

### A. Technical Characteristics

|    |                                                   |               |                            |          |
|----|---------------------------------------------------|---------------|----------------------------|----------|
| 1  | Type                                              | :             | DT 1600/20-15-0,41         |          |
| 2  | Rated Power                                       | :             | 1600                       | kVA      |
| 3  | No-load Voltages                                  | :             | 20-15-0,41                 | kV       |
| 4  | Frequency                                         | :             | 50                         | Hz       |
| 5  | Vector Group                                      | :             | Dyn11                      |          |
| 6  | Voltage Regulation (at HV Side)                   | :             | +2x2.5% ; -2x2.5%          | Off-load |
| 7  | No-load Losses (Po)                               | :             | 1,08                       | kW       |
| 8  | Load Losses (at 75 °C & Nominal Pos.) (Pk)        | :             | 12                         | kW       |
| 9  | Short-circuit Impedance (at 75 °C & Nominal Pos.) | :             | 6                          | %        |
| 10 | Short Circuit Withstand Duration                  | :             | 2                          | s        |
| 11 | Duty                                              | :             | Continuous                 |          |
| 12 | Design Ambient Temperatures (Min./Max.)           | :             | -25 / 40                   | °C       |
| 13 | Temperature Rises (Oil/Winding)                   | :             | 60 / 65                    | K        |
| 14 | Operational Altitude                              | :             | ≤ 1000                     | m        |
| 15 | Cooling Type                                      | :             | ONAN                       |          |
| 16 | Applicable Standard                               | :             | IEC 60076                  |          |
| 17 | Winding Material                                  | :             | Aluminum-Aluminum          |          |
| 18 | Type of Insulating Liquid                         | Mineral Oil : | Nynas Taurus or equivalent |          |
| 19 | Type of Oil Preservation System                   | :             | Hermetical Sealed Type     |          |
| 20 | Type of Tank Construction                         | :             | Corrugated Wall            |          |
| 21 | Surface Protection                                | :             | Standard Paint, RAL 7033   |          |
| 22 | Underbase Construction                            | :             | With Wheels                |          |

**Note:** 1.No-load losses are guaranteed at 1.0Un and short-circuit losses are guaranteed at nominal tap and rated power.

2.According to EU-548/2014 Tier 2 standard .((Po:+15%)(Pk:+10%)(Uk:±10%)

### B. Insulation Levels

|   |    | Um<br>(kV) |   | Rated Lightning Impulse Withstand Voltage (kV,<br>1.2μs) |  | Rated Power Frequency Withstand Voltage<br>(kV, 1min   50Hz) |
|---|----|------------|---|----------------------------------------------------------|--|--------------------------------------------------------------|
| 1 | HV | 24         | : | 125                                                      |  | 50                                                           |
| 2 | LV | 1,1        | : | -                                                        |  | 3                                                            |
| 3 |    | -          | : | -                                                        |  | -                                                            |
| 4 |    |            | : |                                                          |  |                                                              |

### C. Bushings/Terminals

|   |           |   | Type                      | Termination       |
|---|-----------|---|---------------------------|-------------------|
| 1 | HV        | : | 24 kV 250 A Plug-in       | Without Cable Box |
| 2 | LV & LV-N | : | 1 N 3150 A Busbar Bushing | With Cable Box    |
| 3 |           | : |                           |                   |
| 4 | LV-N      | : | -                         | -                 |

**Note:**

### D. Dimensions

|   |              |   | Total (mm) | Transport (mm) |
|---|--------------|---|------------|----------------|
| 1 | Length       | : | 1820       | 1820           |
| 2 | Width        | : | 1120       | 1120           |
| 3 | Height       | : | 2210       | 2210           |
| 4 | Roller Space | : | 820        | -              |
| 5 | Rail Space   | : |            |                |

### E. Weights

|   |                  |   |      |    |
|---|------------------|---|------|----|
| 1 | Total Weight     | : | 3770 | kg |
| 2 | Oil Weight       | : | 900  | kg |
| 3 | Active Part      | : | 2270 | kg |
| 4 | Transport Weight | : | 3770 | kg |

**Note:** All Weights and dimensions are approximate values.

### Accessories & Protection Devices :

Hermetic Relay(DMCR),Pressure Valve,Oil filling valve, Oil drain and sampling valve,