

TBC0026F2V51-2

TRIPLEXER 700/850/1900-AWS

Designed to combine 700, 850 and 1900/AWS technologies the Kaelus TBC0026 provides a low loss combiner with excellent insertion loss and passive inter-modulation performance. The TBC0026 is AWS 3 / AWS 3U and AWS 4 ready.

FEATURES

- AWS 3 / AWS 3U and AWS4 ready, combines 700, 850 and high band BTS onto a single feeder
- Designed for low passive inter-modulation
- DC/AISG bypass field settable
- Very low insertion loss



TECHNICAL SPECIFICATIONS

BAND NAME	700	850	1900/AWS
Passband	698-798MHz	824-894MHz	1695-2200MHz
Insertion loss	0.25dB maximum @ 698-793MHz / 0.35dB maximum @ 793-798MHz	0.25dB maximum	0.2dB maximum

ELECTRICAL	
Impedance	50Ohms
Return loss	21dB minimum, 24dB typical
Intermodulation products	-161dBc typical / -153dBc maximum all ports with 2 x 20W carriers
Maximum input power	300W (average) / 3kW (PEP)
Isolation from port to port	50dB minimum, 698-793MHz & 824-894MHz & 1695-2200MHz
Isolation from port to port	35dB minimum, 793-798MHz
Phase linearity variation over any 10MHz	10° maximum
Group delay variation over any 10MHz	15ns maximum

DC / AISG	
A field selectable DC/AISG path is achieved via mechanical links on a IEC60130-9, 8-pin female connector (see electrical block diagram). It is Kaelus's recommendation that due to AISG link budget reasons that a maximum of 2 DC/AISG paths are activated simultaneously without active repeating of the AISG signal	
Passband	0 – 3MHz
Insertion loss, single DC/AISG pass	1dB maximum
Return loss, single DC/AISG pass	12dB minimum
Insertion loss, two DC/AISG pass	4.5dB typical
Return loss, two DC/AISG pass	9dB typical
Input voltage range	± 31V
DC current rating	2A continuous, 4A peak
Compliance	AISG 1.1/2.0

ENVIRONMENTAL	
For further details of environmental compliance, please contact Kaelus.	
Temperature range	-40°C to +65°C -40°F to +149°F
Ingress protection	IP67
Lightning protection	IEC61000-4-5, RF: ±5kA maximum (8/20us)
MTBF	>1,000,000 hours
Compliance	ETSI EN 300 019 class 4.1, RoHS

MECHANICAL	
Dimensions H x D x W (single unit)	236 x 168 x 81mm 9.3 x 6.6 x 3.2in
Dimensions H x D x W (twin unit)	236 x 168 x 165mm 9.3 x 6.6 x 6.5in
Weight	5.2kg 11.5lbs (single unit) 11.6kg 25.6lbs(twin unit)
Finish	Painted, light grey (RAL7035)
Connectors	DIN 7-16 (F) x 4 long neck(single unit) DIN 7-16 (F) x 8 long neck(twin unit)
Mounting	Pole/wall bracket supplied with two metal clamps for 45-178 mm diameter poles

ORDERING INFORMATION

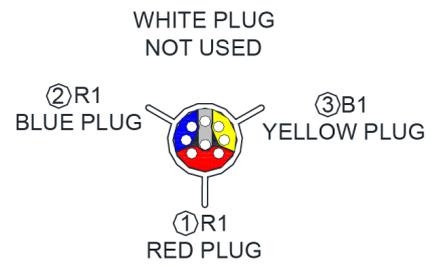
PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
TBC0026F2V51-1	SINGLE 1 in / 3 out	DC SWITCH	7/16 (F)	FIELD CONFIGURABLE
TBC0026F2V51-2	TWIN 2 in / 6 out	DC SWITCH	7/16 (F)	FIELD CONFIGURABLE
TBC0026F2V51-6R	RACK 6 in / 18 out	DC SWITCH	7/16 (F)	FIELD CONFIGURABLE

