



**PT. Simotech Global
Indonesia**
Driving to the future

MPS MV Softstarter introduction



Product
introduction



Type selection
and application



Typical case

- **General**

MPS series electrical soft start device is widely used for HV squirrel cage asynchronous motor or asynchronously started synchronous motor below 10000 kW in industry, civil and municipal areas, as voltage reduction soft starter.



● Executive standards

GB/T 11022-2011 Common specifications for high-voltage switchgear and controlgear standards (IEC62271-1)

GB/T 191 Packaging - Pictorial Marking for Handling of Goods (ISO 780:1997)

GB 311.1-2012 Insulation co-ordination-Part 1: Definitions, principles and rules (IEC 60071-1:2006)

GB/T 4025 basic and safety principles for man-machine interface, marking and identification - coding principles for indicators and actuators (IEC 60073:1996)

GB 4208-2008 Description: Degrees of Protection Provided by Enclosure (IP Code) (IEC 60529:2001)

GB/T 4798.1 Environmental conditions existing in the application of electric and electronic products - Section 1: Storage (IEC 60721-3-1:1997)

GB/T 4798.2 Environmental conditions existing in the application of electric and electronic products - Section 2: Transportation (IEC 721-3-2 NEQ)

GB 7947 Basic and safety principles for man machine interface, marking and identification—Identification of conductors by colors or numbers (IEC 60446:2007)

JB/T 10251-2001 AC power & electronic motor soft starters

GB/T 13384 General specifications for packing of mechanical and electrical product

GB/T 14436 General principles of industrial product guarantee documents

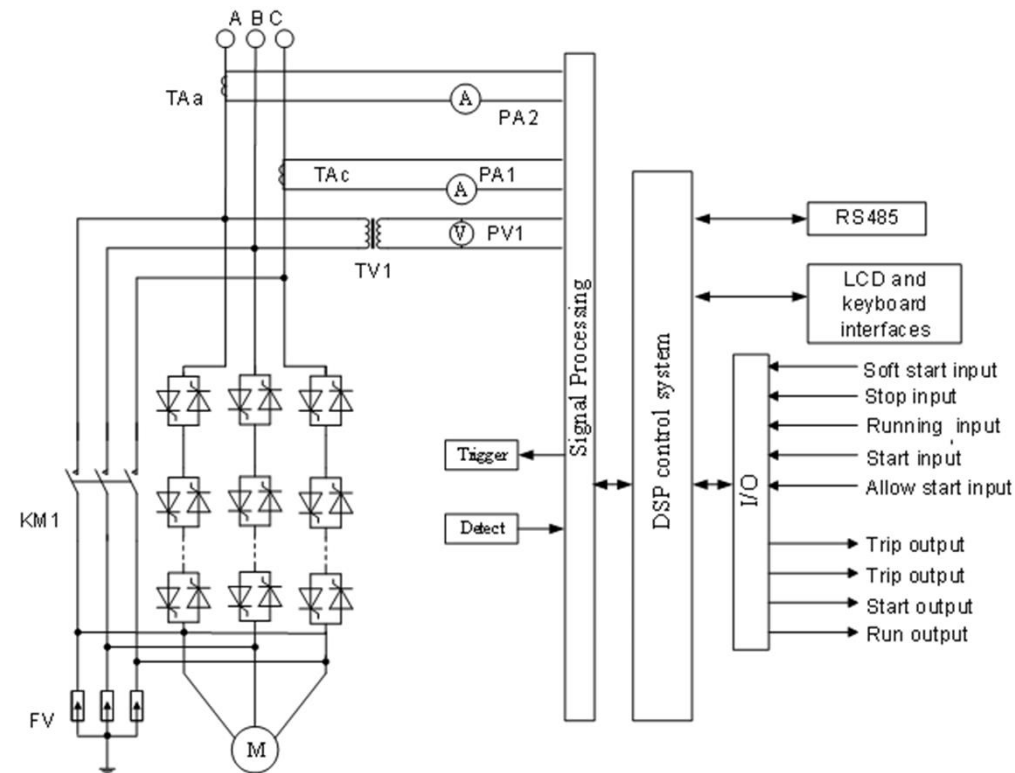
GB/T 14808-2001 High-voltage alternating current contactors and contactor-based motor-starters (IEC 60470:1999)

