APPEL INNOVATION
The future Technology Company

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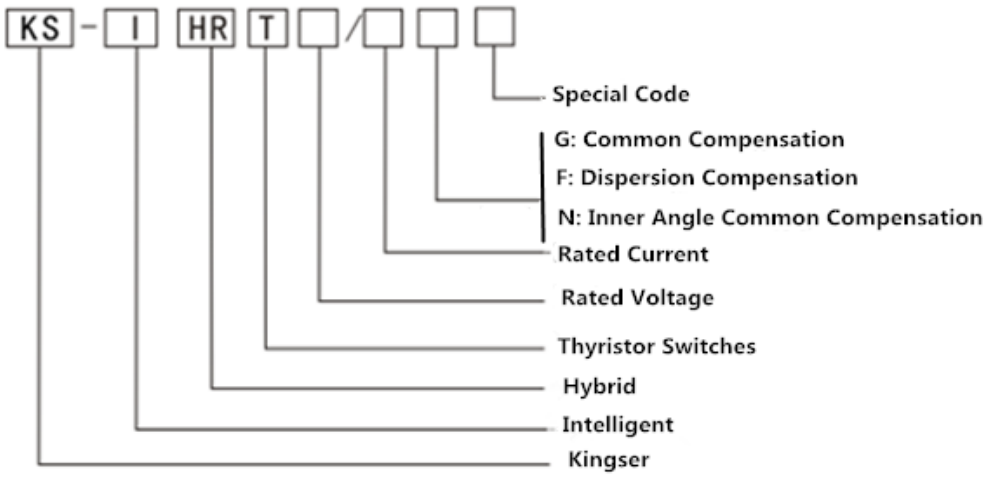
The IHRT-Series: Intelligent Hybrid Thyristor Switches

General:

The KS-IHRT series of intelligent hybrid thyristor switches have been designed by KS with industry-leading, arc-free, no-surge current, patented switch technology.The novel intelligent hybrid thyristor switches, combining the functions of a circuit breaker and a hybrid fast-disconnect thyristor switch for intelligent monitoring. Compared to conventional thyristor switches, they are characterized by comprehensive protection functions, high safety and reliability, low construction volume, simple wiring and assembly. They can be used as a replacement for conventional quick-release circuit breakers made of different separate components. They simplify the on- and off-switching of loads and are suitable for the no-surge current, arc-free switching-on and switching off of loads, such as, an electrical capacity, in a power distribution network in the range from 0.4 KV to 0.72 KV.

Product code:



The default is 12v control, 220v AC is optional, RS485 communication control.

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Features:

1. The intelligent IHRT series of hybrid thyristor switches employs an industry - leading patented technique for early zero - crossing triggering with capacitive energy storage, which provides a lower inrush current value. Problems known from other synchronous switches and combination switches in the market, such as low reliability, high current pulses switching on, rapid burn-up of the mechanical contacts, adhesion or thyristor breakthrough, do not occur.
2. These worldwide unique non-surge-current-switch-process thyristor-switches, which can be operated without the triggering of a transformator or an electronic high-voltage switch. Due to that fact, the transformator caused duty cycle or high-voltage switch caused dead zones during zero-crossings or break-throughs are avoided,
3. A highly developed, patented control method, in which the duty cycle of a thyristor is a few milliseconds, less than one-tenth the duty cycle of the thyristor of already available combination switch. These thyristors have a very high overload capability and are also available in specific types which can withstand a complete short circuit of a load without having to accept damage to the thyristor or the switch.
4. Modular integration, low construction volume, simplified wiring and maintenance. *
5. Quick-release protection against over currents, phase failure, over voltages, under voltage etc. *
6. Detecting error information to simplify error diagnosis. *
7. Communication RS-485, remote-controlled. *
8. Industrial electronic elements or components, excellent interference-free opto-isolated circuits ensuring long-term operational safety in demanding industrial environments.

(Notes: For product features marked with * please refer to the technical description of the product, as they differ from type to type.)

Technical Index:

Patented Products
Temperature：-25～+45℃
Rated frequency：50/60HZ
Circuit power consumption：≤2W
Voltage Drop across contacts:：≤0.1V
Relative Humidity：20%～90%[40℃]
Rated voltage:：450V/250V AC
Internal time required: One cycle of on and off:: ≥1 second
Internal time required: Interval between two consecutive connect: ≥10 seconds
Service lifetime:≥1,000,000 times

Models list and Parameters Table:

KS-IHRT450/20G	20A	≤15Kvar	Common Compensation	450V
KS-IHRT450/30G	30A	≤20Kvar		
KS-IHRT450/40G	40A	≤30Kvar		
KS-IHRT450/60G	60A	≤36Kvar		
KS-IHRT450/80G	80A	≤50Kvar		
KS-IHRT450/100G	100A	≤60Kvar		
KS-IHRT250/20F	20A	≤4*3 Kvar	Dispersion Compensation	250V
KS-IHRT250/30F	30A	≤6*3 Kvar		
KS-IHRT250/40F	40A	≤9*3 Kvar		
KS-IHRT250/60F	60A	≤12*3 Kvar		
KS-IHRT250/80F	80A	≤16*3 Kvar		
KS-IHRT250/100F	100A	≤20*3 Kvar		

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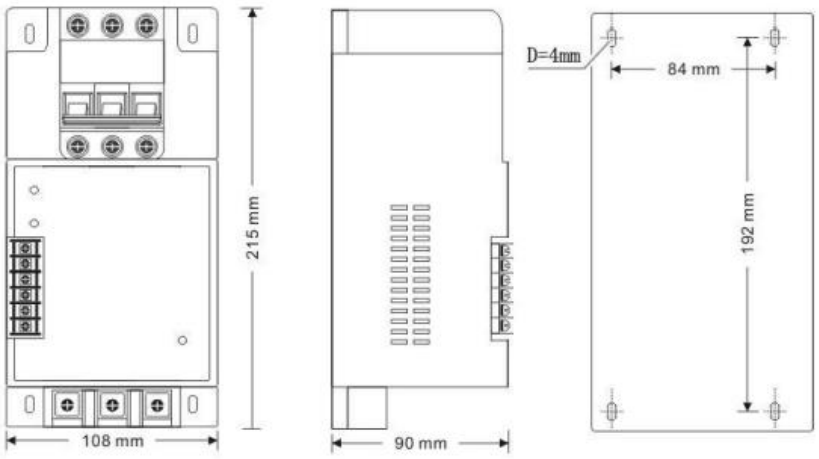
Installation Size (Unit:mm):



Product wiring diagram: