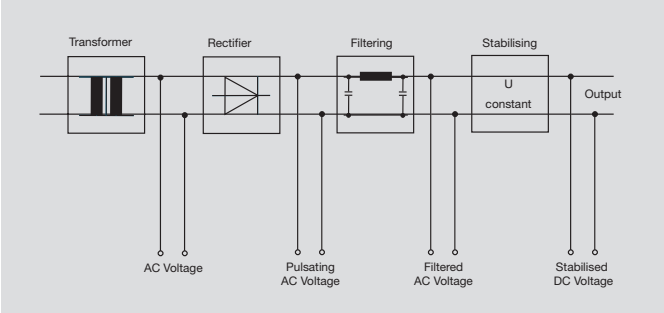
Power supplies

Power supplies

Introduction

Transformers and power supplies are important links in the energy supply chain of automation systems. They form the heart of each and every electrical cabinet. 24 V has become established as a control voltage throughout the world, supplying power to all manner of electrical subassemblies. Other voltages are still also being used to power user applications.
Careful consideration must be given to choosing the correct power supply as this is decisive for the connected components to function reliably.



Weidmüller power supplies have proven themselves over many years in the supply of power to electrical subassemblies. They carry the CE mark and meet the requirements contained in the standards DIN EN 50081-1 and DIN EN 50082-2 (as of 1st April 2002, EN 61000-6-2).
As a result, they are suitable for use in industry, small businesses and residential areas. Their performance capabilities have also been proven in harsh environments.

Weidmüller can provide industry-standard power supplies and supplementary components:

- Unregulated transformer power supplies
- Primary switch-mode power supplies
- DC/DC converters
- Diode modules
- UPS control modules
- Electronic fusing

Power supply units always consist of a transformer, which converts an AC voltage into a different AC voltage to meet application requirements.
A rectifier converts the AC voltage on the secondary side into a pulsating DC voltage, which is smoothed by means of a filter circuit.
The output voltage of stabilised power supply units is kept constant by means of a stabilising unit.

Input voltage in accordance with DIN IEC 38

In 2003 the tolerance for the valid 230 V AC / 400 V AC mains voltage was extended to ±10 %.
Weidmüller's power supplies fulfilled the DIN IEC 38 specifications even before they came into force.

In use all over the world

Power supplies from Weidmüller have internationally recognised approvals endorsing their suitability for use in widely varying applications all over the world. They are used in mechanical engineering, in industrial automation, in systems engineering and in the power supply industry, in production lines and in building technology.

Temperature range

The power loss constantly produced by the power supplies is converted into heat. This heat is dissipated via a heat sink and the surface of the housing. Depending on the module, Weidmüller power supplies are suitable for use in ambient temperatures up to 60 °C. The device to be installed is selected taking the prevailing ambient temperatures into consideration.

Compact designs

Due to their small footprint, Weidmüller's power supplies are also suitable for use in confined spaces. That saves space in electrical cabinets and reduces costs!

Standards and approvals

Standard/Approval	Description
DIN EN 50178 DIN VDE 0160	Electronic equipment for use in power installations
DIN EN 61558	Safety of power transformers, power supply units and similar
DIN EN 60950 IEC 950 DIN VDE 0805	Safety of information technology equipment
DIN EN 60742 DIN VDE 0550 part 1	Specifications for small transformers
DIN VDE 0550 part 3	Particular requirements for isolating and control transformers
DIN VDE 0551	Specification for safety isolating transformers
DIN VDE 0106 part 101	Basic specifications for safe isolation in electrical equipment
DIN VDE 0113 part 1	Electrical equipment of machines
DIN IEC 68	Basic environmental test procedures
IEC 38	Supplementary notes relating to status of international standards and European harmonisation of mains voltages 230/400 V
DIN EN 61131-2	Programmable logic controllers – equipment requirements and tests
UL	Safety approval for the United States market
CSA	Safety approval for the Canadian market
GL	Test specifications for electrical/electronic devices and systems for use in marine technology
73/23/EC	Electrical equipment for use within specific voltage limits (Low Voltage Directive)
89/336/EC	Electromagnetic compatibility (EMC Directive)
98/37/EC	Safety of machines (directive covering mechanical equipment)

Primary switch-mode power supplies connectPower

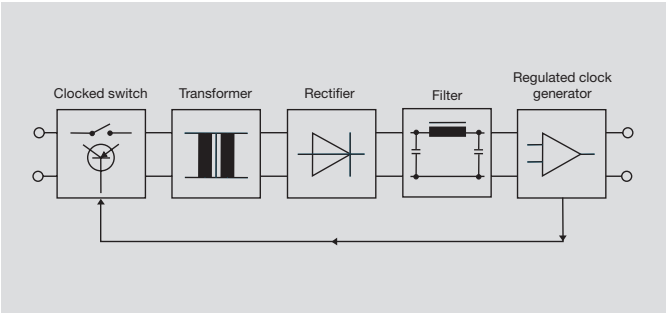
Thanks to the wide range of inputs (85 V AC to 265 V AC), the connectPower range of switch-mode power supplies is suitable for a wide variety of applications. The devices are interference-suppressed (in accordance with DIN EN 55022 Class B) and fulfil safety extra-low voltage (SELV) requirements.

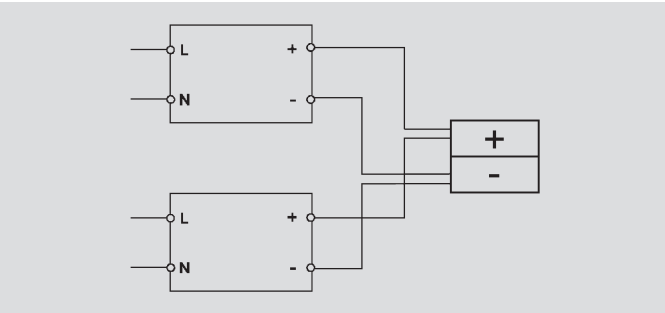
Equipped with an electronic short-circuit feedback control on the output side, the primary switch-mode power supplies are rated between 12 W and 300 W. The power supplies are suitable for both industrial and building automation.

Power distribution and redundancy

To increase performance, or for redundancy purposes, switch-mode power supplies from Weidmüller can be connected in parallel. Two techniques are available: an active and a passive power distribution. Active power distribution requires more complex switching. The advantage is the exact power distribution and uniform device loading.

Requiring less sophisticated switching, passive power distribution results in lower costs, but also in a load-dependent characteristic curve and less exact power distribution. Before connecting in parallel, the output voltages of the devices must be adjusted exactly (± 100 – 200 mV).





Method of operation

Primary switch-mode power supplies are distinguished by a high degree of efficiency and also by their compact dimensions and moderate generation of heat. The mains voltage is rectified directly. The rectified voltage is then chopped with a higher frequency than that of the mains frequency. A transformer – which can be quite small due to the high switching frequency – converts the voltage with the switching frequency to the required value.

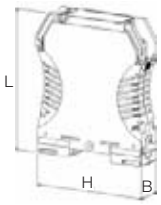
The voltage is now rectified and smoothed by a filter. This regulator control itself is carried out by means of pulse-width modulation. The on and off times of the chopper transformers are regulated to ensure that the output voltage remains stable.

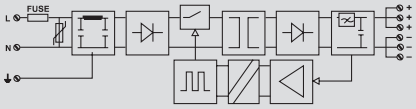
Power factor correction (PFC)

Power factor correction ensures that the mains current drawn is sinusoidal. One positive side-effect is the regulation of the power factor to approx. 1.

connectPower single phase WAVEPOWER

CP SNT 12 W 24 V 0.5 A





Technical data

Input		
Input voltage		85…265 V AC, 120…300 V DC
Input current		260 mA @ 115 V AC; 180 mA @ 230 V AC
Input frequency		50/ 60 Hz
Input fuse		2 A slow-blow fuse (internal)
Overvoltage protection		Varistor
Output		
Output voltage		24 V DC
Output current		0.5 A
max. output power		12 W
max. residual ripple		0.1 %
Overload protection		Overvoltage / thermal cut-out
Overvoltage protection		Varistor
Mains failure bridge-over time		30 ms @ 115 V AC / 80 ms @ 230 V AC
Control at 10…100% load		0.6 %
Parallel connection option		no
Insulation coordination		
Electrical isolation, output-earth		500 V RMS
Electrical isolation, input-earth		1.5 kV RMS
Electrical isolation, input-output		3 kV RMS
Electrical isolation, I/O rail		4 kV RMS
General data		
Operating temperature		-20 °C…+50 °C
Storage temperature		-40 °C…+85 °C
Degree of efficiency at max. load		80 %
Status indication		green LED
Standards		EN 50178, EN 60950, IEC950
EMC standards		IEC 61000-6 /-2, -3
Power factor correction		no
Approvals		CSA;UL;CE;
		Screw connection
Clamping range (rating- / min. / max.)	mm^2	2.5 / 0.5 / 2.5
Length x width x height	mm	112.4 x 22.5 x 92.4
Note		

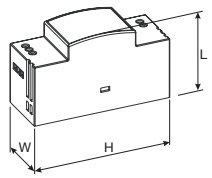
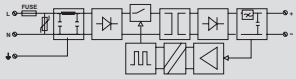
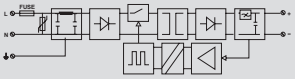
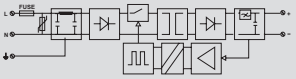
Ordering data

Type	Qty.	Order No.
CP SNT 12W 24V 0.5A	1	**9918840024**

Note

Accessories

Note

connectPower single phase INSTAPOWER	CP SNT 24 W 28 V 1 A	CP SNT 24 W 24 V 1 A	CP SNT 24 W 15 V 1.5 A
			
			

Technical data

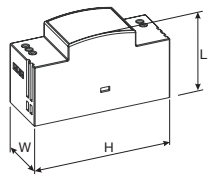
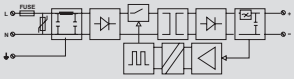
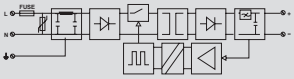
Input			
Input voltage	85…265 V AC, 120…300 V DC	85…265 V AC, 120…300 V DC	85…265 V AC, 120…300 V DC
Input current	460 mA @ 115 V AC; 250 mA @ 230 V AC	460 mA @ 115 V AC; 250 mA @ 230 V AC	460 mA @ 115 V AC; 250 mA @ 230 V AC
Input frequency	50/ 60 Hz	50/ 60 Hz	50/ 60 Hz
Making current limit	Thermistor	Thermistor	Thermistor
Input fuse	2 A slow-blow fuse (internal)	2 A slow-blow fuse (internal)	2 A slow-blow fuse (internal)
Overvoltage protection	Varistor	Varistor	Varistor
Output			
Output voltage	28 V DC	24 V DC	15 V DC
Output current	1 A	1 A	1.5 A
max. output power	28 V	24 W	23 V
max. residual ripple	< 2 %	< 2 %	< 2 %
Overload protection	Overvoltage / thermal cut-out	Overvoltage / thermal cut-out	Overvoltage / thermal cut-out
Overvoltage protection	Varistor	Varistor	Varistor
Mains failure bridge-over time	35 ms @ 115 V AC / 160 ms @ 230 V AC	35 ms @ 115 V AC / 160 ms @ 230 V AC	35 ms @ 115 V AC / 160 ms @ 230 V AC
Control at 10…100% load	0.5 %	0.5 %	0.5 %
max. capacitance at output	8000 µF	8000 µF	8000 µF
Insulation coordination			
Electrical isolation, output-earth	500 V RMS	500 V RMS	500 V RMS
Electrical isolation, input-earth	1.5 kV RMS	1.5 kV RMS	1.5 kV RMS
Electrical isolation, input-output	3 kV RMS	3 kV RMS	3 kV RMS
Electrical isolation, I/O rail	4 kV RMS	4 kV RMS	4 kV RMS
General data			
Operating temperature	-20 °C…+50 °C	-20 °C…+50 °C	-20 °C…+50 °C
Storage temperature	-40 °C…+85 °C	-40 °C…+85 °C	-40 °C…+85 °C
Degree of efficiency at max. load	78 %	78 %	78 %
Standards	EN 50178, EN 60950, IEC950	EN 50178, EN 60950, IEC950	EN 50178, EN 60950, IEC950
Approvals	CSA / CE / cULus	CSA / CE / cULus	CSA / CE / cULus
EMC standards	EN 61000-6 /-2, -3	EN 61000-6 /-2, -3	EN 61000-6 /-2, -3
	Screw connection	**Screw connection**	**Screw connection**
Clamping range (rating- / min. / max.) mm²	4.0 / 0.1 / 4	4.0 / 0.1 / 4	4.0 / 0.1 / 4
Length x width x height mm	62.5 x 52 x 90.5	62.5 x 52 x 90.5	62.5 x 52 x 90.5
Note	Derating: 33% @ 60°C	Derating: 33% @ 60°C	Derating: 33% @ 60°C