GB/T 20990.1-2007 Thyristor valves for high voltage direct current (HVDC) power transmission--Part 1 electrical test (IEC 60700-1;1998)

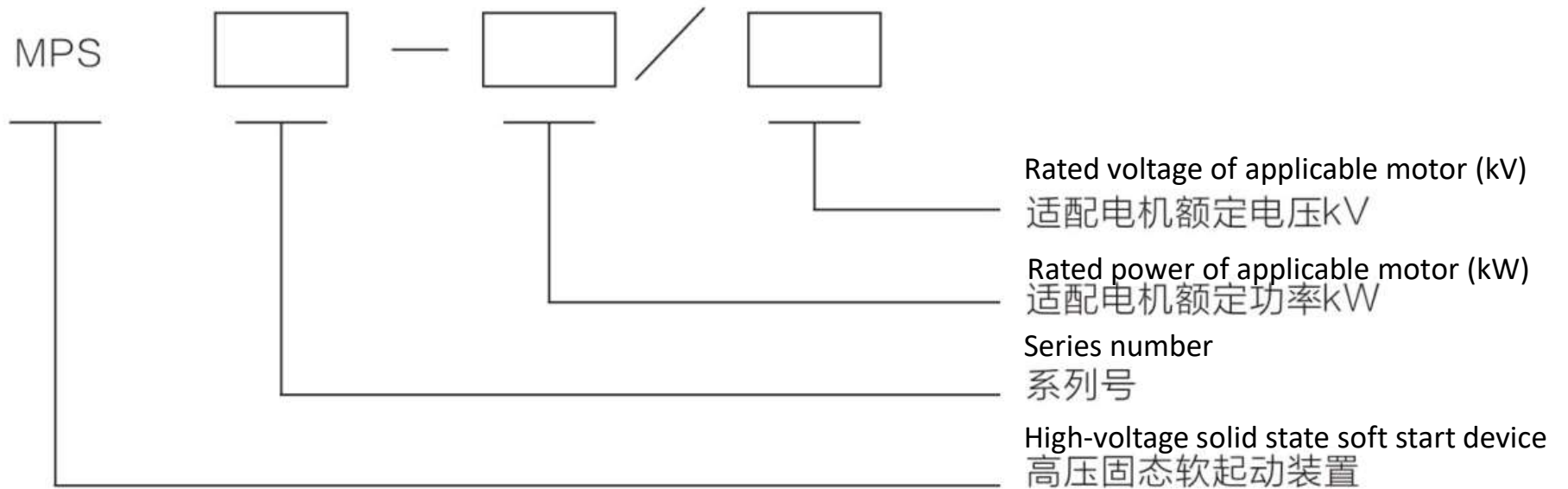
● Product principle

The product is composed of several anti-parallel thyristors. By controlling the trigger angle of thyristor to control the value of output voltage to meet different current and voltage requirements during motor starting process.

When the speed of motor has reached normal speed, the bypass vacuum contactor or circuit breaker will be closed. The motor starting process is finished and thyristor parts will be removed from operating circuit.



● Model Description



Note: MPS electrical soft starter is short for HV solid soft start device.