ELECTRICAL BLOCK DIAGRAM

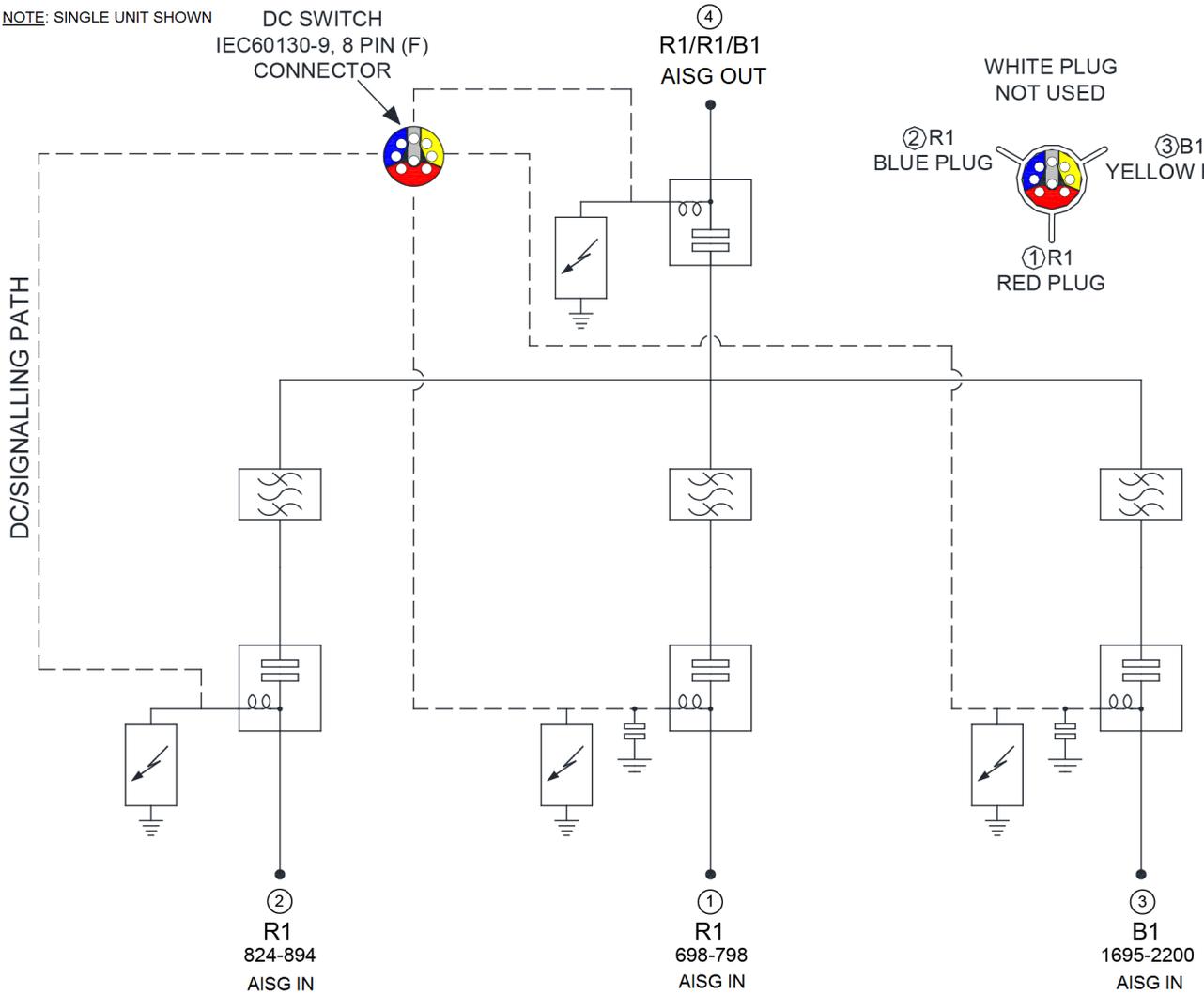
NOTE: SINGLE UNIT SHOWN

DC SWITCH
IEC60130-9, 8 PIN (F)
CONNECTOR

④
R1/R1/B1
AISG OUT

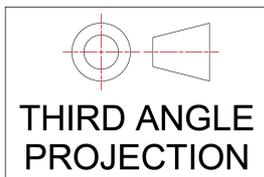
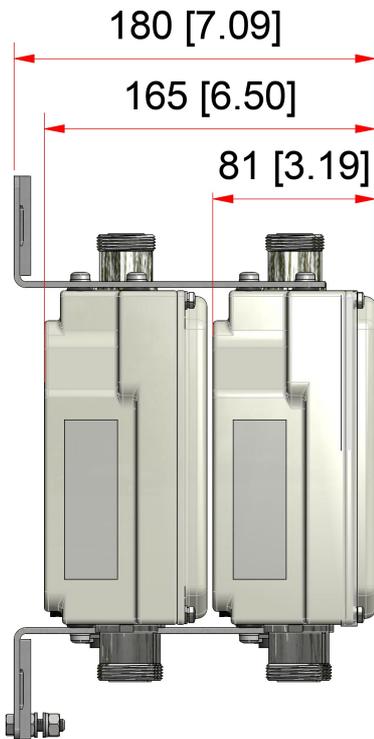


DC/SIGNALLING PATH



