

A stylized map of the Asia-Pacific region is centered on the slide. The map is white and overlaid with a network of yellow lines and dots, representing a global or regional network. The background is a dark teal color with a subtle pattern of light teal geometric shapes and lines.

APAC Sales Meeting



Dec 2022
WONLEE Solutions co., Ltd.
Won Hong Lee

Project overview




Project	Hyundai Heavy Industries Global R&D Center	Start	Sep. 2018 Design started
Customer	Hyundai Heavy Industries	Value	approx. € 133,000
Project Phase	<ul style="list-style-type: none"> Scheduled to be completed in December 2022 		
Customer Goals	<ul style="list-style-type: none"> For electrical safety in the DC power distribution system, a system that monitors insulation failure or leakage current in real time is established to prevent personal accidents, fire accidents, and unexpected power outages. 		
Project Description	<p>Hyundai Heavy Industries Group is building a global R&D center called 'GRC' in Pangyo, which will be completed in the second half of this year. About 5,000 R&D personnel from seven affiliates of Hyundai Heavy Industries, including HD Hyundai, Korea Shipbuilding & Marine Engineering, Hyundai Genuine, and Hyundai Oilbank, will work here.</p> <p>In particular, the DC distribution system was applied from the 8th to the 19th floor of the GRC, and a real-time insulation and leakage current monitoring system was applied for electrical safety and fire prevention of the DC system.</p>		

Final Product Pictures

	8 x COM465IP		58 x RCMS490
	2 x ISO1685-P		37 x Type A CT
	7 x EDS440		359 x Type B CT

Application (Picture)



At a glance



Customer problem

In order to proactively respond to the DC next-generation power distribution market, Hyundai Electric adopted a 1.5MW DC power distribution system for lighting on 9 floors of the newly built Hyundai Heavy Industries Global R&D Center. Hyundai Electric has established a DC distribution system that supplies AC/DC converters, DC/DC converters, DC switchboards/distribution panels

Solution

For ground fault monitoring of DC systems, we provided iso685-D-P and EDS440 solutions to the electrical indoor IT system, and provided RCMS490 solutions to the distribution panels for lighting on the 8th to 19th floors. CT is selected according to site installation conditions. It can communicate with the central control system via Modbus RTU or Modbus TCP.

Benefit for the customer

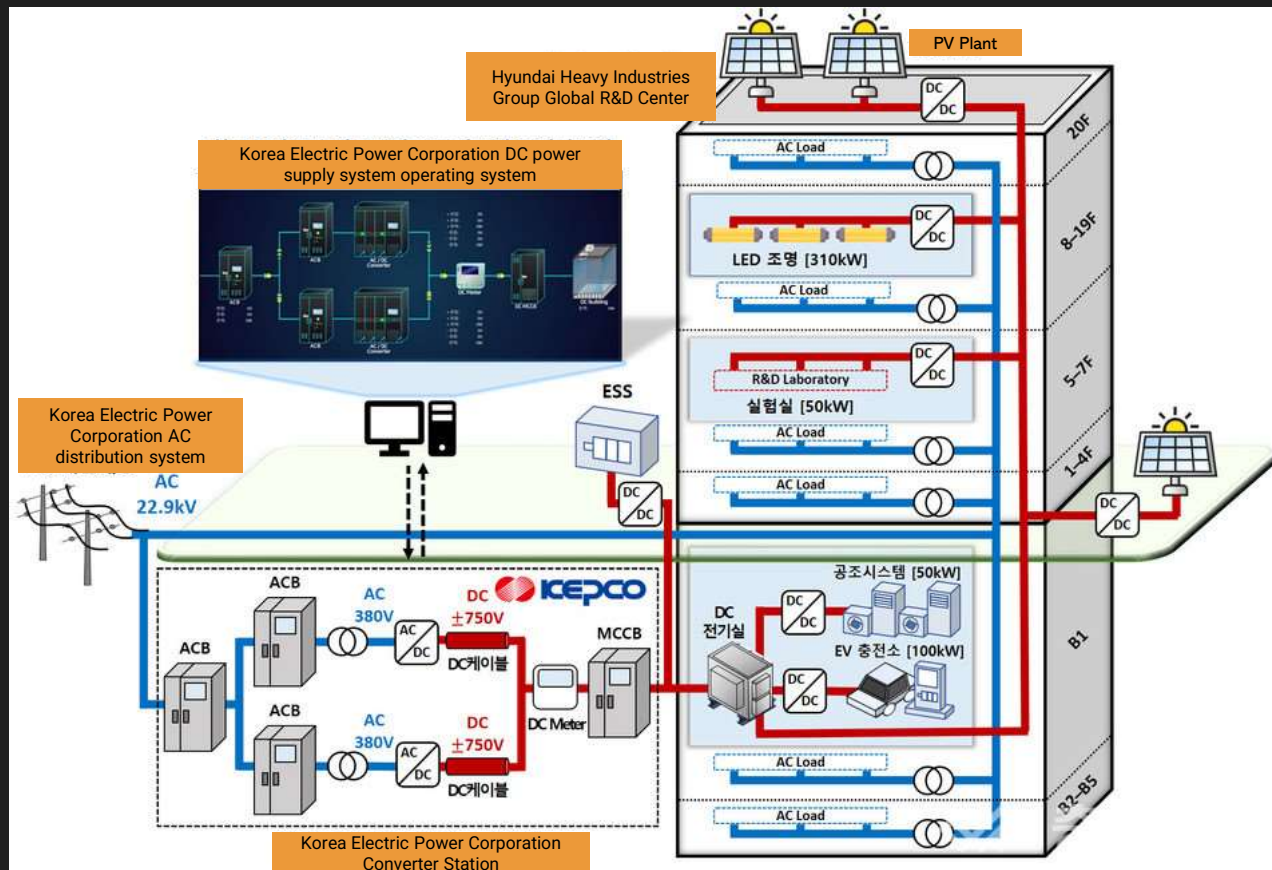
When a ground fault occurs in the system, real-time alarm information is obtained from the terminal, the circuit breaker is blocked, and the ground fault circuit is automatically identified to determine the location. This greatly improves the reliability of the system and allows you to locate faults quickly, reducing maintenance time and costs.

