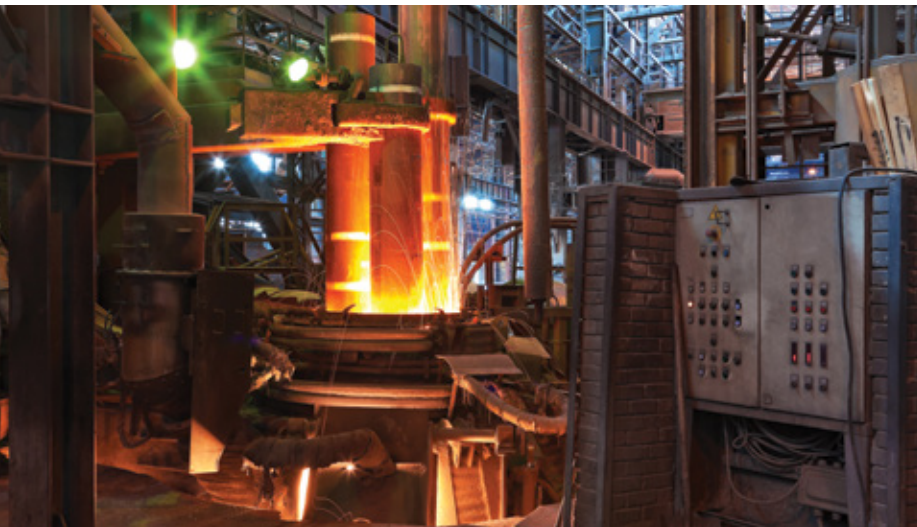


QUICK GUIDE

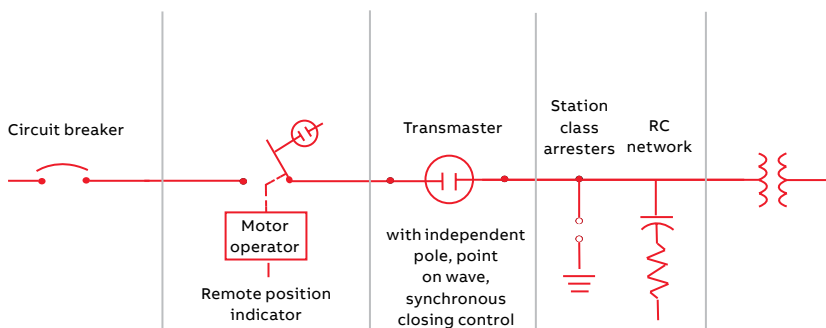
Joslyn® Transmaster® VBT electric arc furnace switch



Why is the Transmaster switch used?

- Uses vacuum interruption and solid dielectric insulation for 15 kV to 69 kV applications
- Provides the longest maintenance-free life of any electric furnace switch*
- Proven in over 4,000 field installations worldwide
- Point on wave (POW) closing control options available

How is the Transmaster switch used?



Applications

The VBT switches control power to an arc furnace and are designed specifically for use in steel mills and foundries.

Value proposition

Reliability

- Reduces stress on equipment associated with closing circuit of transformers
- Reduces stress on all other components of the furnace by synchronously closing three switch poles independently, with the occurrence of peak voltage in each phase
 - Reduces inrush currents and transients associated with transformer switching

Environmental sustainability

No oil or gases

- Uses vacuum interruption and solid dielectric insulation for 15 kV to 69 kV applications
- Solenoid operating mechanism provides a long life of maintenance-free operations*

Lifecycle cost reductions with solenoid operators

Long operational life of up to 100,000 open and close operations with no required maintenance*

- No oil or gas interrupting mediums to require maintenance or personal protective equipment
- No regulatory requirements for monitoring and measuring of oil and gas usage/leakage

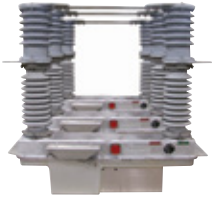
*Note: Because it contains no oil or gas to monitor or maintain, the Transmaster switch is considered to be maintenance-free.

Target customers

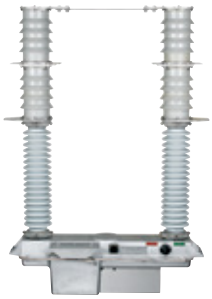
Ideal for customers looking for a highly reliable arc furnace switch. When paired with a point on wave control, can prolong the life of their electric arc furnace (EAF) or ladle metallurgy furnace (LMF) transformers.

Target customers are:

- Steel mills
- Foundries



01 38 kV 600 amp
Transmaster switch



02 Transmaster VBT switch

Features and benefits

The Transmaster VBT electric arc furnace switch is less costly than our competitors' alternative technology or breakers. It also allows a customer to take one of the three elements off-line for service without shutting down the entire furnace. Although we compete against a similar product, we are the original brand.

- Long, maintenance-free life under demanding conditions, designed for 100,000 operations*
- No oil or gas used for interruption or insulation
- Safe — all switches exceed the electrical requirements of the ANSI C37.66 standard
- Vacuum interrupter condition can be determined quickly by a high-potential withstand test
- Lightweight, modular design — no special foundations or costly support required
- Removable fuses provide protection
- Vacuum contacts withstand excessive overloads and system short circuits at any power factor
- Eight heavy-duty auxiliary contacts provided for remote indications, control and interlocking of other furnace functions or equipment
- Capacitor discharge circuit trips switch open upon loss of control voltage
- Circuit trips switch open if one mechanism does not close within the specified time
- All switches exceed the electrical requirements of the ANSI C37.66 standard

Frequently asked questions

How does the switch interrupt current?

The Transmaster VBT electric arc furnace switches use long-life vacuum interrupters for switching.

Are the Transmaster VBT electric arc furnace switches eco-safe?

Yes, these switches do not use any oil or gas for switching for the lifetime of 100,000 operations.

Are the Transmaster VBT electric arc furnace switches easy to maintain and test?

The condition of the switches can easily be determined in the field, using only a high potential “hi-pot” tester and a low resistance “ductor” without any disassembly.

Can the switches be used in any environment?

The Transmaster VBT electric arc furnace switches are completely sealed and are suitable for indoor or outdoor use.

Discovery questions

Is the customer looking for a long-life, low-maintenance product?

The Transmaster VBT electric arc furnace switches are rated for 100,000 operations.

Is the customer looking for an easy-to-install product?

The Transmaster VBT electric arc furnace switches come completely factory assembled, are lightweight and can be used indoors or outdoors.

Is the customer looking for an easy-to-maintain product?

The Transmaster VBT electric arc furnace switches have few moving parts and, in case of issues, can be repaired either onsite or at the factory.

Is the customer looking for a flexible-use product?

The Transmaster VBT electric arc furnace switches can be paired with a wide variety of controls, including single operator, multiple operator, zero voltage closing (ZVC) and point on wave (POW) controls. This allows for use in a variety of applications in steel mills and foundries.

Is the customer looking for a product backed by OEM parts and service?

The Transmaster VBT electric arc furnace switches are fully warranted and are backed by a field service department that uses genuine OEM parts and provides 24/7 service.