Ordering data

	Type	(Qty.=1)	Order No.
	CP SNT 24W 28V 1A		**9928890028**
	CP SNT 24W 24V 1A		**9928890024**
	CP SNT 24W 15V 1.5A		**9928890015**
Note			

Accessories

Note

connectPower single phase INSTAPOWER	CP SNT 24 W 12 V 1.5 A	CP SNT 24 W 5 V 2 A
		
		

Technical data

Input		
Input voltage	85…265 V AC, 120…300 V DC	85…265 V AC, 120…300 V DC
Input current	460 mA @ 115 V AC; 250 mA @ 230 V AC	460 mA @ 115 V AC; 250 mA @ 230 V AC
Input frequency	50/ 60 Hz	50/ 60 Hz
Making current limit	Thermistor	Thermistor
Input fuse	2 A slow-blow fuse (internal)	2 A slow-blow fuse (internal)
Overvoltage protection	Varistor	Varistor
Output		
Output voltage	12 V DC	5 V DC
Output current	1.5 A	2 A
max. output power	18 V	10 V
max. residual ripple	< 2 %	< 2 %
Overload protection	Overvoltage / thermal cut-out	Overvoltage / thermal cut-out
Overvoltage protection	Varistor	Varistor
Mains failure bridge-over time	35 ms @ 115 V AC / 160 ms @ 230 V AC	35 ms @ 115 V AC / 160 ms @ 230 V AC
Control at 10…100% load	0.5 %	0.5 %
max. capacitance at output	8000 µF	8000 µF
Insulation coordination		
Electrical isolation, output-earth	500 V RMS	500 V RMS
Electrical isolation, input-earth	1.5 kV RMS	1.5 kV RMS
Electrical isolation, input-output	3 kV RMS	3 kV RMS
Electrical isolation, I/O rail	4 kV RMS	4 kV RMS
General data		
Operating temperature	-20 °C…+50 °C	-20 °C…+50 °C
Storage temperature	-40 °C…+85 °C	-40 °C…+85 °C
Degree of efficiency at max. load	78 %	78 %
Standards	EN 50178, EN 60950, IEC950	EN 50178, EN 60950, IEC950
Approvals	CSA / CE / cULus	CSA / CE / cULus
EMC standards	EN 61000-6 /-2, -3	EN 61000-6 /-2, -3
	Screw connection	**Screw connection**
Clamping range (rating- / min. / max.) mm²	4.0 / 0.1 / 4	4.0 / 0.1 / 4
Length x width x height mm	62.5 x 52 x 90.5	62.5 x 52 x 90.5
Note	Derating: 33% @ 60°C	Derating: 33% @ 60°C

Ordering data

Type	(Qty.=1)	Order No.
CP SNT 24W 12V 1.5A		**9928890012**
Note		

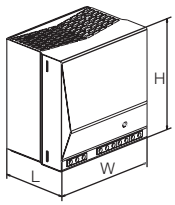
Type	(Qty.=1)	Order No.
CP SNT 24W 5V 2A		**9928890005**
Note		

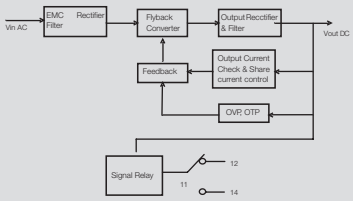
Accessories

Note		

connectPower single phase ECOLINE

CP SNT 70 W 24 V 3 A





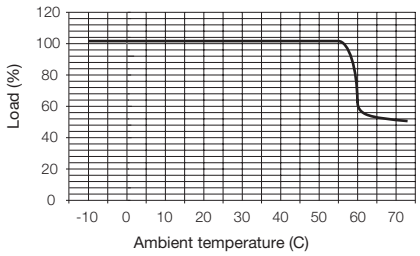
Technical data

Input	
Input voltage	85…264 V AC / 110…370 V DC
Input current	2 A @ 100…240 V AC
Input frequency	50/ 60 Hz
Input fuse	Fusible link 2.5 A (T) / 250 V
Overvoltage protection	Varistor
Output	
Output voltage	24…28 V DC (adjustable via potentiometer)
Output current	3 A
max. output power	72 W
max. residual ripple	< 100 mV_{SS} / bandwidth 20 MHz
Overload protection	105%…130% I_{konst} of max. output power, automatic restart
Overvoltage protection	29…34 V
Mains failure bridge-over time	10 ms @ 115 V AC / 20 ms @ 230 V AC
Control at 10…100% load	< 2 %
Parallel connection option	recommended with diode module
Status relay / Change-over contact	250 V AC (max. 30 V DC) / 1 A
Insulation coordination	
Electrical isolation, output-earth	0,5 kV AC
Electrical isolation, input-earth	1.5 kV AC
Electrical isolation, input-output	3 kV AC
General data	
Operating temperature	-10 °C…+55 °C
Storage temperature	-20 °C…+85 °C
Degree of efficiency at max. load	80 %
Status indication	green LED
Standards	EN 60204 (PELV) ;EN 60950 (SELV)
EMC standards	EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3
Mounting position horizontal	on mounting rail TS 35
Installation advice	Clearance: above/below ≥ 3 cm
Weight	0.55 kg
Approvals	CE / cULus 508 / cULus 60950

		Screw connection
Clamping range (rating- / min. / max.)	mm^2	2.5 / 0.1 / 4
Length x width x height	mm	110 x 55.5 x 125
Note		For redundant operation or for maintaining fault signalling function - operate with diode module only.

Derating curve

Output load/ambient temperature



Ordering data

Type	Qty.	Order No.
CP SNT 70W 24V 3A	1	**8708660000**

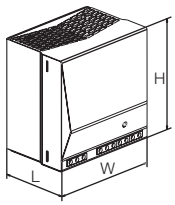
Note

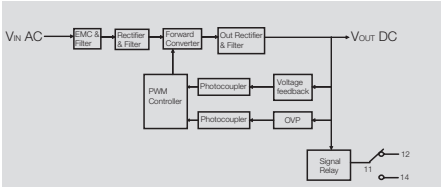
Accessories

Note

connectPower single phase ECOLINE

CP SNT 120 W 24 V 5 A





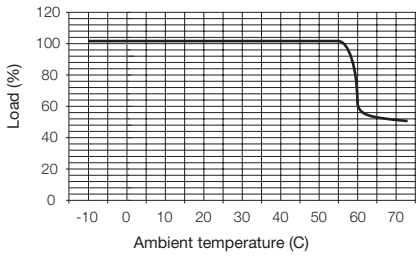
Technical data

Input	
Input voltage	88…132 V AC/176…264 V AC selectable; 250…370 V DC
Input current	3 A @ 115 V AC / 2 A @ 230 V AC
Input frequency	50/ 60 Hz
Input fuse	Fusible link 4 A (T) / 250 V
Overvoltage protection	Varistor
Output	
Output voltage	24…28 V DC (adjustable via potentiometer)
Output current	5 A
max. output power	120 W
max. residual ripple	< 100 mV_{SS} / bandwidth 20 MHz
Overload protection	105%…130% I_{konst} of max. output power, automatic restart
Overvoltage protection	29…34 V
Mains failure bridge-over time	20 ms @ 115 V AC / 20 ms @ 230 V AC
Control at 10…100% load	< 2 %
Parallel connection option	recommended with diode module
Status relay / Change-over contact	250 V AC (max. 30 V DC) / 1 A
Insulation coordination	
Electrical isolation, output-earth	0,5 kV AC
Electrical isolation, input-earth	1.5 kV AC
Electrical isolation, input-output	3 kV AC
General data	
Operating temperature	-10 °C…+55 °C
Storage temperature	-20 °C…+85 °C
Degree of efficiency at max. load	84 %
Status indication	green LED
Standards	EN 60204 (PELV) ;EN 60950 (SELV)
EMC standards	EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3
Mounting position horizontal	on mounting rail TS 35
Installation advice	Clearance: above/below ≥ 3 cm
Weight	0.65 kg
Approvals	CE / cULus 508 / cULus 60950

		Screw connection
Clamping range (rating- / min. / max.)	mm^2	2.5 / 0.1 / 4
Length x width x height	mm	110 x 65.5 x 125
Note		For redundant operation or for maintaining fault signalling function - operate with diode module only.

Derating curve

Output load/ambient temperature



Ordering data

Type	Qty.	Order No.
CP SNT 120W 24V 5A	1	**8708670000**

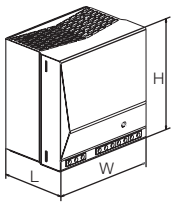
Note

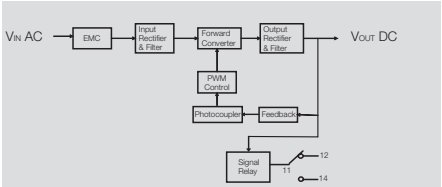
Accessories

Note

connectPower single phase ECOLINE

CP SNT 250 W 24 V 10 A





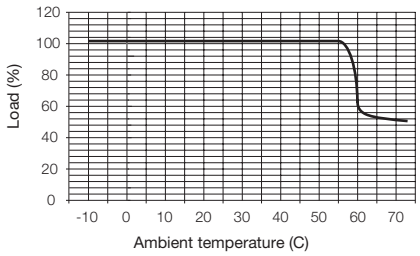
Technical data

Input	
Input voltage	88…132 V AC/176…264 V AC selectable; 250…370 V DC
Input current	3.6 A @ 115 V AC / 2 A @ 230 V AC
Input frequency	50/ 60 Hz
Input fuse	Fusible link 5 A (T) / 250 V
Overvoltage protection	Varistor
Output	
Output voltage	24…28 V DC (adjustable via potentiometer)
Output current	10 A
max. output power	240 W
max. residual ripple	< 100 mV_{SS} / bandwidth 20 MHz
Overload protection	105%…130% I_{konst} of max. output power, automatic restart
Overvoltage protection	30…36 V
Mains failure bridge-over time	10 ms @ 115 V AC / 15 ms @ 230 V AC
Control at 10…100% load	< 2 %
Parallel connection option	recommended with diode module
Status relay / Change-over contact	250 V AC (max. 30 V DC) / 1 A
Insulation coordination	
Electrical isolation, output-earth	0,5 kV AC
Electrical isolation, input-earth	1.5 kV AC
Electrical isolation, input-output	3 kV AC
General data	
Operating temperature	-10 °C…+55 °C
Storage temperature	-20 °C…+85 °C
Degree of efficiency at max. load	84 %
Status indication	green LED
Standards	EN 60204 (PELV) ;EN 60950 (SELV)
EMC standards	EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3
Mounting position horizontal	on mounting rail TS 35
Installation advice	Clearance: above/below ≥ 3 cm
Weight	1.6 kg
Approvals	CE / cULus 508 / cULus 60950

		Screw connection
Clamping range (rating- / min. / max.)	mm^2	4.0 / 0.1 / 6
Length x width x height	mm	110 x 125.5 x 125
Note		For redundant operation or for maintaining fault signalling function - operate with diode module only.

