

FlexKraft

Water-Cooled Rectifiers

For Industrial Applications
in Demanding Environments



All power modules are built-in in a sealed cabinet. The IP44 protection class allows FlexKraft to be used under demanding conditions



Modular design for system scalability with quality consistency and easy maintenance



Low output ripple and accurate current/voltage control for consistent end user product quality



Dual mode output design for high process flexibility, reducing cost and footprint



Output Polarity reverse option

OUTPUT RANGES

Output voltage	Number of power modules										
	0.5	1	2	3	4	5	6	7	8	9	10
0-12V	300A	600A ^D	1200A ^D	1800A ^D	2400A ^D	3000A ^D	3600A ^D	4200A ^D	4800A ^D	5400A ^D	6000A ^D
0-15V	250A	500A ^D	1000A ^D	1500A ^D	2000A ^D	2500A ^D	3000A ^D	3500A ^D	4000A ^D	4500A ^D	5000A ^D
0-20V	200A	400A ^D	800A ^D	1200A ^D	1600A ^D	2000A ^D	2400A ^D	2800A ^D	3200A ^D	3600A ^D	4000A ^D
0-24V	-	300A	600A ^D	900A	1200A ^D	1500A ^D	1800A ^D	2100A	2400A ^D	2700A	3000A ^D
0-30V	-	250A	500A ^D	750A	1000A ^D	1250A	1500A ^D	1750A	2000A ^D	2250A	2500A ^D
0-36V	-	-	-	600A	-	-	1200A ^D	-	-	1800A	-
0-40V	-	200A	400A ^D	600A	800A ^D	1000A	1200A ^D	1400A	1600A ^D	1800A	2000A ^D
0-45V	-	-	-	500A	-	-	1000A ^D	-	-	1500A	-
0-48V	-	-	300A	-	600A ^D	-	900A	-	1200A ^D	-	1500A
0-60V	-	-	250A	400A	500A ^D	600A	750A/800A ^D	-	1000A ^D	1200A	1250A
0-72V	-	-	-	300A	-	-	600A ^D	-	-	900A	-
0-75V	-	-	-	-	-	500A	-	-	-	-	1000A ^D
0-80V	-	-	200A	-	400A ^D	-	600A	-	800A ^D	-	1000A
0-84V	-	-	-	-	-	-	-	600A	-	-	-
0-90V	-	-	-	250A	-	-	500A ^D	-	-	750A	-
0-96V	-	-	-	-	300A	-	-	-	600A ^D	-	-
0-100V	-	-	-	-	-	400A	-	-	-	-	800A ^D
0-105V	-	-	-	-	-	-	-	500A	-	-	-
0-108V	-	-	-	-	-	-	-	-	-	600A	-
0-120V	-	-	-	200A	250A	300A	400A ^D	-	500A	600A	600A ^D
Height*	450 mm	450 mm	590 mm	730 mm	870 mm	1010 mm	1150 mm	1290 mm	1570 mm	1710 mm	1850 mm
Weight*	42 kg	49 kg	76 kg	102 kg	133 kg	160 kg	188 kg	220 kg	251 kg	286 kg	315 kg

* For voltages above 120V or currents above 6000A, contact KraftPowercon.

** The red 'D' symbol indicates that the rectifier can have dual output. The amperage value shown is halved for each output.

FlexKraft

Water-Cooled Rectifiers

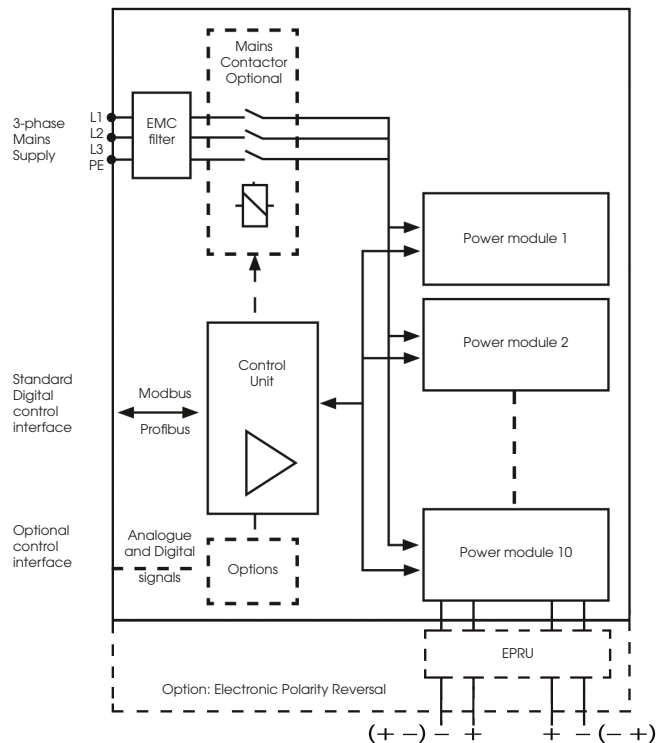
For Industrial Applications
in Demanding Environments

The FlexKraft rectifiers are designed to give the best electrical performance in demanding industrial environments. The design is based on primary switching technology.

TECHNICAL DATA

Supply voltage:	380–480 VAC \pm 10%, 50–60 Hz, 3 Phase 220 VAC \pm 10%, 50–60 Hz, 3 Phase for maximum 2x7 VDC / 300A per module
EMC conformity:	According to EN 61000A–6–4, Emissions, and EN 61000A–6–2, Immunity
LVD conformity:	According to EN-62477-1
Protection class:	IP44
Power factor:	\geq 0.93 @ rated load
Efficiency:	Typically 0.9 @ rated output
Ambient temp.:	Max. 50°C
Cooling:	Water cooling
Water inlet temperature:	20–35°C but not below condensation point
Temperature rise:	10°C
Water pressure:	1–6 bar
Pressure drop:	1 bar
Control precision:	Voltage/current \pm 1%
DC ripple:	< 2% 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 1000m altitude
HMI and Digital interface:	Digital Display with Keypad; Modbus RTU/RS-485; Profibus DP/RS-485
Protection:	Over-current, Over-voltage, Over-temperature, Short circuit, Open circuit, Module failure
Setting parameters:	Current, Voltage, On / Off, Start / Stop, Stand by / Run, Amp hours, Run time, Clear counters
Measurement parameters:	Actual current, Actual voltage, On signal, Run signal, Actual Amp hours, Actual run time, Alarm status (cause of alarm), End of process

BLOCK SCHEMATIC DIAGRAM



Specification is subject to change without notice

OPTIONS

- Remote control box 'basic version' with analogue or digital display, potentiometers etc.
- RS-232C interface for control of one power supply.
- Non-isolated Master/Slave Analogue/Digital control interface
- Isolated Master/Slave Analogue/Digital control interface
- Digital interface to connect ControlKraft Digital
- Emergency stop connection Interface to disconnect AC mains by additional contactor.
- Polarity Reversal.
- Raise / Lower function.

ACCESSORY

- External reference shunt, 60 mV.
- ControlKraft Digital