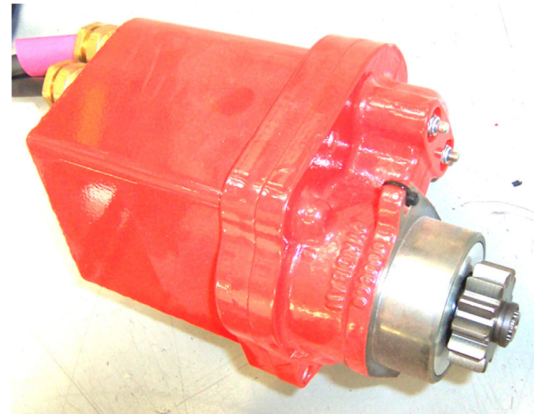


DESCRIPTION

The FPS23 starter motor is suitable for use on industrial vehicles in hazardous areas where explosive gasses occur (ATEX directive 94/9/EC).

The unit is a pre-engaged type supplied in a robust steel flameproof casing. The unit includes 4m of supply cable wired through Ex d glands. The unit has double pole wiring which is insulated from chassis. An internal thermal switch prevents the motor and surface overheating and causing ignition.

Adaptor plates and pinions are available to suit specific engine types up to 6l capacity and are available on application.



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

TECHNICAL DATA

Label
Information:

PYROBAN	
TYPE FPS23	12V DC 400A
Ex d IIB T5	Ex II 2 G
No. <input type="text"/>	Year <input type="text"/>
INERIS 99 ATEX0003X	
CE 0518	WARNING Ex
DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE IS PRESENT	
Pyroban Limited, Dolphin Road, Shoreham-by-Sea Sussex, BN43 6QG, ENGLAND Tel. +44 (0)1273 466200 Fax +44 (0)1273 465313	

Additional
Information:

Type of Protection	Flameproof
Standards of compliance	EN60079-0: 2006 EN60079-1: 2007
Ambient Temperature	-20°C to +40°C
Weight	15k g
Nominal Power	2.3kW
Part Numbers	300804129, 300804129/N, 300804129/J 300804129/N/J, 300804129/H, 300804129/L

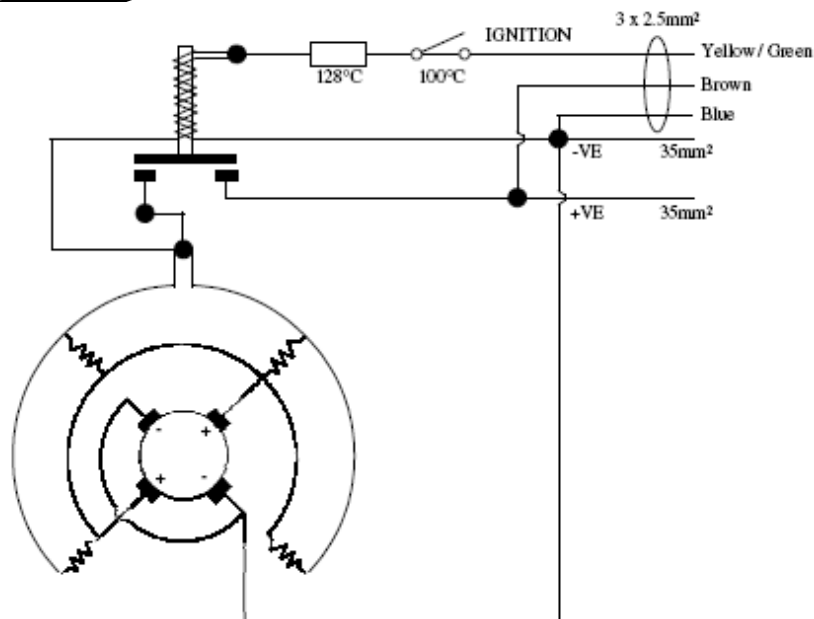
INSTALLATION AND ELECTRICAL CONNECTIONS

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.

