

SiC Hybrid Module Applicable
FRENIC-VG

690V Series Industry First

Stack Type 690V Series Capacity Expansion

Overview Compact stack and capacity expansion (355 to 450kW) realized through the adoption of an SiC hybrid module to reduce loss

Customer value More compact size than competitor's products equipment "space-saving", and "maintainability improvements" realized

Features

Hybrid module applicable

Loss reduced by 28%,
Realizing single-unit capacity up to 450kW

Slim construction

Stack width unified at 226.2 mm

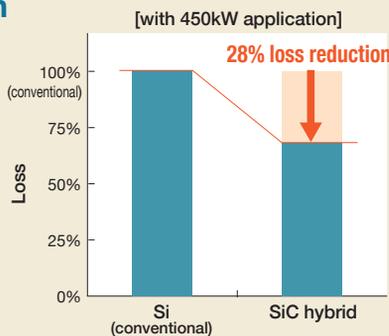
Extend capacity through direct parallel connection

Expansion up to 1200kW possible by connecting up to 3 units
(Large capacity of up to 2700kW with multiwinding motor drive)

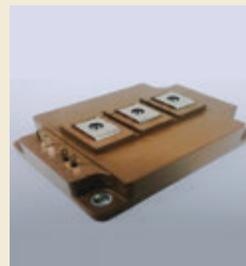
Benefits of SiC Hybrid Module

Loss comparison

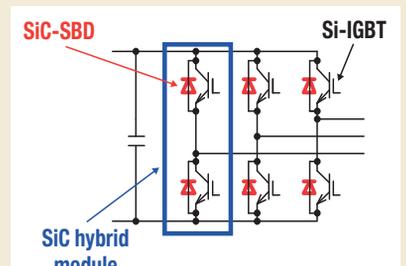
28% loss reduction compared to conventional Si (silicon) modules through SiC hybrid module application



Appearance



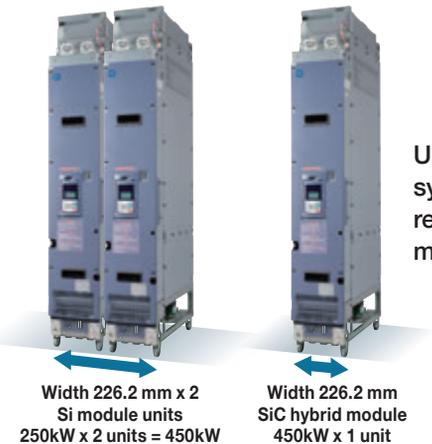
Circuit configuration



Merits

[Conventional]

[New product]



Use of a "single" 450kW system configuration realized with SiC hybrid module application

Applications

Applications extending chiefly to large-scale equipment, plants



Oil, chemicals

Iron and steel

Mining



Water treatment

Air conditioning (fans, pumps)

Harbor cranes

