

# LOW VOLTAGE CROWBAR

**Address**

Via Archimede 18  
Sesto San Giovanni (MI) 20099  
Italy

**Phone**

T: +39 02.26.22.40.54  
F: +39 02.24.06.945

**Email / Web**

commerciale@secompower.it  
info@secompower.it  
www.secompower.it

# About Us

## FOUNDED IN 1975, SECOM IS A LEADING COMPANY FOR THE DISTRIBUTION AND PRODUCTION OF COMPONENTS AND DEVICES FOR POWER ELECTRONICS

SECOM continuously carries out new research and technical proposal in conjunction with important clients, providing technical support to meet their specific needs.

Production excellence and efficient organization allow SECOM to commit itself to providing to the market with timely and professional service in numerous sectors of static energy conversion. Flexibility and short delivery time have become pillars to SECOM's company policy.

### WHO WE ARE



Over the years the company has become an important designer and manufacturer of power electronic devices for industrial automation manufacturing technologies

### WHAT WE DO



SECOM studies and manufactures customized solutions on behalf of its customers.

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# LOW VOLTAGE CROWBAR

## OVERVIEW

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The hard crowbar assembly has two main circuit components:

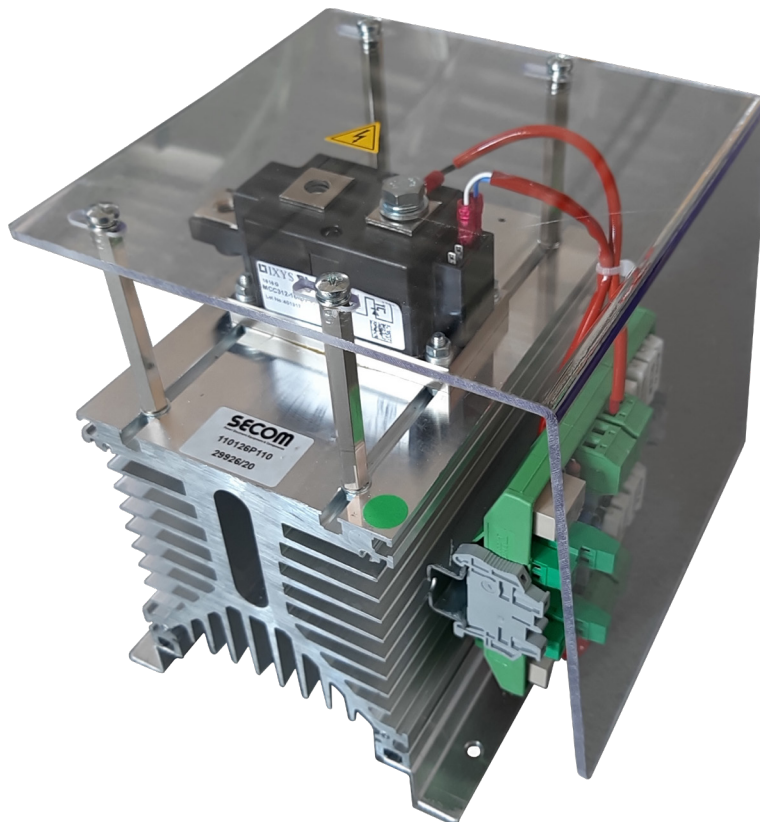
- A bod-firing panel which measures the high voltage input and generates a thyristor firing pulse if the voltage exceeds a present threshold
- A thyristor assembly which when fired shorts the anode and cathode to discharge the circuit.

The crowbar and thyristor firing card are designed to detect the voltage across a thyristor and fire the crowbar to protect the thyristor if the voltage exceeds a preset threshold.

Crowbar is used typically for synchronous machine and for wind generators, for discharge the filed and to protect the filed from overvoltage.

**Benefits of Crowbar Circuit:**

- The Crowbar has fastest response than DC field breaker.
- The field discharge through Crowbar is linear while in DC Field breaker it is nonlinear.
- The maintenance is not required in Crowbar while in DC Field breaker due mechanical operations regular maintenance required.
- The life time of the system is higher if the DC breaker is not used.



# TECHNICAL DATA

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Parameter name	Additional description
Diode type	Press pack/stud or power module
Cooling system	Natural air
Mounting	Wall mounting
Altitude	1000 m. a.s.l.
Climate	Temperate
Min/Max operating temperature	0 ÷ 40 °C
Storage temperature	-40 ÷ 55 °C
Relative humidity	10 ÷ 90 % (from 0 ÷ 40 °C)

# PRODUCTS

## TABLE

In the table below is showed the detailed electrical and mechanical characteristic of the crowbar. The detailed mechanical drawing can be requested.

Current	Voltage	Dimension "A"	Component
20 A	800 V	120	110126P464
60 A	600 V	120	110126P532
60 A	800 V	120	110126P470
60 A	1000 V	120	110126P549
100 A	300 V	180	110126P465
125 A	400 V	180	110126P466
350 A	1000 V	180	110126P523
200 A	1100 V	180	110126P544

Current	Voltage	Dimension "A"	Component
50 A	650 V	120	110126P456
60 A	650 V	120	110126P461
60 A	900 V	120	110126P475
200 A	800 V	180	110126P457
350 A	1000 V	180	110126P522
30 A	800 V	120	110126P539
30 A	600 V	120	110126P608
250 A	1000 V	180	110126P637
90 A	800 V	180	110126P646



