



230V ~ 50Hz    



SafeStart 420 - 423

Characteristics: Hose installation with thermostat
DEFA no: 420-423

DEFA number series 420 to 423 and are a sub-category of series 400. DEFA 420,421,422,423 are distinguished from the other series 400 heaters by two basic differences:

1. The heating element is completely surrounded by a coolant chamber (A).
2. The heating temperature is limited by a built-on thermostat.

The thermostat regulates the coolant temperature and switches off the power supply to the element when the coolant has reached a temperature of 80°C at the intake/outlet of the heater. The thermostat switches the heater back on at 70°C.

(B) The flange diameter for the heaters is:

- 411420 = Ø 41,5 mm
- 411421 = Ø 36,0 mm
- 411422 = Ø 32,0 mm
- 411423 = Ø 26,0 mm

Install the heater in a rising hose (C) according to the physical property of that hot water rise and cool water sinks. This requires an open coolant circuit.

DEFA AS is conforming to the requirements of both ISO 9001-2008, ISO 14001:2004 and OHSAS 18001:2007. In addition to this, our engine heaters and cables are conforming to the requirements of ISO/TS 16949:2002.

Item number

DEFA no.: From 411420 to 411423.
Weight: ca 310 gram
Up to 25-pack. Varies with the size of the heater.

Part of

Engine pre-heaters are supplied separately because of special adapted solutions for a variety of engines and vehicles.

Installation

Install the heater according to the enclosed installation guide.
ONLY Install the heater on vehicles listed in the installation guide.
Installing DEFA heaters must only be executed by authorized garages.

Use

Normal usage - DEFA engine heaters is dimensioned for "normal usage". DEFA defines "normal usage" as; 3 connections for 3 hours pr. 24 hour based upon 150 users days a year (5 months a year).

Professional usage - It is necessary to make a yearly function control and if necessary install a new heater to obtain necessary extent of service on emergency vehicles or power supplies where the heater is connected more or less 24/7. This yearly service cost will not be covered by DEFA AS.

Pulse power - Some car parking areas are using interval (pulse) power timers turning the power On and Off several times per hour. Using DEFA engine heater in suchlike parking facilities will not be considered as "Normal use" and claims will be declined.

Technical specifications

Voltage [V]	230
Power [W]	600
IP rating [IP]	44
Test and approval	EMKO-TUB(61)NO 293/91 EN 60335-1, EMKO-TSB(61) NO293A94

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