

## Data Sheet | Item Number: 2685-1001/601-220

UPS Integrated; CAP; 24 VDC output voltage; 20 A output current; 0.47 Wh capacity; communication capability

<https://www.wago.com/2685-1001/601-220>



### Features:

- DC UPS module for building an uninterruptible power supply (UPS)
- Potential-free contacts for functional monitoring
- Remote function via digital signals
- Integrated memory expandable via additional modules
- Configuration via USB-C

### Technical data

#### Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	23.5 ... 29 VDC
Nominal mains frequency range	0 Hz
Input current $I_i$	$\leq 0.1$ A (no load); $\leq 4$ A (charging); $\leq 44$ A

#### Output

Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Output voltage range	22 ... 28 VDC
Nominal output current $I_{o, \text{nom}}$	20 A; 40 A

### Energy storage systems

Buffer time	41 s (1 A) / 1 s (20 A)
Memory type	Supercaps
Battery capacity	0.0196 Ah; 0.4704 Wh; 1.69344 kJ
Charging time (typ.)	4.3 min

### Signaling and Communication

Signaling	2 x Isolated relay contact (max. 30 VDC; 1 A) 3 x LED (green/red/yellow)
Operation status indicator	Green LED (DC OK) Yellow LED (warning) Red LED (error)
Configuration options	USB-C (socket); USB 2.0
Communication/interfaces	1 x digital input for remote ON/OFF

### Safety and protection

Isolation voltage (connectors – housing)	0.5 kVDC
Protection class	III
Protection type	IP20; per EN 60529
Reverse voltage protection	Yes
Parallel operation	No
Series operation	No

### Connection Data

#### Connection 1

Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1.5 mm <sup>2</sup>
Strip length	6 ... 7 mm / 0.24 ... 0.28 inches

#### Connection 2

Connection type	Relay
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 733 Series
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 20 AWG
Fine-stranded conductor	0.08 ... 0.5 mm <sup>2</sup> / 28 ... 20 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 0.34 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 0.34 mm <sup>2</sup>
Strip length	5 ... 6 mm / 0.2 ... 0.24 inches

#### Connection 3

Connection type	Communication
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 713 Series
Solid conductor	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 16 AWG
Fine-stranded conductor	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 16 AWG
Strip length	6 ... 7 mm / 0.24 ... 0.28 inches

### Physical data

Width	55 mm / 2.17 inches
Height	127 mm / 5 inches
Depth from upper-edge of DIN-rail	131.5 mm / 5.18 inches

### Mechanical data

Mounting type	DIN-35 rail
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### Material data

Fire load	0 MJ
Weight	700 g

### Environmental requirements

Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)

### Standards and Specifications

Conformity marking	CE
Standards/specifications	EN 61010-1 EN 61010-2-201 EN 61140 UL 61010-1
Standards/specifications (pending)	DNV

### Commercial data

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4066966633160
Customs tariff number	85044083900

### Product Classification

UNSPSC	39121006
ETIM 9.0	EC000382
ETIM 10.0	EC000382
ECCN	NO US CLASSIFICATION

### Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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### Approvals / Certificates

#### General approvals



Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc.	UL 61010-2-201	E255817

#### Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

## Downloads

### Environmental Product Compliance

#### Compliance Search

Environmental Product Compliance  
2685-1001/601-220



## Documentation

### Instruction Leaflet

USV-Lade- und -Kontrolleinheit; Eingangsspannung DC 24 V

16.04.2024  
04.02.2025

pdf  
1592.75 KB



## CAD/CAE-Data

### CAD data

2D/3D Models  
2685-1001/601-220



## 1 Compatible Products

### 1.1 Product Expansions

#### 1.1.1 Uninterruptible power supply



**Item No.: [2685-2501/603-240](#)**

UPS Storage module; CAP; 24 VDC output voltage; 40 A output current; 3.19 Wh capacity

### 1.2 Optional Accessories

#### 1.2.1 General accessories

##### 1.2.1.1 Electronic circuit breaker



**Item No.: [787-3664](#)**

Electronic circuit breaker; 4-channel; 24 VDC input voltage; adjustable 1 ... 10 A; Signal contact



**Item No.: [787-3668](#)**

Electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 1 ... 10 A; Signal contact

## 1.2.2 Power supply

### 1.2.2.1 Power Supply



**Item No.: 2587-2146**

Switched-mode power supply; Base; 1-phase; 24 VDC output voltage; 10 A output current; DC-OK LED

**Item No.: 2587-2147**

Switched-mode power supply; Base; 1-phase; 24 VDC output voltage; 20 A output current; DC-OK LED

**Item No.: 2587-2144**

Switched-mode power supply; Base; 1-phase; 24 VDC output voltage; 5 A output current; DC-OK LED

## 1.2.3 Tool

### 1.2.3.1 Operating tool



**Item No.: 210-719**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

**Item No.: 210-720**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

**Item No.: 210-721**

Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured