



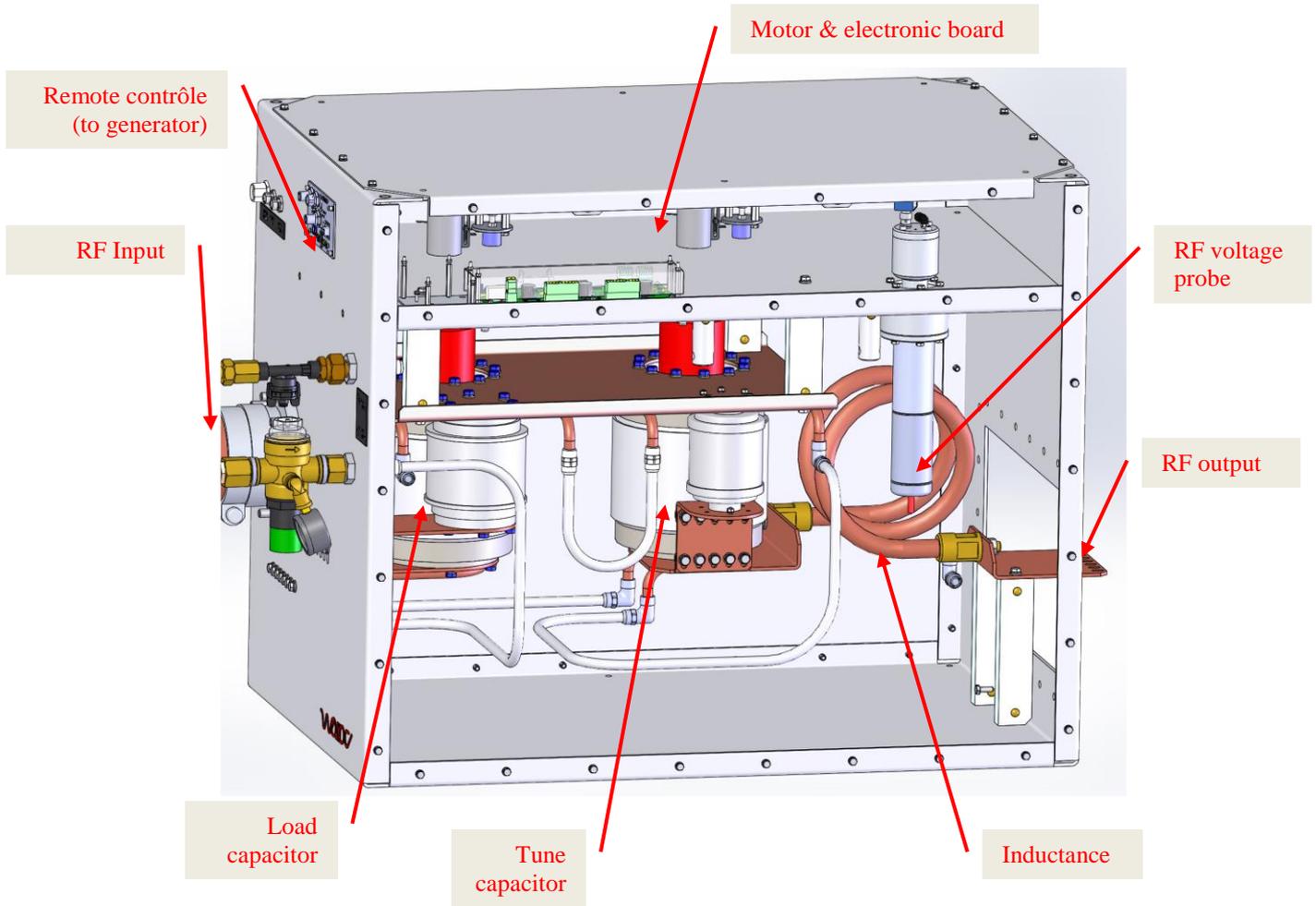
BA200VV-R-CO
RF Matching box: 200 A & 40 kV RF



