

File E234324
Project 10CA14950

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REPORT

on

COMPONENT - INDUSTRIAL CONTROL PANELS

***STEGO Elektrotechnik** GmbH
Schwäbisch Hall, Germany

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DESCRIPTION:

PRODUCT COVERED:

USR, CNR - Open Type, Air Heaters,
model CS, Model No. 028 and Model CS, Model No. 128, followed by 0, followed
by 0 or 1 or 2, followed by 0 or 1 or 2 or 9, followed by 0-20; model CSL 028,
followed by 1, followed by 0 or 1, followed by **0 or 9**, followed by 0-20.

(Model CSF, Model No. 028, followed by 1 or 2, followed by 0 or 1 or 2 or 3,
followed by 0 or 9, followed by 0-60.

GENERAL:

These devices are open type air heaters intended for controlling the
temperature within industrial control panels for prevention of condensation.
The heater is intended for permanent connection.

NOMENCLATURE - ELECTRICAL RATING:

Model + Model no. (first 3 numbers) = Heater Type

Example:

CS + 028 = CS 028

CS 028/CS 128 Series:

CS 028 W Y. Z-XX

CS - Model

028 or, - 028: PTC Heater Basic Design

128 128: PTC Heater Customer Design Variant (Cosmetic)

W - Size

0 = 90 x 65 75 mm

Y. - Heater Power

0. = 150 W

1. = 200 W

2. = 270 W

Z - Supply Voltage

0 - 230V

9 = 120V ac

XX - combination of the following variations

0 - 20: Fan and heater connected together
Fan and heater connected separately
Clip Mounting
Clip - Screw Mounting

Maximum Surrounding Air Temperature for all models: 40°C.

CSL 028 Series:

CSL 028 W Y. Z-XX

*CSL - **Model**

028 - 028: PTC Heater Basic Design

W - Size

* 1 = **103-113** x 85 x 90 mm - **screw terminal, strain relief**
* 2 = **103-113 x 85 x 90** mm - **pressure clamp terminal**

Y. - Heater Power

* 0 = 400 W

* 1 = 250 W

* *

Z - Supply voltage

0 = 230V ac

9 = 120V ac

XX - combination of the following variations

0 - 20: Fan and heater powered together
Fan and heater powered separately
Clip Mounting
Clip - Screw Mounting
Clip-Screw Flange Mounting

CSF 028 Series :

CSF 028 W Y. Z-XX

*CSF - **Model**

028 - 028: PTC Heater Basic Design with thermostat

W - Size

* 1 = **108-118** x 85 x 90 mm - screw terminal, strain relief

* 2 = **108-118** x 85 x 90 mm - pressure clamp terminal

Y. - Heater Power

* 0 = 400 W

* 1 = 250 W

Z - Supply voltage

0 = 230V ac

9 = 120V ac

XX - combination of the following variations

0 - 60: Fan and heater powered together
Fan and heater powered separately
Clip Mounting
Clip - Screw Mounting
Clip-Screw **Flange** Mounting
With STEGO branding
Without STEGO branding
Without thermostat
Thermostat 10°C
Thermostat 15°C
Thermostat 25°C

Maximum Surrounding Air Temperature for all models: 40°C.

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE'S USE):

*USR - Indicates investigated to UL Standard UL508 **18th** Edition,
(Industrial Control Equipment).

*CNR - Indicates investigated to Canadian National Standard(s)
C22.2 No. 14.

Note: USR = United States Standards - Recognized
CNR = Canadian National Standards - Recognized

Conditions of Acceptability - The following are among the considerations to be made when evaluating the device in the end-use product. For use only in (or with) complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

1. The terminal block for the supply connections is only suitable for factory wiring.
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2. **Products with optional strain relief: The suitability of the strain relief clamp shall be considered in the end-product application.**
3. **These heaters require an unobstructed flow of air to maintain both the marked power rating and safe operating temperatures. Client literature recommends that a minimum of 25 mm shall be maintained below the air intake, and a minimum of 100 mm shall be maintained in the blow direction of hot air, and between the heater and components.**
4. **Models with optional Thermostat - The heaters were tested with no temperature control in the circuit. The thermostat is rated 240 Vac. Suitability of the thermostat with respect to electrical ratings and number of cycles shall be considered in the end product.**
5. **Models with optional Interconnect Cable and Connector (terminal block) - Suitability of the interconnect cable shall be determined in the end product. A Strain Relief Test was not conducted on the Interconnect Cable, and shall be conducted in the end product if it is deemed necessary.**