

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE)  
CB SCHEME

## CB TEST CERTIFICATE

Product

Open type switched mode power supply

Name and address of the applicant

PULS GMBH  
Elektrastr 6 81925 Munchen, GERMANY

Name and address of the manufacturer

PULS GMBH  
Elektrastr 6 81925 Munchen, GERMANY

Name and address of the factory

PULS ELECTRONICS (SUZHOU) CO LTD  
100114-604) NO 1 RUI EN LANE XINGPU RD, SIP SUZHOU  
JIANGSU 215021  
CHINA

Note: When more than one factory, please report on page 2

 Additional Information on page 2

Ratings and principal characteristics

CP20.241  
Power Supply 1-Phase, 24V, 20A, 480W  
Input:  
AC 100-240V (-15%/+10%), 6.3-2.7A, 50-60Hz  
DC 110-150V ( $\pm 20\%$ ), 5.7-4.2A  
Output:  
DC 24-28V, 24-20.6A (below +45°C)  
20-17.1A (at +60°C)  
15-13A (at +70°C)  
Derate linearly between +45°C and +70°C  
Ambient temperature range: -25°C to +70°C  
See page 2, 3, 4, and 5

Trademark (if any)



Type of Customer's Testing Facility (CTF) Stage used

CTF Stage 3

Model / Type Ref.

CP20.aax-ww, CP20.aax-Sz-ww, CP20.aax-Vz-ww and  
CP20.aax-Ry-ww, See page 2Additional information (if necessary may also be  
reported on page 2)Additionally evaluated to EN 61010-1: 2010 and EN 61010-2-201:  
2013; National Differences specified in the CB Test Report. Additional Information on page 2A sample of the product was tested and found  
to be in conformity with

IEC 61010-1:2010, IEC 61010-2-201:2013

As shown in the Test Report Ref. No. which forms part  
of this Certificate

E198865-4788720837-CB issued on 2019-05-13

This CB Test Certificate is issued by the National Certification Body



- UL (US), 333 Pflugsten Rd IL 60062, Northbrook, USA
- UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
- UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
- UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see [www.ul.com/ncbnames](http://www.ul.com/ncbnames)

Date: 2019-06-05

Signature:

Jan-Erik Storgaard

## Model details:

CP20.aax-ww, CP20.aax-Sz-ww, CP20.aax-Vz-ww and CP20.aax-Ry-ww  
Where

"R" is a constant character indicating the units with built -in redundancy;

"S" is a constant character indicating terminal options;

"V" is a constant character indicating the option for Remote ON/OFF input

"ww" stands for blank or numbers or characters (2) for nonsafety relevant option (e.g. C1 for conformal coated pc-boards).

See nomenclature in Test Report for details.

## Factories:

PULS INVESTICNI S R O  
PRAZSKA 5639 430 01 CHOMUTOV  
CZECH REPUBLIC

## Ratings:

CP20.241-R1

Redundancy Power Supply 1-Phase, 24V, 20A, 480W

## Input:

AC 100-240V (-15%/+10%), 6.3-2.7A, 50-60Hz

DC 110-150V ( $\pm 20\%$ ), 5.7-4.2A

## Output:

DC 24V, 24A (below +45°C)

20A (at +60°C)

15A (at +70°C)

Derate linearly between +45°C and +70°C

Ambient temperature range: -40°C to +70°C

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CP20.241-R2

Redundancy Power Supply 1-Phase, 24V, 20A, 480W

## Input:

AC 100-240V (-15%/+10%), 6.3-2.7A, 50-60Hz

DC 110-150V ( $\pm 20\%$ ), 5.7-4.2A

## Output:

DC 24V, 24A (below +45°C)

20A (at +60°C)

15A (at +70°C)

Derate linearly between +45°C and +70°C

Ambient temperature range: -40°C to +70°C

CP20.241-R3

Redundancy Power Supply 1-Phase, 24V, 20A, 480W

## Input:

AC 100-240V (-15%/+10%), 6.3-2.7A, 50-60Hz

DC 110-150V ( $\pm 20\%$ ), 5.7-4.2A

## Output:

DC 24V, 24A (below +45°C)

20A (at +60°C)

15A (at +70°C)

