Our 100-Year History and the Sustainable Future of Transportation Systems

CONTENTS

Foreword ........................................................................................................... 1
by Carsten Thomas

Technical Reports

The 100-Year History and Future Perspective of Mitsubishi Transportation Systems .................................................. 2
by Yoshiyasu Hagiwara and Masaki Sugaya

Traction Inverter Systems with SiC Power Modules for Railway Vehicles .......................................................... 7
by Tetsuo Sugahara and Takahito Ishida

Activities in Overseas Transportation Business to Achieve the SDGs ....................................................................... 11
by Tetsuo Komura and Yoshinori Yamashita

The Impact and Future of the Railways on a New Society Brought by COVID-19 ............................................................. 16
by Kazufumi Yoshida

Precis

For 100 years since foundation, Mitsubishi Electric Corporation’s transportation business has developed in line with the history of advancement of electric railway technologies. Railway transportation is so environmentally friendly that can contribute to solving the global environmental problems and social issues that have been intensifying against the backdrop of the COVID-19 pandemic. In this edition, we look over the technological trends of the last 100 years toward the sustainable future and aim to highlight the following: the promotion of energy-saving through power electronics technologies; the expansion of our overseas transportation business and the SDGs (Sustainable Development Goals) initiatives; and the consideration being given to societal change in the face of the COVID-19 pandemic.