KA-2023

DIPLEXER 617-960+1695-2690/3300-4200



The Kaelus KA-2023 is a bi-directional Diplexer designed to combine low bands with C-band, the KA-2023 provides excellent insertion loss and passive intermodulation performance.

FEATURES

- Enables antenna/feeder to inject C-band into existing installations
- Designed and 100% tested for low passive intermodulation
- Very low insertion loss
- Small size, lightweight

TECHNICAL SPECIFICATIONS

PORT NAME	LOW BAND	HIGH BAND
Passband	617-960/1695-2690 MHz	3300 - 4200 MHz
Insertion loss	617- 960 MHz: 0.3 dB typical, 0.4 dB max 1695 - 2690 MHz: 0.2 dB typical, 0.3 dB max	0.2 dB typical, 0.3 dB max
Return loss	20 dB typical 18 dB min	
Maximum input power	100 W (average) / 1000 W (PEP)	100 W (average) / 1000 W (PEP)
Intermodulation products	<-160 dBc typ at 2 x +43 dBm TX Carrier (IM3)	<-153 dBc typ at 2 x +43 dBm TX Carrier (IM3)
ELECTRICAL		
Isolation	40 dB minimum 3300-4200 MHz	40 dB minimum 617-960 MHz 1695-2690 MHz
Impedance	50 Ω	
ENVIRONMENTAL		
For further details of environmental compliance, please contact Kaelus.		
Temperature range	-40 ºC to +65 ºC | -40 ºF to +149 ºF	
Ingress protection	IP67	
Altitude	3000 m/10,000 ft maximum	
Lightning protection	RF: ±5 kA maximum (8/20 us), IEC61312-1	
MTBF	>1,000,000 hours	
Compliance	FCC part 15 subpart B	
MECHANICAL		
Dimensions H x D x W (single unit)	170 x 51 x 153 mm | 6.9 x 2.0 x 6.0 in	
Dimensions H x D x W (twin unit)	170 x 94 x 153 mm | 6.9 x 3.7 x 6.0 in	
Dimensions H x D x W (quad unit)	170 x 198 x 162 mm | 6.9 x 7.8 x 6.4 in	
Weight	2.2 kg | 4.7 lbs (single unit) 3.9 kg | 8.6 lbs (twin unit) 7.8 kg | 17.1 lbs (quad unit)	
Finish	Painted, NCS 1502-R	
Connectors	4.3-10 Female	
Mounting	Pole/wall bracket supplied with two metal clamps for 45-178 mm diameter poles	

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ORDERING INFORMATION

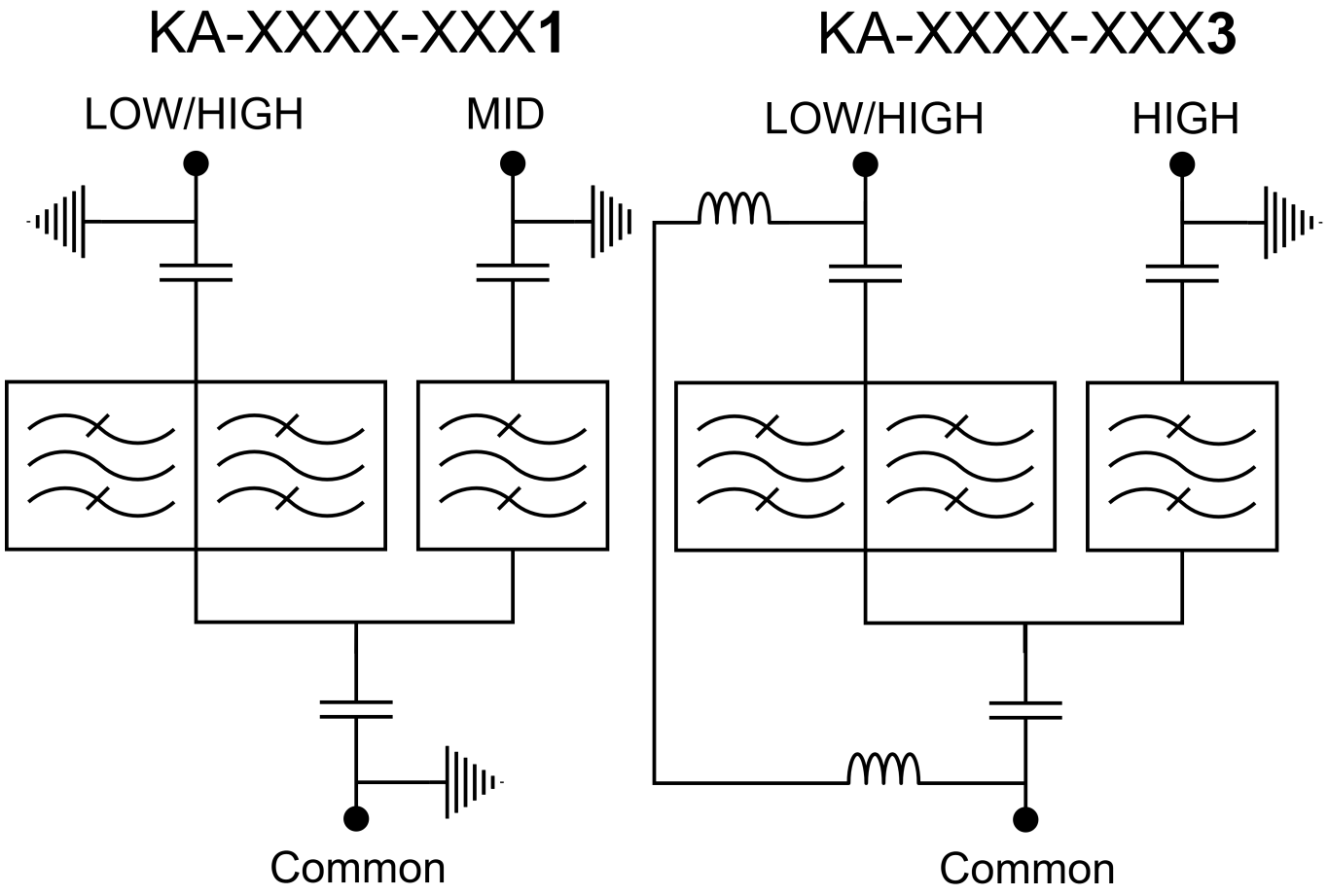
PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
KA-2023-1031	2 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
KA-2023-1033	2 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC LOW TO COMMON
KA-2023-2031	4 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
KA-2023-2033	4 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC LOW TO COMMON
KA-2023-4031	8 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
KA-2023-4033	8 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC LOW TO COMMON

