Certification Record

Customer	Class	File Number
PULS GmbH Elektrastrasse 6, Munich Bayern Germany 81925	5318-01 POWER SUPPLIES-For Hazardous Locations	095515_0_000

Class I, Division 2, Groups A, B, C and D:

Din Rail Component type switching mode power supply, class I

Models: CS3.241, CS5.241, CS5.241-S1, CS5.243, CS5.244, CS10.241, CS10.241-S1, CS10.242, CS10.243, CS10.244, CS10.481; Temperature code T3

Ratings:

Model	Input	Output
CS3.241	100-240Vac; 50-60Hz; 1.4A	24-28Vdc; 3.3-2.7A (-25°C≤Ta≤60°C)
CS5.241	100-120Vac/200-240Vac; 50-60Hz; 2.6-1.4A	24-28Vdc; 6-5.1A (-25°C≤Ta ≤45°C) 5-4.3A (-25°C≤Ta≤60°C)
CS5.241-S1	100-120Vac/200-240Vac; 50-60Hz; 2.6-1.4A	24-28Vdc; 6-5.1A (-25°C≤Ta ≤45°C) 5-4.3A (-25°C≤Ta ≤60°C)
CS5.243	100-120Vac; 50-60Hz; 2.6A	24-28Vdc; 6-5.1A (-10°C≤Ta ≤45°C) 5-4.3A (-10°C≤Ta ≤60°C)
CS5.244	200-240Vac; 50-60Hz; 1.4A	24-28Vdc; 6-5.1A (-10°C≤Ta ≤45°C) 5-4.3A (-10°C≤Ta ≤60°C)
CS10.241	100-120Vac/200-240Vac; 50-60Hz; 5.0-2.7A	24-28Vdc; 12-10.3A (-25°C≤Ta ≤45°C) 10-8.6A (-25°C≤Ta≤60°C)
CS10.241-S1	100-120Vac/200-240Vac; 50-60Hz; 5.0-2.7A	24-28Vdc; 12-10.3A (-25°C≤Ta≤45°C) 10-8.6A (-25°C≤Ta ≤60°C)
CS10.242	100-120Vac/200-240Vac; 50-60Hz; 5.0-2.4A	24-28Vdc; 12-10.3A (-25°C≤Ta ≤45°C) 10-8.6A (-25°C≤Ta ≤60°C)
CS10.243	100-120Vac; 50-60Hz; 5A	24-28Vdc; 12-10.3A (0°C≤Ta≤45°C) 10-8.6A (0°C≤Ta ≤60°C)
CS10.244	200-240Vac; 50-60Hz; 2.7A	24-28Vdc; 12-10.3A (0°C≤Ta ≤45°C) 10-8.6A (0°C≤Ta ≤60°C)
CS10.481	100-120Vac/200-240Vac; 50-60Hz; 5.0-2.7A	48-52Vdc; 6-5.5A (-25°C≤Ta ≤45°C) 5-4.6A (-25°C≤Ta ≤60°C)

Conditions of Certification:

- Units were evaluated as components where the suitability of the combination must be determined in the end use product by the local authority having jurisdiction.
- A suitable mechanical, electrical and fire enclosure must be provided for the end product.

Class I, Division 2, Groups A, B, C and D

Din Rail Component Type Switching Mode Power Supply, Class I

Models: QS3.241 (RPS80EEC), QS5.241 (RPS120EEC), QS5.241-C1 (RPS120EEC (CC)), QS5.DNET, QS10.121, QS10.241, QS10.241-C1, QS10.301, QS10.481, QS10.DNET, QS20.241, QS20.241-C1, QS20.244, QS20.361, QS20.481, suffix –A1 optional for models with coating; Temperature Code T3/T4.

RATINGS:

Model	Input	Output
QS3.241 (RPS80EEC)	100-240Vac ±15%, 50-60Hz, 1.8-1.0A	24-28Vdc, 3.4-3.0A

QS3.241-A1	100-240Vac ±15%, 50-60Hz, 1.8-1.0A	24-28Vdc, 3.4-3.0A
QS5.241 (RPS120EEC)	100-240Vac +10%/-15%, 50-60Hz, 1.4-0.65A	24-28Vdc, 5.0-4.5A
QS5.241-C1 (RPS120EEC (CC))	100-240Vac +10%/-15%, 50-60Hz, 1.4-0.65A	24-28Vdc, 5.0-4.5A
QS5.241-A1	100-240Vac +10%/-15%, 50-60Hz, 1.4-0.65A	24-28Vdc, 5.0-4.5A
QS5.DNET	100-240Vac +10%/-15%, 50-60Hz; 1.1-0.5A	24Vdc, 3.8A
QS5.DNET-A1	100-240Vac +10%/-15%, 50-60Hz; 1.1-0.5A	24Vdc, 3.8A
QS10.121	100-240Vac ±15%, 50-60Hz; 2.1-0.9A	12-15Vdc, 15.0-13.5A
QS10.121-A1	100-240Vac ±15%, 50-60Hz; 2.1-0.9A	12-15Vdc, 15.0-13.5A
QS10.241	100-240Vac ±15%, 50-60Hz; 2.8-1.2A	24-28Vdc, 10.0-9.0A
QS10.241-A1	100-240Vac ±15%, 50-60Hz; 2.8-1.2A	24-28Vdc, 10.0-9.0A
QS10.241-C1	100-240Vac ±15%, 50-60Hz; 2.8-1.2A	24-28Vdc, 10.0-9.0A
QS10.301	100-240Vac ±15%, 50-60Hz; 2.8-1.2A	28-32Vdc, 8.6-7.5A
QS10.301-A1	100-240Vac ±15%, 50-60Hz; 2.8-1.2A	28-32Vdc, 8.6-7.5A
QS10.481	100-240Vac ±15%, 50-60Hz; 2.8-1.2A	48-56Vdc, 5.0-4.3A
QS10.481-A1	100-240Vac ±15%, 50-60Hz; 2.8-1.2A	48-56Vdc, 5.0-4.3A
QS10.DNET	100-240Vac ±15%, 50-60Hz; 2.3-1.0A	24Vdc, 8.0A
QS10.DNET-A1	100-240Vac ±15%, 50-60Hz; 2.3-1.0A	24Vdc, 8.0A
QS20.241	100-240Vac ±15%, 50-60Hz, 5.4-2.4A	24-28Vdc, 20.0-17.1A
QS20.241-A1	100-240Vac ±15%, 50-60Hz, 5.4-2.4A	24-28Vdc, 20.0-17.1A
QS20.241-C1	100-240Vac ±15%, 50-60Hz, 5.4-2.4A	24-28Vdc, 20.0-17.1A
QS20.244	200-240Vac ±15%, 50-60Hz, 4.8A	24-28Vdc, 20.0-17.1A
QS20.244-A1	200-240Vac ±15%, 50-60Hz, 4.8A	24-28Vdc, 20.0-17.1A
QS20.361	100-240Vac ±15%, 50-60Hz, 5.4-2.4A	36-42Vdc, 13.3-11.4A
QS20.361-A1	100-240Vac ±15%, 50-60Hz, 5.4-2.4A	36-42Vdc, 13.3-11.4A
QS20.481	100-240Vac ±15%, 50-60Hz, 5.4-2.4A	48-55Vdc, 10.0-8.7A
QS20.481-A1	100-240Vac ±15%, 50-60Hz, 5.4-2.4A	48-55Vdc, 10.0-8.7A

-25°C ≤ Ta ≤ +60°C

Conditions of Certification:

- Units were evaluated as components where the suitability of the combination must be determined in the end use product by the local authority having jurisdiction.
- A suitable mechanical, electrical and fire enclosure must be provided for the end product.

Class I, Division 2, Groups A, B, C and D, Temperature code T4

Ta: -40°C≤Ta≤70°C

Redundancy modules for built-in use (DIN rail)

