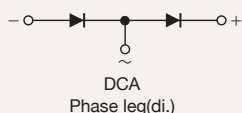
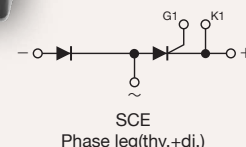
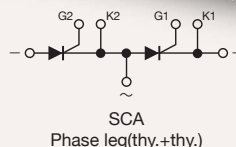


History of *reliability* and *longevity* for over two decades



Applications for DCA-DB/EB -series:

- ▶ Motor Drives (especially for 100-200 kW machines)
- ▶ Battery Charger
- ▶ Generator
- ▶ Elevator
- ▶ Various Power Supplies
- ▶ Traction



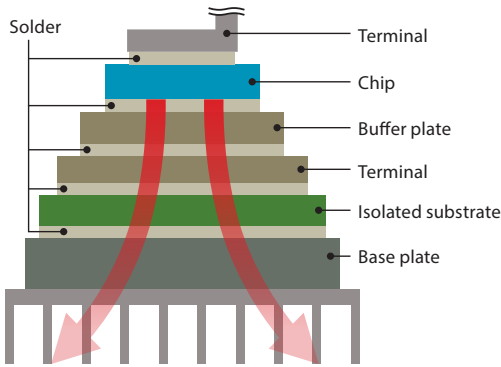
Applications for SCA/SCE-DB -series:

- ▶ Motor Drives (especially for 100-200 kW machines)
- ▶ Servo Controller
- ▶ Power Controller
- ▶ UPS
- ▶ Soft Starter
- ▶ Various Power Supplies

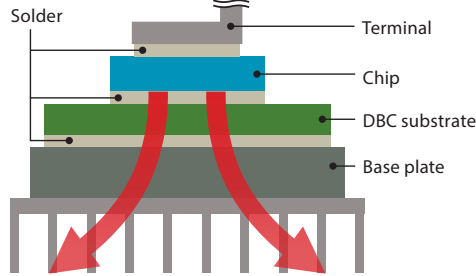
PRODUCT	MODEL	COMPOSITION	WITHSTAND VOLTAGE	CURRENT CAPACITY	DIMENSIONS	FEATURES
Diode Module	DCA200/240DB	Diode 2 in 1	800/1600V	200/240A	34,0 X 93,5 X 30,0 mm	High heat dissipation/High reliability model
	DCA200DB		2200V	200A		High heat dissipation/High voltage resistance model (2200V)
	DCA240EB		800/1600V	240A		Super high heat dissipation model
Thyristor Diode Module	SCA160/200DB	Thyristor - Diode 2 in 1	800/1600V	160/200A		Lightweight model/High di/dt capability
	SCE160/200DB					

Internal structure

Both the diode module DCA -series as well as thyristor-thyristor/thyristor-diode module SCA/SCE -series have the following benefits:



Existing structure



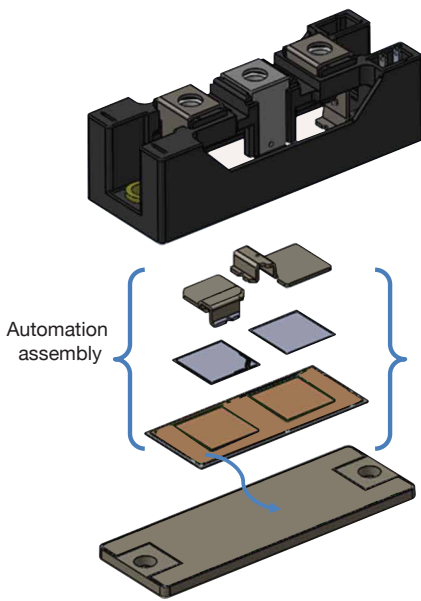
New structure

1. High heat dissipation: The high heat dissipation is made possible with an internal structure that has fewer layers than the previous versions of the same series. This also allows a smaller thermal stress on the thyristor and diode chips that also improves the power cycle capability.

2. Improved longterm reliability: With the decrease of two layers in the internal structure, as well as soldering the chips on both sides, the products' reliability can be even twice as long as the existing versions of the modules.

PRODUCTION PROCESS

DA Series

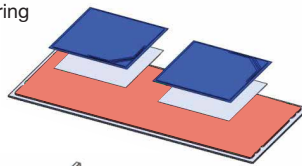


DBC/CASE manual mount

DB Series

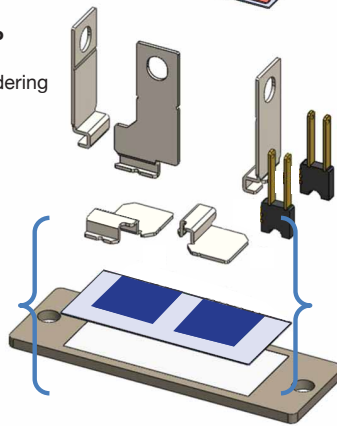
1st STEP

DBC Soldering



2nd STEP

Base Soldering



Automation assembly

3. Overall lightweight design: By optimising the internal design and materials, we have been able to decrease the weight 10% for SCA/SCE -series and even 20% for DCA -series modules, compared to the existing models.

4. A Green choice: We have decided to use 100% lead-free solder that gives less strain to the environment.

5. Easy availability: The series are completely produced in an automatised process - this ensures significantly more efficient production as well as lower cost.