Derating curve

Output load/ambient temperature



Ordering data

Type	Qty.	Order No.
CP SNT 250W 24V 10A	1	**8708680000**

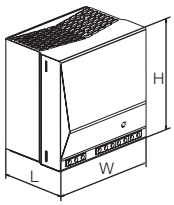
Note

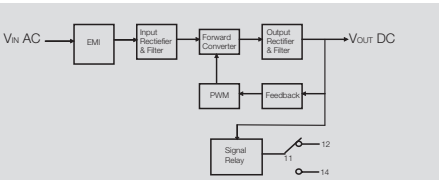
Accessories

Note

connectPower single phase ECOLINE

CP SNT 500 W 24 V 20 A





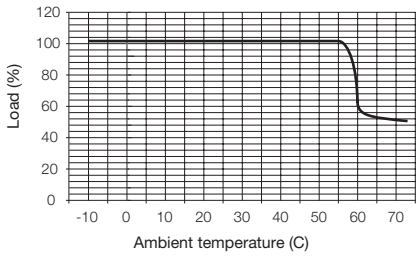
Technical data

Input	
Input voltage	88…132 V AC/176…264 V AC selectable; 250…370 V DC
Input current	9 A @ 115 V AC / 6 A @ 230 V AC
Input frequency	50/ 60 Hz
Input fuse	Fusible link 10 A (T) / 250 V
Overvoltage protection	Varistor
Output	
Output voltage	24…28 V DC (adjustable via potentiometer)
Output current	20 A
max. output power	480 W
max. residual ripple	< 100 mV_{SS} / bandwidth 20 MHz
Overload protection	105%…130% I_{konst} of max. output power, automatic restart
Overvoltage protection	30…36 V
Mains failure bridge-over time	10 ms @ 115 V AC / 15 ms @ 230 V AC
Control at 10…100% load	< 2 %
Parallel connection option	recommended with diode module
Status relay / Change-over contact	250 V AC (max. 30 V DC) / 1 A
Insulation coordination	
Electrical isolation, output-earth	0,5 kV AC
Electrical isolation, input-earth	1.5 kV AC
Electrical isolation, input-output	3 kV AC
General data	
Operating temperature	-10 °C…+55 °C
Storage temperature	-20 °C…+85 °C
Degree of efficiency at max. load	86 %
Status indication	green LED
Standards	EN 60950 (SELV) ;EN 60204 (PELV)
EMC standards	EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3
Mounting position horizontal	on mounting rail TS 35
Installation advice	Clearance: above/below ≥ 3 cm
Weight	2 kg
Approvals	CE / cULus 508 / cULus 60950

		Screw connection
Clamping range (rating- / min. / max.)	mm^2	4.0 / 0.1 / 6
Length x width x height	mm	110 x 227.5 x 125
Note		For redundant operation or for maintaining fault signalling function - operate with diode module only.

Derating curve

Output load/ambient temperature



Ordering data

Type	Qty.	Order No.
CP SNT 500W 24V 20A	1	**8778870000**

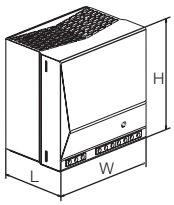
Note

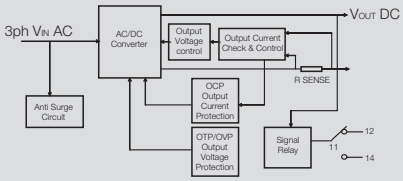
Accessories

Note

connectPower 3-phase ECOLINE

CP SNT3 250 W 24 V 10 A





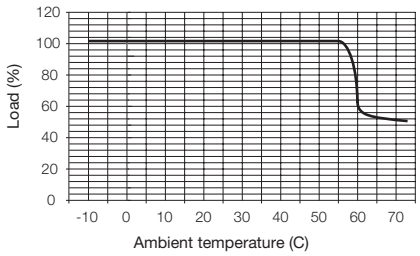
Technical data

Input	
Input voltage	3x400 V AC / 340…575 V AC
Input current	0.95 A @ 400 V AC
Input frequency	47…63 Hz
Input fuse	External via 3 circuit-breakers up to 6 A, char. C
Overvoltage protection	Varistor
Output	
Output voltage	24…28 V DC (adjustable via potentiometer)
Output current	10 A
max. output power	250 V
max. residual ripple	< 100 mV_{SS} / bandwidth 20 MHz
Overload protection	105%…130% I_{konst} of max. output power, automatic restart
Overvoltage protection	29…34 V
Mains failure bridge-over time	> 10 ms @ 400 V AC
Control at 10…100% load	< 2 %
Parallel connection option	recommended with diode module
Status relay / Change-over contact	250 V AC (max. 30 V DC) / 1 A
Insulation coordination	
Electrical isolation, output-earth	0,5 kV AC
Electrical isolation, input-earth	1.5 kV AC
Electrical isolation, input-output	3 kV AC
General data	
Operating temperature	-10 °C…+55 °C
Storage temperature	-20 °C…+85 °C
Degree of efficiency at max. load	88 %
Status indication	green LED
Standards	EN 60204 (PELV) ;EN 60950 (SELV)
EMC standards	EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3
Mounting position horizontal	on mounting rail TS 35
Installation advice	Clearance: above/below ≥ 3 cm
Weight	1.5 kg
Approvals	CE / cULus 508 / cULus 60950

		Screw connection
Clamping range (rating- / min. / max.)	mm^2	4.0 / 0.1 / 6
Length x width x height	mm	110 x 125.5 x 125
Note		For redundancy or correct function of the signal relays use a diode modul

Derating curve

Output load/ambient temperature



Ordering data

Type	Qty.	Order No.
CP SNT3 250W 24V 10A	1	**8708700000**

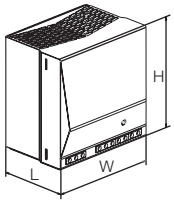
Note

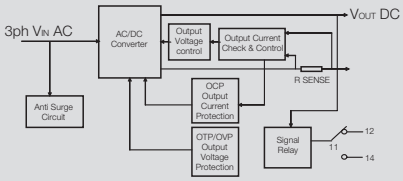
Accessories

Note

connectPower 3-phase ECOLINE

CP SNT3 500 W 24 V 20 A





Technical data

Input	
Input voltage	3x400 V AC / 340…575 V AC
Input current	1.7 A @ 400 V AC
Input frequency	47…63 Hz
Input fuse	External via 3 circuit-breakers up to 6…16 A, char. C
Overvoltage protection	Varistor
Output	
Output voltage	24…28 V DC (adjustable via potentiometer)
Output current	20 A
max. output power	480 V
max. residual ripple	< 100 mV_{SS} / bandwidth 20 MHz
Overload protection	105%…130% I_{konst} of max. output power, automatic restart
Overvoltage protection	29…34 V
Mains failure bridge-over time	> 10 ms @ 400 V AC
Control at 10…100% load	< 2 %
Parallel connection option	recommended with diode module
Status relay / Change-over contact	250 V AC (max. 30 V DC) / 1 A
Insulation coordination	
Electrical isolation, output-earth	0,5 kV AC
Electrical isolation, input-earth	1.5 kV AC
Electrical isolation, input-output	3 kV AC
General data	
Operating temperature	-10 °C…+55 °C
Storage temperature	-20 °C…+85 °C
Degree of efficiency at max. load	88 %
Status indication	green LED
Standards	EN 60204 (PELV) ;EN 60950 (SELV)
EMC standards	EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3
Mounting position horizontal	on mounting rail TS 35
Installation advice	Clearance: above/below ≥ 3 cm
Weight	3 kg
Approvals	CE / cULus 508 / cULus 60950

		Screw connection
Clamping range (rating- / min. / max.)	mm^2	4.0 / 0.1 / 6
Length x width x height	mm	110 x 227.5 x 125
Note		For redundancy or correct function of the signal relays use a diode modul

Ordering data

Type	Qty.	Order No.
CP SNT3 500W 24V 20A	1	**8708710000**

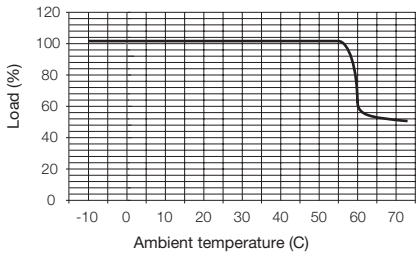
Note

Accessories

Note

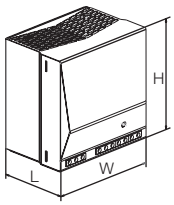
Derating curve

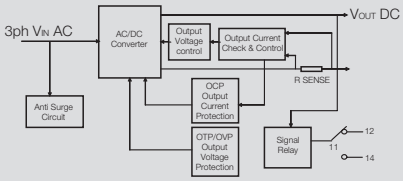
Output load/ambient temperature



connectPower 3-phase ECOLINE

CP SNT3 1000 W 24 V 40 A





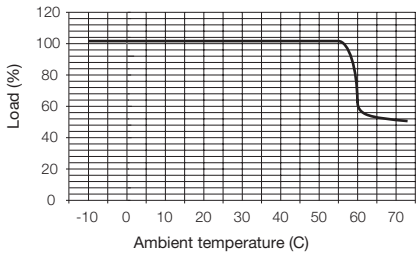
Technical data

Input	
Input voltage	3x400 V AC / 340…575 V AC (450…800 V DC)
Input current	3.4 A @ 400 V AC
Input frequency	47…63 Hz
Input fuse	External via 3 circuit-breakers up to 10…16 A, char. C
Overvoltage protection	Varistor
Output	
Output voltage	24…28 V DC (adjustable via potentiometer)
Output current	40 A
max. output power	960 V
max. residual ripple	< 100 mV_{SS} / bandwidth 20 MHz
Overload protection	105%…130% I_{konst} of max. output power, automatic restart
Overvoltage protection	29…34 V
Mains failure bridge-over time	> 10 ms @ 400 V AC
Control at 10…100% load	< 2 %
Parallel connection option	direct for same type
Status relay / Change-over contact	250 V AC (max. 30 V DC) / 1 A
Insulation coordination	
Electrical isolation, output-earth	0,5 kV AC
Electrical isolation, input-earth	1.5 kV AC
Electrical isolation, input-output	3 kV AC
General data	
Operating temperature	-10 °C…+55 °C
Storage temperature	-20 °C…+85 °C
Degree of efficiency at max. load	88 %
Status indication	green LED
Standards	EN 60204 (PELV) ;EN 60950 (SELV)
EMC standards	EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3
Mounting position horizontal	on mounting rail TS 35
Installation advice	Clearance: above/below ≥ 3 cm
Weight	3.5 kg
Approvals	CE / cULus 508 / cULus 60950

		Screw connection
Clamping range Input (rating-/min./max)	mm^2	4 / 0.1 / 6
Clamping range Output (rating-/ min./max)	mm^2	10 / 0.3 / 16
Length x width x height	mm	125 x 280 x 150
Note		Clamping range identical for input and signalling contact

Derating curve

Output load/ambient temperature



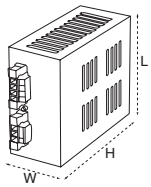
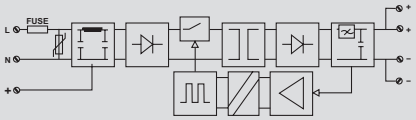
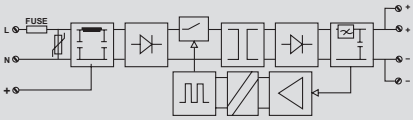
Ordering data

