

# PARTNERING WITH YOU TO KEEP YOUR DATA CENTER ALWAYS ON

Data center operation is mission critical to business. Whether as the backbone of a hyperscale cloud provider, large colocation network, or support for essential information for enterprise, a reliable power solution from a dependable partner is vital.

With our knowledge and experience in serving data center customers globally, and in every sub-segment, we are that partner. Cummins is an industry leader in power generation, executing a wide variety of data center projects. We have more than a century of experience providing power solutions from 15kVA to 3750kVA across many applications.

# TRUST IN OUR EXPERTISE



# ACCOUNTABILITY FORA COMPLETE INTEGRATED POWER SYSTEM SOLUTION

A complete power system from Cummins addresses every aspect of fail-safe power delivery for the data center — no matter how far you expand or how complex your data center topology is. We provide a holistic service, manufacturing and assembling all of the key components while exercising the industry's highest degree of design and performance control.

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### **HIGH-HORSEPOWER GENERATOR SET**

Rugged, fuel-efficient engines, high-performance alternators and on-board digital control systems comprise the most trusted and reliable generator sets in the world. Sophisticated emission control technologies and tailored data center load ratings are two of our most important data center innovations. Our Data Center Continuous Ratings (DCC) meet the Uptime Institute Tier III and Tier IV requirements making site certification seamless for our customers.



### **POWER DISTRIBUTION**

PowerCommand® paralleling systems integrate paralleling controls on generator sets, low or medium voltage power sections, automatic transfer switches, and a digital master control (DMC) for supervisory functions. A distributed logic concept is critical for meeting data center redundancy requirements; ensuring generators continue to function under multiple-failure response modes.



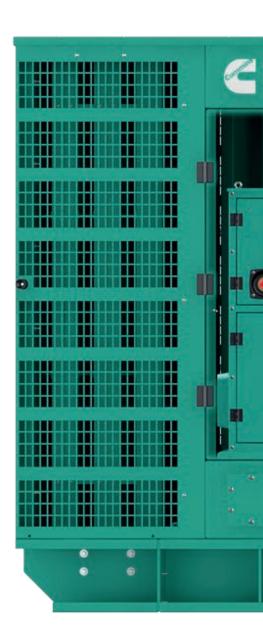
### **DIGITAL CONTROLS TECHNOLOGY**

PowerCommand® microprocessor-based controls comprise the industry's best singlesource solution, capable of integrating generator sets, automatic transfer switches and paralleling systems into a complete system. Modular systems are easily configured to meet data center requirements, including paralleling, non-paralleling and basic control scenarios.



### **REMOTE MONITORING AND CONTROL**

PowerCommand Cloud™ is a fully integrated cloud-based system that ensures uptime through 24/7 monitoring. Accessed via your work station, tablet or smart phone via a user friendly interface, PowerCommand Cloud™ allows you to check your system status, identify faults and access critical notifications, reducing your operation and maintenance costs.



### **CASE STUDIES**

# CRITICAL PROTECTION FOR KBC BANK

KBC Bank and its Hungarian subsidiary K&H selected Cummins for standby power at two of the bank's data center sites in Hungary. Each of the mirrored sites is equipped with two C3000D5 generator sets per site, powered by z engines and fitted with PCC 3.3 controls.

#### WHERE:

Törökbálint and Baracska – Hungary.

### **SUPPLY:**

4 x C3000D5 (3000 kVA) generators.

### **PURPOSE:**

Standby power systems for mirrored data centers.

### PRIMARY CHOICE FACTORS:

A tailor made solution allowing for a restricted footprint and reduced sound levels. Scope for future expansion.

# AIS DATA CENTER STAND BY POWER

At the heart of Thailand's growing mobile data service industry,

Advanced Info Service (AIS) is committed to delivering uninterrupted service to its customers. Cummins was chosen to design and install a complete system to comply with Tier 3 data center requirements for minimal planned and unplanned downtime.

### WHERE:

Panthum Thani - Thailand.

#### **SUPPLY:**

8 x C1675D5A (1675 kVA) generators

1 x KTA50-GS8 engine

1 x PowerCommand 3.3 control system

2 x DMC1000 controls.

### **PURPOSE:**

Standby power for AIS' Tellus Data Center for uninterrupted critical load during utility outage.

### PRIMARY CHOICE FACTORS:

Vast expertise and experience in data centers, proven product reliability, integrated solutions, excellent technical support.



# STANDBY POWER FOR SASKTEL

As SaskTel planned for growth beyond its 1.4 million customers, it became clear that it would need greater capacity from its power supply. The C3250D6e generator set powered by the QSK95 engine was the perfect fit. Cummins delivered a dependable system that provides longer intervals between services and minimizes downtime during service events.

### **WHERE:**

Saskatoon - Canada

### **SUPPLY:**

1 x C3250D6e (3,250 kW) generator

#### **PURPOSE:**

Standby power for leading Canadian telecom provider data center.

### PRIMARY CHOICE FACTORS:

Prior experience with Cummins - excellent service and robust products with best in class performance and footprint.

# LARGE COLOCATION CRITICAL PROTECTION

The ability to meet tight deadlines was a key aspect of this project. The continuous power solution architecture provided, allows six generators to support each floor on a single bus system, and also operate as separate entities to the master controls. The system is also scalable and load can be added as necessary.

### **WHERE:**

Chicago - United States

#### **SUPPLY:**

12 x DQKAB (2000 kW) generators 2 x Paralleling systems

### **PURPOSE:**

Dedicated emergency standby power for 12 separate data center suites.

### PRIMARY CHOICE FACTORS:

Speed to delivery, 99.999% uptime reliability, cost- competitiveness, medium voltage paralleling switchgear architecture, exceptional service and support.





At Cummins, we are living out our brand promise of innovation and dependability, so you can expect quality products and exceptional customer support.

### **QUALITY PRODUCTS**

Our innovative culture, robust design and rigorous integrated system testing practices and our world class manufacturing facilities allow us to deliver the quality products and services that data centers need. We have pioneered technologies that continue to set the standard for quality and reliability globally. All our products are backed by a comprehensive 2-year standard warranty.

### **EXCEPTIONAL CUSTOMER SUPPORT**

We strive to foster long-term partnerships that are built on trust and dependability. We take the time to understand your unique energy needs and provide innovative, reliable power solutions that cater to your individual specifications and give you peace of mind.

01. PLAN 02. DESIGN 03. SPECIFY 04. REQUEST PROPOSALS
05. PROCURE 06. PROJECT MANAGEMENT 07. INSTALL 08. COMMISSION



09. SERVICE / UPGRADE

### **GLOBAL SUPPORT**

We are continuously improving the way we serve, manage, and protect our customers fleet through innovative service solutions and a strong global channel.

### **PROACTIVE**

Our global distribution network implements proactive measures to minimize unplanned downtime and any associated risks to your data center.

### **RESPONSIVE**

Our dedicated service teams are committed to provide responsive support no matter where your data center is. 62,600 EMPLOYEES
7,600 DEALER LOCATIONS
600 DISTRIBUTOR LOCATIONS
190 COUNTRIES
125 MANUFACTURING FACILITIES
20 PARTS DISTRIBUTION CENTERS
15 TECHNICAL CENTERS
10 WAREHOUSES

### **EXPERTS IN YOUR FIELD**

We have a robust track record from years of executing hundreds of data center projects around the world and enjoy a global reputation for excellence. With a dedicated and experienced team, you can trust our capabilities to help you on a global scale with a variety of solutions.

