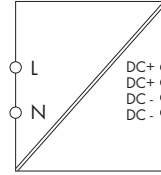


# 5 Switched-Mode Power Supply, 1-Phase

EPSITRON® COMPACT Power



- Primary switch mode power supply unit
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards or distribution boxes
- Parallel operation, series connection possible
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1

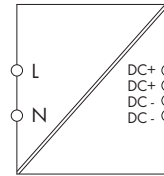
Description	Item No.	Pack. Unit
Switched-mode power supply, 5 VDC / 5.5A	787-1020	1

Technical Data	
<b>Input:</b>	
Nominal input voltage $V_{i\text{nom}}$	100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Frequency	44 Hz ... 66 Hz; 0 Hz
Input current $I_i$	0.6 A at 110 VAC; 0.3 A at 230 VAC
Discharge current	1 mA typ.
Inrush current	< 30 A, NTC
Mains failure hold-up time	> 10 ms at 110 VAC; > 80 ms at 230 VAC
<b>Output:</b>	
Nominal output voltage $V_{o\text{nom}}$	5 VDC, SELV
Output voltage range	4.5 ... 8.5 VDC adjustable
Factory preset	5 VDC
Output current $I_o$	5.5 A at 5 VDC; max. 3.5 A in any mounting position
Adjustment accuracy	< 2 %
Residual ripple	< 100 mV (peak-to-peak) at 20 MHz
Current limitation	1.1 x $I_o$ typ.
Overload behavior	Constant current
Operational indication	LED green ( $V_o$ )
<b>Efficiency/Power Losses:</b>	
Efficiency	75 % typ.
Power loss $P_V$	2.4 W (230 VAC, no load) 9.4 W (230 VAC, nominal load)
Max. power loss $P_V$	9,9 W typ. (264 VAC; 5 VDC, 5,5 A)
<b>Fuse Protection:</b>	
Internal fuse	T 2 A / 250 V
External fuse	Circuit breakers 6 A, 10 A, 16 A, B or C characteristic; an external DC fuse is required for the DC input voltage

Technical Data	
<b>Environmental Requirements:</b>	
Ambient operating temperature	-25 °C ... +60 °C (UL: -25 °C ... +55 °C); Device start at -40 °C (type-tested)
Storage temperature	-25 °C ... +80 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	-3 % / K (> 45 °C)
Climatic category	3K3 (acc. to EN 60721)
<b>Safety and protection:</b>	
Enclosure	Plastic, light gray, Flammability class V0 acc. to UL94
Test voltage PRI-SEC	4.2 kV DC
Protection class	II
Degree of protection	IP20 acc. to EN 60529
Overvoltage category	II
Overvoltage protection	< 16 VDC (in the event of a fault)
Short circuit protection	Yes
No-load proof	Yes
Feedback voltage	Max. 10 VDC
Parallel operation	Yes
Series connection	Yes
MTBF	> 500000 h
<b>Connection and type of mounting:</b>	
Wire connection	Input/Output: WAGO 740 Series
Cross sections	Input/Output: 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Strip lengths	Input/Output: 6 ... 7 mm / 0.24 ... 0.28 in.
Type of mounting	DIN-rail mount (EN 60715)
<b>Dimensions and weight:</b>	
Dimensions (mm) W x H x L	72 x 89 x 59 Length: 55 mm, from upper-edge of DIN
Weight	240 g
<b>Standards and Specifications:</b>	
Standards/specifications	EN 60950-1, EN 61204-3, UL 60950-1, UL 508, GL* (*pending)

## Switched-Mode Power Supply, 1-Phase

EPSITRON® COMPACT Power



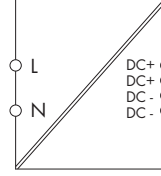
- Primary switch mode power supply unit
- Natural convection cooling when horizontally mounted
- Stage profile, ideal for distribution boards or distribution boxes
- Parallel operation, series connection possible
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950

Technical Data	
<b>Input:</b>	
Nominal input voltage $V_{i\text{nom}}$	100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	< 100 VAC: $I_a$ max. 1.5 A
Frequency	44 ... 66 Hz; 0 Hz
Input current $I_i$	0.6 A at 110 VAC / 0.4 A at 230 VAC
Discharge current	1 mA typ.
Inrush current	< 30 A, NTC
Mains failure hold-up time	> 10 ms at 110 VAC / > 80 ms at 230 VAC
<b>Output:</b>	
Nominal output voltage $V_{o\text{nom}}$	12 VDC (SELV)
Output voltage range	10.8 ... 18 VDC adjustable
Output current $I_o$	2 A at 12 VDC 0.75 A at 18 VDC max. 1.4 A (12 VDC) in any mounting position
Factory preset	12 VDC
Adjustment accuracy	2%
Residual ripple	< 150 mV (peak-to-peak) at 20 MHz
Current limitation	$1.1 \times I_o$ typ.
Overload behavior	Constant current
Operational indication	LED green ( $V_o$ )
<b>Efficiency / power losses:</b>	
Efficiency	80 % typ.
Power loss $P_V$	2.6 W (230 VAC/no load), 6.0 W (230 VAC/rated load)
Max. power loss $P_V$	6 W typ. (100 VAC / 12 VDC, 2 A)
<b>Fuse protection:</b>	
Internal fuse	T 2 A / 250 V
External fuse	Circuit breakers 10 A, 16 A, B or C characteristic an external DC fuse is required for the DC input voltage