Type	Qty.	Order No.
CP SNT3 1000W 24V 40A	1	**8708730000**

Note

Accessories

Note

connectPower single phase	CP SNT 55 W 48 V 1.04 A	CP SNT 55 W 24-28 V 2.3 A
		
		

Technical data

Input			
Input voltage		85…265 V AC, 120…300 V DC	85…265 V AC, 120…300 V DC
Input current		1.1 A @ 115 V AC; 0.55 A @ 230 V AC	1.1 A @ 115 V AC; 0.55 A @ 230 V AC
Input frequency		50/ 60 Hz	50/ 60 Hz
Input fuse		2 A slow-blow fuse (internal)	2 A slow-blow fuse (internal)
Overvoltage protection		Varistor	Varistor
Output			
Output voltage		48 V DC	24…28 V DC
Output current		1.04 A	2.3 A
max. output power		50 V	55 V
max. residual ripple		< 50 mV RMS	< 50 mV RMS
Overload protection		Overvoltage / thermal cut-out	Overvoltage / thermal cut-out
Overvoltage protection		Varistor	Varistor
Mains failure bridge-over time		30 ms @ 115 V AC / 180 ms @ 230 V AC	30 ms @ 115 V AC / 180 ms @ 230 V AC
Control at 10…100% load		1%	1%
Parallel connection option		no	no
Insulation coordination			
Electrical isolation, output-earth		500 V RMS	500 V RMS
Electrical isolation, input-earth		1.5 kV RMS	1.5 kV RMS
Electrical isolation, input-output		3 kV RMS	3 kV RMS
Electrical isolation, I/O rail		3 kV RMS	3 kV RMS
General data			
Operating temperature/Storage temperature		-20 °C…+40 °C /-40 °C…+85 °C	-20 °C…+40 °C /-40 °C…+85 °C
Degree of efficiency at max. load		78 %	78 %
Status indication		green LED	green LED
Standards		EN 50178, EN 60950, IEC950	EN 50178, EN 60950, IEC950
EMC standards		IEC 61000-6 /-2, -3	IEC 61000-6 /-2, -3
Power factor correction		no	no
Approvals		CSA;UL/UR;CE;	CSA;UL/UR;CE;cURus;cCSAus;UL/LIST
		Screw connection	**Screw connection**
Clamping range (rating- / min. / max.)	mm^2	4.0 / 0.1 / 4	4.0 / 0.1 / 4
Length x width x height	mm	131 x 57 x 98	131 x 57 x 98
Note		Derating: 2.1A/ 24V @ 50°C; 1.5A/ 24V @ 60°C	Derating: 2.1A/ 24V @ 50°C; 1.5A/ 24V @ 60°C

Ordering data

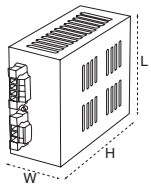
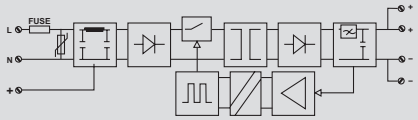
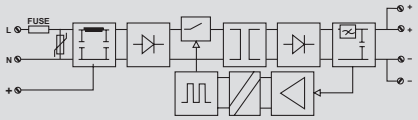
Type	Qty.	Order No.	Type	Qty.	Order No.
CP SNT 55W 48V 1.04A	1	**9927480048**	CP SNT 55W 24-28V 2.3A	1	**9927480024**
Note					

Accessories

Note	Bracket for wall mounting: 7920560000	Bracket for wall mounting: 7920560000

Switch-mode power supplies

connectPower single phase

	CP SNT 55 W 12-15 V 3 A	CP SNT 55 W 5 V 3 A
		 
		 

Technical data

		CP SNT 55 W 12-15 V 3 A	CP SNT 55 W 5 V 3 A
Input			
Input voltage		85…265 V AC, 120…300 V DC	85…265 V AC, 120…300 V DC
Input current		1.1 A @ 115 V AC; 0.55 A @ 230 V AC	1.1 A @ 115 V AC; 0.55 A @ 230 V AC
Input frequency		50/ 60 Hz	50/ 60 Hz
Input fuse		2 A slow-blow fuse (internal)	2 A slow-blow fuse (internal)
Overvoltage protection		Varistor	Varistor
Output			
Output voltage		12…15 V DC	5 V DC
Output current		3 A	3 A
max. output power		36 V	15 V
max. residual ripple		< 50 mV RMS	< 50 mV RMS
Overload protection		Overvoltage / thermal cut-out	Overvoltage / thermal cut-out
Overvoltage protection		Varistor	Varistor
Mains failure bridge-over time		30 ms @ 115 V AC / 180 ms @ 230 V AC	30 ms @ 115 V AC / 180 ms @ 230 V AC
Control at 10…100% load		1%	1%
Parallel connection option		no	no
Insulation coordination			
Electrical isolation, output-earth		500 V RMS	500 V RMS
Electrical isolation, input-earth		1.5 kV RMS	1.5 kV RMS
Electrical isolation, input-output		3 kV RMS	3 kV RMS
Electrical isolation, I/O rail		3 kV RMS	3 kV RMS
General data			
Operating temperature/Storage temperature		-20 °C…+40 °C /-40 °C…+85 °C	-20 °C…+40 °C /-40 °C…+85 °C
Degree of efficiency at max. load		78 %	78 %
Status indication		green LED	green LED
Standards		EN 50178, EN 60950, IEC950	EN 50178, EN 60950, IEC950
EMC standards		IEC 61000-6 /-2, -3	IEC 61000-6 /-2, -3
Power factor correction		no	no
Approvals		CSA;UL/UR;CE;	CSA;UL/UR;CE;
		Screw connection	**Screw connection**
Clamping range (rating- / min. / max.)	mm^2	4.0 / 0.1 / 4	4.0 / 0.1 / 4
Length x width x height	mm	131 x 57 x 98	131 x 57 x 98
Note		Derating: 2.1A/ 24V @ 50°C; 1.5A/ 24V @ 60°C	Derating: 2.1A/ 24V @ 50°C; 1.5A/ 24V @ 60°C

Ordering data

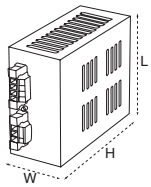
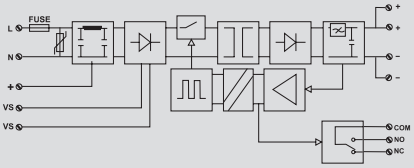
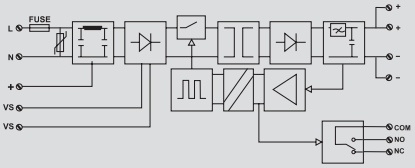
Type	Qty.	Order No.
CP SNT 55W 12-15V 3A	1	**9927480012**

Type	Qty.	Order No.
CP SNT 55W 5V 3A	1	**9927480005**

Note

Accessories

Note	CP SNT 55 W 12-15 V 3 A	CP SNT 55 W 5 V 3 A
	Bracket for wall mounting: 7920560000	Bracket for wall mounting: 7920560000

connectPower single phase	CP SNT 160 W 48 V 3.5 A	CP SNT 160 W 24-28 V 6.5 A
		
		

Technical data

Input			
Input voltage		min. 85/138 V AC, max. 195/250 V AC, typ. 115…230 V AC	min. 85/138 V AC, max. 195/250 V AC, typ. 115…230 V AC
Input current		2.9 A @ 115 V AC; 1.45A @ 230 V AC	2.9 A @ 115 V AC; 1.45A @ 230 V AC
Input frequency		50/ 60 Hz	50/ 60 Hz
Input fuse		6.3 A slow-blow fuse (internal)	6.3 A slow-blow fuse (internal)
Overvoltage protection		Varistor	Varistor
Output			
Output voltage		48 V DC	24…28 V DC
Output current		3.5 A	6.5 A
max. output power		168 V	156 V
max. residual ripple		0.2 % RMS	0.2 % RMS
Overload protection		Overcurrent and overvoltage protection	Overcurrent and overvoltage protection
Overvoltage protection		Varistor	Varistor
Mains failure bridge-over time		40 ms @ 115 V AC / 50 ms @ 230 V AC	40 ms @ 115 V AC / 50 ms @ 230 V AC
Control at 10…100% load		1%	1%
Parallel connection option		no	no
Insulation coordination			
Electrical isolation, output-earth		500 V RMS	500 V RMS
Electrical isolation, input-earth		1.5 kV RMS	1.5 kV RMS
Electrical isolation, input-output		3 kV RMS	3 kV RMS
Electrical isolation, I/O rail		3 kV RMS	3 kV RMS
General data			
Operating temperature/Storage temperature		0 °C…+50 °C /-40 °C…+85 °C	0 °C…+50 °C /-40 °C…+85 °C
Degree of efficiency at max. load		85 %	85 %
Status indication		green LED	green LED
Standards		EN 50178, EN 60950, IEC950	EN 50178, EN 60950, IEC950
EMC standards		EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3	EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3
Power factor correction		no	no
Approvals		CSA;UL/UR;CE;	CSA;UL/UR;CE;
		Screw connection	**Screw connection**
Clamping range (rating- / min. / max.)	mm^2	4.0 / 0.1 / 4	4.0 / 0.1 / 4
Length x width x height	mm	175 x 57 x 127	175 x 57 x 127
Note		Derating: 10% @ 60°C	Derating: 10% @ 60°C

Ordering data

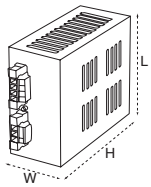
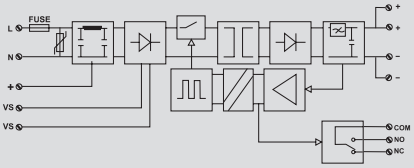
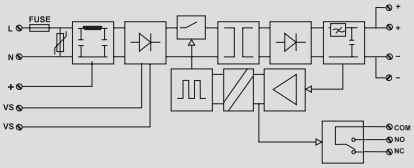
Type	Qty.	Order No.
CP SNT 160W 48V 3.5A	1	**9925340048**

Type	Qty.	Order No.
CP SNT 160W 24-28V 6.5A	1	**9925340024**

Note

Accessories

Note	
	Bracket for wall mounting: 7920560000
	Bracket for wall mounting: 7920560000

connectPower single phase	CP SNT 160 W 12-15 V 8 A	CP SNT 160 W 5 V 8 A
		
		

Technical data

Input			
Input voltage		min. 85/138 V AC, max. 195/250 V AC, typ. 115…230 V AC	min. 85/138 V AC, max. 195/250 V AC, typ. 115…230 V AC
Input current		2.9 A @ 115 V AC; 1.45A @ 230 V AC	2.9 A @ 115 V AC; 1.45A @ 230 V AC
Input frequency		50/ 60 Hz	50/ 60 Hz
Input fuse		6.3 A slow-blow fuse (internal)	6.3 A slow-blow fuse (internal)
Overvoltage protection		Varistor	Varistor
Output			
Output voltage		12…15 V DC	5 V DC
Output current		8 A	8 A
max. output power		96 V	40 V
max. residual ripple		0.2 % RMS	0.2 % RMS
Overload protection		Overcurrent and overvoltage protection	Overcurrent and overvoltage protection
Overvoltage protection		Varistor	Varistor
Mains failure bridge-over time		40 ms @ 115 V AC / 50 ms @ 230 V AC	40 ms @ 115 V AC / 50 ms @ 230 V AC
Control at 10…100% load		1%	1%
Parallel connection option		no	no
Insulation coordination			
Electrical isolation, output-earth		500 V RMS	500 V RMS
Electrical isolation, input-earth		1.5 kV RMS	1.5 kV RMS
Electrical isolation, input-output		3 kV RMS	3 kV RMS
Electrical isolation, I/O rail		3 kV RMS	3 kV RMS
General data			
Operating temperature/Storage temperature		0 °C…+50 °C /-40 °C…+85 °C	0 °C…+50 °C /-40 °C…+85 °C
Degree of efficiency at max. load		85 %	85 %
Status indication		green LED	green LED
Standards		EN 50178, EN 60950, IEC950	EN 50178, EN 60950, IEC950
EMC standards		EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3	EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3
Power factor correction		no	no
Approvals		CSA;UL/UR;CE;	CSA;UL/UR;CE;
		Screw connection	**Screw connection**
Clamping range (rating- / min. / max.)	mm^2	4.0 / 0.1 / 4	4.0 / 0.1 / 4
Length x width x height	mm	175 x 57 x 127	175 x 57 x 127
Note		Derating: 10% @ 60°C	Derating: 10% @ 60°C

Ordering data

Type	Qty.	Order No.
CP SNT 160W 12-15V 8A	1	**9925340012**
CP SNT 160W 5V 8A	1	**9925340005**

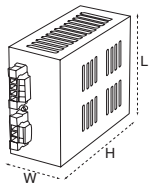
Note

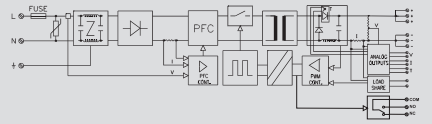
Accessories

Note	
Bracket for wall mounting: 7920560000	Bracket for wall mounting: 7920560000

connectPower single phase

CP SNT 300 W 24 V 12.5 A





Technical data

Input	
Input voltage	86…265 V AC, 100…200 V DC; typ 115…230 V AC
Input current	3.3 A @ 115 V AC; 1.65 A @ 230 V AC
Input frequency	50/ 60 Hz
Input fuse	Thermistor
Overvoltage protection	Varistor
Output	
Output voltage	Adjustable, 22-28 V DC
Output current	12.5 A
max. output power	300 W
max. residual ripple	at 100 kHz: 2 mV_{SS} ;at 120 Hz: 20 mV AC RMS
Overload protection	Overcurrent and overvoltage protection
Overvoltage protection	Varistor
Mains failure bridge-over time	40 ms @ 115 V AC / 40 ms @ 230 V AC
Control at 10…100% load	0.2 %
Parallel connection option	Yes, max. 5 devices, active current splitting
Signalling delay	2 s
Monitoring function	Output voltage, current, temperature
Insulation coordination	
Electrical isolation, output-earth	500 V RMS
Electrical isolation, input-earth	1.5 kV RMS
Electrical isolation, input-output	3 kV RMS
Electrical isolation, I/O rail	4 kV RMS
General data	
Operating temperature/Storage temperature	-15°C…+50°C (at 100% duty cycle) /-40 °C…+85 °C
Degree of efficiency at max. load	80 %
Status indication	Current limiting: yellow LED / Error: red LED / On: green LED
Standards	EN 50178, EN 60950, IEC950
EMC standards	EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3
Power factor correction	PFC passive
Derating	Derating: 20% @ 60°C
Approvals	CSA;UL/UR;CE;

		Screw connection
Clamping range (rating- / min. / max.)	mm^2	4.0 / 0.1 / 4
Length x width x height	mm	101 x 240 x 155
Note		

Ordering data

Type	Qty.	Order No.
CP SNT 300W 24V 12.5A	1	**9916250024**

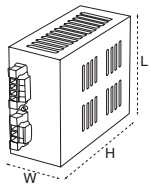
Note

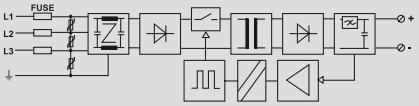
Accessories

Note	Bracket for wall mounting: 7920560000

connectPower 3-phase

CP-SNT 380-480 V AC/24 V





Technical data

Input	
Input voltage	306… 550 V AC, typ.: 360…480 V AC
Input current	120 mA @ 360 V AC; 100 mA @ 230 V AC
Input frequency	50/ 60 Hz
Input fuse	3 x 1 A slow-blow fuse (internal)
Overvoltage protection	Varistor
Output	
Output voltage	24 V DC
Output current	2.3 A
max. output power	55 W
max. residual ripple	< 50 mV RMS
Overload protection	Overvoltage / thermal cut-out
Overvoltage protection	Varistor
Mains failure bridge-over time	120 ms @ 360 V AC / 120 ms @ 480 V AC
Control at 10…100% load	1%
Parallel connection option	no
Overload protection	Overvoltage / thermal cut-out
Insulation coordination	
Electrical isolation, output-earth	500 V RMS
Electrical isolation, input-earth	1.5 kV RMS
Electrical isolation, input-output	3 kV RMS
Electrical isolation, I/O rail	3 kV RMS
General data	
Operating temperature	0 °C…+50 °C
Storage temperature	-40 °C…+85 °C
Degree of efficiency at max. load	
Status indication	green LED
Standards	EN 50178, EN 60950, IEC950
EMC standards	EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3
Power factor correction	no
Approvals	CSA;UL/UR;CE;

		Screw connection
Clamping range (rating- / min. / max.)	mm^2	4.0 / 0.1 / 4
Length x width x height	mm	168 x 60 x 108
Note		Derating: 10% @ 85°C

Ordering data

Type	Qty.	Order No.
CP-SNT 380-480VAC/24V	1	**9917790324**

Note

Accessories

Note

Diode modules

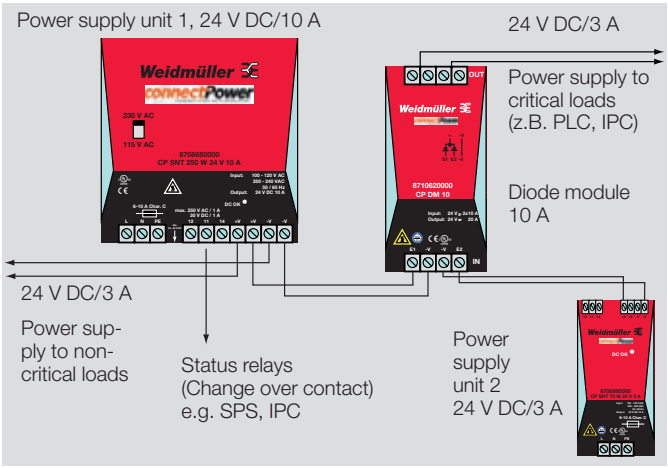
Power supply to critical loads

As a rule, actuators require relative high amounts of current, and a modern power supply concept should envisage supplying them separately. It is also recommended that a second power supply unit with lower output be used to supply the controls (for example, PLC, IPC). Together with a diode module, doubling up guarantees that the controls are constantly supplied with power should one of the devices fail; thus ensuring that no data is lost.

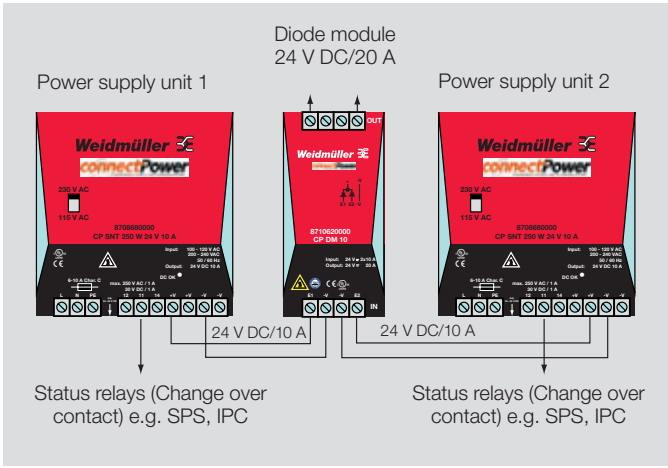
Redundant circuit for fail-safe power supply to loads

Both devices operate in parallel and share the load required by the equipment via the diode module. Should one of these devices fail, the second device immediately supplies the full amount of power. The diode module decouples both switch-mode power supplies to 100 %, so that they do not negatively affect each other if a failure occurs.

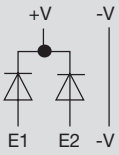
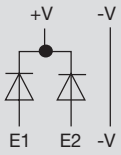
Power supply to critical loads



Redundant circuit for fail-safe power supply to loads



connectPower diode module ECOLINE

	CP DM 10	CP DM 20
		
		
		

Technical data

	CP DM 10	CP DM 20
Input		
Input voltage	40 V DC max.	40 V DC max.
Input current	2 x 0 … 10 A max.	2 x 0 … 20 A max.
Output		
Output voltage	Vin – 0.5 typical	Vin – 0.5 typical
Output current	0 … 20 A max. or 10 A max. in redundancy mode	0 … 40 A max. or 20 A max. in redundancy mode
General specifications		
Operating temperature	0 °C … 50 °C	0 °C … 50 °C
Storage temperature	–20 °C ... +85 °C	–20 °C ... +85 °C
Efficiency under max. load	approx. 95.5 % at 24 V DC	approx. 97.5 % at 24 V DC
DIN rail mounting	TS35 top-hat rail to DIN EN 50022	TS35 top-hat rail to DIN EN 50022
Mounting position	Horizontal rail	Horizontal rail
Mounting	Clearance: side ≥ 4 cm; above/below ≥ 10 cm	Clearance: side ≥ 4 cm; above/below ≥ 10 cm
Weight	approx. 0.15 kg	approx. 0.6 kg
Approvals	CE	CE
	Screw connection	**Screw connection**
Input clamping range (nom. / min. / max.) mm²	4 / 0.13 / 4	4 / 0.13 / 4
Output clamping range (nom. / min. / max.) mm²		10.0 / 0.32 / 16.0
Length x width x height mm	125.0 x 55.5 x 100.0	142.0 x 55.5 x 100.0
Note	* Clamping range identical for input/output	

Ordering data

Type	Qty	Order No.
CP DM 10	1	**8710620000**

Type	Qty	Order No.
CP DM 20	1	**8768650000**

Note

Accessories

Note

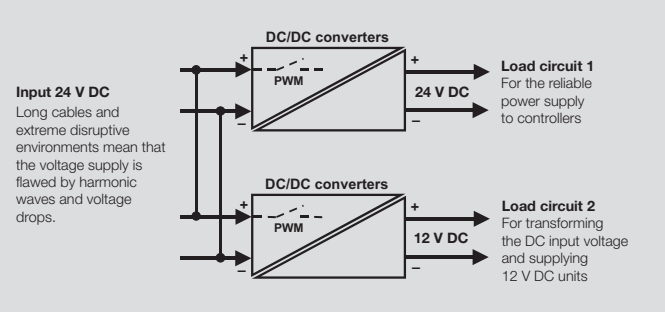
If there is no regulated and stable DC voltage available to supply sensitive equipment, DC/DC converters can guarantee a stabilised voltage. To a certain extent, other voltage levels are generated at the output; consequently, DC/DC converters can also be utilised for converting to other voltage levels. Electrical isolation of the input and output ensures reliable and safe separation of the circuits. The status of the output is reliably indicated by means of a status LED.

DC/DC converters

DC/DC converters are particularly suitable for decentralised power supplies to circuitry, subassemblies and modules. DC/DC converters are often required in emergency power supplies supplying electrical devices from batteries and other DC systems.

DC/DC converters for supplying sensitive loads for example, PLCs, mini controllers etc.