Project scope

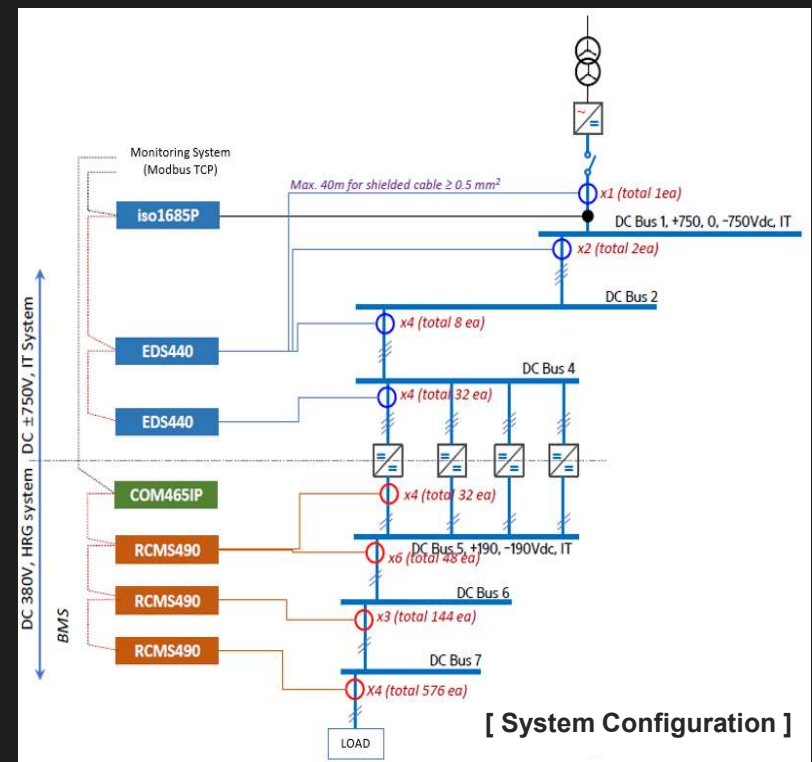
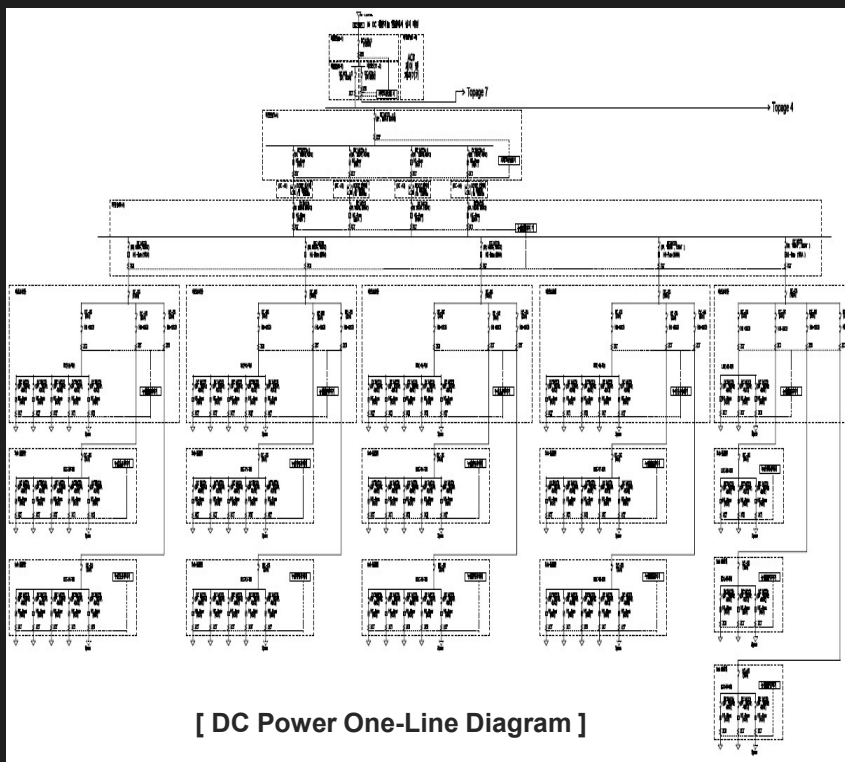
IMD & RCMS... approx. € 133,000



