

Power Rider 80A

Sophisticated & Simple – Circuit Breaker, Relay, contactor

Smart Single Circuit breakers - Advantages:

- 3 levels of protection:
 - Software – I^2t
 - Hardware – 1 μ second cutoff of over current
 - Thermal Fuse
- Multi Task element – High end Technology in a “small box”
- Solid state-based technology
- High Reliability and MTBF
- 60 configurable parameters
- Intuitive GUI – “non developer” (no code needed)
- Scenario based logics (upon discrete Inputs)
- Cascade option – one communication line for multiple connected units (in the 25A)
- Events log for improved maintenance
- Automatic recovery plan configuration



Single Power Rider 80A

0-80A/0-150A continuous current
 8 MOSFET transistors, power switch
 Data logger, Coulomb counter, High current situation
 4 inputs/4 outputs
 Single and double rout protection (one or two ways' protection)

- Data logger, Coulomb counter, High current situation
- Discrete ON/OFF command and status output (open collector)
- High reliability fuse replacement
- Based on Redler's IP. (Patent pending PCT)
- 8-48VDC
- Communication: CAN BUS (50kbps-1Mbps- J1939) and RS 422/485
- Firmware upgrade via CAN BUS
- MMI – Load/Read parameters and live graph monitor
- Protections: Over current, i^2t , over Temperature, over voltage, Hardware tripped, more...
- Fast 1 μ Sec hardwired cutoff protection - patented
- Comprehensive error messages
- Pilot LED
 - Reliable: high current, low RDS-on, 100V Power MOSFETs, Hardware fast short protection
- New effective thermal solution
- BIT
- Black out and Power Down mode
- 3 points overvoltage protection

Specifications:

Function	Parameter	
	Single Power Rider 80A	
CPU and Memory		
CORE	STM32F091CCT7 - 32bits DSP	
Flash	256 Kbytes	
RAM	32 Kbytes	
CORE Speed	40Mhz	
MOSFET Interface		
Nominal channel resistance (room temp.)	Single route - <10mΩ	Dual route - <15mΩ
Charge Pump	>10	
Power MOSFET	8X100V@150A	
SwitchTurn ON	200nSec	
SwitchTurn OFF	300nSec	
Current measurement accuracy	2%	
General Purpose Interface		
Digital Input	4	
OC output	2	
Communication I	CANBUSj1939 - 2.0B 1Mbit/Sec	
Communication II	RS422/RS485 - 614400 bit/Sec	
Power Supply/Operating temperature		
Current consumption	30mA	
Operating Voltage	8V to 48V	
Ambient Operating Temperature	-40°C +71°C@ derating table	
Storage temp	-65°C +150°C	
I/O Connection		
Data and control connector	Norocomp 197-015-113-1 male	
Power In Power out	WE-7461059	
Ground	Harwin-R25-1001402	
Dimensions	101.6mm 54mmX26.6mm	
Weight	200g	



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