Description	Item No.	Pack. Unit
Switched-mode power supply, 12 VDC / 2A	787-1001	1
<b>Technical Data</b>		
<b>Environmental requirements:</b>		
Ambient operating temperature	-25 °C ... +60 °C (UL: -25 °C ... +55 °C); Device start at -40 °C (type-tested)	
Storage temperature	-25 °C ... +80 °C	
Rel. humidity	5 % ... 96 % (no condensation permissible)	
Derating	-3 % / K (> 45 °C)	
Degree of pollution	2 (acc. to EN 50178)	
Climatic category	3K3 (acc. to EN 60721)	
<b>Safety and protection:</b>		
Enclosure	Plastic, light gray, Flammability class V0 acc. to UL94	
Test voltage pri. - sec.	4.2 kV DC	
Protection class	II	
Degree of protection	IP20 (acc. to EN 60529)	
Overvoltage category	II	
Overvoltage protection	< 30 VDC (in the event of a fault)	
Short circuit protection	Yes	
No-load proof	Yes	
Feedback voltage	Max. 20 VDC	
Parallel operation	Yes	
Series connection	Yes	
MTBF	500000 h	
<b>Connection and type of mounting:</b>		
Wire connection	Input/Output: WAGO 740 Series	
Cross sections	Input/Output: 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG	
Strip lengths	Input/Output: 6 ... 7 mm / 0.24 ... 0.28 in.	
Type of mounting	DIN-rail mount (EN 60715)	
<b>Dimensions and weight:</b>		
Dimensions (mm) W x H x L	54 x 89 x 59 Length: 55 mm, from upper-edge of DIN 35 rail	
Weight	180 g	
<b>Standards and approvals:</b>		
Standards/specifications	EN 60950, EN 61204-3, UL 60950, UL 508, GL	

# 5 Switched-Mode Power Supply, 1-Phase

EPSITRON® COMPACT Power



- Primary switch mode power supply unit
- Natural convection cooling when horizontally mounted
- Stage profile, ideal for distribution boards or distribution boxes
- Parallel operation, series connection possible
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950

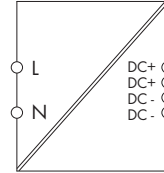
Description	Item No.	Pack. Unit
Switched-mode power supply, 12 VDC / 4A	787-1011	1

Technical Data	
<b>Input:</b>	
Nominal input voltage $V_{i\text{nom}}$	100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	< 100 VAC: $I_a$ max. 3.5 A
Frequency	44 ... 66 Hz; 0 Hz
Input current $I_i$	0.9 A at 110 VAC / 0.5 A at 230 VAC
Discharge current	1 mA typ.
Inrush current	< 30 A, NTC
Mains failure hold-up time	> 10 ms at 110 VAC / > 80 ms at 230 VAC
<b>Output:</b>	
Nominal output voltage $V_{o\text{nom}}$	12 VDC (SELV)
Output voltage range	10.5 ... 15.5 VDC adjustable
Output current $I_o$	4 A at 12 VDC
	max. 2.4 A in any mounting position
Factory preset	12 VDC
Adjustment accuracy	2%
Residual ripple	< 100 mV (peak-to-peak) at 20 MHz
Current limitation	$1.1 \times I_o$ typ.
Overload behavior	Constant current
Operational indication	LED green ( $V_o$ )
<b>Efficiency / power losses:</b>	
Efficiency	85 % typ.
Power loss $P_V$	2.2 W (230 VAC/no load), 8.5 W (230 VAC/rated load)
Max. power loss $P_V$	9 W typ. (100 VAC / 12 VDC, 4 A)
<b>Fuse protection:</b>	
Internal fuse	T 2 A / 250 V
External fuse	Circuit breakers 10 A, 16 A, B or C characteristic
	an external DC fuse is required for the DC input voltage

Technical Data	
<b>Environmental requirements:</b>	
Ambient operating temperature	-25 °C ... +60 °C (UL: -25 °C ... +55 °C); Device start at -40 °C (type-tested)
Storage temperature	-25 °C ... +80 °C
Rel. humidity	5 % ... 96 % (no condensation permissible)
Derating	-3 % / K (> 45 °C)
Degree of pollution	2 (acc. to EN 50178)
Climatic category	3K3 (acc. to EN 60721)
<b>Safety and protection:</b>	
Enclosure	Plastic, light gray, Flammability class V0 acc. to UL94
Test voltage pri. - sec.	4.2 kV DC
Protection class	II
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage category	II
Overvoltage protection	< 30 VDC (in the event of a fault)
Short circuit protection	Yes
No-load proof	Yes
Feedback voltage	Max. 20 VDC
Parallel operation	Yes
Series connection	Yes
MTBF	500000 h
<b>Connection and type of mounting:</b>	
Wire connection	Input/Output: WAGO 740 Series
Cross sections	Input/Output: 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Strip lengths	Input/Output: 6 ... 7 mm / 0.24 ... 0.28 in.
Type of mounting	DIN-rail mount (EN 60715)
<b>Dimensions and weight:</b>	
Dimensions (mm) W x H x L	72 x 89 x 59
Weight	Length: 55 mm, from upper-edge of DIN 35 rail 255 g
<b>Standards and approvals:</b>	
Standards/specifications	EN 60950, EN 61204-3, UL 60950, UL 508, GL