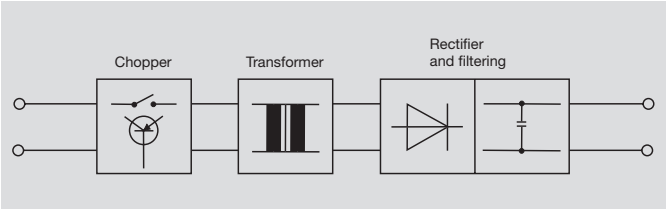
Power supply to loads with different voltage levels



It is possible to supply both sides of an analogue coupling module with the help of a DC/DC converter without neutralising the electrical isolation. Weidmüller's DC/DC converters are available in housings suitable for mounting on DIN rails.

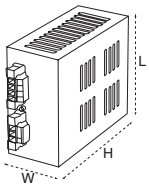
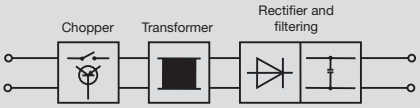
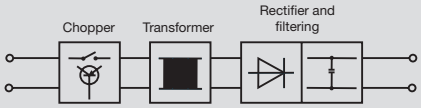
Method of operation

DC/DC converters are a variation on switched-mode regulators. The DC current at the input is chopped with the switching frequency and brought up to the required voltage by a transformer. The voltage is then rectified, smoothed and regulated.



DC/DC converter

connectPower

	CP DCDC 50 W 22-24 V DC 2 A	CP DCDC 50 W 15 V DC 3 A
		
		

Technical data

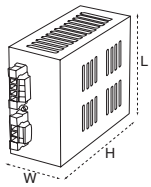
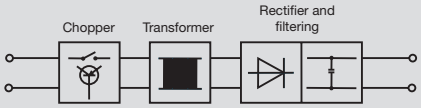
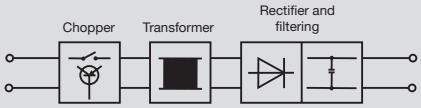
Input			
Input voltage		18…30 V DC, typ. 24 V DC	18…30 V DC, typ. 24 V DC
Input fuse		internal	internal
Output			
Output voltage		22…24 V DC	15 V DC
Output current		2 A	3 A
Overload behaviour		Overvoltage cut-out with self-reset	Overvoltage cut-out with self-reset
General data			
Operating temperature		0 °C…+40 °C max. full rate load	0 °C…+40 °C max. full rate load
Storage temperature		-40 °C…+85 °C	-40 °C…+85 °C
Status indication		green LED	green LED
Switching frequency		200.0 kHz	200.0 kHz
Approvals		CSA / UL/UR / CE	CSA / UL/UR / CE
		Screw connection	**Screw connection**
Clamping range (rating- / min. / max.)	mm^2	4.0 / 0.1 / 4	4.0 / 0.1 / 4
Length x width x height	mm	131 x 57 x 98	131 x 57 x 98
Note			

Ordering data

Connection system	**Type**	**Qty.**	**Order No.**	**Type**	**Qty.**	**Order No.**
Screw connection	CP DCDC 50W 22-24V 2A	1	**9919372424**	CP DCDC 50W 15V 3A	1	**9919372415**
Note						

Accessories

Note	Bracket for wall mounting: 7920560000	Bracket for wall mounting: 7920560000

connectPower	CP DCDC 50 W 12 V DC 3 A	CP DCDC 50 W 5 V DC 8 A
		
		

Technical data

Input			
Input voltage		9…16 V DC, type 12 V DC	9…16 V DC, type 12 V DC
Input fuse		internal	internal
Output			
Output voltage		12 V DC	5 V DC
Output current		3 A	8 A
Overload behaviour		Overvoltage cut-out with self-reset	Overvoltage cut-out with self-reset
General data			
Operating temperature		0 °C…+40 °C max. full rate load	0 °C…+40 °C max. full rate load
Storage temperature		-40 °C…+85 °C	-40 °C…+85 °C
Status indication		green LED	green LED
Switching frequency		200.0 kHz	200.0 kHz
Approvals		CSA / UL/UR / CE	CSA / UL/UR / CE
		Screw connection	**Screw connection**
Clamping range (rating- / min. / max.)	mm^2	4.0 / 0.1 / 4	4.0 / 0.1 / 4
Length x width x height	mm	131 x 57 x 98	131 x 57 x 98
Note			

Ordering data

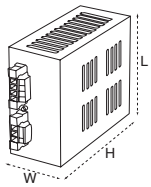
Connection system	Type	Qty.	Order No.	Type	Qty.	Order No.
Screw connection	CP DCDC 50W 12V 3A	1	**9919371212**	CP DCDC 50W 5V 8A	1	**9919371205**
Note						

Accessories

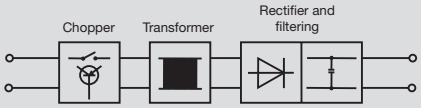
Note		
	Bracket for wall mounting: 7920560000	Bracket for wall mounting: 7920560000

DC/DC converter

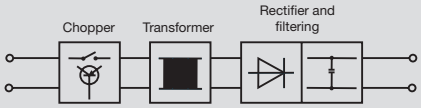
connectPower



CP DCDC 50 W 22-24 V DC 2 A



CP DCDC 50 W 15 V DC 3 A



Technical data

Input			
Input voltage		9…16 V DC, type 12 V DC	9…16 V DC, type 12 V DC
Input fuse		internal	internal
Output			
Output voltage		22…24 V DC	15 V DC
Output current		2 A	3 A
Overload behaviour		Overvoltage cut-out with self-reset	Overvoltage cut-out with self-reset
General data			
Operating temperature		0 °C…+40 °C max. full rate load	0 °C…+40 °C max. full rate load
Storage temperature		-40 °C…+85 °C	-40 °C…+85 °C
Status indication		green LED	green LED
Switching frequency		200.0 kHz	200.0 kHz
Approvals		CSA / UL/UR / CE	CSA / UL/UR / CE
		Screw connection	**Screw connection**
Clamping range (rating- / min. / max.)	mm^2	4.0 / 0.1 / 4	4.0 / 0.1 / 4
Length x width x height	mm	131 x 57 x 98	131 x 57 x 98
Note			

Ordering data

Connection system	Type	Qty.	Order No.	Type	Qty.	Order No.
Screw connection	CP DCDC 50W 22-24V 2A	1	**9919371224**	CP DCDC 50W 15V 3A	1	**9919371215**
Note						

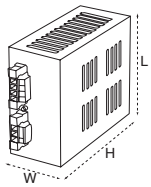
Accessories

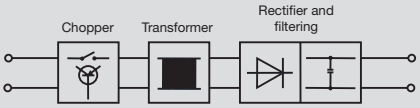
Note		
	Bracket for wall mounting: 7920560000	Bracket for wall mounting: 7920560000

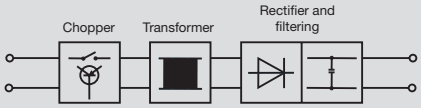
connectPower

CP DCDC 50 W 12 V DC 3 A

CP DCDC 50 W 5 V DC 8 A







Technical data

Input		
Input voltage	18…30 V DC, typ. 24 V DC	18…30 V DC, typ. 24 V DC
Input fuse	internal	internal
Output		
Output voltage	12 V DC	5 V DC
Output current	3 A	8 A
Overload behaviour	Overvoltage cut-out with self-reset	Overvoltage cut-out with self-reset
General data		
Operating temperature	0 °C…+40 °C max. full rate load	0 °C…+40 °C max. full rate load
Storage temperature	-40 °C…+85 °C	-40 °C…+85 °C
Status indication	green LED	green LED
Switching frequency	200.0 kHz	200.0 kHz
Approvals	CSA / UL/UR / CE	CSA / UL/UR / CE
	Screw connection	**Screw connection**
Clamping range (rating- / min. / max.) mm²	4.0 / 0.1 / 4	4.0 / 0.1 / 4
Length x width x height mm	131 x 57 x 98	131 x 57 x 98
Note		

Ordering data

Connection system	**Type**	**Qty.**	**Order No.**	**Type**	**Qty.**	**Order No.**
Screw connection	CP DCDC 50W 12V 3A	1	**9919372412**	CP DCDC 50W 5V 8A	1	**9919372405**
Note						

Accessories

Note	Bracket for wall mounting: 7920560000	Bracket for wall mounting: 7920560000

Unregulated power supplies – compactPower

Compact power supply units are important links in the power supplies for controllers. They are utilised where processes or control voltages are required that vary from the mains voltage. Transformers provide the electrical isolation between the input circuit and the output circuit.
The minimum requirement (to VDE 0550) is 2000 V.
Screw terminals secure the input-side connection to the mains. The single-phase devices are rated for a nominal voltage of ~230 ± ~15V, or ~400 V ± ~15V, 50/60 Hz, the 3-phase devices for 3 x 400 V ± 5 %. The secondary DC voltage from the transformer is conducted to a bridge rectifier where it is rectified. The pulsating DC voltage is then fed from the rectifier and filtered to a low residual ripple by means of an electrolytic capacitor. This DC voltage is then fed to the output terminal. These are designed as pluggable screw terminals. A varistor is integrated in the output circuitry to attenuate voltage peaks. The operating status is indicated by means of a green LED via the output circuit. Devices with 600 W and higher are equipped with a fan.

Well-balanced spectrum for optimum economy

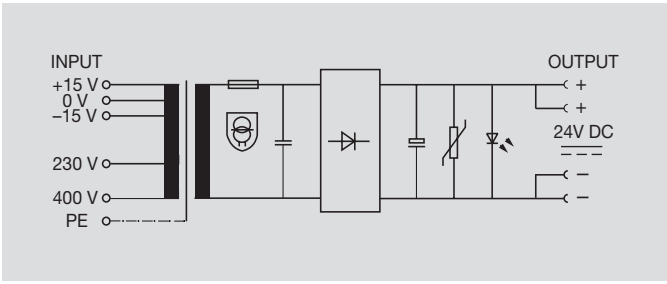
The output currents of these practical products are defined by way of two ambient temperatures.
Size selection is based on the maximum effectiveness of the components.

Adapted to standard voltages in accordance with IEC 38

By choosing the appropriate terminals, the ± 15 V tapping capability allows the single-phase devices to be connected to six different nominal AC voltages: 215, 230, 245, 385, 400, 415 V.
The ± 5 % tapping capability allows the 3-phase devices to be connected to three different nominal voltages: 380, 400, 415 V.

Single-phase unregulated power supplies

Block diagram for single-phase devices CP NT



Reliable short-circuit and overload protection

Integrated on the secondary side in device sizes up to CP NT 192W, the FKS fuse protects against overloads and short-circuits. For the devices CP NT 264W and CP NT 432W, this protection is achieved by means of a thermostatic switch built into the transformer.

Easy mounting

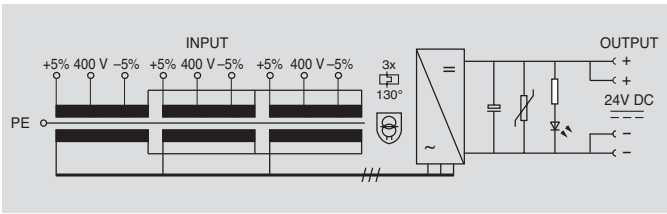
Keyhole assembly simplifies mounting and saves time. A snap-on fixing attachment for 35 mm DIN rails is available as an accessory for single-phase devices up to 144 W.
Simply plugged into the device and secured with two screws, it ensures easiest possible mounting!

