/8" EIA male			
Filter type integrated cavities/size	8/230 ≡ BN 616670			
Temperature stability	≤ 2 kHz / K			
Harmonics attenuation	≥ 50 dB for f ≤ 860 MHz			
DTV Mask filtering	DVB-T @ 8 MHz ( $\dot{U}/U_{rms}=13$ dB)	ISDB-T @ 6 MHz ( $\dot{U}/U_{rms}=13$ dB)	ATSC @ 6 MHz ( $\dot{U}/U_{rms}=11$ dB)	
Average input power The input power of liquid cooled filters must be reduced if installed more than 500 m above sea level.	≤ 23 kW @ 0 - 2700 m ≤ 22 kW @ 3000 m ≤ 20 kW @ 3400 m ≤ 18 kW @ 3800 m ≤ 16 kW @ 4200 m	≤ 23 kW @ 0 - 1600 m ≤ 22 kW @ 1800 m ≤ 20 kW @ 2400 m ≤ 18 kW @ 3000 m ≤ 16 kW @ 3400 m ≤ 14 kW @ 4000 m	≤ 23 kW @ 0 - 1600 m ≤ 22 kW @ 1800 m ≤ 20 kW @ 2400 m ≤ 18 kW @ 3000 m ≤ 16 kW @ 3400 m ≤ 14 kW @ 4000 m	
Tuning instruction	AS8124		AS8128	
Insertion loss & Mask filtering (alternative tuning on request)	470 MHz 790 MHz $f_0$ ≤ 0.4 dB ≤ 0.45 dB $f_0 \pm 3.805$ ≤ 1.05 dB ≤ 1.10 dB $f_0 \pm 3.885$ ≤ 1.25 dB ≤ 1.35 dB $f_0 \pm 4.2$ ≥ 15 dB $f_0 \pm 6$ ≥ 40 dB $f_0 \pm 12$ ≥ 55 dB	470 MHz 790 MHz $f_0$ ≤ 0.45 dB ≤ 0.5 dB $f_0 \pm 2.79$ ≤ 1.15 dB ≤ 1.20 dB $f_0 \pm 3.15$ ≥ 15 dB $f_0 \pm 4.5$ ≥ 30 dB $f_0 \pm 9$ ≥ 55 dB $f_0 \pm 15$ ≥ 65 dB	470 MHz 790 MHz $f_0$ ≤ 0.45 dB ≤ 0.5 dB $f_0 \pm 2.69$ ≤ 1.00 dB ≤ 1.1 dB $f_0 \pm 3.0$ ≥ 4 dB $f_0 \pm 3.25$ ≥ 18 dB $f_0 \pm 9$ ≥ 64 dB	
Group delay variation	$\Delta\tau \leq 700$ ns		$\Delta\tau \leq 550$ ns	
<b>Wide band input</b>	3 1/8" EIA male	4 1/2" EIA male	52-120 BT male	6 1/8" EIA male
Average input power	≤ 17.5 kW	≤ 33 kW	≤ 60 kW	≤ 80 kW
DTV Mask filtering	no			
Insertion loss	≤ 0.1 dB (non adjacent)			
<b>Output</b>	3 1/8" EIA male	4 1/2" EIA male	52-120 BT male	6 1/8" EIA male
Peak output voltage	≤ 12.5 kV	≤ 15.5 kV	≤ 19.5 kV	≤ 24 kV
Isolation between inputs	≥ 35 dB			
VSWR (one WB channel)	≤ 1.06			
Dimensions (L x W x H) mm	900 x 570 x 1400	900 x 570 x 1400	900 x 570 x 1600	900 x 570 x 1650
Weight	≈ 200 kg	≈ 210 kg	≈ 260 kg	≈ 285 kg
Environmental conditions	for limitations see „Environmental Conditions for Broadcast Products“			