## Switched-Mode Power Supply, 1-Phase

EPSITRON® COMPACT Power



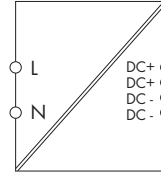
- Primary switch mode power supply unit
- Natural convection cooling when horizontally mounted
- Stage profile, ideal for distribution boards or distribution boxes
- Parallel operation, series connection possible
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950

Technical Data	
<b>Input:</b>	
Nominal input voltage $V_{i, nom}$	100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	Max. 6 A (< 90 VAC) / 5.5 A (< 90 VAC)
Frequency	44 ... 66 Hz; 0 Hz
Input current $I_i$	1.6 A at 110 VAC / 0.9 A at 230 VAC
Discharge current	1 mA typ.
Inrush current	< 30 A, NTC
Mains failure hold-up time	> 15 ms at 110 VAC / > 100 ms at 230 VAC
<b>Output:</b>	
Nominal output voltage $V_{o, nom}$	12 VDC (SELV)
Output voltage range	10.5 ... 15.5 VDC adjustable
Output current $I_o$	6.5 A at 12 VDC max. 3.9 A (12 VDC) in any mounting position
Factory preset	12 VDC
Adjustment accuracy	2%
Residual ripple	< 100 mV (peak-to-peak) at 20 MHz
Current limitation	$1.1 \times I_o$ typ.
Overload behavior	Constant current
Operational indication	LED green ( $V_o$ )
<b>Efficiency / power losses:</b>	
Efficiency	87 % typ.
Power loss $P_V$	< 1 W (no load) / 15 W (rated load)
Max. power loss $P_V$	15 W typ. (100 VAC / 12 VDC, 6.5 A)
<b>Fuse protection:</b>	
Internal fuse	T 4 A / 250 V
External fuse	Circuit breakers 10 A, 16 A, B or C characteristic; an external DC fuse is required for the DC input voltage

Description	Item No.	Pack. Unit
Switched-mode power supply, 12 VDC / 6.5A	787-1021	1
Technical Data		
<b>Environmental requirements:</b>		
Ambient operating temperature	-25 °C ... +60 °C (UL: -25 °C ... +55 °C); Device start at -40 °C (type-tested)	
Storage temperature	-25 °C ... +85 °C	
Rel. humidity	5 % ... 96 % (no condensation permissible)	
Derating	-3 % / K (> 45 °C)	
Degree of pollution	2 (acc. to EN 50178)	
Climatic category	3K3 (acc. to EN 60721)	
<b>Safety and protection:</b>		
Enclosure	Plastic, light gray, Flammability class V0 acc. to UL94	
Test voltage pri. - sec.	4.2 kV DC	
Protection class	II	
Degree of protection	IP20 (acc. to EN 60529)	
Overvoltage category	II	
Overvoltage protection	< 30 VDC (in the event of a fault)	
Short circuit protection	Yes	
No-load proof	Yes	
Feedback voltage	Max. 20 VDC	
Parallel operation	Yes	
Series connection	Yes	
MTBF	500000 h	
<b>Connection and type of mounting:</b>		
Wire connection	Input/Output: WAGO 740 Series	
Cross sections	Input/Output: 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG	
Strip lengths	Input/Output: 6 ... 7 mm / 0.24 ... 0.28 in.	
Type of mounting	DIN-rail mount (EN 60715)	
<b>Dimensions and weight:</b>		
Dimensions (mm) W x H x L	90 x 89 x 59 Length: 55 mm, from upper-edge of DIN 35 rail	
Weight	300 g	
<b>Standards and approvals:</b>		
Standards/specifications	EN 60950, EN 61204-3, UL 60950, UL 508, GL	

# 5 Switched-Mode Power Supply, 1-Phase

EPSITRON® COMPACT Power



- Primary switch mode power supply unit
- Natural convection cooling when horizontally mounted
- Stage profile, ideal for distribution boards or distribution boxes
- Parallel operation, series connection possible
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950

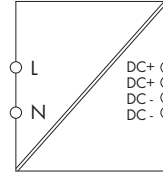
Description	Item No.	Pack. Unit
Switched-mode power supply, 24 VDC / 1.3A	787-1002	1

