CRB Compact Rectifier Bridge

Overview

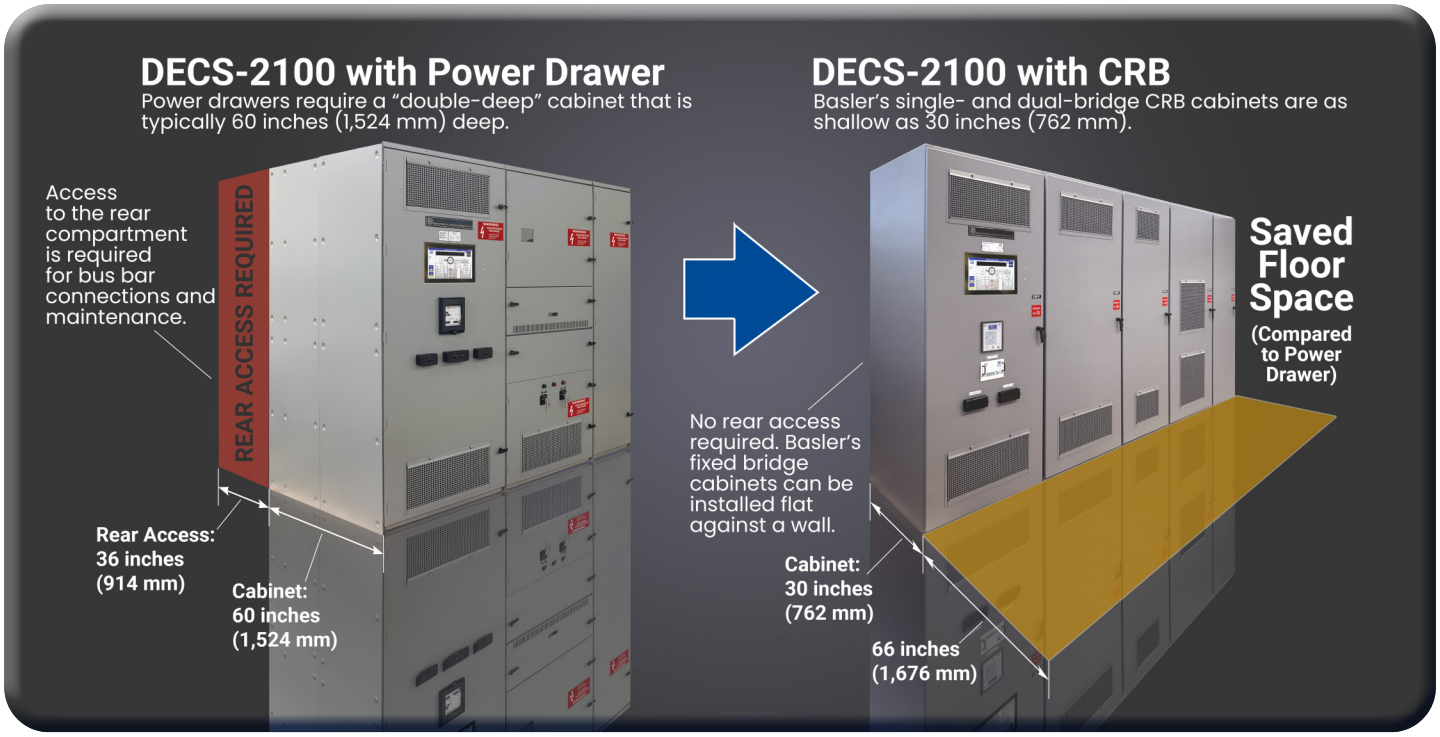
The CRB Compact Rectifier Bridge provides excitation power for synchronous machines and its compact size allows for installation into DECS-2100 cubicles as shallow as 30 inches (762 mm). Multiple CRB units may be paralleled for high output currents and redundancy.

Features

- Compact size: A single CRB fits in cabinets as shallow as 30 inches (762 mm)
- No required rear access provides for against-the-wall installations
- Six-SCR (silicon-controlled-rectifier) fixed power bridge
- Six cooling fans (three run continuously, three are redundant)
- Multi-bridge paralleling configurations
- Field forcing levels up to 750 Vdc for LV and 1125 Vdc for MV version
- Patented active temperature balance algorithm
- BESTCOMS™*Pro*: extremely flexible software for setup and testing

Benefits

- Ideal for synchronous applications with small space requirements. DECS-2100 system enclosures equipped with CRB rectifier bridges can be as shallow as 30 inches (762 mm).
- Install flat against the wall with no need for rear access. From the intake and exhaust of the cooling fans to the location of serviceable parts, the CRB is designed for front-only access to save valuable floor space.