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ELECTRICAL BLOCK DIAGRAM

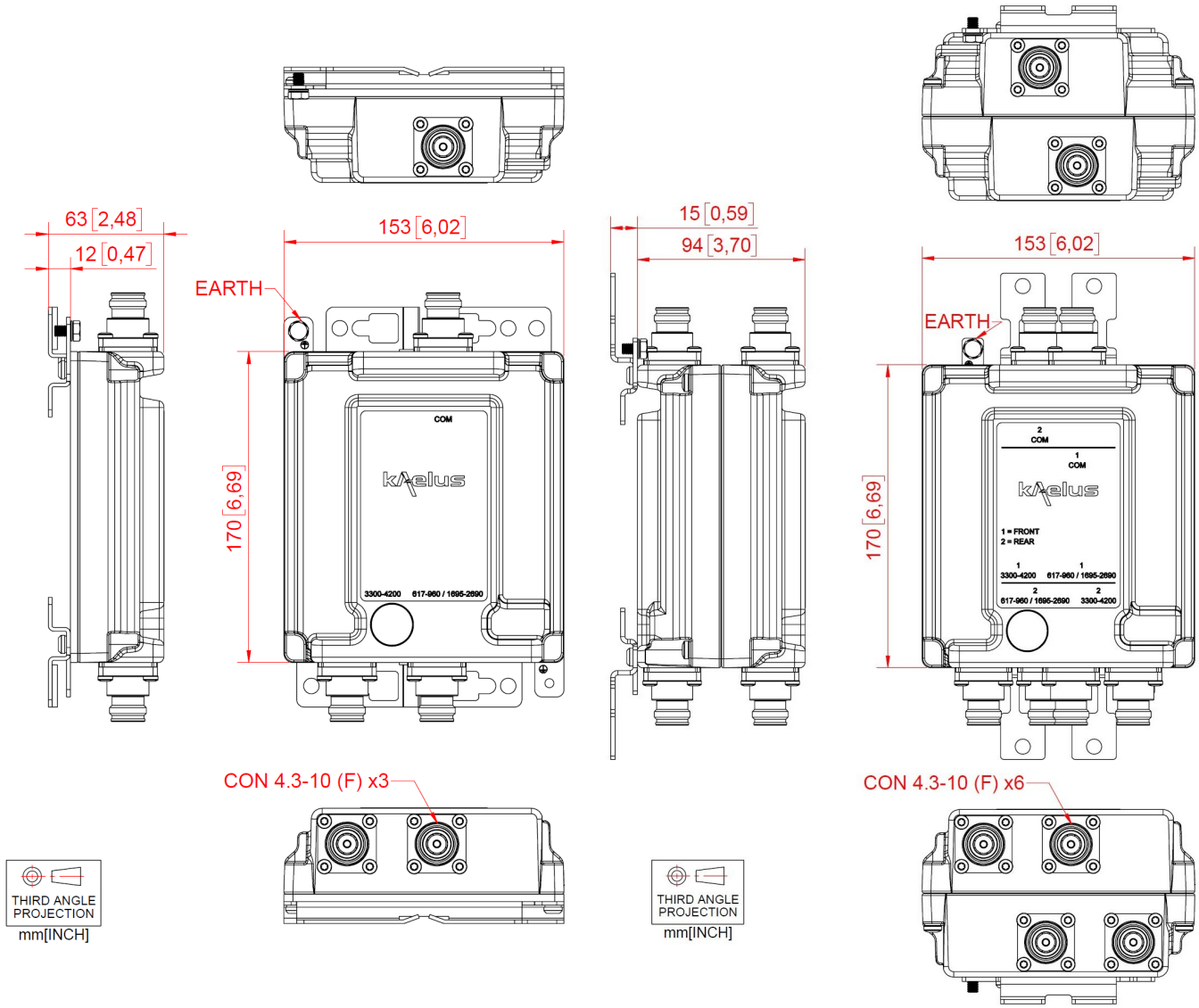
KA-2023-**XXXZ** where
Z denotes the DC path variant
LOW port is 617-960/1695-2690 MHz
HIGH port is 3300-4200 MHz
Please note if DC ALL is used that all ports which are DC shorted need to have a DC block



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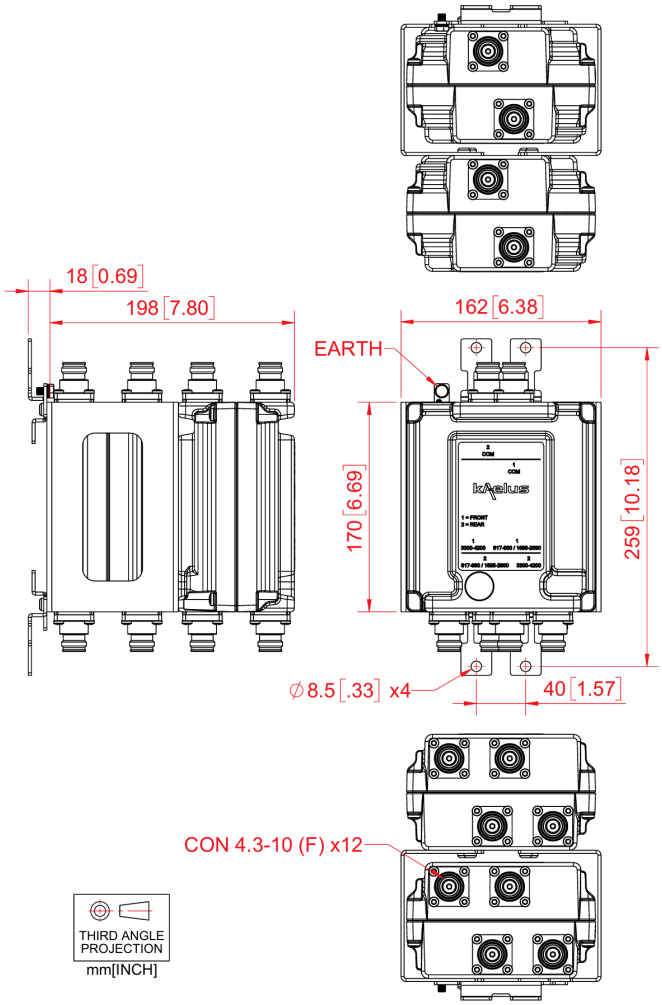
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MECHANICAL BLOCK DIAGRAM



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