Technical Data	
<b>Input:</b>	
Nominal input voltage $V_{i\text{nom}}$	100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	< 100 VAC: $I_a$ max. 1 A
Frequency	44 ... 66 Hz; 0Hz
Input current $I_i$	0.7 A at 110 VAC / 0.5 A at 230 VAC
Discharge current	1 mA typ.
Inrush current	< 30 A, NTC
Mains failure hold-up time	> 10 ms at 110 VAC / > 80 ms at 230 VAC
<b>Output:</b>	
Nominal output voltage $V_{o\text{nom}}$	24 VDC (SELV)
Output voltage range	22.8 ... 26.4 VDC adjustable
Output current $I_o$	1.3 A at 24 VDC max. 0.9 A in any mounting position
Factory preset	24 VDC
Adjustment accuracy	2%
Residual ripple	< 100 mV (peak-to-peak) at 20 MHz
Current limitation	$1.1 \times I_o$ typ.
Overload behavior	Constant current
Operational indication	LED green ( $V_o$ )
<b>Efficiency / power losses:</b>	
Efficiency	82 % typ.
Power loss $P_V$	2.6 W (230 VAC/no load), 7.0 W (230 VAC/rated load)
Max. power loss $P_V$	7.3 W typ. (100 VAC / 24 VDC, 1.3 A)
<b>Fuse protection:</b>	
Internal fuse	T 2 A / 250 V
External fuse	Circuit breakers 10 A, 16 A, B or C characteristic; an external DC fuse is required for the DC input voltage

Technical Data	
<b>Environmental requirements:</b>	
Ambient operating temperature	-25 °C ... +60 °C (UL: -25 °C ... +55 °C); Device start at -40 °C (type-tested)
Storage temperature	-25 °C ... +80 °C
Rel. humidity	5 % ... 96 % (no condensation permissible)
Derating	-3 % / K (> 45 °C)
Degree of pollution	2 (acc. to EN 50178)
Climatic category	3K3 (acc. to EN 60721)
<b>Safety and protection:</b>	
Enclosure	Plastic, light gray, Flammability class V0 acc. to UL94
Test voltage pri. - sec.	4.2 kV DC
Protection class	II
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage category	II
Overvoltage protection	< 40 VDC (in the event of a fault)
Short circuit protection	Yes
No-load proof	Yes
Feedback voltage	Max. 30 VDC
Parallel operation	Yes
Series connection	Yes
MTBF	500000 h
<b>Connection and type of mounting:</b>	
Wire connection	Input/Output: WAGO 740 Series
Cross sections	Input/Output: 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Strip lengths	Input/Output: 6 ... 7 mm / 0.24 ... 0.28 in.
Type of mounting	DIN-rail mount (EN 60715)
<b>Dimensions and weight:</b>	
Dimensions (mm) W x H x L	54 x 89 x 59 Length: 55 mm, from upper-edge of DIN 35 rail
Weight	180 g
<b>Standards and approvals:</b>	
Standards/specifications	EN 60950, EN 61204-3, UL 60950, UL 508, GL

## Switched-Mode Power Supply, 1-Phase

EPSITRON® COMPACT Power



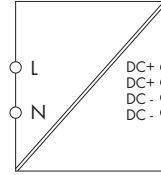
- Primary switch mode power supply unit
- Natural convection cooling when horizontally mounted
- Stage profile, ideal for distribution boards or distribution boxes
- Parallel operation, series connection possible
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950

Technical Data	
<b>Input:</b>	
Nominal input voltage $V_{i, \text{nom}}$	100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	< 100 VAC: $I_a$ max. 2.0 A < 90 VAC: $I_a$ max. 1.8 A
Frequency	44 ... 66 Hz; 0 Hz
Input current $I_i$	1.4 A at 110 VAC / 0.6 A at 230 VAC
Discharge current	1 mA typ.
Inrush current	< 30 A, NTC
Mains failure hold-up time	> 10 ms at 110 VAC / > 80 ms at 230 VAC
<b>Output:</b>	
Nominal output voltage $V_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	22.8 ... 26.4 VDC adjustable
Output current $I_o$	2.5 A at 24 VDC max. 1.6 A in any mounting position
Factory preset	24 VDC
Adjustment accuracy	2%
Residual ripple	< 100 mV (peak-to-peak) at 20 MHz
Current limitation	1.1 x $I_o$ typ.
Overload behavior	Constant current
Operational indication	LED green ( $V_o$ )
<b>Efficiency / power losses:</b>	
Efficiency	88 % typ.
Power loss $P_v$	2.2 W (230 VAC/no load), 8.5 W (230 VAC/rated load)
Max. power loss $P_v$	10.5 W typ. (100 VAC / 24 VDC, 2.5 A)
<b>Fuse protection:</b>	
Internal fuse	T 2 A / 250 V
External fuse	Circuit breakers 10 A, 16 A, B or C characteristic; an external DC fuse is required for the DC input voltage