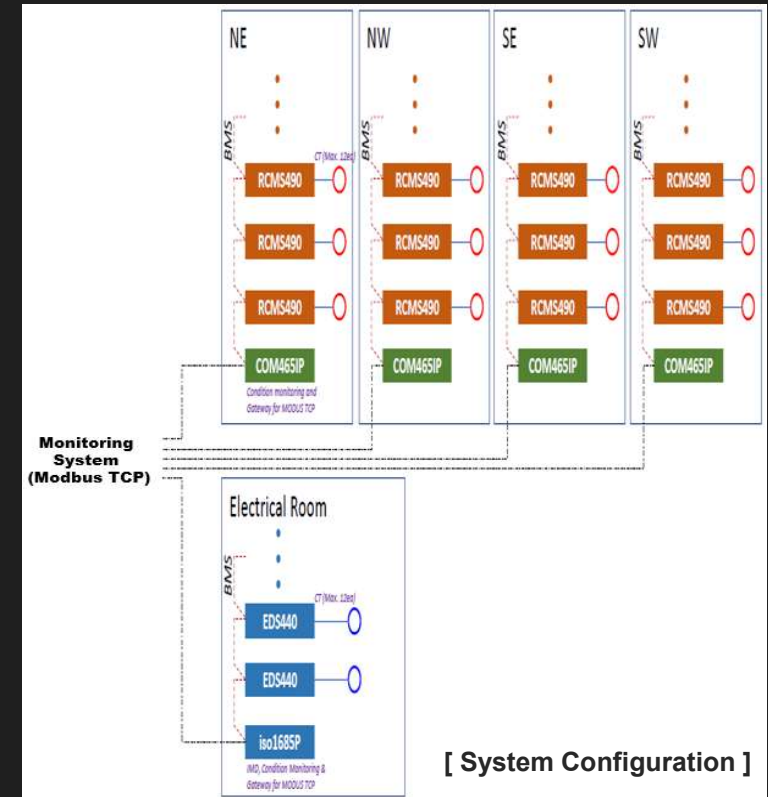
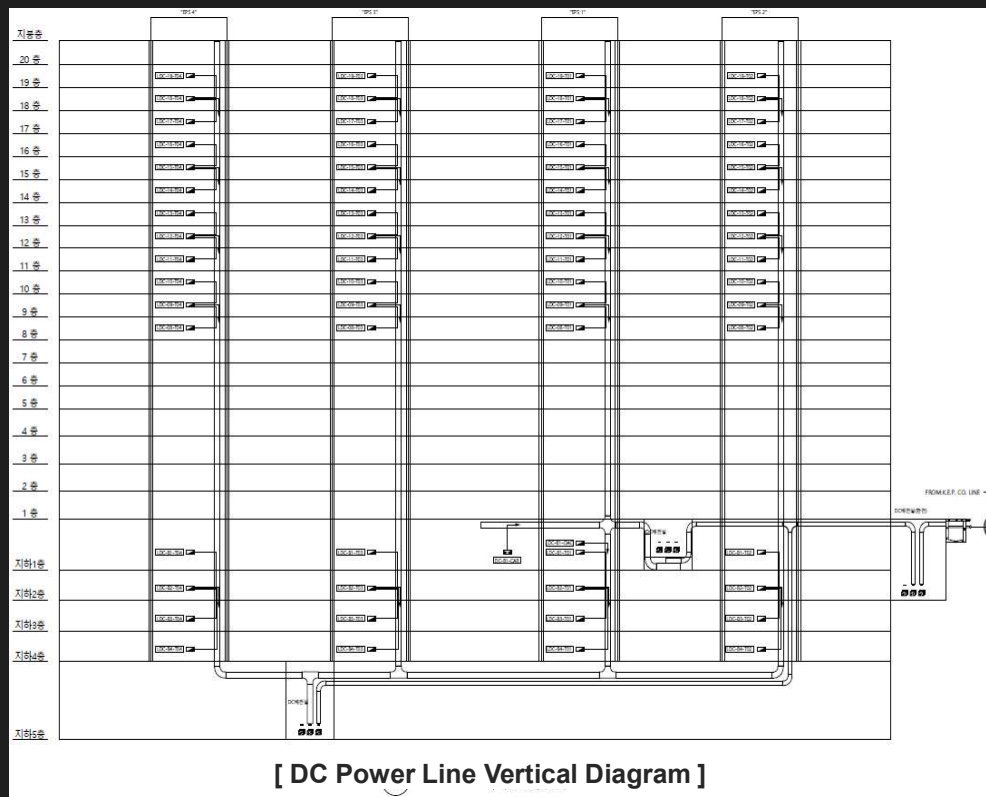
DC Distribution System of HHI Group Global R&D Center



DC Power Line Diagram & System Configuration-1



DC Power Line Diagram & System Configuration-2



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