Derate linearly between +45°C and +70°C

Ambient temperature range: -40°C to +70°C

## Additional information (if necessary)



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CP20.241-S1  
Power Supply 1-Phase, 24V, 20A, 480W  
Input:  
AC 100-240V (-15%/+10%), 6.3-2.7A, 50-60Hz  
DC 110-150V (±20%), 5.7-4.2A  
Output:  
DC 24-28V, 24-20.6A (below +45°C)  
20-17.1A (at +60°C)  
15-13A (at +70°C)  
Derate linearly between +45°C and +70°C  
Ambient temperature range: -25°C to +70°C  
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CP20.241-S2  
Power Supply 1-Phase, 24V, 20A, 480W  
Input:  
AC 100-240V (-15%/+10%), 6.3-2.7A, 50-60Hz  
DC 110-150V (±20%), 5.7-4.2A  
Output:  
DC 24-28V, 24-20.6A (below +45°C)  
20-17.1A (at +60°C)  
15-13A (at +70°C)  
Derate linearly between +45°C and +70°C  
Ambient temperature range: -25°C to +70°C  
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CP20.241-V1  
Power Supply 1-Phase, 24V, 20A, 480W  
Input:  
AC 100-240V (-15%/+10%), 6.3-2.7A, 50-60Hz  
DC 110-150V (±20%), 5.7-4.2A  
Output:  
DC 24-28V, 24-20.6A (below +45°C)  
20-17.1A (at +60°C)  
15-13A (at +70°C)  
Derate linearly between +45°C and +70°C  
Ambient temperature range: -25°C to +70°C  
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CP20.242  
Power Supply 1-Phase, 24V, 20A, 480W  
Input:  
AC 100-240V (-15%/+10%), 6.3-2.7A, 50-60Hz  
DC 110-300V (±20%), 5.7-2.1A  
Output:  
DC 24-28V, 24-20.6A (below +45°C)  
20-17.1A (at +60°C)  
15-13A (at +70°C)  
  
Derate linearly between +45°C and +70°C  
Ambient temperature range: -25°C to +70°C  
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**Additional information (if necessary)**



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CP20.242-R2  
Redundancy Power Supply 1-Phase, 24V, 20A, 480W

Input:

AC 100-240V (-15%/+10%), 6.3-2.7A, 50-60Hz

DC 110-300V ( $\pm 20\%$ ), 5.7-2.1A

Output:

DC 24V, 24A (below +45°C)

20A (at +60°C)

15A (at +70°C)

Derate linearly between +45°C and +70°C

Ambient temperature range: -40°C to +70°C

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CP20.242-R3  
Redundancy Power Supply 1-Phase, 24V, 20A, 480W

Input:

AC 100-240V (-15%/+10%), 6.3-2.7A, 50-60Hz

DC 110-300V ( $\pm 20\%$ ), 5.7-2.1A

Output:

DC 24V, 24A (below +45°C)

20A (at +60°C)

15A (at +70°C)

Derate linearly between +45°C and +70°C

Ambient temperature range: -40°C to +70°C

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CP20.481  
Power Supply 1-Phase, 48V, 10A, 480W

Input:

AC 100-240V (-15%/+10%), 6.3-2.7A, 50-60Hz

DC 110-150V ( $\pm 20\%$ ), 5.7-4.2A

Output:

DC 48-56V, 12-10.3A (below +45°C)

10-8.6A (at +60°C)

7.5-6.5A (at +70°C)

Derate linearly between +45°C and +70°C

Ambient temperature range: -25°C to +70°C

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CP20.481-S1  
Power Supply 1-Phase, 48V, 10A, 480W

Input:

AC 100-240V (-15%/+10%), 6.3-2.7A, 50-60Hz

DC 110-150V ( $\pm 20\%$ ), 5.7-4.2A

Output:

DC 48-56V, 12-10.3A (below +45°C)

10-8.6A (at +60°C)

7.5-6.5A (at +70°C)

Derate linearly between +45°C and +70°C

Ambient temperature range: -25°C to +70°C

#### Additional information (if necessary)



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Ref. Certif. No.

**DK-84089-UL**

CP20.481-S2  
 Power Supply 1-Phase, 48V, 10A, 480W  
 Input:  
 AC 100-240V (-15%/+10%), 6.3-2.7A, 50-60Hz  
 DC 110-150V (±20%), 5.7-4.2A  
 Output:  
 DC 48-56V, 12-10.3A (below +45°C)  
 10-8.6A (at +60°C)  
 7.5-6.5A (at +70°C)  
 Derate linearly between +45°C and +70°C  
 Ambient temperature range: -25°C to +70°C

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 CP20.482  
 Power Supply 1-Phase, 48V, 10A, 480W  
 Input:  
 AC 100-240V (-15%/+10%), 6.3-2.7A, 50-60Hz  
 DC 110-300V (±20%), 5.7-2.1A  
 Output:  
 DC 48-56V, 12-10.3A (below +45°C)  
 10-8.6A (at +60°C)  
 7.5-6.5A (at +70°C)  
 Derate linearly between +45°C and +70°C  
 Ambient temperature range: -25°C to +70°C

**Additional information (if necessary)**



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- UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
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