The unit may be fitted to a number of different diesel engines, with an appropriate pinion to suit the engine ring gear and an adaptor flange to fix it to the bell housing.

The unit is supplied with a 35mm² power cables and a 3 core cable which should be shortened to the required length. These must be terminated appropriately for example via a suitable cable gland into another flameproof enclosure. The length of the power lead between the starter and the battery has a large effect on the starter output power and should be minimised. Power to the starter should be provided by a suitably protected battery. The multi-core cable should have the green/yellow core connected to ignition. The brown and blue cables are for test purposes only, and are connected to positive and negative terminals respectively inside the starter unit (refer to electrical diagram). Ends of these cables should be isolated suitably. Ensure that the enclosure is electrically bonded to the chassis on which it is mounted.

WIRING DIAGRAM



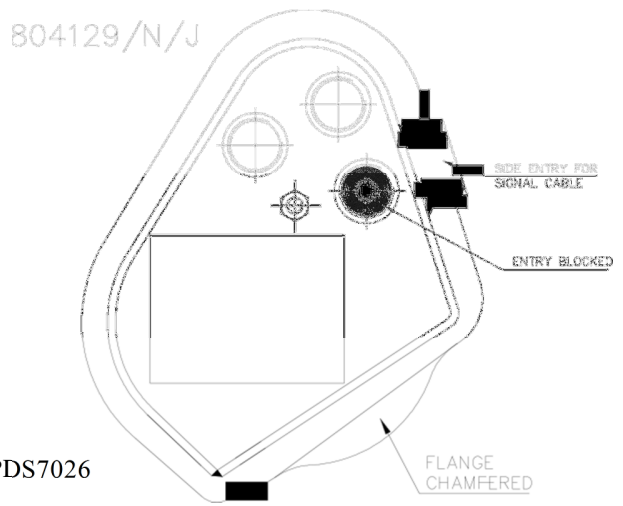
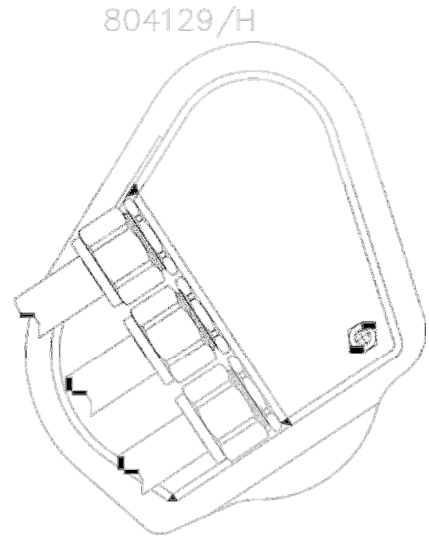
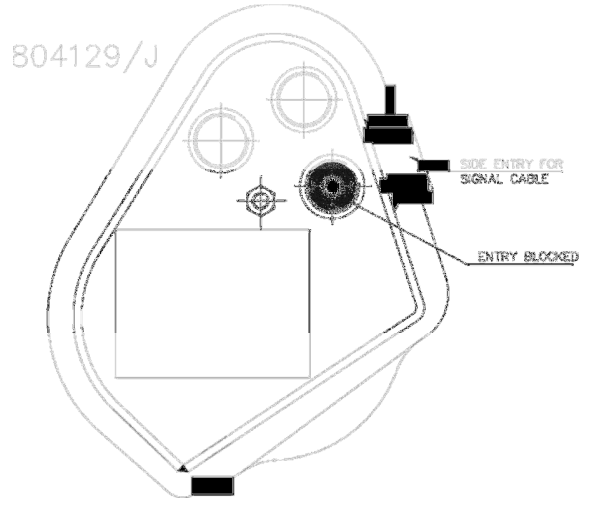
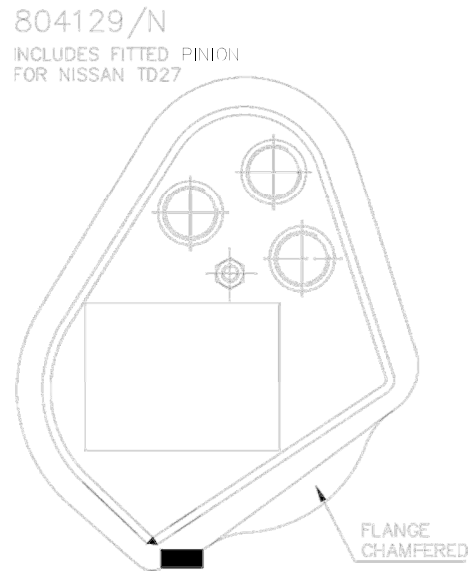
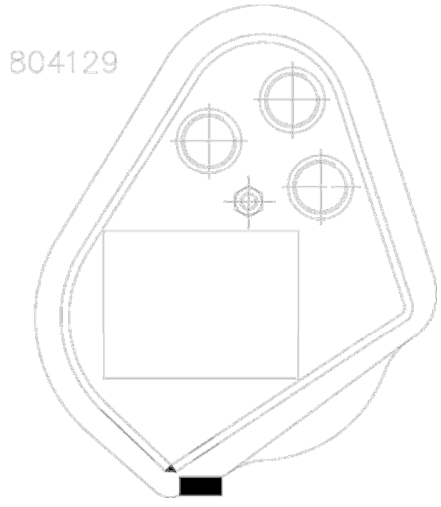
INSPECTION AND MAINTENANCE

