PROFESSIONAL MANUFACTURER OF HIGH AND LOW VOLTAGE PRODUCTS



Medium Voltage Switchgear

KYN61-40.5 Metalclad AC Enclosed Switchgear, Withdrawable Type

- KYN61-40.5 Air insulated metal clad movable switchgear is an indoor switchgear, assembly operating under the conditions of 50/60Hz three phase and rated 40.5kV AC voltage, which is applied to the transmission and distribution for generators, transformer substations and the industry and mine enterprises. It also can be used to control, protect and monitor electric circuits, and very useful for frequent operating conditions.
- Standard: IEC62271-200

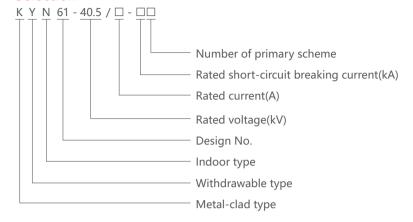
General



Medium Voltage Switchgear

KYN61-40.5 Metalclad AC Enclosed Switchgear, Withdrawable Type

Selection



Operating conditions

- 1. Ambient air temperature: -15°C~+40°C
- 2. Altitude: ≤1000m
- 3. Relative humidity : Daily average≤95%; Monthly average≤90%
- 4. Earthquake intensity:≤magnitude 8.
- 5. Applicable in the places without corrosive and flammable gas.

Note: Customized products are available.

Features

- 1. The cabinet is made of aluminum-zinc coated sheet processed by CNC equipment and assembled with bolts or rivets, with a fully modular structure.
- 2. This switchgear has various functions to prevent misoperations, including preventing loaded trolleys from moving, preventing live coupling and earthing switches, and preventing inadvertent entry into live compartments.
- 3. The switchgear is equipped with a ZN85 vacuum circuit breaker with excellent performance and a handcart, and the main busbar is connected without the need for transitional transfer.
- 4. This switchgear is an advanced, stable performance, reasonable structure, easy-to-use, safe and reliable power distribution equipment

Medium Voltage Switchgear

KYN61-40.5 Metalclad AC Enclosed Switchgear, Withdrawable Type

Technical data

Switchgear parameter

| No. | ltem | | Unit | Value |
|-----|---|-----------------------------------|------|--|
| 1 | Rated voltage | | kV | 40.5 |
| 2 | Rated current | | А | 630/1250/1600/2000/2500 |
| 3 | Rated frequency | | Hz | 50/60 |
| 4 | Power frequency withstand voltage in 1 min | Phase, Earthed | | 95 |
| 4 | Fower frequency withstand voltage in 1 fillin | Isolating Fracture | kV | 110 |
| 5 | Lightning impulse withstand voltage(Peak) | Phase,Earthed | kV | 185 |
| 5 | Lightning impulse withstand voltage(Peak) | Isolating Fracture | kV | 215 |
| 6 | Rated current of the main busbar | | А | 630/1250/1600/2000/2500 |
| 7 | Rated current of the branch busbar | | Α | 630/1250/1600/2000/2500 |
| 8 | Rated short-circuit breaking current | | kA | 20/25/31.5 |
| 9 | Rated short-time withstand current | ated short-time withstand current | | 20/25/31.5 |
| 10 | Rated peak withstand current | | kA | 50/63/80 |
| 11 | Rated short circuit making current | | kA | 50/63/80 |
| 12 | Frequency withstand voltage in 1min of aux control loop | | V | 2000 |
| 13 | Internal arc duration test(0.5s) | | kA | 31.5 |
| 14 | Degress of protection | | IP | IP4X(IP2X when the front door is opened) |
| 15 | Rated voltage of aux control loop | | V | AC or DC 110/220 |

