First 3-phase AC Mainline EMU Train with BHEL Electrics rolls out

New Delhi, December 16: The first 3-phase Ethernet-based AC Mainline Electric Multiple Unit (MEMU) equipped with BHEL manufactured electrics has rolled out from RCF Kapurthala to Asansol MEMU shed, Eastern Railways, signaling a new era in the urban transportation segment. The 12 coach MEMU train is equipped with 3-phase IGBT-based converter and inverter designed and developed by BHEL.

Significantly, the state-of-the-art Ethernet-based Train Control Management System which provides advanced control features, has been developed in-house in collaboration with a global OEM. With a focus on passenger comfort and safety, this AC MEMU train is designed for speeds of up to 110 kmph which will make travel faster and comfortable for passengers.

The MEMU train is equipped with the latest GPS-based public address and passenger information system in each coach to facilitate passengers with respect to railway stations enroute. A touchscreen-based user-friendly driver display unit is also installed for easy monitoring and control of the MEMU Train. An air-conditioned driving cab with an ergonomically designed driver desk provides a comfortable driving environment to the driver. Energy efficient LED lights have been provided with 50 percent emergency lights in each coach.

Notably, the MEMU also features a technologically advanced regenerative braking system which feeds braking energy back to the overhead supply line which can be utilised within the system by other trains in the same feeding zone.

BHEL has been at the forefront in the development of electric propulsion systems for rolling stock and locomotives for Indian railways. The company has set up an ecosystem for indigenisation of transportation technology thereby strengthening the vision of 'Make in India' and 'Atmanirbhar Bharat.' The company has also established collaborations with global OEMs to cater to new business opportunities like Metro, Monorail, Metrolite, Maglev and high speed rail. These alliances are expected to result in inorganic growth of BHEL in the transportation business.