Maintenance may not take place in a hazardous area. The starter contains no user serviceable parts. 6 monthly, check gland tightness and casing screw tightness.

Should the unit suffer impact or damage, the casing must be checked for permanent deformation. Should flameproof joints be damaged, the unit must be sent back to Pyroban for repair or replacement. Should the glands be damaged, they must be replaced with a suitable flameproof gland and the entry threads of the casing checked.

A record must be kept of all maintenance and repairs to BS EN60079-17

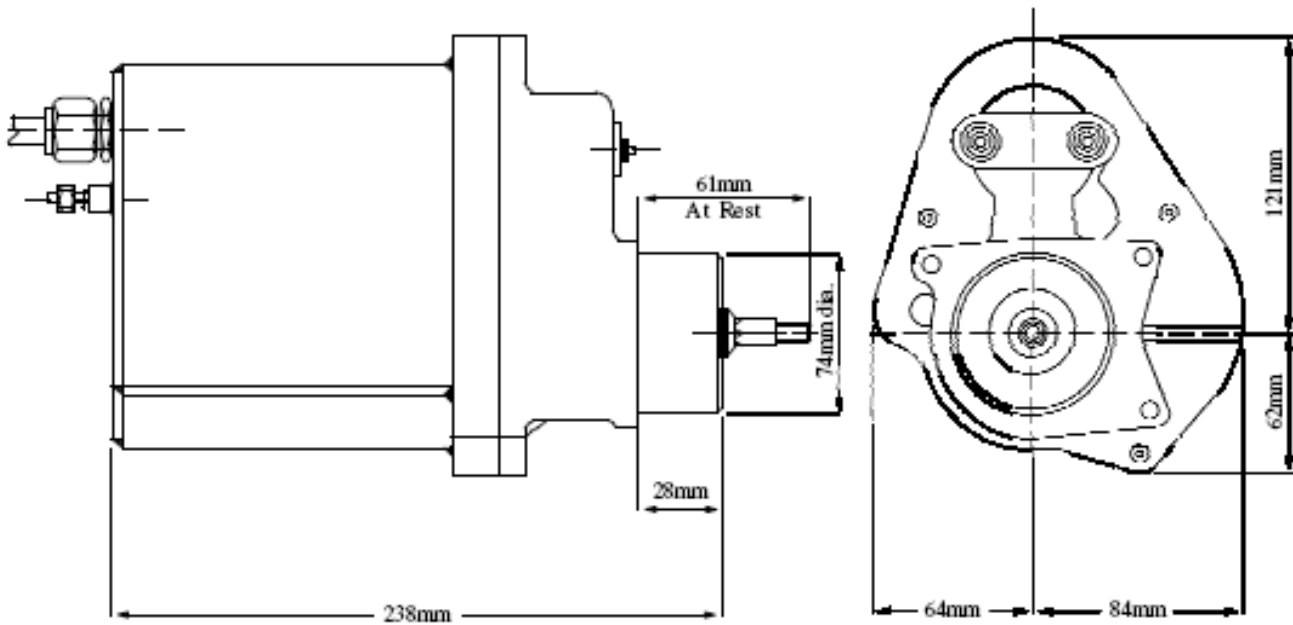
SELECTION OF VARIANTS



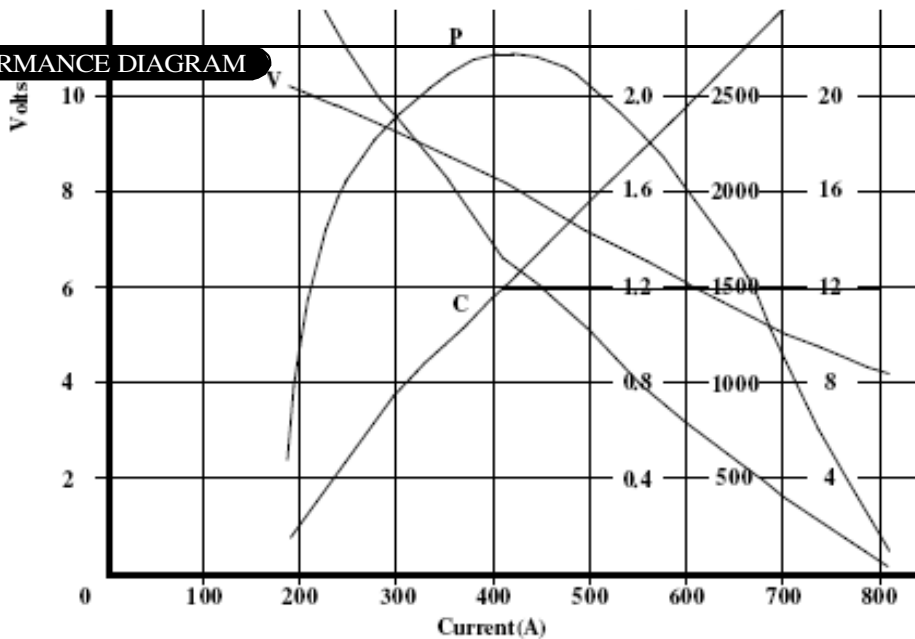
Details of variations:

- 300804129 Standard starter motor, 35mmSQ. power cables, 3m length leads.
- 300804129/50 Standard starter motor, 50mmSQ. power cables, 3m length leads.
- 300804129/H Glands protrude at 90° to all above variations, 35mmSQ. power cables, 3m length leads.
- 300804129/J Signal cable gland variation, 35mmSQ. power cables, 3m length leads.
- 300804129/L Standard starter motor, 35mmSQ. power cables, 5m length leads.
- 300804129/N Standard starter motor, pinion 300800155/2 fitted, 35mmSQ. power cables, 3m length leads.

DIMENSIONS



PERFORMANCE DIAGRAM



SCHEDULE OF LIMITATIONS

- * The minimum tensile strength of the fixings for the enclosure lid is 780N/mm² (grade 8.8).
- * Cables leading to the starter motor must be clamped to prevent twisting or pulling.

REMOVAL FROM SERVICE AND DISPOSAL

Using information provided in this data sheet 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, Dolphin Road, Shoreham-by Sea, Sussex, BN43 6QG, 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 Directive 94/9/EC (ATEX) inclusive of subsequent amendments. Compliance with these Directives is established by meeting the technical requirements of the relevant CEN and CENELEC standards.



David Waring CEng MIMechE

Engineering 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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