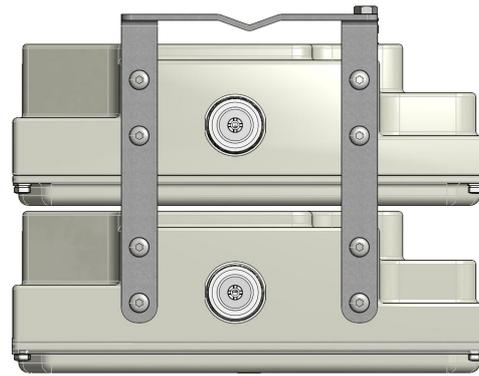
MECHANICAL BLOCK DIAGRAM

NOTE: TWIN UNIT SHOWN

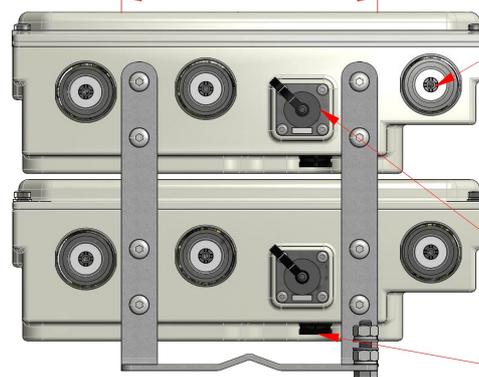
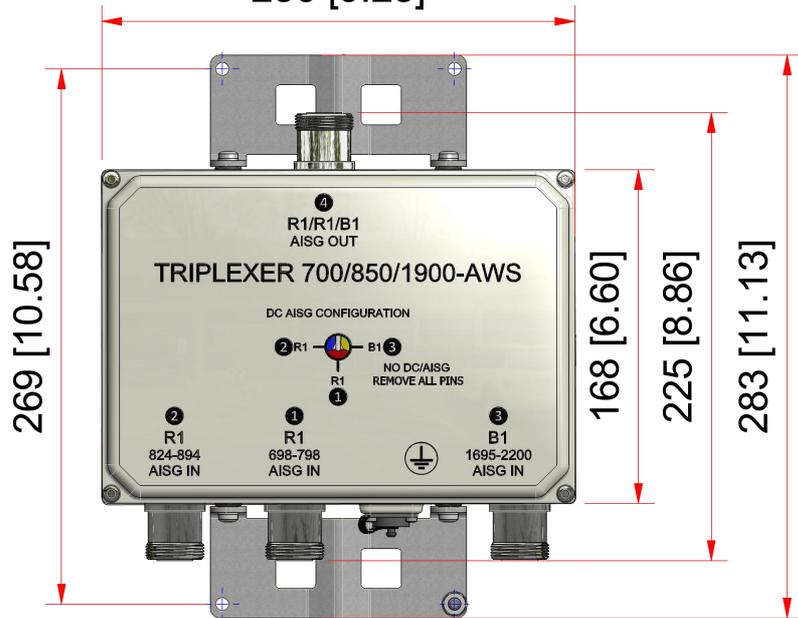


THIRD ANGLE PROJECTION

mm[inch]
Tolerance: ± 1mm



236 [9.28]



DIN7-16(F) x 8

DC SWITCH

BREATHER