



Certification Record

CUSTOMER	CLASS	FILE
PULS GmbH Arabellastr. 15, Munich 81925 Germany	<u>5311-07</u> POWER SUPPLIES - Component Type-(CSA 60950-1-03)	095515_0_000
Refer to Class Description for program details		

TO THE REQUIREMENTS OF CSA 60950-1-03:

- DIN Rail Component type switching mode power supply*, class I, model CS5.KKX-XX** rated as follow:
 - Model CS5.241:
Input:100-120Vac; 2.6 A; 50-60Hz / 200-240Vac; 1.4A; 50-60Hz
Output: 24V-28V, 5A-4.3A; max. ambient 60°C. or Output: 24V-28V, 6A - 5.1A; max.ambient 45°C
 - Model CS5.243:
Input:100-120Vac; 2.6A; 50-60Hz
Output: 24V-28V, 5A-4.3A; max. ambient 60°C. or Output:24V-28V, 6A - 5.1A; max.ambient 45°C
 - Model CS5.244:
Input: 200-240Vac; 1.4A; 50-60Hz
Output: 24V-28V, 5A-4.3A; max. ambient 60°C. or Output:24V-28V, 6A - 5.1A; max.ambient 45°C

Notes:

(*) - The products have been certified as components where the suitability of the combination with the end use product shall be re-evaluated

- A suitable electrical and fire enclosure must be provided for the end product.

(**) - where KK represents the output voltage and can be 24Vdc to 28Vdc, X can be any character or number, not safety relevant.

- DIN Rail Component type switching mode power supply*, class I, model CS10.KKX-XX** Series, rated as follow:
Input: 100-120/ 200-240Vac, 50-60Hz, 5/2.7A;
 - where KK is 24: Output: 24-28Vdc, 10-8.6A, 240W @ max. ambient 60°C. or 288W @ max. ambient 45°C or 75% rated load @ max. ambient 70°C.
 - where KK is 48: Output: 48-52Vdc, 5.0-4.6A, 240W @ max. ambient 60°C. or 288W @ max. ambient 45°C or 75% rated load @ max. ambient 70°C

Notes:

(*) - The products have been certified as components where the suitability of the combination with the end use product shall be re-evaluated.

- A suitable electrical and fire enclosure must be provided for the end product.

(**) where KK represents the output voltage and can vary from 24Vdc to 52Vdc, X can be any character or number, not safety relevant.

- DIN Rail Component type DC/DC switching mode power supply*, class III, model UB10.KKX-XX and UBC10.KKX-XX*, rated as follow:
Input: 22.5 to 30Vdc, 17A max
Output: Normal mode: 22.2VDC up to 29.7VDC (voltage drop input-output: 0.3V); 15A
Buffer mode: 22.3VDC; 10A
- where KK represents the input voltage and can be from 22.5Vdc to 30Vdc, X can be any character or number, not safety relevant.

Notes(*):

1. The products have been certified as components where the suitability of the combination with the end use product shall be re-evaluated.
 2. A suitable electrical and fire enclosure must be provided for the end product.
 3. The 2 models max ambient temp. Model UB10.KKX-XX = 60°C: Model UBC10.KKX-XX = 35°C.
 4. The units are not intended for direct connection to centralized DC. The Units are intended to be supplied by SELV circuits.
- DIN Rail Component type switching mode power supply*, class I, model QS10.YYZ-ZZ** Series and QS10.DNET, rated as follow:
QS10.YYZ-ZZ Series:
AC Input : 100-240Vac, 50-60Hz, 2.8-1.2A or DC Input: 110-300Vdc, 2.4-0.9A.
DC output : 12-15Vdc @ 15-13.5A, 200W or 24-28Vdc @ 10-9A, 252W or 48-56Vdc @ 5-4.3A, 240W

- where YY represents the output voltage and can be 12-15 or 24-28 or 48-56 and Z can be any character or number, not safety relevant.

QS10.DNET:

AC Input : 100-240Vac, 50-60Hz, 2.3-1A or DC Input: 110-300Vdc, 1.9-0.72A and DC output : 24Vdc @ 8A.

Notes:

(*) - The products have been certified as components where the suitability of the combination with the end use product shall be re-evaluated.

- A suitable mechanical, electrical and fire enclosure must be provided for the end product.

- DIN Rail Component type switching mode power supply*, class I, model QT20.KKX-XX* Series, rated as follow:

Input: 3x 380-480VAC, 50-60Hz, 0.9-0.65A (per phase);

Output: see table below;

where KK is 24: Output: 24 - 28VDC; 20 - 17.5A; 490W.

where KK is 36: Output: 36 - 42VDC; 13.3 - 11.4A; 480W.

where KK is 48: Output: 48 - 55VDC; 10 - 8.7A; 480W.

- where KK represents the output voltage and can be 24 to 55, X can be any character or number, not safety relevant.

Notes:

(*) - The products have been certified as components where the suitability of the combination with the end use product shall be re-evaluated.

- A suitable mechanical, electrical and fire enclosure must be provided for the end product.

- DIN Rail Component type switching mode power supply*, class I, models and rating as follow:

ML90.ZXX-YY rated:

Input: 2 x 380-480Vac, 50-60Hz, 0.5A (two phase):

Output: 24Vdc - 28Vdc, 3.75A-3.2A

ML100.ZXX-YY rated:

Input: 2 x 380V-480Vac, 50-60Hz, 0.6A (two phase)

Output: 24Vdc - 28Vdc, 4.2A-3.6A

- where Z is either 2 or 6 and stands for customer specific version, XX and YY can be any character or number, not safety relevant.

Notes:

(*) - The products have been certified as components where the suitability of the combination with the end use product shall be re-evaluated.

- A suitable mechanical, electrical and fire enclosure must be provided for the end product.

- DIN Rail Component type switching mode power supply*, class I, model(s) QS20.KKZ-XX Series, rated as follow;

QS20.KK1-XX Series:

AC Input: 100-240Vac, 5.4-2.4A; 50-60Hz or DC Input: 110-300Vdc; 4.8-1.8A

Output: -Model QS20.241-XX: 24-28Vdc, 20-17.1A continuous *

-Model QS20.361-XX: 36-42Vdc, 13.3-11.4A continuous *

-Model QS20.481-XX: 48-55Vdc, 10-8.7A continuous *

QS20.KK4-XX and QS20.KK6-XX Series:

Input: 200-240Vac, 4.8A; 50-60Hz

Output: -Model QS20.244-XX: 24-28Vdc, 20-17.1A continuous *

-Model QS20.364-XX: 36-42Vdc, 13.3-11.4A continuous *

- Model QS20.484-XX: 48-55Vdc, 10-8.7A continuous *
- Model QS20.246-XX: 24-28Vdc, 20-17.1A continuous *
- Model QS20.366-XX: 36-42Vdc, 13.3-11.4A continuous *
- Model QS20.486-XX: 48-55Vdc, 10-8.7A continuous *

QS20.249-XX:

Input: 370VDC, 1.4A. Output: 24-28VDC, 20-17A continuous*.

*For all models listed above: Repetitive pulse load rated at maximum of 150% of rated power.

- where KK represents the output voltage and can be 24V to 55V, Z can be 1, 4, 6 and 9 and X can be any character or number, not safety relevant.

Notes:

(*) - The products have been certified as components where the suitability of the combination with the end use product shall be re-evaluated.

- A suitable mechanical, electrical and fire enclosure must be provided for the end product.

- DIN Rail Component type switching mode power supply*, class I, Model SL10.3XX Series or SL10.6XX, rated as follow:
 - Input: 400-500V ac, 3 or 2 phases, 50-60Hz, 0.8-0.7A (per phase)
 - Output: 24-8V dc; 10A; 240W continuous or 288W peak power.
 - Output: 48-52V dc; 5A; 240W continuous or 288W peak power.
 - where XX represents customer specific versions, not safety relevant.

Notes:

1. The products have been certified as components where the suitability of the combination with the end use product shall be re-evaluated.
 2. A suitable mechanical, electrical and fire enclosure must be provided for the end product.
- DIN Rail Component type DC/DC Redundancy Modules*, models and rating as follow:
 - SLR01, SLR02, MLY02 followed by .50X or .51X; rated: SLR01: input 24-28V dc, 0-40A, output: Vin-0,6V, 0-40A.
 - SLR02: Input 24-28V dc, 0-30A, input 2: 24-28V(DC), 0-30A, output: Vin-0,5A, 0-30A.
 - MLY02: Input 1: 10-60V dc, 0-10A, input 2: 10-60V dc, 0-10A, output: 0,9V, 0-10A (Vin = Input Voltage from input 1 or Input 2)
 - YR2.DIODE.XX and YRM2.DIODE.XX where XX is optional and can be any character or number, not safety relevant.
 - rated: input 1: 10-60V dc, 0-20A, input 2: 10-60V dc, 0-20A, output: Vin-0,9V, 0-20A. (Vin = Input Voltage from Input 1 or Input 2)

Notes(*):

1. The products have been certified as components where the suitability of the combination with the end use product shall be re-evaluated.
2. A suitable mechanical, electrical and fire enclosure must be provided for the end product.
 - DIN Rail Component type switching mode power supply*, class I, model and rating as follow:
 - Model CS3.KKX-XX;
 - Input: 100-240Vac, 1.4-0.7A, 50-60Hz or 110-300Vdc, 0.9-0.3A
 - Output: 24V-28V, 3.3-2.8A, max. ambient 60°C.

Notes (*):

1. The products have been certified as components where the suitability of the combination with the end use product shall be re-evaluated
2. A suitable mechanical, electrical and fire enclosure must be provided for the end product.
3. Where KK represents the output voltage and can be 24Vdc to 28Vdc, X can be any character or number, not safety relevant.
 - DIN Rail Component type switching mode power supply*, class I, model and rating as follow;
 - ML15.10K-XX and ML15.YYX-XX
 rated input for all models; 100-240V ac, 0.3A, 50-60Hz or 110-300V dc, 0.17A
 rated output;
 - Model ML15.100 (ML15.241): 24-48V dc, 0.63-0.54A @ max ambient* temp. of 60°C
 - Model ML15.101 (ML15.051): 5-5.5V dc, 3A @ max ambient* temps. of 60°C
 - Model ML15.102 (ML15.121): 12-15V dc, 1.3-1.0A @ max ambient* temps. of 60°C

where K can be 0, 1 or 2 and X can be any character or number, not safety relevant.

where YY can be 24, 05 or 12 and X can be any character or number, not safety relevant.

*Note: Output can be derated at an ambient from 60-70°C at reduced power at a rate of 0.4W/°C.

Notes(*):

1. The products have been certified as components where the suitability of the combination with the end use product shall be re-evaluated.
2. A suitable mechanical, electrical and fire enclosure must be provided for the end product.
 - DIN Rail Component type DC/DC Converter*, class III, models** and rating as follow:
 - CD5.241 and CD5.241-S1:
 Input: DC 24 V (-25% / +35%), 7 A ,
 Output: DC 24 - 28 V / 5 - 4.3 A, -25 to +60°C or DC 24 - 28 V / 6 - 5.1 A, -25 to +45°C
 - CD5.242:
 Input: DC 48 V (-25% / +25%), 3.5 A
 Output: DC 24 - 28 V / 5 - 4.3 A, -25 to +60°C or DC 24 - 28 V / 6 - 5.1 A, -25 to +45°C

- CD5.121:

Input: DC 24 V (-25% / +35%), 5.6 A

Output: DC 12 - 15 V / 8.0 - 6.4 A, -25 to +60°C or DC 12 - 15 V / 9.6 - 7.7 A, -25 to +45°C

- SLAD4.100:

Input: DC 24 V (-25% / +35%), 7 A

Output: DC-AS 30.5 V / 4 A, -25 to +60°C, Use on AS-interface net only.

Notes:

(*) - The products have been certified as components where the suitability of the combination with the end use product shall be re-evaluated.

- A suitable mechanical, electrical and fire enclosure must be provided for the end product.

(**) All model designations may be followed by any character or number or blank, not safety relevant.

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