



# FlexKraft Air-Cooled DC Power Supplies

## Single & Dual Outputs with Optional Polarity Reversal

*A new and modern range of FlexKraft **switch mode** DC power supplies designed for harsh industrial environments.  
The compact and modular design offers many benefits to the user.*

### **FLEXIBILITY**

Power control allows the use of a wide range of the output voltages and currents.

### **UPGRADABLE OUTPUT POWER**

The modular design allows for future increase of the output power.

### **SERVICEABLE**

Easy access for module repair or replacement.

### **SPACE-SAVING**

The modular design allows for easy installation and exceptional layout flexibility – especially with two or more power supplies assembled into one tower.

### **HIGH POWER FACTOR**

Low reactive power consumption.

### **RIPPLE**

Low ripple at ALL output currents.

### **MODULAR DESIGN**

Any combination of power modules up to 60 VDC or 24,000A can be supplied.

### **INDIVIDUALLY CONTROLLED DUAL OUTPUTS**

FlexKraft is also available with dual outputs up to 15 VDC 2 x 3,000A. The two outputs are controlled 0-100% completely individually and independently.

The FlexKraft power supplies are designed to give the best electrical performance in demanding industrial environments. The design is based on switch mode technology.

A complete power supply unit consists of 1-10 power modules and a control module.

**POWER SUPPLY CONTROLS**

Standard control interfaces:  
 Digital Display and Keypad integrated into unit  
 Modbus RTU/RS-485 computer interface  
 Profibus DP/RS-485 computer interface

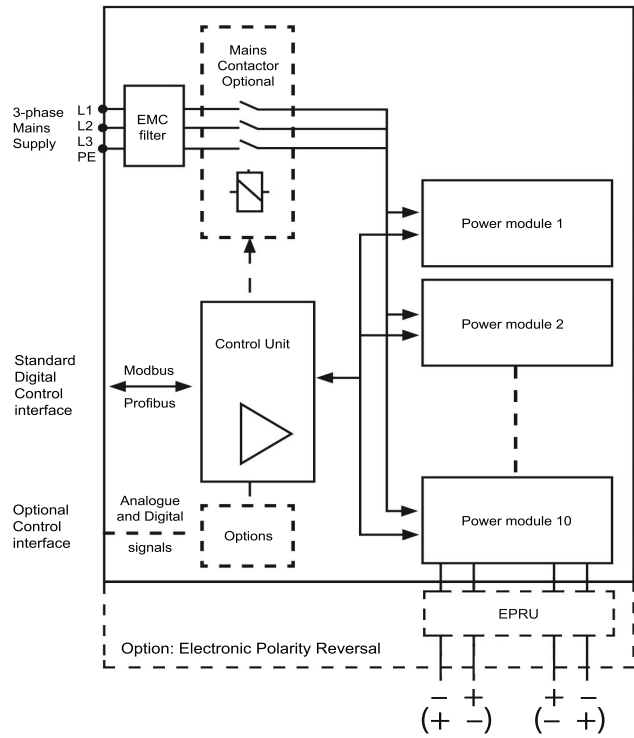
**CONTROL PARAMETERS**

Setting:	Outputs:
Set current	Actual current
Set voltage	Actual voltage
On / Off	On signal
Start / Stop	Run signal
Stand by / Run	Actual Amp hours
Amp hours	Actual run time
Run time	Alarm (general alarm)
Clear counters	Alarm status (cause of alarm)
	End of process

**TECHNICAL DATA**

Supply voltage: 480 VAC ± 10%, 60 Hz, 3 Phase  
 EMC conformity: According to IEC 61000-6-4, Emissions, and IEC 61000-6-2, Immunity  
 LVD conformity: According to IEC 50178  
 Protection class: IP 32 (except for fan)  
 Power factor: ≥ 0.93 @ rated load  
 Efficiency: Typical 0.9 @ rated output  
 Ambient temp.: Max. 104°F, de-rated operation up to 122°F  
 Cooling: Forced air cooling  
 Humidity: Max. 85% relative, non-condensing  
 Control precision: Voltage/current < ± 1%  
 DC ripple: < 1% of rated output current at constant current mode in the entire range of regulation  
 Regulation range: Stepless at constant voltage or current 0–100%  
 Duty ratio: Designed for continuous operation at rated load up to 3300 ft altitude  
 Protection: Over-current, Over-voltage, Overtemperature, Short circuit, Open circuit, Module failure

**BLOCK SCHEMATIC DIAGRAM**



**OPTIONS**

- Remote control box 'basic version' with analogue or digital display, potentiometers etc.
- RS 232C interface control of one dual power supply.
- Analogue/Digital interface. Two control and two status signals 0-10 VDC and two control and two status signals 24 VDC.
- Standard configuration: Iset, Uset, Iact and Uact: 0-10 VDC. On/Off, Block/Run, Power On and Alarm as digital signals: 24 VDC.
- Analogue interface with four inputs and four outputs - galvanically isolated. Control and status signals either 0-10 VDC or 0/4-20 mA. Standard configuration: Iset, Uset, Iact and Uact: 0-10 VDC
- Digital interface with four inputs and four outputs. Control signals 24 VDC. Status signals via voltage free relay contacts; contact data 24 VDC or 24 VAC. Standard configuration: On/Off, Block/Run, Power On and Alarm.
- Raise / Lower function.
- Electrically controlled AC breaker.
- External reference shunt, 60 mV.
- Polarity Reversal.

**STANDARD OUTPUT RANGES**

DC output voltage	Number of power modules									
	1	2	3	4	5	6	7	8	9	10
	Output Current (A)									
0-12 V	600	1200	1800	2400	3000	3600	4200	4800	5400	6000
0-12 V Dual	2x300	2x600	2x900	2x1200	2x1500	2x1800	2x2100	2x2400	2x2700	2x3000
0-15 V	500	1000	1500	2000	2500	3000	3500	4000	4500	5000
0-15 V Dual	2x250	2x500	2x750	2x1000	2x1250	2x1500	2x1750	2x2000	2x2250	2x2500
0-24 V	300	600	900	1200	1500	1800	2100	2400	2700	3000
0-30 V	250	500	750	1000	1250	1500	1750	2000	2250	2500
0-48 V	-	300	-	600	-	900	-	1200	-	1500
0-60 V	-	250	-	500	-	750	-	1000	-	1250
Height* (inches)	18	23	29	34	40	45	51	62	67	73
Weight* (lbs)	108	168	224	243	352	414	484	554	630	695

\* Footprint of cabinet: 20" W x 24" D, including busbars on the rear side, and excluding options (20" W x 36" D with polarity reversal)