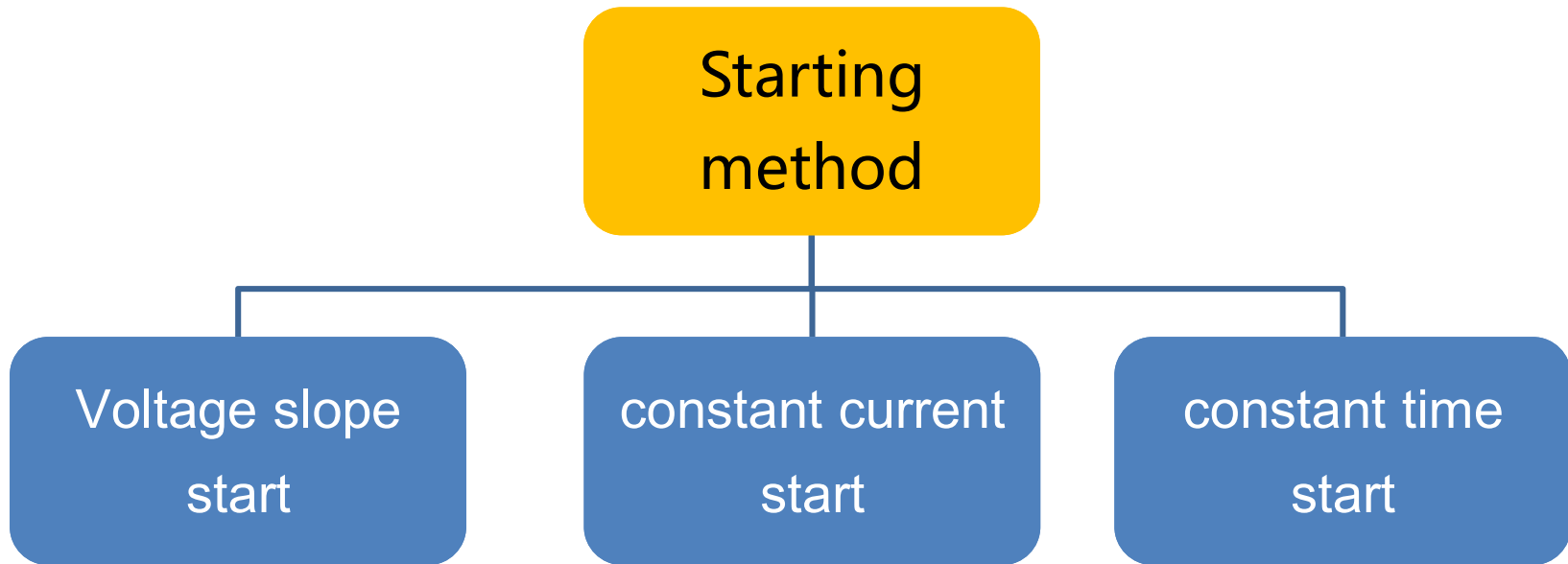
- **Performance characteristics**

Starting current 2.5-4 I_e

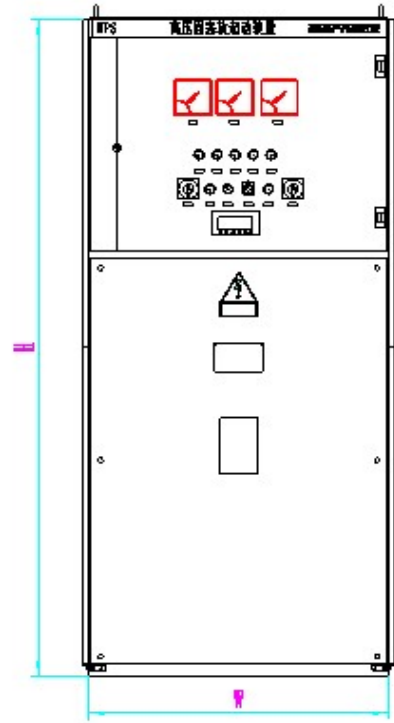
Soft stop, small size,
flexible parameter settings