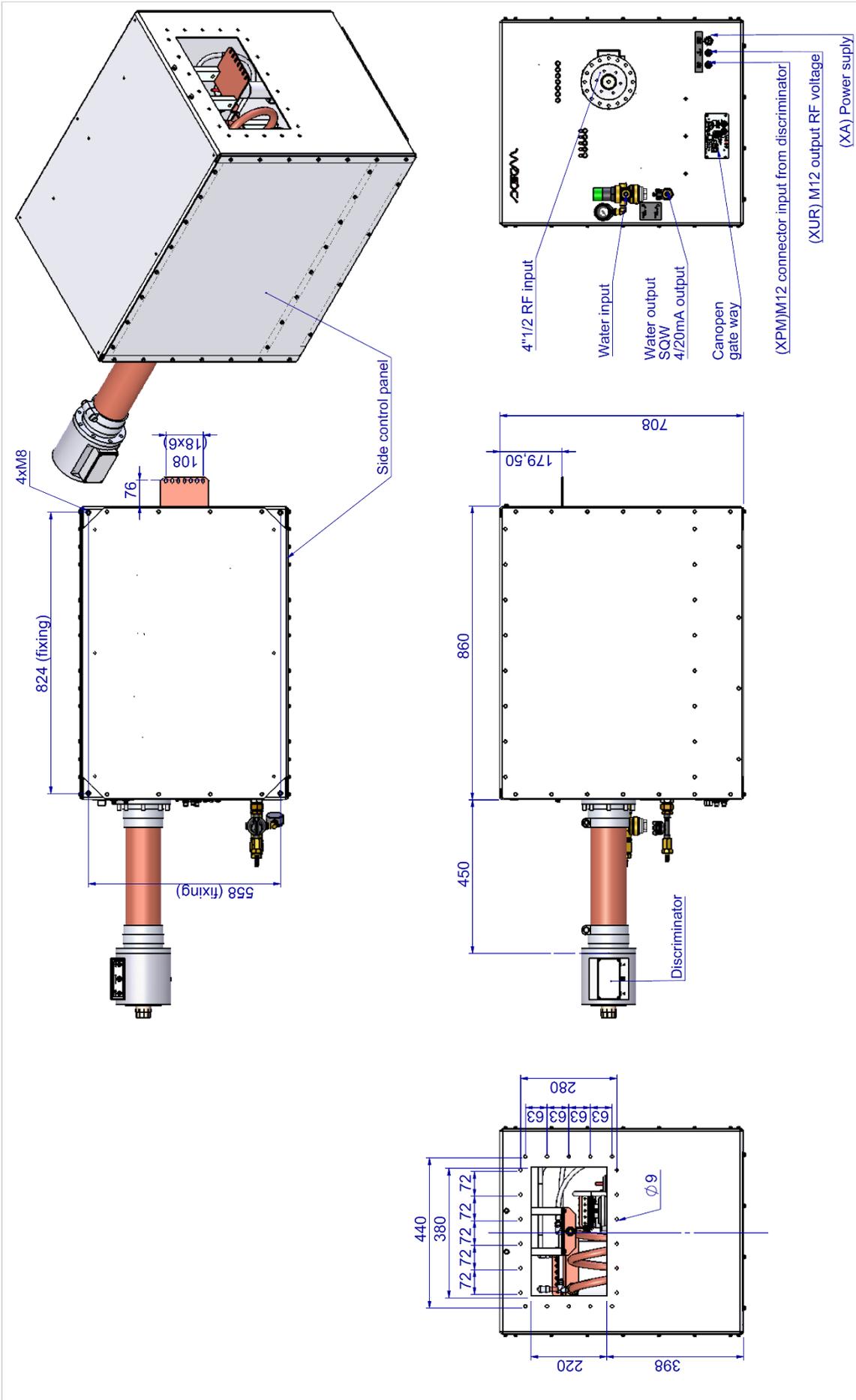
The matching box (MB) matches the impedance between the 50 Ω line from the generator and the impedance of the applicator, which is generally capacitive and very low resistive impedance. Two adjustable capacitors are used to match tune and load; depending on the load, a cooling coil is integrated to compensate the capacitive part of applicator; capacitors are motor-driven.

The electronic driver unit of the MB is integrated inside the cabinet. The control of the MB is done via the RF generator HMI. A discriminator in connection with the MB makes possible the automatic tuning.

REF	BA200VV-R-CO
Presentation	Aluminium cabinet, IP52, all components included: capacitors, motors & position sensors, quick fit electronic board driver without adjustment, water circuit. 50 Ohm discriminator is delivered separately
Frequency	13.56 MHz or 27.12 MHz
Load capacities	One variable capacitor from 50 pF to 650 pF. IRF max. 110 A @ 13.56 MHz, 200 A @ 27.12 MHz
Tune capacities	One variable capacitor from 20 pF to 250 pF. IRF max. 110 A @ 13.56 MHz, 200 A @ 27.12 MHz, VRF max. working 40 kV.
Inductance (optional)	Can be integrated inside the cabinet and is highly dependent on the load; for an inductive reactor the inductance is not required
Matching range	“r” circuit, $Z_{load} = a + jb$, $2 \Omega < a < 40 \Omega$ & $-100 j$ (with an inductance) $< b < +100 j$
RF generator max. power	From 10 kW to 100 kW depending on the load impedance or on the applicator. The limiting factor is 200 A, not the level of power.
RF voltage measurement optional	An HV sensor inside MB transforms 20 000 RF Volt to 10 VDC. RF voltage is displayed on HMI on RF generator.
RF coax line in	3”1/8 EIA coaxial, to be chosen
RF coax line out	See drawings. The output must be as close as possible to the applicator
Cooling	Water cooling, min. 10 L/min and min. 3 bar, 18 to 22 °C
Size, weight	See drawings, 65 kg



Inside view BA200VV-R-CO



TITLE: MATCHING BOX 4"1/2 RF INPUT	
FORMAT: A3	DESIGN NO. 3441-ENSA
ECHELLE: 1:10	WEIGHT:
	
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INDEXE	DATE
A	26/04/16
ML	DESSINE
VERIFIE	APPROUVE
EMISSION ORIGINALE	MODIFICATION DU DESSIN