

3-channel Broadband Hybrid Combiner for the frequency range UHF450 MHz

DESCRIPTION

- > New improved design on PCB of high power hybrid combiners.
- > Broadband, working in all the frequency range 380-470 MHz, without compromise the Tx-Tx isolation
- > Used for combining three transmitters or receivers to just one antenna.
- > Reduces the required number of antennas.
- > Can also be used with three antennas combining to one transmitter or receiver.
- > As standard the hybrid is supplied with 30 W loads.
- > Other loads for higher input power are available on request.



SPECIFICATIONS

Electrical	
Model	PRO-PHY450-3/380-470
Filter Type	Hybrid Junction
Frequency	380 - 470 MHz
Max. Input Power	45 W per ch. with 30 W loads fitted (See note**) (Max. 150 W per ch. with larger loads)
Insertion Loss	< 5.8 dB
Impedance	50 Ω
Isolation Tx1 - Tx2	> 30 dB (See note*)
VSWR	< 1.5:1 on every port, when the other ports are terminated with 50 Ω
Load	30 W load fitted (other ratings available)
No. of channels	3
Mechanical	
Connection(s)	N(f) (other on request)
Dimensions	428 x 56.7 (incl. conn.) x 70 mm / 16.85 x 2.23 x 2.76 in.
Weight	Approx. 1.3 kg / 2.88 lb. incl. 30 W loads
Environmental	
Operating temperature range	-30 °C to +60 °C

ORDERING

Model	Product No.
PRO-PHY450-3/380-470/45W	210003084
PRO-PHY450-3/380-470/75W	210003111
PRO-PHY450-3/380-470/110W	210003112

TYPICAL RESPONSE CURVE

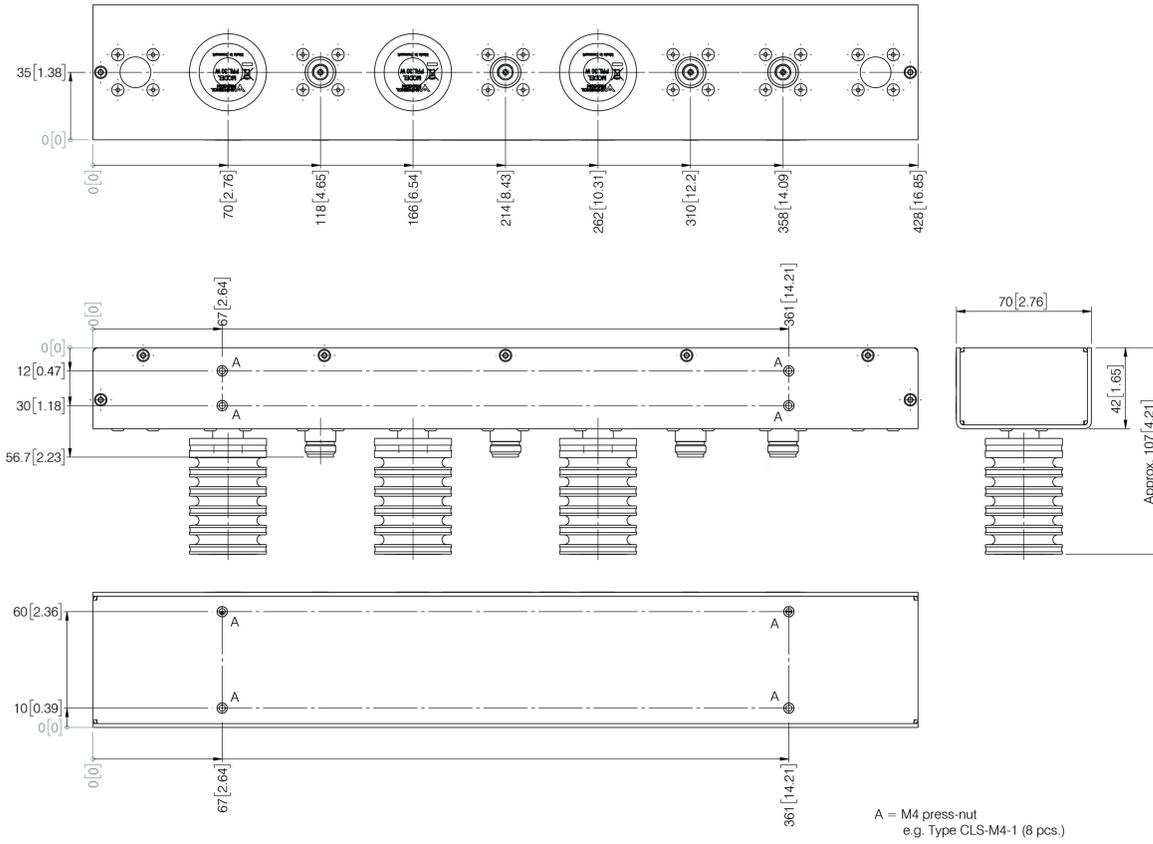


NOTE

* The isolation between the Tx ports is directly dependent on the terminating VSWR on the antenna port. E.g. with a VSWR = 1.5:1 on the ANT. port, the isolation between the Tx ports can be reduced to 20 dB @ in the 380-470 MHz range

** In a 3 channel hybrid 1/3 of the total input power will be led out to the Ant. port. The rest 2/3 of the total input power will be distributed equal to the 3 loads. E.g. with 3 x 45 W input power, 2/3 = 90 W is accommodated equal in the 3 loads, this means 90W/3 loads = 30 W of power per load.

MOUNTING DETAILS



All dimensions are given in mm [in.]