Patented synchronous
trigger technology,
high reliability

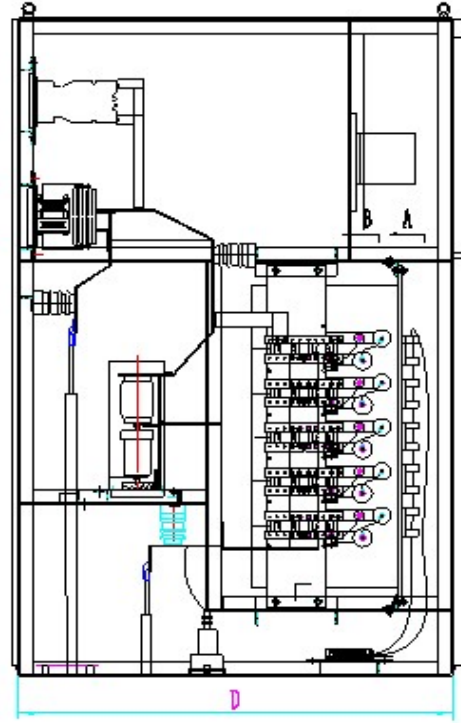
- **Starting method**



- Outline and structure



Soft start device outline drawing

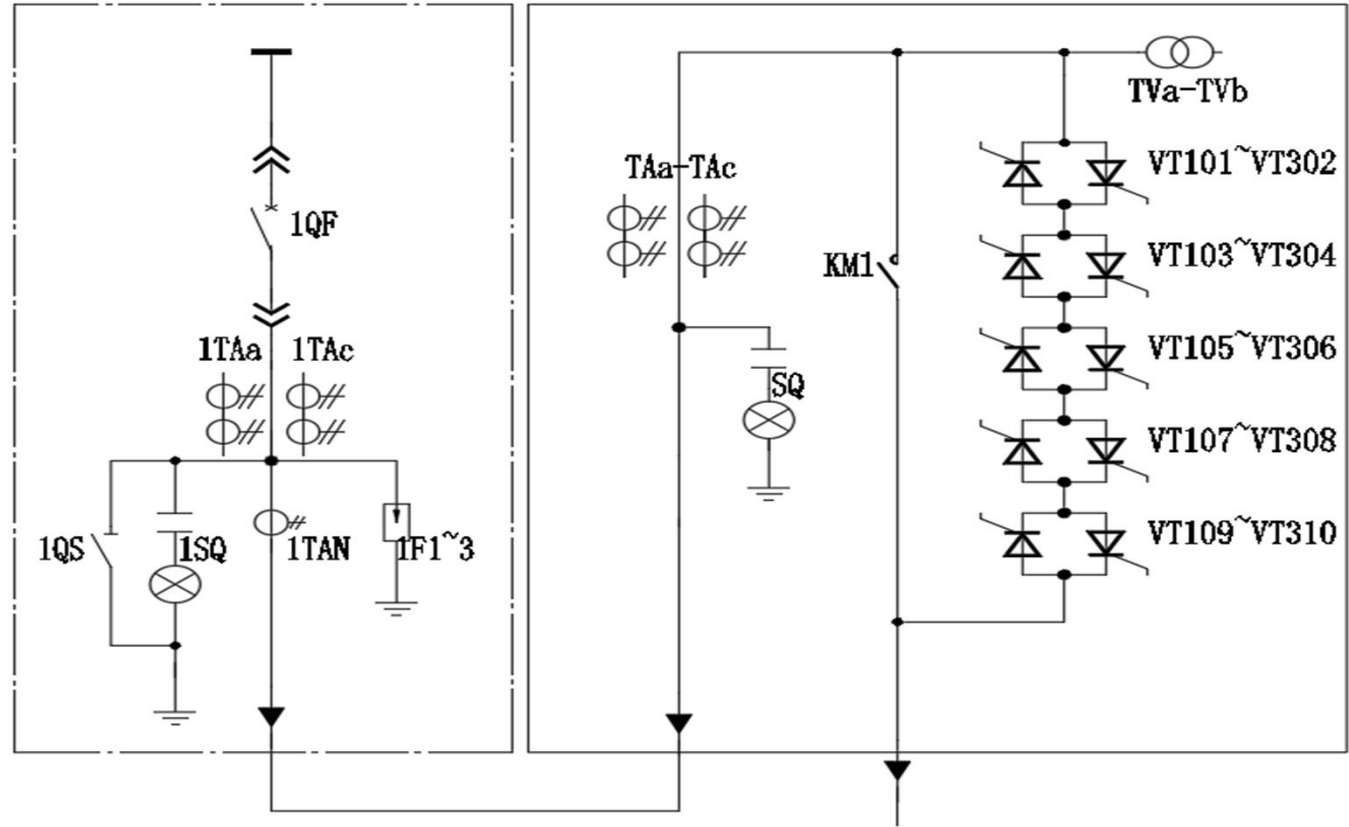


Soft start device internal drawing

MPS electrical soft starter type selection table

Suitable load	Starting current	Starting time	Applicable industries	Notes
Pump	2.5~3.5Ie	30S	National water conservancy, city and factory polluted water treatment, municipal water supply	
No-load motor	2~2.5Ie	20S	Test and inspection in colleges and institutions	
Centrifugal fan	3~4Ie	40S	Metallurgy, petrochemical	
Compressor	3~4Ie	35S	Oxygen production, paper making, petrochemical	
Crusher	3~4Ie	40S	Cement, coal	
Lifting machinery	3~4Ie	40S	Mine	

- **System diagram**



Thank You!

