

# SEALED RESTRICTIVE BREATHING STARTER MOTOR SRBS91

**PRODUCT DATA SHEET: PDS 7149 - ISSUE 1** 

#### DESCRIPTION

The SRBS91 starter motor is designed to fit an SAE No3 starter mounting and is suitable for zone 2 hazardous areas where explosive gases occur (ATEX directive 2014/34/EU).

The SRBS91 unit has been converted under "nR" to protect internal components and is provided with 4m of supply cable.



THIS EQUIPMENT MUST BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH EN 60079-14 AND 17. FAILURE TO OBSERVE ANY INSTRUCTIONS IN THIS DATA SHEET MAY INVALIDATE ANY WARRANTY AGREEMENT.

#### TECHNICAL DATA

Label Information:





Additional Information:

Type of Protection	Restrictive Breathing (nR)
Standards of compliance	EN 60079-0: 2018
	EN 60079-15: 2019
Ambient Temperature	-20°C to +45°C
Weight	41 kg
Nominal Power	9.0kW
Part Number	300833309/322

# **Special Conditions of Safe Use:**

- The SRB91 starter motor shall only be cranked for a maximum of 90 seconds
- If the associated engine is hot prior to starting, the engine shall be allowed to cool to room temperature before a starting operation can commence.
- Starter motor to be installed in accordance with EN 60079-14.
- Routine test on restricted breathing enclosure to be conducted as per the requirements of EN 60079-17.

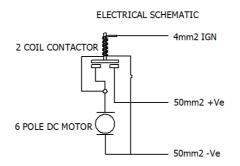
# Installation should be carried out in accordance with EN60079-14 or other national standards. Under no circumstances should the weight of the unit be supported by its cables.

Fit the unit using the three mounting holes in the starter flange.

The unit is supplied with 2off 50mm<sup>2</sup> power cables and a single core  $4mm^2$  trigger cable, all 4m in length. Where practical, the length of the 50mm<sup>2</sup> power leads should be shortened to optimise cranking performance. All leads should have suitable terminals fitted. The power leads are marked "+" (positive) and "-"(negative) for correct connection to a 12V battery supply.

Fit cable clamps or clips to prevent the cables moving/twisting in service. The 3off fixing points which mount the starter motor to the engine provide earthing. Power to the starter should be provided by a suitably certified battery.

Fit the label (300833314) near the keyswitch or starter button to warn the operator of the cranking limitations.



# INSPECTION AND MAINTENANCE

#### Maintenance may not take place in a hazardous area.

The starter contains no user serviceable parts. A record must be kept of all maintenance and repairs to EN60079-17

#### 6 monthly:

- Check for mechanical damage.
- Conduct nR Routine test as per EN 60079-15:2019 Clause 12.2.2.1.1

Certification and protection of the unit relies on the integrity of the casing, and that the fitted cables are fitted and in good order.

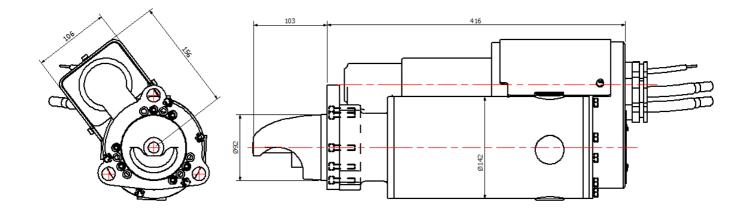
- If the casing has damage which may affect the "nR" protection, do not use it until a replacement or repair has been made.
- If the external or supply leads are damaged, approach Pyroban for replacements.

# OPERATION

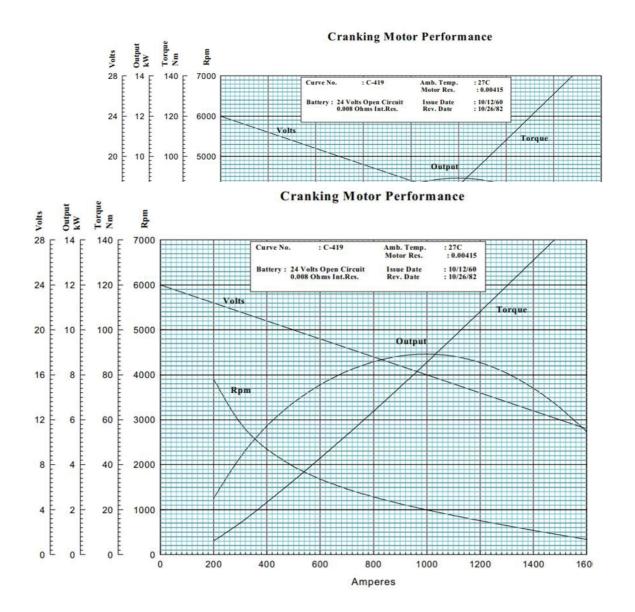
The surface temperatures rely on limited operator cranking; hence the following instructions must be followed:

- The engine can only be cranked for a maximum period of 90 seconds.
- The engine should be allowed to cool to room ambient temperature before another cranking cycle is attempted.

#### DIMENSIONS



PERFORMANCE DIAGRAM



#### REMOVAL FROM SERVICE AND DISPOSAL

Advice should be obtained from the waste regulation authority whether special waste regulations apply.

#### ORDERING SPARE PARTS

Use only genuine Pyroban parts. Order spares or replacement parts directly from Pyroban quoting the Pyroban Part Number. Note that fitting of incorrect parts may invalidate certification.

#### DECLARATION OF CONFORMITY

We, Pyroban Limited, 23 Dolphin Road, Shoreham-by Sea, Sussex, BN43 6PB, UK, declare that the component mentioned in this data sheet has been designed and manufactured in accordance with the essential health and safety requirements of both the EU Directive 2014/34/EU (ATEX) and UK Regulation UK SI 2016 No. 1107 inclusive of subsequent amendments. Compliance with these is established by meeting the technical requirements of the relevant CEN, CENELEC and designated standards.

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Dave Waring Engineering & QHSE Manager

# OTHER INFORMATION

Nothing contained in this brochure is intended to extend any warranty or representation, expressed or implied, regarding the products described herein. Any such warranties or other terms and conditions of sale of products shall be in accordance with Pyroban's standard terms and conditions of sale for such products, which are available upon request. Specifications and machinery may be altered without notice at any time.



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