

# CABS 200N LOAD IMPEDANCE FOR BS200NX ELECTRONIC SWITCHES



# FOR TESTS ACCORDING TO ...

> ISO 7637-1:1990 > ISO 7637-2:2004 > ISO 7637-2:2011

# CA BS 200N - LOAD IMPEDANCE FOR BS200NX ELECTRONIC SWITCHES

The switching behaviour of the BS 200N series semiconductor switches shall be verified on 0.60hm to 50uH load inpedance.

The CA BS 200N is directly connected to the output of the BS 200Nx. The switching parameters of the BS 200Nx are measured with the load connected.

Additionally, the CA BS 200N includes a number of shunt resistors Rs such as 10ohm, 20ohm, 40ohm and 120ohm being required as per standards used during the emission measurement of transients as per ISO 7637-2:2011 and the former ISO 7637-2:2004.

#### HIGHLIGHTS

- > Verification load for electronic switch 0.6ohm / 50uH as per ISO 7637-2:2004
- > Max. supply voltage 28VDC
- > Max. load current 50A
- > Additional shunt resistors 10ohm, 20ohm, 40ohm, 120ohm built-in for emission measurement

# **APPLICATION AREAS**

🚗 🔁 AUTOMOTIVE



# **TECHNICAL DETAILS**

### VERIFICATION SET-UP

# VERIFICATION OF THE BS 200N SERIES SWITCHING CHARACTERISTIC

As per standard ISO 7637-2 the electronic switch BS 200Nx is requested to meet a rise/fall time specification of 300ns +/-20% in to a defined load of 0.60hm in series with 50uH.

The CA BS 200N is set up in direct proximity to the BS 200Nx with short leads to verify the switching time characteristic. An oscilloscope of sufficient bandwidth is required to properly evaluate the rise/fall time parameters.



#### WIRING SET-UP

#### SET-UP OF CA BS 200N AND BS 200NX FOR VERIFICATION

In order to properly verify the rise/fall time characteristic of the electronic switch (e.g. BS 200N and BS 200N80) it is important to maintain the connection leads as short as possible. EM TEST recommend a maximum length of the connection leads between the CA BS 200N verification load (unit on the left side in the below picture) and the BS 200Nx electronic switch (right side unit in the below picture) of 0.5m.



# SPECIFICATIONS

Max battery supply voltage	28Vdc
Load current	Max. 50A
Operating time	13.5V supply approx. 1 hour
	28.0V supply approx. 10 minutes
Overheat indication	LED
Protection	Switch Off (overtemperature sensor)
Cooling	Forced Air

# **TECHNICAL DATA**

Load	0.60hm in series with 50uH
Parallel load	10, 20, 40 or 120ohm, selectable via
resistor	short circuit connectors

## GENERAL DATA

Dimensions	19"/3HU, 133mm x 500mm x 500mm
Weight	19.1kg
Mains supply	80V to 240Vac
Fuse	1A slow blow







# COMPETENCE WHEREVER YOU ARE



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Information about scope of delivery, visual design and technical data correspond with the state of development at time of release. Subject to change without further notice.

