



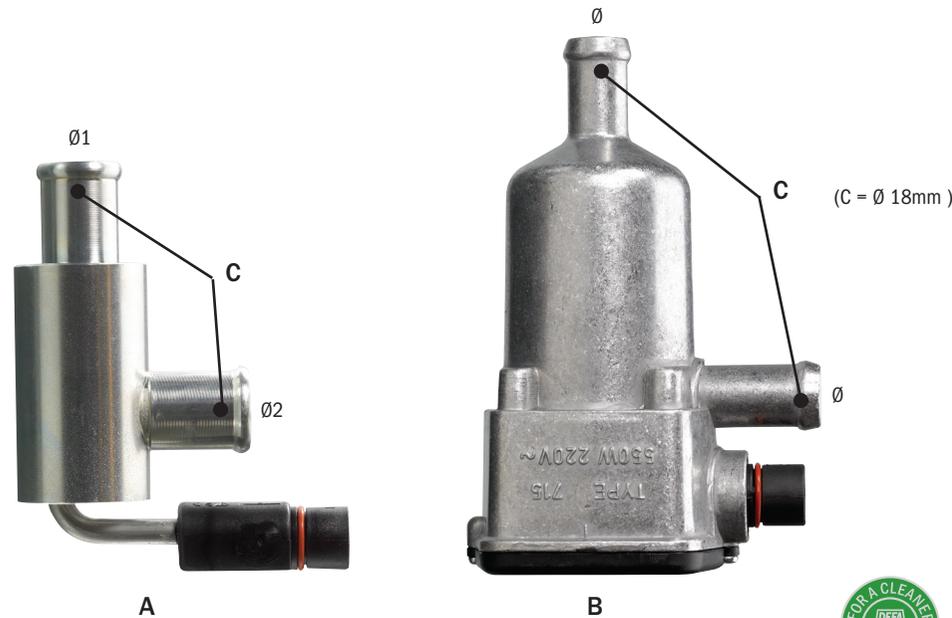
#### Angled PlugIn power contact

- 411701/411707 (Ø1/Ø2 16mm)\*
- 411702 (Ø1/Ø2 19mm)\*
- 411703/412736 (Ø1/Ø2 13mm)\*
- 411704 (Ø1/Ø2 8mm)\*
- 411705 (Ø1/Ø2 13/19mm)\*
- 411708 (Ø1/Ø2 19/16mm)\*
- 411709 (Ø1/Ø2 12/10mm)\*
- 412710 (Ø1/Ø2 14mm)\*
- 412731 (Ø1/Ø2 10mm)\*
- 412735 (Ø1/Ø2 18mm)\*

#### Straight PlugIn power contact

- 411784 (Ø1/Ø2 16mm)\*

\* Stated diameter Ø, is inner hose diameter.



230V ~ 50Hz



## SafeStart 700-series

**Characteristics:** Hose heater

**DEFA no:** 700-720, 735 -799, 2700-2799, 3700-3799

This heaters can be divided into two different groups:

#### A. Heaters without thermostat

The heaters consist of a heating element and a coolant chamber with intake and outlet connections (C) for different hose dimensions.

#### B. Heaters with thermostat.

The heater is equipped with a thermostat that 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.

Separate product sheet for the 721-734 heaters.

Required and adapted connectors, screws and hoses are supplied with the heater.

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 number series 411700-411799, 412700-412799 and 413700-413799

Weight: A=250gr, B=325gr.

Up to 25-pack. Varies with the size of the heater.

#### Part of

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

#### Installation

**Read and follow the included fitting instructions for your vehicle carefully.**

The heater should **ONLY** be installed as described in the installation guide.

Installation of engine heaters **shall be performed** 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]	550-600
IP rating	IP44
Testing & acceptance	EMKO-TUB(61)NO 293/91 EN 60335-1, EMKO-TSB(61) NO293A94

[www.defa.com](http://www.defa.com)