Description	Item No.	Pack. Unit
Switched-mode power supply, 24 VDC / 2.5A	787-1012	1
Technical Data		
<b>Environmental requirements:</b>		
Ambient operating temperature	-25 °C ... +60 °C (UL: -25 °C ... +55 °C); Device start at -40 °C (type-tested)	
Storage temperature	-25 °C ... +80 °C	
Rel. humidity	5 % ... 96 % (no condensation permissible)	
Derating	-3 % / K (> 45 °C)	
Degree of pollution	2 (acc. to EN 50178)	
Climatic category	3K3 (acc. to EN 60721)	
<b>Safety and protection:</b>		
Enclosure	Plastic, light gray, Flammability class V0 acc. to UL94	
Test voltage pri. - sec.	4.2 kV DC	
Protection class	II	
Degree of protection	IP20 (acc. to EN 60529)	
Overvoltage category	II	
Overvoltage protection	< 40 VDC (in the event of a fault)	
Short circuit protection	Yes	
No-load proof	Yes	
Feedback voltage	Max. 30 VDC	
Parallel operation	Yes	
Series connection	Yes	
MTBF	> 500000 h	
<b>Connection and type of mounting:</b>		
Wire connection	Input/Output: WAGO 740 Series	
Cross sections	Input/Output: 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG	
Strip lengths	Input/Output: 6 ... 7 mm / 0.24 ... 0.28 in.	
Type of mounting	DIN-rail mount (EN 60715)	
<b>Dimensions and weight:</b>		
Dimensions (mm) W x H x L	72 x 89 x 59 Length: 55 mm, from upper-edge of DIN 35 rail	
Weight	255 g	
<b>Standards and approvals:</b>		
Standards/specifications	EN 60950, EN 61204-3, UL 60950, UL 508, GL	

# 5 Switched-Mode Power Supply, 1-Phase

EPSITRON® COMPACT Power



- Primary switch mode power supply unit
- Natural convection cooling when horizontally mounted
- Stage profile, ideal for distribution boards or distribution boxes
- Parallel operation, series connection possible
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950

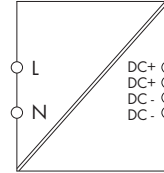
Description	Item No.	Pack. Unit
Switched-mode power supply, 24 VDC / 4A	787-1022	1

Technical Data	
<b>Input:</b>	
Nominal input voltage $V_{i\text{nom}}$	100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	On request
Frequency	44 ... 66 Hz; 0 Hz
Input current $I_i$	1.6 A at 110 VAC / 0.9 A at 230 VAC
Discharge current	1 mA typ.
Inrush current	< 30 A, NTC
Mains failure hold-up time	> 15 ms at 110 VAC / > 100 ms at 230 VAC
<b>Output:</b>	
Nominal output voltage $V_{o\text{nom}}$	24 VDC (SELV)
Output voltage range	22.8 ... 26.4 VDC adjustable
Output current $I_o$	4 A at 24 VDC
	max. 2.4 A in any mounting position
Factory preset	24 VDC
Adjustment accuracy	2 %
Residual ripple	< 100 mV (peak-to-peak) at 20 MHz
Current limitation	1.1 x $I_o$ typ.
Overload behavior	Constant current
Operational indication	LED green ( $V_o$ )
<b>Efficiency / power losses:</b>	
Efficiency	88 % typ.
Power loss $P_V$	0.8 W (230 VAC/no load), 13.1 W (230 VAC/rated load)
Max. power loss $P_V$	14.8 W typ. (264 VAC / 24 VDC, 4 A)
<b>Fuse protection:</b>	
Internal fuse	T 4 A / 250 V
External fuse	Circuit breakers 10 A, 16 A, B or C characteristic; an external DC fuse is required for the DC input voltage

Technical Data	
<b>Environmental requirements:</b>	
Ambient operating temperature	-25 °C ... +60 °C (UL: -25 °C ... +55 °C); Device start at -40 °C (type-tested)
Storage temperature	-25 °C ... +80 °C
Rel. humidity	5 % ... 96 % (no condensation permissible)
Derating	-3 % / K (> 45 °C)
Degree of pollution	2 (acc. to EN 50178)
Climatic category	3K3 (acc. to EN 60721)
<b>Safety and protection:</b>	
Enclosure	Plastic, light gray, Flammability class V0 acc. to UL94
Test voltage pri. - sec.	4.2 kV DC
Protection class	II
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage category	II
Overvoltage protection	< 40 VDC (in the event of a fault)
Short circuit protection	Yes
No-load proof	Yes
Feedback voltage	Max. 30 VDC
Parallel operation	Yes
Series connection	Yes
MTBF	500000 h
<b>Connection and type of mounting:</b>	
Wire connection	Input/Output: WAGO 740 Series
Cross sections	Input/Output: 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Strip lengths	Input/Output: 6 ... 7 mm / 0.24 ... 0.28 in.
Type of mounting	DIN-rail mount (EN 60715)
<b>Dimensions and weight:</b>	
Dimensions (mm) W x H x L	90 x 89 x 59 Length: 55 mm, from upper-edge of DIN 35 rail
Weight	310 g
<b>Standards and approvals:</b>	
Standards/specifications	EN 60950, EN 61204-3, UL 60950, UL 508, GL