CRB Compact Rectifier Bridge

Specifications

Operating Power

Configuration: Three-phase

Maximum Three-Phase Operation Voltage Input

Frequency:	*CRB-LV*	*CRB-MV*
50/60 Hz:	600 Vac	900 Vac
420 Hz:	275 Vac	n/a
Burden*:	1.19 MVA	1.27 MVA
Power Dissipation:	4.5 kW	5.0 kW

**With maximum voltage input and maximum continuous output*

Control Power

Nominal Voltage: 125 Vdc or 120 Vac, 50/60 Hz

Voltage Range: 120 to 140 Vdc, 90 to 132 Vac

Field Output Ratings

Single Bridge	*CRB-LV*	*CRB-MV*
Max. Continuous:	1400 A/500 V	1000 A/750 V
30-Second Forcing:	2100 A/750 V	1500 A/1125 V
*Dual Bridges**	*CRB-LV*	*CRB-MV*
Max. Continuous:	2800 A/500 V	2000 A/750 V
30-Second Forcing:	4200 A/750 V	3000 A/1125 V

**Dual bridges are stacked per cubicle.*

Agency, Standards, and Directives

RoHS2 Restriction of Hazardous Substances

Environment

Operating Temp.: -20 to 40°C (-4 to 104°F)

Storage Temp.: -20 to 85°C (-4 to 185°F)

Ingress Protection: IP20

Physical

Dimensions (WxHxD): 31.4 x 28.0 x 20.7 inches (797 x 711 x 526 mm)

Weight: 280 lb (127 kg)

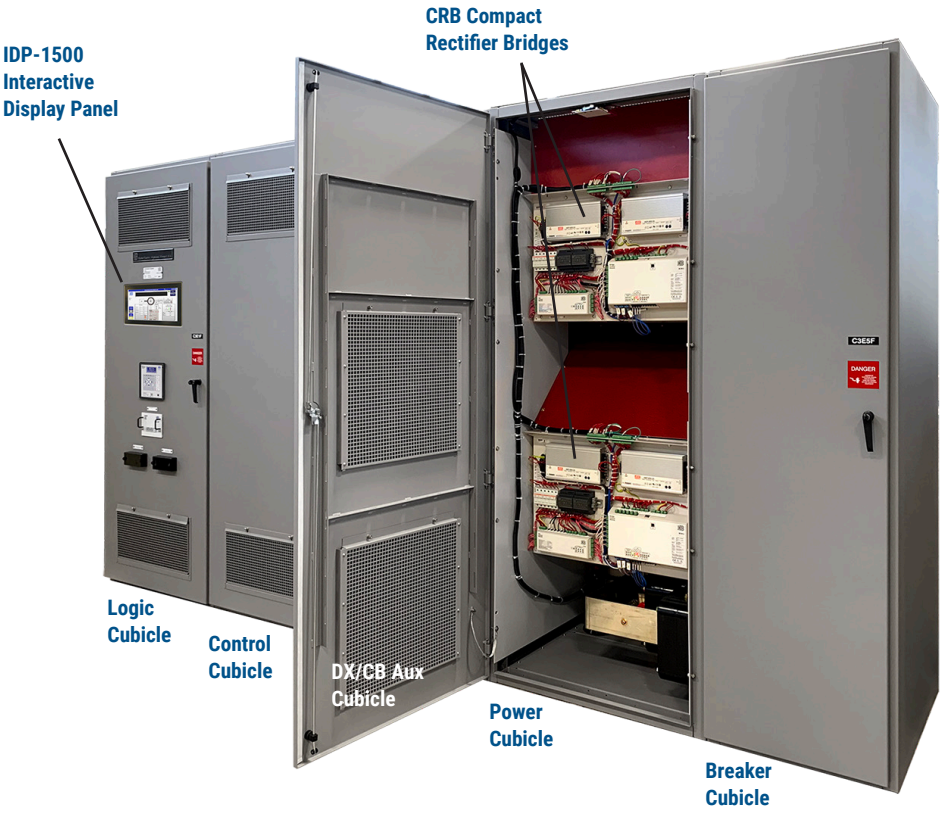


Figure 1 - Typical DECS-2100 with Dual CRB Compact Rectifier Bridges

Related Products

DECS-2100 Digital Excitation Control System
An extremely powerful and flexible excitation system that precisely controls, protects, and monitors synchronous generators and motors.

DECS-450 Digital Excitation Control System
A versatile digital excitation control system for synchronous generators and motors.

Large Power Transformers
Basler offers custom dry-type designs in a variety of UL-approved insulation systems through 2,500 kVA (convection cooled) or 2,800 kVA (forced-air cooled).

SGC-150 Synchronous Generator Controller
A prepackaged solution for applications requiring single or dual DECS-150 Digital Excitation Control Systems.

SGC-250 Synchronous Generator Controller
A prepackaged solution for applications requiring single or dual DECS-250 Digital Excitation Control Systems.

SMC-250 Synchronous Generator Controller
Combines the DECS-250 and BE1-11 in a complete unit for easy installation for motor control and protection applications.

BE1-FLEX Protection, Automation and Control System
Designed to be configurable for nearly any Power System Application.

Accessories

IDP-1500 Interactive Display Panel
A 15.6 inch (396 mm) diagonal Human Machine Interface (HMI) capable of displaying generator system parameters locally and remotely.

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