

**NEW**

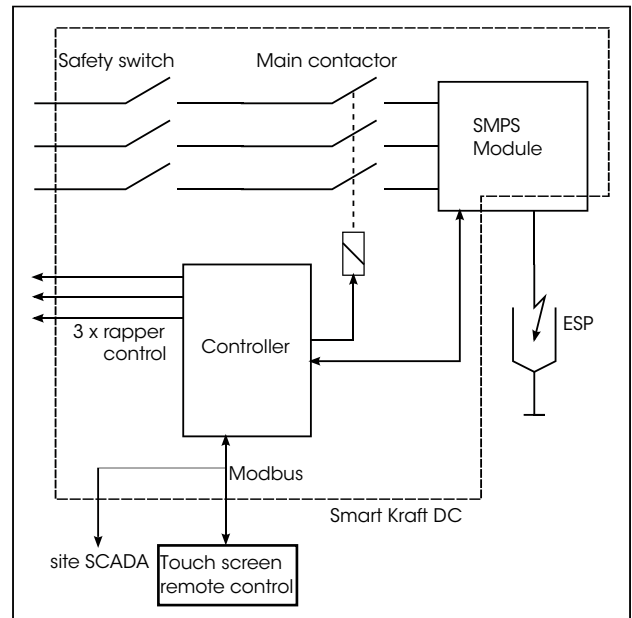
# SmartKraft

SmartKraft<sup>⊕</sup> is the next generation of KraftPowercon's industry leading high frequency ESP power supply technology. SmartKraft<sup>⊕</sup> is smarter, more efficient and more reliable than ever before taking it to industry leading levels. The new innovative features provide end users with the improved operational performance and reliability needed to meet future emission requirements. For best possible system design, SmartKraft<sup>⊕</sup> is available in several new sizes.

**MAIN FEATURES AND BENEFITS**

	Features	Benefits
NEW	More SmartKraft models are available	Project cost optimisation
NEW	More efficient and smart cooling system	Less maintenance and higher reliability
NEW	More Control functions	Increase ESP performance efficiency
NEW	Smart Intermittent Energization function	Increase collection efficiency
	Increasing charge on particles	Higher efficiency and reduced back corona
	Higher efficiency and Better power factor than traditional thyristor controlled rectifier. Symmetrical three phase load	Less impact on the main electricity network
	Compact and light equipment	Lower transportation and handling costs
	Different communication protocols	Easy access and remote control
	Control up to 3 rapper groups	No need for external PLC

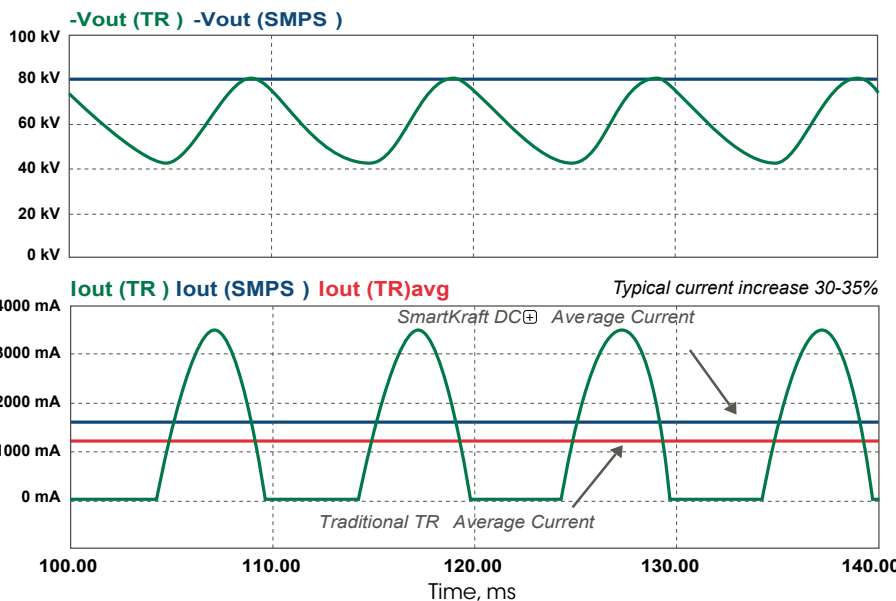
**BLOCK SCHEMATIC DIAGRAM**



Technical Data	Type									Unit
	GJDE 90/1600	GJDE 90/1200	GJDE 90/800	GJDE 90/400	GJDE 80/1600	GJDE 80/1200	GJDE 80/800	GJDE 80/400	GJDE 72/1800	
Output Voltage	90				80				72	kV DC
Output Current	1600	1200	800	400	1600	1200	800	400	1800	mA DC
Output Power	144	108	72	36	128	96	64	32	129	kW
Input Line Voltage	3x400 ± %10				3x400 ± %10 / 3x480 ± %10				3x400 ± %10	V AC
Input Line Current	255	193	133	73	226 / 191	173 / 146	119 / 102	66 / 57	229	A AC
Input Line Frequency	50 ± %5				50 ± %5 / 60 ± %5					Hz
Input Power	156	118	78	39	139	105	70	35	141	kW
Input Apparent Power	173	131	90	50	154	118	81	45	156	kVA
Efficiency	> 0.93 @ rated output power									
Operating Frequency	24									kHz
Cooling	Forced Oil/Air Cooling									
Height	1975 / 77.75									mm/in
Width	826 / 32.5									mm/in
Length	1525 / 60 incl. HV Bus Duct									mm/in
Weight	580 / 1279									Kg/lb
Ambient Temperature	± 40									°C
Relative Humidity	Max 93%									
Degree of Protection	IP 54									
EMC Conformity	EN 61000-6-4:2007 , EN 61000-6-2:2005									
LVD Conformity	EN 50178:1997									
Communication Standard	RS 485 Modbus RTU									
Communication option	Profibus-Profinet									

Blue Color specification are new released.

Above mentioned ratings are SmartKraft standard sizes , but there is availability of customized and bigger rating upon the request up to 160kW output power.



The SmartKraft<sup>⊕</sup> DC improves collection efficiency with higher average voltage and by delivering more current to the ESP.

Waveforms in figure compares a traditional TR 80kV 1600mA with a SmartKraft<sup>⊕</sup> DC 80kV 1600mA (SMPS).