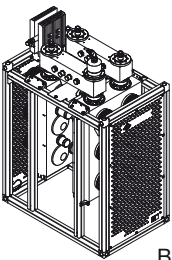
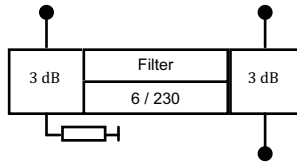
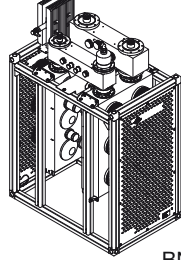


CCS UHF CIB COMBINERS

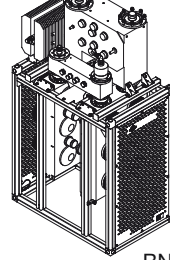
- **CCS** compact design
- integrated mask filters for DTV
- adjacent channel operation
- for 6, 7 and 8 MHz channel bandwidth
- temperature compensated
- tuneable within the whole UHF range
- liquid cooled filters and couplers



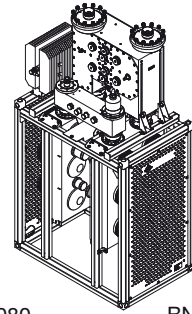
BN 57 55 40 A0080



BN 57 55 41 A0080



BN 57 55 42 A0080



BN 57 55 43 A0080

Part number Cooling	BN 57 55 40 A0080 liquid cooling	BN 57 55 41 A0080 liquid cooling	BN 57 55 42 A0080 liquid cooling	BN 57 55 43 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	6/230 ≡ BN 616669			
Temperature stability	≤ 2 kHz / K			
Harmonics attenuation	≥ 50 dB for f ≤ 800 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 - 3200 m ≤ 20 kW @ 3800 m ≤ 18 kW @ 4200 m	≤ 23 kW @ 0 - 2200 m ≤ 20 kW @ 3000 m ≤ 18 kW @ 3400 m ≤ 16 kW @ 4000 m	≤ 23 kW @ 0 - 3200 m ≤ 20 kW @ 3800 m ≤ 18 kW @ 4200 m	
Tuning instruction	AS6303		AS6365	
Insertion loss & Mask filtering (alternative tuning on request)	470 MHz	786 MHz	470 MHz	785 MHz
	$f_0$	≤ 0.30 dB ≤ 0.4 dB	$f_0$	≤ 0.4 dB ≤ 0.45 dB
	$f_0 \pm 3.805$	≤ 0.75 dB ≤ 0.9 dB	$f_0 \pm 2.79$	≤ 0.85 dB ≤ 1.00 dB
	$f_0 \pm 3.885$	≤ 0.85 dB ≤ 1.0 dB	$f_0 \pm 3.0$	≥ 2 dB
	$f_0 \pm 4.2$	≥ 4 dB	$f_0 \pm 3.15$	≥ 8 dB
	$f_0 \pm 6$	≥ 20 dB	$f_0 \pm 4.5$	≥ 23 dB
	$f_0 \pm 12$	≥ 40 dB	$f_0 \pm 9$	≥ 48 dB
Group delay variation	$\Delta\tau \leq 350$ ns		$\Delta\tau \leq 500$ 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	Attention: The power at the wide band input must be reduced by 50 % of the power fed into the narrow band input			
Insertion loss	no			
	≤ 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	≈ 160 kg	≈ 170 kg	≈ 220 kg	≈ 245 kg
Environmental conditions	for limitations see „Environmental Conditions for Broadcast Products“			

Mehrsenderweichen  
Multi-Channel Combiners