## Switched-Mode Power Supply, 1-Phase

EPSITRON® COMPACT Power



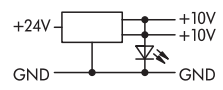
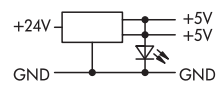
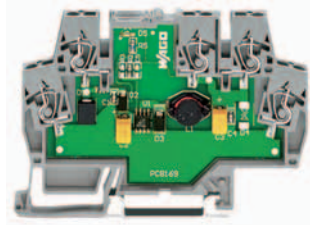
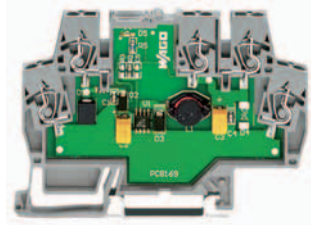
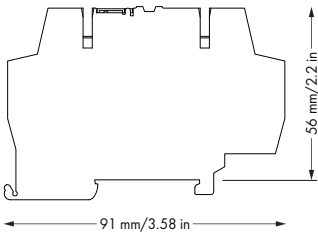
- Primary switch mode power supply unit
- Natural convection cooling when horizontally mounted
- Stage profile, ideal for distribution boards or distribution boxes
- At reduced output current, any type of mounting positions are possible (e.g., horizontal, overhead mounting).
- Electrically isolated output voltage (SELV) acc. to EN / UL 60950-1

Technical Data	
<b>Input:</b>	
Nominal input voltage $V_{i, \text{nom}}$	100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	Max. 2 A (< 100 VAC)
Frequency	44 Hz ... 66 Hz; 0 Hz
Input current $I_i$	0.9 A at 110 VAC / 0.5 A at 230 VAC
Discharge current	1 mA typ.
Inrush current	< 30 A, NTC
Mains failure hold-up time	> 10 ms at 110 VAC / > 130 ms at 230 VAC
<b>Output:</b>	
Nominal output voltage $V_{o, \text{nom}}$	18 VDC
Output voltage range	15 ... 28 VDC adjustable
Output current $I_o$	2.4 A at 18 VDC 2.0 A at 24 VDC in horizontal mounting position
Factory preset	18 VDC
Adjustment accuracy	2 %
Residual ripple	< 100 mV (peak-to-peak) at 20 MHz
Current limitation	$1.1 \times I_o$ typ.
Overload behavior	Constant current
Operational indication	LED green ( $V_o$ )
<b>Efficiency/Power losses:</b>	
Efficiency	84 % typ.
Power loss $P_V$	2.6 W (230 VAC / no load) 8.1 W (230 VAC / nominal load)
Max. power loss $P_V$	8.2 W (100 VAC / 18 VDC, 2.4 A)
<b>Fuse protection:</b>	
Internal fuse	T 2 A / 250 V
External fuse	Circuit breakers 10 A, 16 A, B or C characteristic; an external DC fuse is required for the DC input voltage

Description	Item No.	Pack. Unit
Switched-mode power supply, 15 ... 28 VDC / 2 A	787-1017	1
Technical Data		
<b>Environmental requirements:</b>		
Ambient operating temperature	-25 °C ... +60 °C (UL: -25 °C ... +55 °C); Device start at -40 °C (type-tested)	
Storage temperature	-25 °C ... +80 °C	
Rel. humidity	5 % ... 96 % (no condensation permissible)	
Derating	-3 % / K (> 45 °C)	
Degree of pollution	2 (acc. to EN 50178)	
Climatic category	3K3 (acc. to EN 60721)	
<b>Safety and protection:</b>		
Enclosure	Plastic, light gray, Flammability class V0 acc. to UL94	
Test voltage pri. - sec.	4.2 kV DC	
Protection class	II	
Degree of protection	IP20 (acc. to EN 60529)	
Overvoltage category	II	
Overvoltage protection	< 40 VDC (in the event of a fault)	
Short circuit protection	Yes	
No-load proof	Yes	
Feedback voltage	Max. 25 VDC	
Parallel operation	Yes	
Series connection	Yes	
MTBF	500000 h	
<b>Connection and type of mounting:</b>		
Wire connection	Input/Output: WAGO 740 Series	
Cross sections	Input/Output: 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG	
Strip lengths	Input/Output: 6 ... 7 mm / 0.24 ... 0.28 in.	
Type of mounting	DIN-rail mount (EN 60715)	
<b>Dimensions and weight:</b>		
Dimensions (mm) W x H x L	72 x 89 x 59 Length: 55 mm, from upper-edge of DIN 35 rail	
Weight	264 g	
<b>Standards and approvals:</b>		
Standards/specifications	EN 60950, EN 61204-3, UL 60950-1, UL 508, GL* (*pending)	



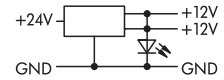
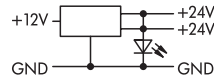
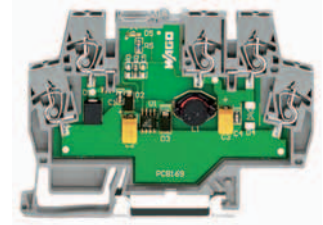
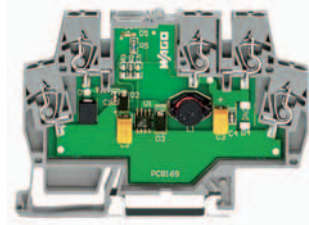
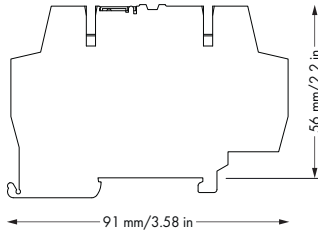
	DC/DC converter 24 V / 5 V, 0.5 ADCADC	DC/DC converter 24 V / 10 V, 0.5 ADC
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Description	V <sub>N</sub> / V <sub>O</sub>	Item No.	Pack. Unit	V <sub>N</sub> / V <sub>O</sub>	Item No.	Pack. Unit
DC/DC converter, for DIN 35 rail	24 VDC / 5 VDC ± 2 %	859-801	1	24 VDC / 10 VDC ± 2 %	859-802	1

