

Power supply unit - ASI QUINT 100-240/2.4 EFD - 2736686

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Power supply unit für AS interface, 2.4 A, integrated ground fault detector, IP20 degree of protection

Product Description

Power supply unit for AS-Interface systems. Special modules with an output voltage range of 29.5 V - 31.6 V DC are used to supply the AS-Interface systems. The AS-i system also requires a data decoupling network in the power supply unit in order to be able to transmit communication signals along the power line. The ASI QUINT 100-240/2.4 EFD can supply an AS-i system with up to 2.4 A. Safety through automatic ground fault detection: if two ground faults occur in an AS-i system, this can cause the machines to inadvertently start up or not to be able to stop operation. The ASI QUINT has an integrated ground fault detection function. A ground fault is signaled via LED and via an alarm output.

Your advantages

- Integrated filters ensure that the modulated data flow is not affected
- Integrated ground-fault monitoring signals short circuits on the secondary side
- Wide-range input for operation on all common AC and DC networks



Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 959678
GTIN	4017918959678

Technical data

Dimensions

Width	55 mm
Height	145 mm
Depth	125 mm
Width with alternative assembly	122 mm
Height with alternative assembly	145 mm
Depth with alternative assembly	58 mm

Ambient conditions

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Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 70 °C (> 60 °C Derating: 2.5 %/K)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	95 % (at 25 °C, non-condensing)

Input data

Nominal input voltage range	100 V AC ... 240 V AC
AC frequency range	45 Hz ... 65 Hz
Frequency range DC	0 Hz
Current consumption	approx. 1 A (120 V AC)
	0.5 A (230 V AC)
Nominal power consumption	72 W
Inrush current	< 15 A (typical)
Mains buffering time	> 20 ms (120 V AC)
	> 80 ms (230 V AC)
Input fuse	5 A (slow-blow, internal)
Recommended breaker for input protection	6 A ... 16 A (Characteristics B, C, D, K)

Output data

Nominal output voltage	30.1 V DC \pm 1.5 %
Output voltage range	28 V DC ... 30 V DC
Nominal output current (I_N)	2.4 A
Connection in parallel	No
Connection in series	yes
Residual ripple	< 30 mV _{PP}
Output power	72 W
Typical response time	< 0.5 s
Peak switching voltages nominal load	< 50 mV _{PP}
Maximum power dissipation in no-load condition	3 W
Power loss nominal load max.	11 W

General

Net weight	0.75 kg
Operating voltage display	LED
Efficiency	> 86 % (for 230 V AC and nominal values)
MTBF (IEC 61709, SN 29500)	> 500000 h
Insulation voltage input/output	4 kV AC (type test)
	2 kV AC (routine test)
Degree of protection	IP20
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	alignable: horizontally 0 mm, vertically 50 mm

Connection data, input

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Connection data, input

Connection method	Pluggable spring-cage connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Stripping length	9 mm
Screw thread	M3

Connection data, output

Connection method	Spring-cage connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Screw thread	M3

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise immunity	EN 61000-6-2
Connection in acc. with standard	CUL
Contact discharge	4 kV (Test Level 2)
Standards/regulations	EN 61000-4-3
Frequency range	80 MHz ... 1 GHz
Test field strength	10 V/m
Frequency range	1.4 GHz ... 2 GHz
Test field strength	3 V/m
Standards/regulations	EN 61000-4-4
Comments	Criterion B
Signal	1 kV (Test Level 2 - asymmetrical)
Standards/regulations	EN 61000-4-6
Frequency range	0.15 MHz ... 80 MHz
Voltage	10 V (Test Level 3)
Low Voltage Directive	Conformance with Low Voltage Directive 2014/35/EC
Standard - Safety of transformers	EN 61558-2-17
Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV)
	DIN VDE 0100-410
Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)

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Standards and Regulations

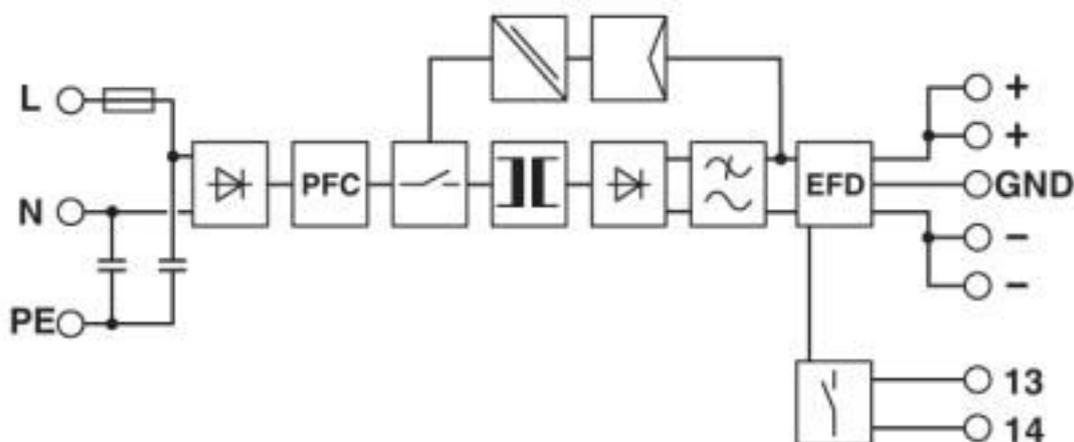
Standard - Safe isolation	DIN VDE 0100-410
	DIN VDE 0106-1010
Standard – Limitation of mains harmonic currents	EN 61000-3-2
UL approvals	UL/C-UL listed UL 508
	UL/C-UL Recognized UL 60950-1

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Block diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27242611
eCl@ss 11.0	27242611
eCl@ss 4.0	27250200
eCl@ss 4.1	27250200
eCl@ss 5.0	27259200
eCl@ss 5.1	27242600
eCl@ss 6.0	27242600
eCl@ss 7.0	27242611
eCl@ss 8.0	27242611
eCl@ss 9.0	27242611

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Classifications

ETIM

ETIM 2.0	EC001039
ETIM 3.0	EC001039
ETIM 4.0	EC002542
ETIM 5.0	EC002583
ETIM 6.0	EC002583
ETIM 7.0	EC002583

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	39121004
UNSPSC 12.01	39121004
UNSPSC 13.2	39121004
UNSPSC 18.0	32151602
UNSPSC 19.0	32151602
UNSPSC 20.0	32151602
UNSPSC 21.0	32151602

Approvals

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UL Listed / UL Recognized / cUL Recognized / IECCE CB Scheme / cUL Listed / ASI-Interface / EAC / EAC / cULus Recognized / cULus Listed

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 123528
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UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 211944
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cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 211944
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Approvals

IECEE CB Scheme		http://www.iecee.org/	SI-1087
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cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 123528
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ASI-Interface			56301/ 14.06.04
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EAC			EAC-Zulassung
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EAC			RU*DE*08.B.01873/19
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cULus Recognized			
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cULus Listed			
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Accessories

Accessories

Assembly adapter

Assembly adapters - UWA 182/52 - 2938235



Universal wall adapter for securely mounting the device in the event of strong vibrations. The device is screwed directly onto the mounting surface. The universal wall adapter is attached on the top/bottom.

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Accessories

Assembly adapters - QUINT-PS-ADAPTERS7/1 - 2938196



Assembly adapter for QUINT-PS... power supply on S7-300 rail

Assembly adapters - QUINT-PS-ADAPTERS7/2 - 2938206



Assembly adapter for QUINT POWER 10A on S7-300 rail

Mounting rail adapter

DIN rail adapter - UTA 107 - 2853983



Universal DIN rail adapter, for screwing on switchgear

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