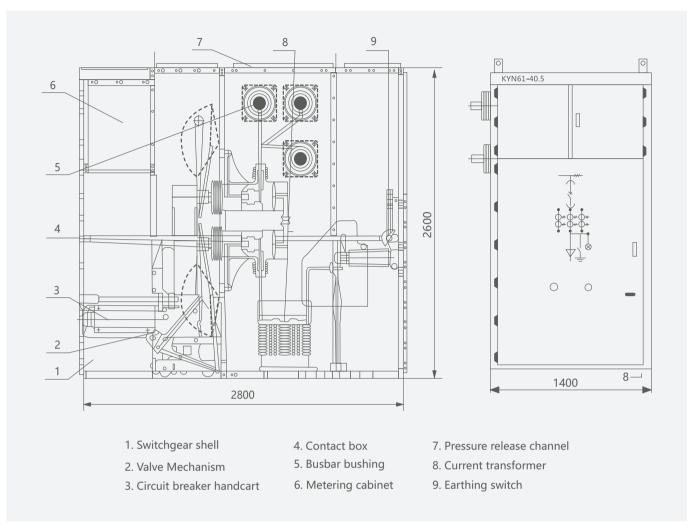
ZN85-40.5 parameter

| No. | ltem | | Unit | | Data | | |
|-----|---------------------------------------|---|-------|--------------------------------------|-----------------------|---------------------|--|
| 1 | Rated voltage | | kV | | 40.5 | | |
| 2 | Rated insulation level | lightning impulse withstand voltage (full wave) | kV | 185 | | 185 | |
| ۷ | Rateu ilisulation level | 1 min power frequency withstand voltage | kV | | 95 | | |
| 3 | Rated frequency | | Hz | | 50 | | |
| 4 | Rated current | | kA | 630 | 630,1250 | 1250,1600,2000,2500 | |
| 5 | Rated short -circuit breaking current | | kA | 20 | 25 | 31.5 | |
| 6 | Rated short -circuit making current | | kA | 50 | 63 | 80 | |
| 7 | Rated withstands current (peak) | | kA | 50 | 63 | 80 | |
| 8 | Rated short-time withstand current | | kA | 20 | 25 | 31.5 | |
| 9 | Fixed breaking time | | S | ≤0.07 | | | |
| 10 | Making time | Electro-magnetic mechanism | S | Electro-magnetic mechanism≤0.2 | | etic mechanism≤0.2 | |
| 10 | making time | Spring mechanism | S | Spr | Spring mechanism≤0.10 | | |
| 11 | Rated operation sequence | | / | Open-0.3s-close open-180s-close open | | | |
| 12 | Mechanical life | | times | 10000 | | | |

Medium Voltage Switchgear

KYN61-40.5 Metalclad AC Enclosed Switchgear, Withdrawable Type

Features



Single line diagram

| | Program No. | 01 | 02 | 03 | 04 |
|----------------------------|-------------------|---------------------------------------|-----|---------------------------------------|---------------------------------------|
| Single line diagram | | | *** | | |
| | VCB ZN85-40.5 | 1 | 1 | 1 | 1 |
| Main electrical components | JNH1-40.5 | 0-1 | 0-1 | 0-1 | 0-1 |
| | CT LZZB7,8,9-40.5 | / | 1 | 2 | 3 |
| Application | | Overhead incoming and outgoing feeder | | Overhead incoming and outgoing feeder | Overhead incoming and outgoing feeder |
| Note | | | | | |

17 18

KYN61-40.5 Metalclad AC Enclosed Switchgear, Withdrawable Type

| | Program No. | 05 | 06 | 07 | 08 |
|----------------------------|------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | Single line diagram | | ### #### #### | | |
| | VCB ZN85-40.5 | 1 | 1 | 1 | 1 |
| Main electrical components | JNH1-40.5 | 0-1 | 0-1 | 0-1 | 0-1 |
| | CT LZZB7,8,9-40.5 | / | 1 | 2 | 3 |
| Application | | Cable incoming and outgoing feeder |
| Note | | | | | |

| | Program No. | 09 | 10 | 11 | 12 |
|-----------------|------------------------|---------------------------|------------------------------|------------------------------|---------------------------|
| | Single line diagram | | *** | ## | |
| Main electrical | VCB ZN85-40.5 | 1 | 1 | 1 | 1 |
| components | CT LZZB7,8,9-40.5 | / | 1 | 2 | 3 |
| Application | | Left(right) communicating | Left(right) communicating | Left(right) communicating | Left(right) communicating |
| Note | | | | | |

| | Program No. | 13 | 14 | 15 | 16 |
|----------------------------|------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| | Single line diagram | | # | ## | |
| Main electrical components | CT LZZB7, 8, 9-40.5 | / | 1 | 2 | 3 |
| Application | | Left(right) communicating | Left(right) communicating | Left(right) communicating | Left(right) communicating |
| Note | | | | | |

Medium Voltage Switchgear

KYN61-40.5 Metalclad AC Enclosed Switchgear, Withdrawable Type

| | Program No. | 17 | 18 | 19 | 20 |
|-----------------|------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| | Single line diagram | | ### | | |
| Main electrical | VCB LZZB7,8,9-40.5 | / | 1 | 2 | 3 |
| components | JNH1-40.5 | 0-1 | 0-1 | 0-1 | 0-1 |
| Application | | Overhead incoming and outgoing feeder |
| Note | | | | | |

| | Program No. | 21 | 22 | 23 | 24 |
|-----------------|------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| | Single line diagram | | ### | ## ## ## | |
| Main electrical | VCB LZZB7,8,9-40.5 | / | 1 | 2 | 3 |
| components | JNH1-40.5 | 0-1 | 0-1 | 0-1 | 0-1 |
| Application | | Overhead incoming and outgoing feeder |
| Note | | | | | |

| Program No. | | 25 | 26 | 27 |
|----------------------------|------------------------|--------------------------|--------------------------|--|
| | Single line diagram | ##- | | —————————————————————————————————————— |
| | CT LZX9-40.5Q | 2 | 3 | / |
| Main electrical components | Fuse XPNP-40.5 | 3 | 3 | 3 |
| | Arrester HY5W-51 | / | / | 3 |
| Application | | Potential transformer | Potential transformer | Potential transformer |
| Note | | | | |