Technical Data						
Nominal input voltage (V <sub>N</sub> )	24 VDC			24 VDC		
Input voltage range	10 ... 30 VDC			15 ... 30 VDC		
Output voltage	5 VDC ± 2 %			10 VDC ± 2 %		
Output current (max.)	500 mA (individual terminal block, 10 mm distance); 400 mA (terminal strip)			500 mA		
Line regulation, max. (full load, over input voltage range)	2 %			0.5 %		
Max. load regulation (no load to full load, nominal input)	0.5 %			0.7 %		
Efficiency at full load (24 VDC in)	70 %			85 %		
Output noise peak-to-peak max. (20 MHz bandwidth)	150 mV			20 mV		
Switching frequency	200 kHz (nominal)			200 kHz (nominal)		
Isolation	Non-isolated			Non-isolated		
Reverse voltage protection, input	Yes			Yes		
Minimum load requirement	No			No		
Max. transient recovery time (recovery time for load change from 25 % to 75% of full load)	40 μs			500 μs		
Max. startup time (24 VDC in, full load)	3 ms			3 ms		
Max. hold time (nominal input voltage, full load)	1 ms			500 μs		
Input fuse	TVS diode			TVS diode		
Output short circuit protection	Temporary (short-circuit of the output for 1 minute without damage to the device)			Temporary (short-circuit of the output for 1 minute without damage to the device)		
Temperature coefficient	70 ppm/°C			100 ppm/°C		
Ambient operating temperature	0 °C ... +40 °C			-25 °C ... +55 °C		
Dimensions (mm) W x H x L	6 x 56 x 91			6 x 56 x 91		
Wire connection	Height from upper-edge of DIN 35 rail CAGE CLAMP®			Height from upper-edge of DIN 35 rail CAGE CLAMP®		
Cross sections	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG			0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG		
Stripped lengths	5 ... 6 mm / 0.2 ... 0.24 in.			5 ... 6 mm / 0.2 ... 0.24 in.		

	<b>DC/DC converter</b> <b>12 V / 24 V, 250 mADC</b>	<b>DC/DC converter</b> <b>24 V / 12 V, 0.5 ADC</b>
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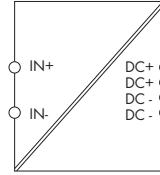
Description	V <sub>N</sub> / V <sub>O</sub>	Item No.	Pack. Unit	V <sub>N</sub> / V <sub>O</sub>	Item No.	Pack. Unit
DC/DC converter, for DIN 35 rail	12 VDC / 24 VDC ± 1 %	859-804	1	24 VDC / 12 VDC ± 2 %	859-805	1

**Technical Data**

	12 VDC / 24 VDC ± 1 %	24 VDC / 12 VDC ± 2 %
Nominal input voltage (V <sub>N</sub> )	12 VDC	24 VDC
Input voltage range	8 ... 16 VDC	15 ... 30 VDC
Output voltage	24 VDC ± 1 %	12 VDC ± 2 %
Output current (max.)	250 mA	500 mA
Line regulation, max. (full load, over input voltage range)	0.5 %	0.5 %
Max. load regulation (no load to full load, nominal input)	0.5 %	0.7 %
Efficiency at full load (24 VDC in)	83 %	85 %
Output noise peak-to-peak max. (20 MHz bandwidth)	40 mV	20 mV
Switching frequency	1.2 MHz (nominal)	200 kHz (nominal)
Isolation	Non-isolated	Non-isolated
Reverse voltage protection, input	Yes	Yes
Minimum load requirement	No	No
Max. transient recovery time (recovery time for load change from 25 % to 75% of full load)	50 µs	500 µs
Max. startup time (24 VDC in, full load)	8 ms	3 ms
Max. hold time (nominal input voltage, full load)	500 µs	500 µs
Input fuse	TVS diode	TVS diode
Output short circuit protection	Fuse	Temporary (short-circuit of the output for 1 minute without damage to the device)
Temperature coefficient	100 ppm/°C	100 ppm/°C
Ambient operating temperature	-25 °C ... +55 °C	-25 °C ... +55 °C
Dimensions (mm) W x H x L	6 x 56 x 91	6 x 56 x 91
Wire connection	Height from upper-edge of DIN 35 rail CAGE CLAMP®	Height from upper-edge of DIN 35 rail CAGE CLAMP®
Cross sections	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Stripped lengths	5 ... 6 mm / 0.2 ... 0.24 in.	5 ... 6 mm / 0.2 ... 0.24 in.

