Ionpure® DCR Power Controllers

SINGLE PHASE DC POWER RECTIFIER

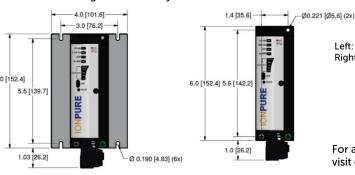
Digital Communication Rectifiers (DCR) from IONPURE® allow for constant control of power applied to Continuous Electrodeionization (CEDI) and Electrodialysis (ED) modules to optimize system performance. Standardized Individual rectifiers improve performance, reduce cost and provide a simplified solution to supply power to CEDI modules. Designed to power the IONPURE MX, LX, VNX CEDI and NEXED™ ED modules.

Digital Communication Rectifier IP-DCR600V15A-M

The DCR rectifier is a highly-reliable, compact single-phase DC power controller that features a high performance microprocessor, designed to efficiently control resistive loads. On-board digital communication allow for easy integration with existing PLC/HMI through the use of Modbus® or 4-20mA signals. A dedicated touch panel display is also available (IP-POWERDSP-TP).

Analog / Retrofit DCR IP-DCR600V15A-R2

G2 power controller users can easily replace one or upgrade all G2 power controllers within their existing power cabinet with the Retrofit DCR rectifier for improved transient voltage protection and higher efficiency.



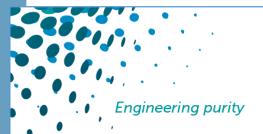


DCR Power Controller Features

- Compact DIN rail mounted design
- Universal Input
 - UL 24 600 VAC
 - o CE 24 660 VAC
 - o 45 65Hz
- Up to 600 VDC (90% of AC input)
- Modbus RTU or 4 20 mA I/O
- Selectable constant voltage operation
- Constant current operation
- 5 selectable Amperage output (0-2,5A, 0-4,0A, 0-6,5A, 0-10,0A and 0-15A)
- 24VDC input to control electronics and maintains critical communications
- Compact touch safe fully-enclosed design
- Soft start protection- Dedicated run / stop bit
- Microprocessor controlled
- On-board diagnostics
- Designed and Manufactured in USA
- Retrofit version available for G2 users

Left: DCR Retrofit Unit IP-DCR600V15A-R2 Right: DCR DIN rail Mountable IP-DCR600V15A-M

For additional information call $\,+31\,165\,348\,253$ or visit our website at www.purewatergroup.com





Ionpure® DCR Power Controllers

Specifications

-	
AC INPUT	
Line Voltage (auto ranging) ²	UL: 24 – 600 VAC CE: 24 – 660 VAC
Phase	Single
Frequency (auto ranging)	45 – 65 Hz
DC INPUT	
Voltage	24 V
Current / Amperage	0,1 A
DC OUTPUT	
Voltage	20 – 600 VDC
Current / Amperage	0 – 15
Selectable Amperage Ranges	0 - 2,5 A 0 - 4,0 A 0 - 6,5 A 0 - 10,0 A 0 - 15,0 A

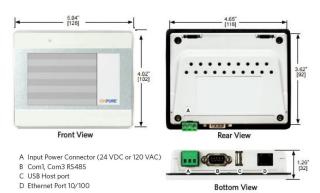
Communications

Programming port	USB			
Fieldbus protocol	Modbus RTU (RS – 485) ³			
Connections	RJ – 45 (2x)			
Terminating resistor	Dip switch enable			
Positioning	16- Position rotary dial			
Parameters	All settable parameters and monitor parameters such us set-point, current, voltage, warnings, faults, etc			
Connection to External Devices	PLC / HMI or Ionpure Touch Panel Display via fieldbus 0 – 5 VDC for the retrofit version			

¹ Display not compatible with retrofit version (-R2). Use G2 Display

TOUCH PANEL DISPLAY IP-POWERDSP-TP1

Independently monitor and control 1 to 16 DCR units, allowing for optimal performance of each CEDI or ED module.



Operating Environment

Cooling	Heatsink and Natural convection
Surrounding air temperature	0 - 50°C (32 - 122°F)
Altitude	<1.828 m (< 6000 ft)
Relative Humidity	< 95% (non-condensing)
Storage temperature	-15 - 70°C (5 - 158°F)

Protections

Line Transients	Dual DVDT Network
Over-voltage	MOV + Voltage limiting
Under-voltage	Output alarm
Over temperature	Manual restart
Ground	Heatsink screw
Printed circuit board	Conformal coated
Touch safe	Fully enclosed

Order Information and Physical Specifications

Order	Model	Description	Width	Height	Depth
W2T827123	IP-DCR600V15A-M	DC RECTIFIER, 600VDC 15A DIN Rail mountable with MODBUS communication	35,6 mm (1,4 in)	152,4 mm (6,0 in)	132,4 mm (5,2 in)
W2T827122	IP-DCR600V15A-R2	Retrofit DCR Rectifier, 600VDC 15A w/ 0-5 VDC communication / Replacement for G2 and PCB power controllers	101,6 mm (4,0 in)	152,4 mm (6,0 in)	135,6 mm (5,34 in)
W2T829935	IP-POWERDSP-TP	4.3" Touch Panel Display	128 mm (5,04 in)	102 mm (4,02 in)	32 mm (1,26 in)

Pure Water Group

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⁽IP-POWERDSP-G2)

Requires isolation transformer to allow proper grounding of ED/CEDI

module cathode
³ Not available on retrofit version (-R2)