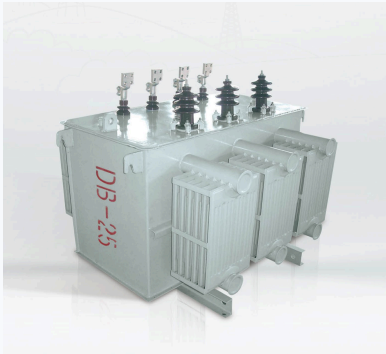




Amorphous Alloy

SBH15-M Amorphous-Alloy  
Distribution Transformer

The SBH15-M amorphous-alloy distribution transformer can replace silicon-steel-core transformers and is widely used in outdoor distribution systems. Deployed at scale on the grid it delivers excellent energy savings and reduced atmospheric pollution. It is particularly suited to sites with insufficient power and large load fluctuation, and where the insulating medium is not subject to atmospheric pollution — so it can run in humid environments. It is an ideal distribution device for both urban and rural distribution networks.

MODEL DESIGNATION

S B H 15 - M - □/□

|   |                      |     |                                           |
|---|----------------------|-----|-------------------------------------------|
| S | three-phase          | B   | copper-foil LV winding                    |
| H | amorphous-alloy core | 15  | performance-level code                    |
| M | sealed construction  | □/□ | rated capacity (kVA) / voltage class (kV) |

TECHNICAL SPECIFICATIONS

|                         |                                 |
|-------------------------|---------------------------------|
| Rated voltage           | 6 / 6.3 / 10 / 10.5 / 11 kV     |
| Rated capacity          | 30 – 2500 kVA                   |
| LV voltage              | 0.4 kV                          |
| Connection              | Dyn11                           |
| Tap range               | ±5% or ±2×2.5%                  |
| No-load loss            | 33 – 900 W                      |
| Load loss               | 0.63 – 20.2 kW                  |
| No-load current         | 1.5% – 0.2%                     |
| Short-circuit impedance | 4.0% / 4.5% / 5.0%              |
| Core                    | Amorphous alloy                 |
| Standards               | GB 1094 / GB/T 6451 / IEC 60076 |

NORMAL OPERATING ENVIRONMENT

- ▶ Altitude not exceeding 1000 m
  - ▶ Outdoor or indoor installation
- ▶ Ambient medium temperature ≤ +40 °C; max monthly average +30 °C; max annual average +20 °C; minimum –25 °C
  - ▶ Transformers for special operating conditions available on request

RATINGS & LOSSES

SBH15-M amorphous-alloy oil-immersed transformer — ultra-low no-load loss (amorphous core). HV 6/6.3/10/10.5/11 kV, LV 0.4 kV, Dyn11. Load loss at 75 °C. Per GB 1094 / GB/T 10228.

| Capacity (kVA) | No-load loss (kW) | Load loss (kW) | No-load current (%) | Impedance Uk (%) |
|----------------|-------------------|----------------|---------------------|------------------|
| 30             | 0.033             | 0.63           | 1.5                 | 4                |
| 50             | 0.043             | 0.91           | 1.2                 | 4                |
| 63             | 0.05              | 1.09           | 1.1                 | 4                |
| 80             | 0.06              | 1.31           | 1                   | 4                |
| 100            | 0.075             | 1.58           | 0.9                 | 4                |
| 125            | 0.085             | 1.89           | 0.8                 | 4                |
| 160            | 0.1               | 2.31           | 0.6                 | 4                |
| 200            | 0.12              | 2.73           | 0.6                 | 4                |
| 250            | 0.14              | 3.2            | 0.6                 | 4                |
| 315            | 0.17              | 3.83           | 0.5                 | 4                |
| 400            | 0.2               | 4.52           | 0.5                 | 4                |
| 500            | 0.24              | 5.41           | 0.5                 | 4                |
| 630            | 0.32              | 6.2            | 0.3                 | 4.5              |
| 800            | 0.38              | 7.5            | 0.3                 | 4.5              |
| 1000           | 0.45              | 10.3           | 0.3                 | 4.5              |
| 1250           | 0.53              | 12             | 0.2                 | 4.5              |
| 1600           | 0.63              | 14.5           | 0.2                 | 4.5              |
| 2000           | 0.75              | 17.4           | 0.2                 | 5                |
| 2500           | 0.9               | 20.2           | 0.2                 | 5                |