Model	Input	Output
MLY02.100	2x DC 12-48V +/-25% 2x 0-5A	Input voltage - 0,9V; 0-10A(1)
MLY10.241	2x DC 12-48V +/-25% 2x 0-5A	Input voltage - 0,9V; 0-10A(2)
YR2.DIODE	2x DC 12-48V +/-25% 2x 0-10A	Input voltage - 0,78V; 0-20A(3)
YRM2.DIODE	2x DC 24-48V +/-25% 2x 0-10A	Input voltage - 0,78V; 0-20A(4)
YR40.241	2x DC 12-28V +/-30% 2x 0-20A	Input voltage - 0,072V; 0-40A
YR80.241	2x DC 12-28V +/-30% 2x 0-40A	Input voltage - 0,049V; 0-80A
YR40.242	2x DC 12-28V +/-30%; 2 x 0-20A	Input voltage - 0,072V; 0-40A(5)
YR40.245	1x DC 12-28V +/-30%; 0-40A	Input voltage - 0,15V; 0-40A(6)
YR40.482	2x DC 24-56V +/-15%; 0-20A	Input voltage - 0,06V; 0-40A(7)
YR80.242	2x DC 12-28V +/-30%; 0-40A	Input voltage - 0,065V; 0-80A(8)
PIRD20.241	2x DC 12-28V +/-25%; 0-10A	Input voltage - 0,56V; 0-20A(9)
YR20.242	2x DC 12-28V +/-30%; 0-20A	Input voltage - 0,06V; 0-24A(10)
YR20.246	2x DC 24-28V +/-25%; 0-12A	Input voltage - 0,06V; 0-24A(11)

(1) De-rated linearly between +60°C and +70°C; 7.5A is the reduced output at 70°C

(2) De-rated linearly between +60°C and +70°C; 7.5A is the reduced output at 70°C

(3) De-rated linearly between +60°C and +70°C; 15A is the reduced output at 70°C

(4) De-rated linearly between +60°C and +70°C; 15A is the reduced output at 70°C

(5) De-rated linearly between +60°C and +70°C; 30A is the reduced output at 70°C

(6) De-rated linearly between +60°C and +70°C; 30A is the reduced output at 70°C

(7) De-rated linearly between +60°C and +70°C; 30A is the reduced output at 70°C

(8) De-rated linearly between +60°C and +70°C; 60A is the reduced output at 70°C

(9) Derated linearly between +55°C and +70°C; 12,5A is the reduced output at 70°C

(10) Derated linearly between +45°C and +70°C; 20A is the reduced output at 70°C

(11) Derated linearly between +45°C and +70°C; 20A is the reduced output at 70°C

(See Att3 - Figure 17, page 1-4, 2413814-Report-Ed3 for details)

NOTE:

- Units were evaluated as components where the suitability of the combination must be determined in the end use product by the local authority having jurisdiction.
- A suitable mechanical, electrical and fire enclosure must be provided for the end product which provides a minimum protection of IP54 and can only be opened with the use of a tool.
- Suitable for use in Class I, Zone 2

Class I, Division 2, Groups A, B, C, and D:

CT-Series Power Supplies: CT5.121, CT5.241, CT10.241, CT10.481

QT-Series Power Supplies: QT20.241, QT20.361, QT20.481, QT40.241, QT40.481

Temperature Class T4: CT5.241, CT10.481, QT20.241, QT20.481

Temperature Class T3: CT5.121, CT10.241, QT20.361, QT40.241, QT40.481

Power Supply (2 and 3-phase, built-in, DIN rail), Ambient Temperature -25° C to +45/+60° C, and Temperature

Code T3/T4 Rated:

Ratings

Model No.	**Input Voltage**	**Input current**	**Input Frequency (Hz)**	**Output Voltage**	**Output Current**
					(A at xx°C Ambient)
CT5.121	2 x 380-480Vac	0,70		12 – 15	8,0 – 6,4 (60°C)
CT5.241				24 – 28	5,0 – 4,3 (60°C)
					6,0 – 5,1 (45°C)
CT10.241				24 – 28	10,0 – 8,6 (60°C)
	3 x 380-480Vac	0,90			12,0 – 10,3 (45°C)
CT10.481				48 – 56	5,0 – 4,3 (60°C)
			50-60Hz		6,0 – 5,2 (45°C)
QT20.241				24 – 28	20,0 – 17,0 (60°C)
QT20.361				36 – 42	13,3 – 11,4 (60°C)
QT20.481	3 x 380-480Vac	0,90 - 0,65		48-55	10,0 – 8,7 (60°C)
QT40.241				24 – 28	40,0 – 34,3 (60°C)
QT40.481		1,80 – 1,30		48 – 54	20,0 – 27,8 (60°C)

Part Number Suffixes Applicable to all Models

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-A1 Designates 1 layers of conformal coating are applied for environmental purposes not related to safety.

-C1 Designates 2 layer of conformal coating are applied for environmental purposes not related to safety.

Conditions of Certification

The Power Supply must be installed in an IP54 enclosure or cabinet in the final installation. The enclosure / cabinet must comply with the requirements of CAN/CSA E60079-15:2010.

Class I, Division 2, Groups A, B, C, and D:

ML-Series and RPS-Series DIN Rail Mount Power Supplies: Models / Ratings / Ambient / T-Code as below:

Model No.	Input Voltage (V)	Output Voltage (VDC)	Output Current (20°C Ambient)	Operating Temperature Range	Input Frequency (Hz)	T-Code
ML15.051	AC100-240V -15%/+10%, DC110-300V -20%/+25%	5 – 5.5V	3A	-10°C to +60°C	50-60Hz, DC	T4
ML15.121	AC100-240V -15%/+10%, DC110-300V -20%/+25%	12 - 15V	1.3A	-10°C to +60°C	50-60Hz, DC	T4
ML15.241	AC100-240V -15%/+10%, DC110-300V -20%/+25%	24 - 28V	0.63A	-10°C to +60°C	50-60Hz, DC	T4
RPS15	AC100-240V -15%/+10%, DC110-300V -20%/+25%	24 - 28V	0.63A	-10°C to +60°C	50-60Hz, DC	T4
ML30.100	AC100-240V -15%/+10%, DC110-300V -20%/+25%	24 – 28V	1.3A, 30W	-10°C to +60°C	50-60Hz, DC	T4
RPS30	AC100-240V -15%/+10%, DC110-300V -20%/+25%	24 – 28V	1.3A, 30W	-10°C to +60°C	50-60Hz, DC	T4
ML30.101	AC100-240V -15%/+10%, DC110-300V -20%/+25%	5 – 5.5V	5A, 25W	-10°C to +60°C	50-60Hz, DC	T4
ML30.102	AC100-240V -15%/+10%, DC110-300V -20%/+25%	10 – 12V	3A, 30W	-10°C to +60°C	50-60Hz, DC	T4
ML30.241	AC100-240V -15%/+10%, DC110-300V -20%/+25%	24 – 28V	1.3A, 30W	-10°C to +60°C	50-60Hz, DC	T4
ML50.100	AC100-240V -15%/+10%, DC110-300V -20%/+25%	24 – 28V	2.1A, 50W	-10°C to +60°C	50-60Hz, DC	T3
ML50.101	AC100-240V -15%/+10%, DC110-300V -20%/+25%	24 – 28V	2.1A, 50W	-10°C to +60°C	50-60Hz, DC	T3
ML50.109	AC100-240V -15%/+10%, DC110-300V -20%/+25%	24 – 28V	2.1A, 50W	-10°C to +60°C	50-60Hz, DC	T3
ML50.111	AC100-240V -15%/+10%, DC110-300V -20%/+25%	24 – 28V	2.1A, 50W	-10°C to +60°C	50-60Hz, DC	T3
ML50.102	AC100-240V -15%/+10%, DC110-300V -20%/+25%	12 - 15V	4.2A, 50W	-10°C to +60°C	50-60Hz, DC	T3
ML60.121	AC100-240V -15%/+10%, DC110-300V -20%/+25%	12 – 15V	4.5A, 54W	-10°C to +60°C	50-60Hz, DC	T3

ML60.122	AC100-240V -15%/+10%, DC110-300V -20%/+25%	12 – 15V	4.5A, 54W	-40°C to +60°C	50-60Hz, DC	T4
ML60.241	AC100-240V -15%/+10%, DC110-300V -20%/+25%	24 – 28V	2.5A, 60W	-10°C to +60°C	50-60Hz, DC	T4
ML60.242	AC100-240V -15%/+10%, DC110-300V -20%/+25%	24 – 28V	2.5A, 60W	-40°C to +60°C	50-60Hz, DC	T4
ML70.100	AC 100-120V / 220-240V (-15% +10%)	24 – 28V	3A, 72W	-10°C to +60°C	50-60Hz	T4
ML95.100	AC 100-120V / 220-240V (-15% +10%)	24 – 28VDC	3.95A, 95W	-10°C to +60°C	50-60Hz	T3
ML100.100	AC 100-120V / 220-240V (-15% +10%)	24 – 28VDC	4.2A, 100W	-10°C to +60°C	50-60Hz	T3
ML100.102	AC 100-120V / 220-240V (-15% +10%)	12 – 15VDC	7.5A, 90W	-10°C to +60°C	50-60Hz	T4
ML100.109	AC 100-120V / 220-240V (-15% +10%)	24 – 28VDC	4.2A, 100W	-10°C to +60°C	50-60Hz	T3

ML Series Part Number Suffixes Applicable to all Models

-A1 Designates 1 layer of conformal coating is applied for environmental purposes not related to safety.
-C1 Designates 2 layers of conformal coating are applied for environmental purposes not related to safety.

Conditions of Certification (ML Series)

The ML Power Supply must be installed in a certified enclosure or cabinet in the final installation subject to the Authority Having Jurisdiction.

Class I, Division 2, Groups A, B, C, and D

Ex nA nC IIC T3 Gc

Class I, Zone 2, AEx nA nC IIC T3 Gc

CPS-Series Power Supplies: CPS20.241, CPS20.121, CPS20.361, CPS20.481, CPS20.241D1, and CPS20.481-D1

CPS20.241:

Input 100-240V; 50-60Hz; 6,4-2,7A

Output 24-28Vdc; 20,0-17,1A (max. 60°C ambient)

24-28Vdc; 24,0-20,6A (max. 45°C ambient)

CPS20.121:

Input 100-240V; 50-60Hz; 4,9-2,2A

Output 12-15Vdc; 30A (max. 60°C ambient)

CPS20.361:

Input 100-240V; 50-60Hz; 6,4-2,7A

Output 36-42Vdc; 13,3-11,4A (max. 60°C ambient)

36-42Vdc; 16,0-13,7A (max. 45°C ambient)

CPS20.481:

Input 100-240V; 50-60Hz; 6,4-2,7A

Output 48-56Vdc; 10,0-8,6A (max. 60°C ambient)

48-56Vdc; 12,0-10,3A (max. 45°C ambient)

CPS20.241-D1:

Input 110-300Vdc; 6,2-2,3A

Output 24-28Vdc; 20,0-17,1A (max. 60°C ambient)

24-28Vdc; 24,0-20,6A (max. 45°C ambient)

CPS20.481-D1:

Input 110-300Vdc; 6,2-2,3A

Output 48-56Vdc; 10,0-8,6A (max. 60°C ambient)

48-56Vdc; 12,0-10,3A (max. 45°C ambient)

Class I, Division 2, Groups A, B, C, and D

Ex nA IIC T3 Gc

Class I, Zone 2, AEx nA IIC T3 Gc

SLA-Series Power Supplies: SLA3.100

SLA3.100:

Input 100-120/220-240V; 50-60Hz; 2,0/0,9A

Output 30,5V; 2,8A

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Part Number Suffixes Applicable to all Models

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-C1 Designates Optional Coating of PCB.

- The CPS20.xxx power supplies are intended for universal use, the SLA3.100 is specially made to supply the AS-Interface field bus system. The output of the SLA3.100 power supply is inductive and is not suitable for other applications.

- Additionally the equipment was tested for 70°C ambient temperature with output power derating for

temperature class T3. This ambient temperature is not marked on the equipment as nominal value. The

output is limited to the following values at temperatures > 60°C.

Conditions of Certification

The Power Supply must be installed in an IP54 enclosure or cabinet in the final installation. The enclosure / cabinet must comply with the requirements of EN 60079-15:2010 and/or IEC 60079-15 – Edition 4.

Class I, Division 2, Groups A, B, C, and D

Din Rail Component Type Switching Mode Power Supply, Class I, OVC II, Pollution Degree (PD): 2, T_{ma} = 60°C with Output Derating 24VA/°K

Models: QS40.241, QS40.244, QS40.361, QS40.481, and QS40.484

Ratings:

QS40.241
Input: 100-240Vac; 50-60Hz; 11.2–4.6A

Output: 24-28Vdc; 40.0-34.3A (continuous)
24-28Vdc; 60.0-51.5A (for max. 4s)
Ambient Temperature: -25°C to +60°C (+70°C with Derating)

T-Code: T4

QS40.244
Input: 200-240Vac; 50-60Hz; 5.4A

Output: 24-28Vdc; 40.0-34.3A (continuous)
24-28Vdc; 60.0-51.5A (for max. 4s)
Ambient Temperature: -25°C to +60°C (+70°C with Derating)

T-Code: T4

QS40.361
Input: 100-240Vac; 50-60Hz; 11.2–4.6A

Output: 36-42Vdc; 26.7-22.9A (continuous)
36-42Vdc; 40.0-34.3A (for max. 4s)
Ambient Temperature: -25°C to +60°C (+70°C with Derating)

T-Code: T3

QS40.481
Input: 100-240Vac; 50-60Hz; 11.2–4.6A

Output: 48-54Vdc; 20.0-17.8A (continuous)
48-54Vdc; 20.0-17.8A (for max. 4s)

Ambient Temperature: -25°C to +60°C (+70°C with Derating)

T-Code: T3

QS40.484
Input: 200-240Vac; 50-60Hz; 5.4A

Output: 48-54Vdc; 20.0-17.8A (continuous)
48-54Vdc; 20.0-17.8A (for max. 4s)
Ambient Temperature: -25°C to +60°C (+70°C with Derating)

Code: T4

Conditions of Certification:

- Units are evaluated as components for building in.
- A suitably rated mechanical, electrical and fire enclosure shall be provided by the end product.
- Suitability of the combination in the end use product shall be determined by CSA.
- Evaluated for Branch/Supply Circuit protection maximum 32A
- Equipment mobility : for building-in
- Connection to the mains : permanent connection
- Operating condition : continuous
- Access location : --
- Over voltage category (OVC) : OVC II
- Mains supply tolerance (%) or absolute mains supply values : AC Mains: +10%, -15%
- Tested for IT power systems : Yes
- IT testing, phase-phase voltage (V) : 240
- Class of equipment : Class I (earthed)
- Considered current rating (A) : 30
- Pollution degree (PD) : PD 2
- IP protection class : IP X0
- Altitude of operation (m): up to 2000 above sea level.
- Altitude of test laboratory (m) : approx. 130
- Mass of equipment (kg) : approx. 1.8kg
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 60°C and up to 70°C with output Derating of 24VA/°K
- The product is intended for use on the following power systems: TT, TN, IT
- The product was investigated to the following additional standards: EN 60950-1:2006+ A11:2009 (which includes all European national differences, including those specified in this test report).
- The following were investigated as part of the protective earthing/bonding: Printed wiring board trace (refer to Enclosure - Schematics + PWB for layouts)
- The following are available from the Applicant upon request: Specific data sheets for LED indicators that are class I and operate at wavelength in the 400-710 nm range.
- The normal mounting orientation is DIN-Rail horizontal (standard mounting orientation-input/output connectors on bottom). Other mounting orientations have been measured at a lower output power. Refer to heating test table for details.

Class I, Division 2, Groups A, B, C, and D:

Uninterruptable Power Supplies:

Model	Ratings
UB10.241	Input: DC 24V (-20%/+25%), max. 17A Output in power supply mode: Input voltage - 0.3V, 15.0A (below +60°C) Input voltage - 0.3V, 11.3A (at +70°C) Output in battery mode: 22.3Vdc, 10A (below +60°C) 22.3Vdc, 7.5A (at +70°C) Short-term, up to 5s: 22.3Vdc, 15A (below +70°C) De-rate linearly between +60°C and +70°C Battery: Use a 12V VRLA battery between 3.9 and 40Ah Ambient temperature range: -25°C to +70°C T-Code: T3
UB10.242	UB10.242 Input: DC 24V (-20%/+25%), max. 18A Output in power supply mode: Input voltage - 0.3V, 15.0A (max. +50°C) Output in battery mode: 22.3Vdc, 10A (max. +50°C) Short-term, up to 5s: 22.3Vdc, 15A Battery: Use a 12V VRLA battery between 17 and 40Ah Ambient temperature range: -25°C to +50°C T-Code: T3
UB10.245	Input: DC 24V (-20%/+25%), max. 17A Outputs in power supply mode: Max. 360W at +50°C or 180W at +70°C for both outputs Output 1: Input - 0.3V, 15A (below +50°C) Input - 0.3V, 10A (at +70°C) Output 2: 12V, 5A (below +50°C) 12V, 4A (at +70°C) Outputs in battery mode: Max. 240W at 50°C or 120W at 70°C for both outputs Output 1: 22.3V, 10A (below +50°C) 22.3V, 7.5A (at +70°C) Short-term, up to 5s: 22.3V, 15A (at +70°C) Output 2: 12V, 5A (below +50°C) 12V, 4A (at +70°C) Short-term, up to 5s: 12V, 5A (at +70°C) De-rate linearly between +50°C and +70°C Battery: Use a 12V VRLA battery between 3.9 and 40Ah Ambient temperature range: -25°C to +70°C T-Code: T3
UBC10.241 and UBC10.241-N1	Input: DC 24V (-20%/+25%), max. 17A Outputs in power supply mode: Input - 0.3V, 15A (max. +40°C) Outputs in battery mode: 22.3V, 10A (max. +40°C) Short-term, up to 5s: 22.3V, 15A Ambient temperature range: 0°C to +40°C

	T-Code: T3
UB20.241	Input: DC 24V (±25%), max. 28A Output in power supply mode: Input voltage - 0.15V, 25.0A (below +60°C) Input voltage - 0.15V, 18.8A (at +70°C) Short-term, up to 5s: 30.0A (at +70°C) Output in battery mode: Selectable: 22.5V, 24.0V, 25.0V or 26.0V Max. 20A or 468W (below +60°C) Max. 15A or 351W (at +70°C) Short-term, up to 4s: 50% current reserves De-rate linearly between +60°C and +70°C Battery: Use a 24V VRLA battery module between 3.9 and 150Ah. Ambient temperature range: -40°C to +70°C T-Code: T4
UC10.241	Input: DC 24V (-20%/+25%), max. 17A Output in power supply mode: Input voltage - 0.3V, 15.0A (max. +60°C) Output in capacitor mode: 22.3Vdc, 15A (max. +60°C) Back-up time: Typ. 16.5s at 10A or 9.0s at 15A Ambient temperature range: -40°C to +60°C T-Code: T4
UC10.242	Input: DC 24V (-20%/+25%), max. 17A Output in power supply mode: Input voltage - 0.3V, 15.0A (max. +60°C) Output in capacitor mode: 22.3Vdc, 15A (max. +60°C) Back-up time: Typ. 33s at 10A or 18s at 15A Ambient temperature range: -40°C to +60°C T-Code: T4

Battery Modules:

Model	Ratings
UZK12.071 and UZO12.07	Nominal battery voltage and capacity: 12Vdc, 7Ah Ambient Temperature ranges: For charging: -10°C to +40°C For discharging: -15°C to +50°C T-Code: T4
UZK12.261 and UZO12.26	Nominal battery voltage and capacity: 12Vdc, 26Ah Ambient Temperature ranges: For charging: -15°C to +50°C For discharging: -20°C to +60°C T-Code: T3
UZK24.071 and UZO24.071	Nominal battery voltage and capacity: 24Vdc, 7Ah Ambient Temperature ranges: For charging: -10°C to +40°C For discharging: -15°C to +50°C T-Code: T4
UZK24.121 and UZO24.121	Nominal battery voltage and capacity: 24Vdc, 12Ah Ambient Temperature ranges: For charging: -10°C to +40°C For discharging: -15°C to +50°C T-Code: T4

Conditions of Certification:

- The equipment's controls and switches shall not be used in areas with explosive atmospheres.
- The equipment is evaluated as a component where the suitability for use must be determined by the local authority having jurisdiction in the end use application.
- The equipment shall be installed in a suitable mechanical, electrical and fire enclosure for the end product which provides a minimum protection of IP54 and can only be opened with the use of a tool.
- Battery modules may be operated in any position, except they shall not be operated upside down. DIN-Rail modules shall be operated in standard vertical orientation (terminals on top/bottom) only.

Power Supply series CD5

Class I, Div 2, Groups A, B, C and D, Temperature class T4

CD5.121
Input: DC 24V (-25%/+35%), 5.6A
Output: DC 12-15V / 9.6 - 7.7 A, (below +45°C)
DC 12-15V / 8.0 - 6.4 A, (at +60° C)
DC 12-15V / 6.0 - 4.8 A, (at +70° C)
Derate linearly between +45°C and +70°C
CD5.241 and CD5.241-S1:
Input: DC 24V (-25%/+35%), 7.0A
Output: DC 24 - 28V / 6.0 - 5.1 A (below +45°C)
DC 24 - 28V / 5.0 - 4.3 A (at +60°C)
DC 24 - 28V / 3.8 - 3.2 A (at +70°C)
Derate linearly between +45°C and +70°C
CD5.241-L1
Input: DC 24V (-40%/+35%), 5.5A
Output: DC 24V, 3.8A, -25 to +70°C
CD5.242
Input: DC 48V (±25%), 3.5A
Output: DC 24 - 28V/ 6.0 - 5.1 A (below +45°C)
DC 24 - 28V/ 5 - 4.3 A (at +60°C)
DC 24 - 28V/ 3.8 - 3.2 A (at 70°C)
Derate linearly between +45°C and +70°C
CD5.243
Input: DC 12 V (-100% / +35%), 12A
Output: DC 24 - 28V, 4.8 - 4.1 A (below +45°C)
DC 24 - 28V, 4.0 - 3.4 A (at+ 60°C)
DC 24 - 28V, 3.0 - 2.6 A (at +70°C)
Input: DC 12V (-30%), 12 A
Output: DC 24 - 28V, 4.0 - 3.4A (below +45°C)
DC 24 - 28V, 3.2 - 2.7A (at +60°C)
DC 24 - 28V, 2.4 - 2.1A (at 70°C)
Derate linearly between +45°C and + 70°C
CD5.121:
Input: DC 24 V (-25% / +35%), 5.6A

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

Power Supply series CP10
Class I, Div 2, Groups A, B, C and D, Temperature class T4

CP10.121
Input: AC 100-240V (-15%/+10%), 2.6-1.1A 50-60Hz
DC 110-150V (±20%), 2.4-1.7A

Output: DC 12-15V
19.2 – 15.4A (below +45°C)
16.0 – 12.8A (at +60°C)
12.0 – 9.6A(at +70°C)

Derate linearly between +45°C and +70°C
Ambient Temperature range: -25°C to +70°C

CP10.241
Input: AC 100-240V (-15%/+10%) 3.3-1.4A, 50-60Hz
DC 110-150V (±20%), 3.0-2.2A

Output: DC 24-28V
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

CP10.241-S1
Input: AC 100-240V (-15%/+10%) 3.3-1.4A, 50-60Hz
DC 110-150V (±20%), 3.0-2.2A

Output: DC 24-28V
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

CP10.242
Input: AC 100-240V (-15%/+10%) 3.3-1.4A, 50-60Hz
DC 110-300V (±20%), 3.0-1.1A

Output: DC 24-28V
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

CP10.361
Input: AC 100-240V (-15%/+10%) 3.3-1.4A, 50-60Hz
DC 110-150V (±20%), 3.0-2.2A

Output: DC 36 – 42V
8.0 – 6.9A (below +45°C)
6.7 – 5.7A (at +60°C)
5.0 – 4.3A (at +70°C)
Derate linearly between +45°C and +70°C
Ambient Temperature range: -25°C to +70°C

CP10.481 (the maximum output current varies depending on the supply voltage tolerances)
Input: AC 100-240V (-15%/+10%) 3.3-1.4A, 50-60Hz
Output: DC 48 – 56V
6.0 – 5.2A (below +45°C)
5.4 – 4.6A (at +60°C)
4.0 – 3.4A (at +70°C)

Input: DC 110-150V (-15%/+20%), 3.0-2.2A
Output: DC 48-56V
6.0 – 5.2A (below +45°C)
5.4 – 4.6A (at +60°C)
4.0 – 3.4A (at +70°C)
Input: DC 110-150V (±20%), 3.0-2.2A
Output: DC 48-56V
6.0 – 5.2A (below +45°C)
5.0 – 4.3A (at +60°C)
3.8 – 3.2A (at+70°C)

Derate linearly between +45°C and +70°C
Ambient Temperature range: -25°C to +70°C

Conditions of Certification:

- The equipment's controls and switches shall not be used in areas with explosive atmospheres.
- The equipment is evaluated as a component where the suitability for use must be determined by the local authority having jurisdiction in the end use application.
- The equipment shall be installed in a suitable mechanical, electrical and fire enclosure for the end product which provides a minimum protection of IP54 and can onl
- De-rating conditions must be considered for high ambient temperatures and non-standard mounting orientations.

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