Transforming The Future Of Power Technology

312 Rising Sun Rd.
Bordentown, NJ 08505
phone: 800-742-5695
fax: 609-298-1982
e-mail: sales.caps@nwl.com
www.nwl.com

CONSULT FACTORY WITH DETAIL REQUIREMENTS OR REQUEST TECHNICAL DIALOG.

PowerPlus & T/R system comparison

Parameter	Power Plus	Conventional T/R system	Explanation of Parameters and their Significance
kVdc	70	55	This is the average value of the output voltage waveform. Maximizing this value increases ESP collection efficiency
mAdc	1000	1000	
Output kW	70	55	
Peak kV	71.8	92.4	This is the maximum value of the output voltage waveform, i.e. it is where arc/sparks occur.
Input Current (AAC)	94	227.1	
# of phases	3	1	
% Ripple (kVp-p)	3-5	35-45	This is the difference between **kVdc** and **peak kV**. Minimizing % ripple means a higher **kVdc** (and better collection efficiency) for a given **peak kV**.
Power Factor	.94	.63	This is the ratio between real power (kW) to apparent power (kVA). A higher PF means that a lower kVA is required to provide the same kW load. For a utility, this equates to more kVA to feed into the grid.
Input kVA	78.7	92.2	
Operating frequency	25 kHz	60 Hz	This is the frequency (in cycles/sec) of the electrical power being supplied to the main step-up transformer. Higher frequencies translate to smaller transformers and faster control responses.
EMI filter	yes	no	
Arc shutdown time (msec)	0.03	8.33	This is the time required for the power supply to extinguish power when an arc occurs. A shorter shutdown time minimizes the fault current and energy delivered to the precipitator.
Max ambient temp (deg C)	40	40	
Volume envelope (ft^3)/(m^3)	24/.68	65/1.84	The smaller footprint and weight of the PowerPlus is a consequence of a much smaller transformer and integrated controls. With larger PowerPlus models, this difference becomes less pronounced.
Plan envelope (ft^3)/(m^3)	10/.28	21/.60	
Weight (lb)/(kg)	1000/454	3860/1751	
Oil reservoir (gal)/(liters)	29/110	135/511	