## DC/DC Converter

EPSITRON® COMPACT Power



- Primary switch mode power supply unit
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards or distribution boxes
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1

Description	Item No.	Pack. Unit
DC/DC Converter, 110 VDC / 24 VDC; 2.0 A	787-1014	1

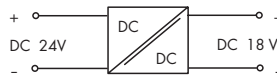
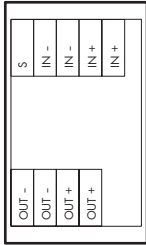
Technical Data	
<b>Input:</b>	
Nominal input voltage $V_{i, nom}$	110 VDC
Input voltage range	77 V ... 140 VDC
Frequency	0 Hz
Input current $I_i$	0.77 A at 77 VDC / 0.42 A at 140 VDC
Inrush current	< 30 A, NTC
Mains failure hold-up time	> 8 ms at 77 VDC / > 25 ms at 140 VDC
<b>Output:</b>	
Nominal output voltage $V_{o, nom}$	24 VDC (SELV)
Output current $I_o$	2.0 A at 24 VDC max. 1.6 A in any mounting position
Factory preset	24 VDC
Adjustment accuracy	10 %
Residual ripple	< 100 mV (peak-to-peak) at 20 MHz
Current limitation	1.1 x $I_o$ typ.
Overload behavior	Constant current
Operational indication	LED green ( $V_o$ )
<b>Efficiency/Power losses:</b>	
Efficiency	85 % typ.
Power loss $P_V$	1.9 W (110 VDC/no load), 9.9 W (110 VDC/nominal load)
Max. power loss $P_V$	9.9 W typ. (77 VDC / 24 VDC, 2 A)
<b>Fuse protection:</b>	
Internal fuse	T 4 A / 125 VDC
External fuse	6 A, 10 A power circuit breakers, B, C characteristics
<b>Environmental requirements:</b>	
Ambient operating temperature	-40 °C ... +70 °C
Storage temperature	-40 °C ... +85 °C
Rel. humidity	5 % ... 96 % (varnished PCB)
Derating	-1.5 %/K (> 55 °C)
Degree of pollution	2 (acc. to EN 50178)
Climatic category	3K3 (acc. to EN 60721)
Shock and vibration	Category 1, class B (acc. to EN 61373:2010)

Technical Data	
<b>Safety and protection:</b>	
Enclosure	Plastic, light gray, Flammability class V0 acc. to UL94
Test voltage pri. - sec.	4.2 kV DC
Protection class	II
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage category	II
Overvoltage protection	Varistor (input side); internal protective circuit, < 40 VDC (output side in case of an error)
Short circuit protection	Yes
No-load proof	Yes
Feedback voltage	Max. 35 VDC
Parallel operation	Yes
Series connection	Yes
MTBF	> 500000 h
Fire load	7 MJ
<b>Connection and type of mounting:</b>	
Wire connection	Input/Output: WAGO 740 Series
Cross sections	Input/Output: 0.08 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Strip lengths	Input/Output: 6 ... 7 mm / 0.24 ... 0.28 in.
Type of mounting	DIN-rail mount (EN 60715)
<b>Dimensions and weight:</b>	
Dimensions (mm) W x H x L	72 x 89 x 59 Length: 55 mm, from upper-edge of DIN-rail
Weight	250 g
<b>Standards and approvals:</b>	
Standards/specifications	EN 60950, EN 61204-3, EN 50121-3-2, EN 50125*, UL 60950*, UL 508*, GL* (*pending)

# 5 Rail-Mounted Modules - DC/DC Converter

322

	<b>24 V / 18 V; 0.4 A DC</b>	
<b>Mounting carrier for DIN 35 rail</b>		



Description	Item No.	Pack. Unit
DC/DC converter	288-895	5 (1)

Technical Data		
Input voltage	24 V DC	
Input voltage range	18 V ... 36 V DC	
Output voltage	18 V DC (± 1 %)	
Nominal output current	400 mA	
Efficiency	82 %	
Test voltage input/output	DC 1500 V	
Short circuit protection	Permanent	
Storage temperature	-40 °C ... +80 °C	
Ambient operating temperature	-25 °C ... +70 °C	
Weight	75.9 g	
Dimensions (mm) W x H x L	50 x 25 x 85	
Wire connection	Height from upper-edge of DIN 35 rail CAGE CLAMP® (256 Series)	
Cross sections	0.08 ... 2.5 mm² / 28 ... 12 AWG (THHN, THWN)	
Stripped lengths	5 ... 6 mm / 0.2 ... 0.24 in.	
EMC I-Immunity to interference	Acc. to EN 50082-2 (1996) * * Only in conjunction with DALI/DSI Master Module 750-641	
EMC I-Emission of interference	Acc. to EN 50081-1 (1993) * * Only in conjunction with DALI/DSI Master Module 750-641	
<b>Accessories</b>		
WMB Multi marking system for mounting carrier	see page 506	
Marker strips for mounting carrier	white 709-198 / translucent 709-196	