Transformers, vacuum-impregnated, painted black

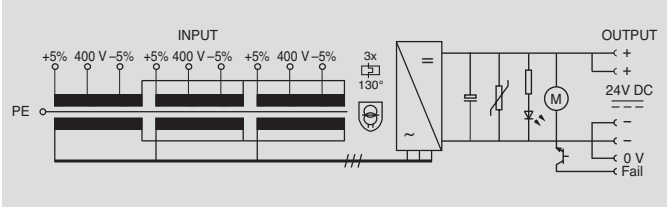
- No humming
- Moisture cannot ingress into the windings
- Windings mechanically secured
- Improved heat dissipation from the windings
- Good heat dissipation

3-phase unregulated power supplies

Block diagram for 3-phase devices CP NT3 250 / 400 / 500 W

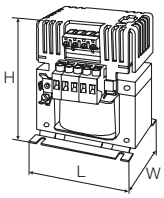
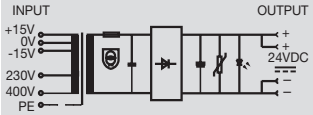
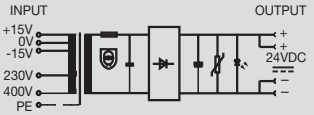
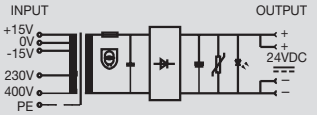


Block diagram for 3-phase devices CP NT3 600 / 750 / 1000 W



Unregulated power supplies

compactPower single phase

	CP NT 36	CP NT 72	CP NT 144
			
			

Technical data

Input			
Input voltage	230 V/ 400 V ±15V	230 V/ 400 V ±15V	230 V/ 400 V ±15V
Input current	0.35 A/ 0.2 A	0.56 A/ 0.32 A	0.95 A/ 0.55 A
Input frequency	50/ 60 Hz	50/ 60 Hz	50/ 60 Hz
No-load input current	0.1A / 0.06A	0.13A / 0.08A	0.33A / 0.19A
External back-up fuse	0.63At / 0.315At	0.1 At / 0.63 At	1.6At / 1.0At
Output			
Output voltage	24 V SELV	24 V SELV	24 V SELV
Output current at 40°C	2 A	3 A	6 A
Output current at 55°C	1 A	3 A	5 A
max. output power	36 W	72 W	144 W
max. residual ripple	< 5 %	< 5 %	< 5 %
Fuse, max.	3 At flat plug-in fuse	7.5 At flat plug-in fuse	10 At flat plug-in fuse
Protective circuit	varistor	varistor	varistor
Insulation coordination			
Electric shock protection	to VBG4	to VBG4	to VBG4
Insulation strength	4 kV	4 kV	4 kV
Insulation class	B	B	B
Ingress protection class	IP 20	IP 20	IP 20
pollution severity	1	1	1
General data			
Operating temperature	-20 °C…+55 °C	-20 °C…+55 °C	-20 °C…+55 °C
Storage temperature	-20 °C…+80 °C	-20 °C…+80 °C	-20 °C…+80 °C
Degree of efficiency at max. load	80 %	83 %	88 %
Mounting position horizontal/arbitrary	1A @ 55 °C; 1.5A @ 40 °C /1A @ 40 °C	2.5A @ 55 °C; 3A @ 40 °C /2.5A @ 40 °C	5A @ 55 °C; 6A @ 40 °C /5A @ 40 °C
Status indication	green LED	green LED	green LED
Weight	1.5 kg	2.1 kg	3.1 kg
Standards	EN 60950, EN 61558-2-4, -6, 72/23/EWG	EN 60950, EN 61558-2-4, -6, 72/23/EWG	EN 60950, EN 61558-2-4, -6, 72/23/EWG
DIN Rail compatibility	Direct mounting, TS 35 with clip-on plate	Direct mounting, TS 35 with clip-on plate	Direct mounting, TS 35 with clip-on plate
EMC standards	EN 61000-6 /-2, -3	EN 61000-6 /-2, -3	EN 61000-6 /-2, -3
Approvals	CE;cURus;UL/LIST;	CE;cURus;UL/LIST;	CE;cURus;UL/LIST;
	Screw connection	**Screw connection**	**Screw connection**
Clamping range In. (rating-/min./max) mm²	2.5 / 0.13 / 2.5	2.5 / 0.13 / 2.5	2.5 / 0.13 / 2.5
Clamping range Out. (rating-/ min./max)mm²	2.5 / 0.5 / 4	2.5 / 0.5 / 4	2.5 / 0.5 / 4
Length x width x height mm	68 x 78 x 123	85 x 84 x 125	92 x 96 x 135
Note			

Ordering data

	Type (Qty.=1)	Order No.
CP NT 36	CP NT 36W 24V 1.5A	**8575260000**
CP NT 72	CP NT 72W 24V 3A	**8575270000**
CP NT 144	CP NT 144W 24V 6A	**8575280000**

Note

Accessories

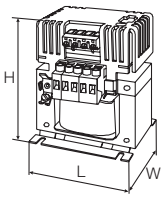
Note	Clip-in plate for TS35: 8588900000

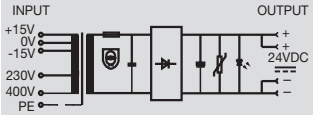
compactPower single phase

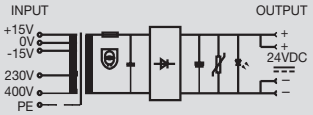
CP NT 192

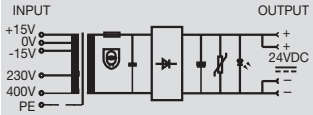
CP NT 264

CP NT 432









Technical data

	CP NT 192	CP NT 264	CP NT 432
Input			
Input voltage	230 V/ 400 V ±15V	230 V/ 400 V ±15V	230 V/ 400 V ±15V
Input current	1.3 A/ 0.7 A	1.8 A/ 1 A	2.5 A/ 1.3 A
Input frequency	50/ 60 Hz	50/ 60 Hz	50/ 60 Hz
No-load input current	0.3A / 0.16A	0.5A / 0.28A	0.54A / 0.31A
External back-up fuse	2.0At / 1.25At	3.15At / 1.6At	4.0At / 2.0At
Output			
Output voltage	24 V SELV	24 V SELV	24 V SELV
Output current at 40°C	8 A	11 A	18 A
Output current at 55°C	7 A	10 A	15 A
max. output power	192 W	264 W	432 W
max. residual ripple	< 5 %	< 5 %	< 5 %
Fuse, max.	15 At flat plug-in fuse	Thermal switch	Thermal switch
Protective circuit	varistor	varistor	varistor
Insulation coordination			
Electric shock protection	to VBG4	to VBG4	to VBG4
Insulation strength	4 kV	4 kV	4 kV
Insulation class	B	B	B
Ingress protection class	IP 20	IP 20	IP 20
pollution severity	1	1	1
General data			
Operating temperature	-20 °C…+55 °C	-20 °C…+55 °C	-20 °C…+55 °C
Storage temperature	-20 °C…+80 °C	-20 °C…+80 °C	-20 °C…+80 °C
Degree of efficiency at max. load	90 %	93 %	95 %
Mounting position horizontal/arbitrary	7A @ 55 °C; 8A @ 40 °C /7A @ 40 °C	10A @ 55 °C; 11A @ 40 °C /10A @ 40 °C	15A @ 55 °C; 18A @ 40 °C /15A @ 40 °C
Status indication	green LED	green LED	green LED
Weight	4.3 kg	6.1 kg	9.1 kg
Standards	EN 60950, EN 61558-2-4, -6, 72/23/EWG	EN 60950, EN 61558-2-4, -6, 72/23/EWG	EN 60950, EN 61558-2-4, -6, 72/23/EWG
DIN Rail compatibility	Direct mounting	Direct mounting	Direct mounting
EMC standards	EN 61000-6 /-2, -3	EN 61000-6 /-2, -3	EN 61000-6 /-2, -3
Approvals	CE;cURus;UL/LIST;	CE;cURus;UL/LIST;	CE;cURus;UL/LIST;
	Screw connection	**Screw connection**	**Screw connection**
Clamping range In. (rating-/min./max) mm²	2.5 / 0.13 / 2.5	2.5 / 0.13 / 2.5	2.5 / 0.13 / 2.5
Clamping range Out. (rating-/ min./max)mm²	2.5 / 0.5 / 4	2.5 / 0.5 / 4	2.5 / 0.5 / 4
Length x width x height mm	105 x 105 x 145	113 x 120 x 165	135 x 135 x 185
Note			

Ordering data

Type	(Qty.=1)	Order No.
CP NT 192W 24V 8A		**8575300000**
CP NT 264W 24V 11A		**8575310000**
CP NT 432W 24V 18A		**8575320000**

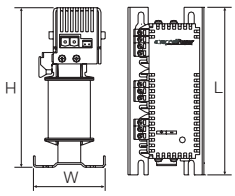
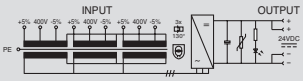
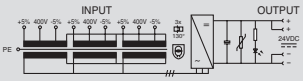
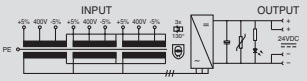
Note

Accessories

Note

Unregulated power supplies

compactPower 3-phase

	CP NT3 250	CP NT3 400	CP NT3 500
			
			

Technical data

	CP NT3 250	CP NT3 400	CP NT3 500
Input			
Input voltage	3 x 400 V ±5 %	3 x 400 V ±5 %	3 x 400 V ±5 %
Input current	0.5 A	0.75 A	0.9 A
Input frequency	50/ 60 Hz	50/ 60 Hz	50/ 60 Hz
No-load input current	0.1A	0.11 A	0.13 A
Input fuse	3 No. thermostatic switches in primary winding	3 No. thermostatic switches in primary winding	3 No. thermostatic switches in primary winding
External back-up fuse	3 x 1.0AT	3 x 1.2 AT	3 x 1.6 AT
Output			
Output voltage	24 V SELV	24 V SELV	24 V SELV
Output current at 40°C/60°C	11 A/10 A	18 A/16 A	22 A/20 A
max. output power	250 W	400 W	500 W
max. residual ripple	< 2 %	< 2 %	< 2 %
Fuse, max.	External 10 AT	External 16/18 AT	External 20/22 AT
Protective circuit	varistor	varistor	varistor
Insulation coordination			
Electric shock protection	to VBG4	to VBG4	to VBG4
Insulation strength	4 kV	4 kV	4 kV
Insulation class	B	B	B
Ingress protection class	IP 20	IP 20	IP 20
pollution severity	1	1	1
General data			
Operating temperature	-20 °C…+60 °C	-20 °C…+60 °C	-20 °C…+60 °C
Storage temperature	-20 °C…+80 °C	-20 °C…+80 °C	-20 °C…+80 °C
Degree of efficiency at max. load	76 %	77 %	78 %
Mounting position horizontal/vertical	11A @ 40 °C /10A @ 60 °C	18A @ 40 °C /16A @ 60 °C	22A @ 40 °C /20A @ 60 °C
Fan signal	no integral fan	no integral fan	no integral fan
Status indication	green LED	green LED	green LED
Weight	4.7 kg	6.9 kg	10 kg
Standards	EN 60950, EN 61558-2-4, -6, 72/23/EWG	EN 60950, EN 61558-2-4, -6, 72/23/EWG	EN 60950, EN 61558-2-4, -6, 72/23/EWG
EMC standards	EN 61000-6 /-2, -3	EN 61000-6 /-2, -3	EN 61000-6 /-2, -3
DIN Rail compatibility	Direct mounting	Direct mounting	Direct mounting
	Screw connection	**Screw connection**	**Screw connection**
Clamping range In. (rating-/min./max) mm²	2.5 / 0.5 / 2.5	2.5 / 0.5 / 2.5	2.5 / 0.5 / 2.5
Clamping range Out. (rating-/ min./max)mm²	6 / 0.5 / 6	6 / 0.5 / 6	6 / 0.5 / 6
Length x width x height mm	185 x 84 x 192	220 x 88 x 213	220 x 108 x 215
Note	Condensation not allowed	Condensation not allowed	Condensation not allowed

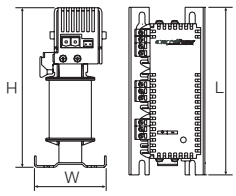
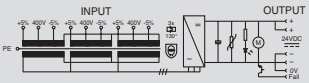
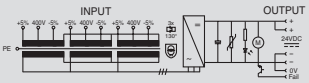
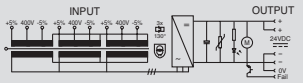
Ordering data

	Type	(Qty.=1)	Order No.
CP NT3 250	CP NT3 250W 24V 10A		**8628620000**
CP NT3 400	CP NT3 400W 24V 15A		**8628630000**
CP NT3 500	CP NT3 500W 24V 20A		**8628650000**

Note

Accessories

Note

compactPower 3-phase	CP NT3 600	CP NT3 750	CP NT3 1000
			
			

Technical data

Input			
Input voltage	3 x 400 V ±5 %	3 x 400 V ±5 %	3 x 400 V ±5 %
Input current	1.2 A	1.4 A	1.8 A
Input frequency	50/ 60 Hz	50/ 60 Hz	50/ 60 Hz
No-load input current	0.15 A	0.16 A	0.14 A
Input fuse	3 No. thermostatic switches in primary winding	3 No. thermostatic switches in primary winding	3 No. thermostatic switches in primary winding
External back-up fuse	3 x 2 AT	3 x 2.5 AT	3 x 3.15 AT
Output			
Output voltage	24 V SELV	24 V SELV	24 V SELV
Output current at 40°C/60°C	26 A/25 A	32 A/30 A	42 A/40 A
max. output power	600 W	750 W	1000 W
max. residual ripple	< 2 %	< 2 %	< 2 %
Fuse, max.	External 25/26 AT	External 30/32 AT	External 40/42 AT
Protective circuit	varistor	varistor	varistor
Insulation coordination			
Electric shock protection	to VBG4	to VBG4	to VBG4
Insulation strength	4 kV	4 kV	4 kV
Insulation class	B	B	B
Ingress protection class	IP 20	IP 20	IP 20
pollution severity	1	1	1
General data			
Operating temperature	-20 °C…+60 °C	-20 °C…+60 °C	-20 °C…+60 °C
Storage temperature	-20 °C…+80 °C	-20 °C…+80 °C	-20 °C…+80 °C
Degree of efficiency at max. load	78 %	77 %	77 %
Mounting position horizontal/vertical	26A @ 40 °C /25A @ 60 °C	32A @ 40 °C /30A @ 60 °C	42A @ 40 °C /40A @ 60 °C
Fan signal	Open collector <30 V/ <5 mA during fault	Open collector <30 V/ <5 mA during fault	Open collector <30 V/ <5 mA during fault
Status indication	green LED	green LED	green LED
Weight	11 kg	14 kg	18 kg
Standards	EN 60950, EN 61558-2-4, -6, 72/23/EWG	EN 60950, EN 61558-2-4, -6, 72/23/EWG	EN 60950, EN 61558-2-4, -6, 72/23/EWG
EMC standards	EN 61000-6 /-2, -3	EN 61000-6 /-2, -3	EN 61000-6 /-2, -3
DIN Rail compatibility	Direct mounting	Direct mounting	Direct mounting
	Screw connection	**Screw connection**	**Screw connection**
Clamping range In. (rating-/min./max) mm²	2.5 / 0.5 / 2.5	2.5 / 0.5 / 2.5	2.5 / 0.5 / 2.5
Clamping range Out. (rating-/ min./max)mm²	6 / 0.5 / 6	6 / 0.5 / 6	10 / 0.5 / 10
Length x width x height mm	230 x 108 x 212	270 x 121 x 255	280 x 122 x 275
Note	Condensation not allowed	Condensation not allowed	Condensation not allowed

Ordering data

	Type	(Qty.=1)	Order No.
	CP NT3 600W 24V 25A		**8628660000**
Note			

	Type	(Qty.=1)	Order No.
	CP NT3 750W 24V 30A		**8628670000**

	Type	(Qty.=1)	Order No.
	CP NT3 1000W 24V 40A		**8628680000**

Accessories

Note

UPS control unit

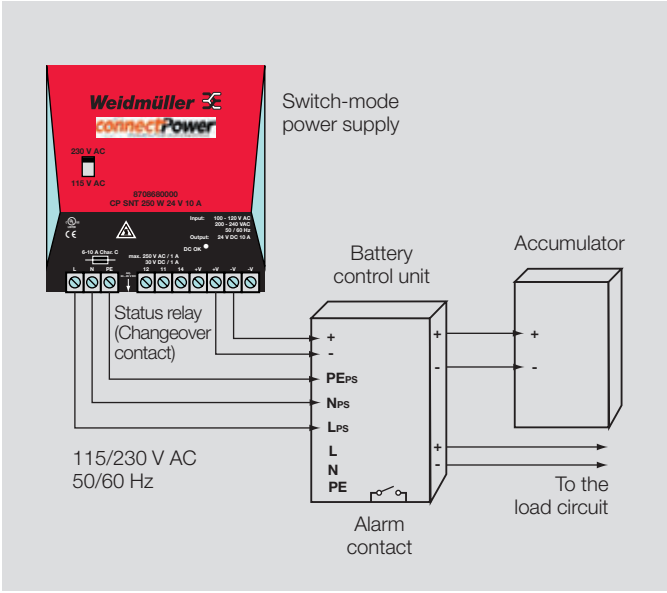
compactPower
POWER FOR AUTOMATION

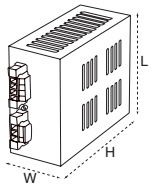
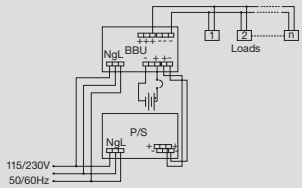
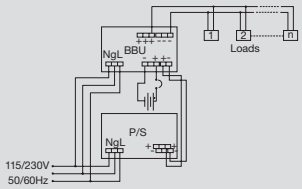
When the power supply fails, UPS control units take over the 12/24 V DC power supply to the installation within seconds, and guarantee plant availability for a defined length of time.

Professional signalling guarantees that all relevant signal statuses can be evaluated on the spot. Critical statuses can also be immediately redirected to a higher-level controller.

The battery module undertakes complete battery management of the connected lead-acid batteries. Constant charging and discharging plus electronic overcurrent protection guarantee an extremely long operational lifetime for the batteries.

Switch-mode power supply, battery control unit and battery providing an uninterrupted power supply.



connectPower	CP-BBU 115-230 V AC / 12 V DC	CP-BBU 115-230 V AC / 24 V DC
		
		

Technical data

Input			
Input voltage		85…265 V AC; 120…300 V DC; typ.115-230 V AC ±10%	85…265 V AC; 120…300 V DC; typ.115-230 V AC ±10%
Input current		0.8 A @ 115 V AC; 0.5 A @ 230 V AC	1 A @ 115 V AC; 0.6 A @ 230 V AC
Input frequency		50/ 60 Hz	50/ 60 Hz
Input fuse		2 A slow-blow fuse (internal)	2 A slow-blow fuse (internal)
Making current limit		Thermistor	Thermistor
Overvoltage protection		Varistor	Varistor
Output			
Output voltage		12 V DC	24 V DC
Output current		max. 15 A / max 9.2 A for power supply	max. 15 A / max 9.0 A for power supply
Mains failure bridge-over time			
Battery charging current		2.00 A	3.00 A
Battery voltage		13.65 V	27.3 V
Control at input voltage		0.2 %	0.2 %
General data			
Operating temperature		-20 °C…+50 °C	-20 °C…+50 °C
Storage temperature		-20 °C…+85 °C	-20 °C…+85 °C
Status indication		LED green (Full Charge): Battery voltage > 14.75 Vdc	LED green (Full Charge): Battery voltage > 29.5 Vdc
		LED yellow (Battery Low): Battery voltage < 11 Vdc	LED yellow (Battery Low): Battery voltage < 22 Vdc
		LED yellow (Chargin): BBU charges Battery	LED yellow (Charging): BBU charges Battery
		LED red (Fault): no AC input voltage	LED red (Fault): no AC input voltage
		LED red (Battery Reverse): Battery polarizing	LED red (Batterie Reverse): Battery polarizing fault
			LED red (Battery open): no battery connected
Standards		EN 50178, EN 60950, IEC950	EN 50178, EN 60950, IEC950
EMC standards		EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3	EN 55011, EN 55022, EN 55024, EN 61000-6-2, 3
Approvals		CSA;UL/UR;CE;	CSA;UL/UR;CE;
Dimensions		**Screw connection**	**Screw connection**
Clamping range (rating- / min. / max.)	mm^2	4.0 / 0.1 / 4	4.0 / 0.1 / 4
Length x width x height	mm	161 x 72.5 x 127.5	161 x 72.5 x 127.5
Note			

Ordering data

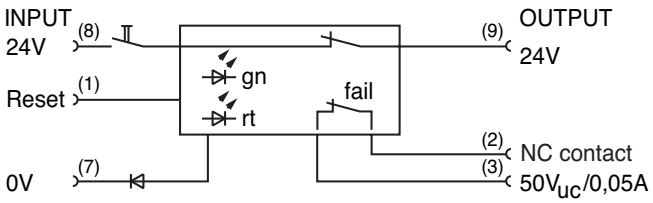
Connection system	Type	Qty.	Order No.	Type	Qty.	Order No.
Screw connection	CP-BBU 115-230VAC / 12VDC	1	**9916280012**	CP-BBU 115-230VAC / 24VDC	1	**9916280024**
Note						

Accessories

Note	Bracket for wall mounting: 7920560000	Bracket for wall mounting: 7920560000

WAVEGUARD electronic fusing

Owing to their technical characteristics, switch-mode power units cannot supply a dynamic output current, or at best only a very limited one. For protection in the case of an overload, the device switches to a current limit and reduces the voltage. As this means that sufficient power is no longer available, circuit-breakers and cartridge fuses do not operate reliably. Selective electronic fusing eliminates detrimental cross-coupling between parallel current paths, protects and switches off only the defective circuits. That results in high system availability and minimises the troubleshooting workload in the ever more complex systems.



Additional reset input

The reset input can be switched with a voltage pulse for remote resetting of the system, and the load circuit is closed again with the trailing pulse edge. A cyclic automatic reset is not permissible and is also inadvisable for safety reasons.

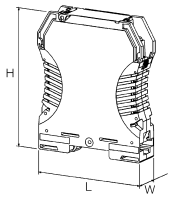
Visual signalling and floating signal contact

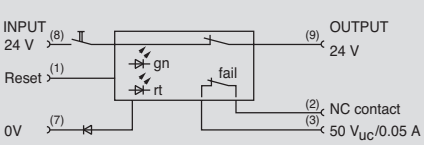
It is necessary to signal one malfunction: the switching status of the fuse is shown by the integral LED and the signal contact (NCC). This speeds up troubleshooting and therefore reduces maintenance costs.

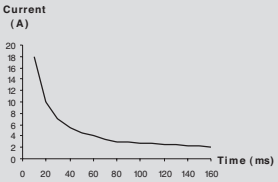
WAVEGUARD

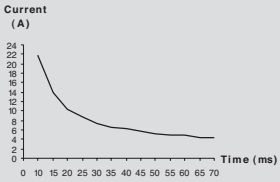
24 V DC 1.6 A

24 V DC 3.15 A









Technical data

Input		
Rated voltage	24 V DC	24 V DC
Rated current	1.6 A	3.15 A
Reset	Pulse > 100 ms +24 V, falling edge ON	Pulse > 100 ms +24 V, falling edge ON
Output		
Status relay / Change-over contact	NCC, max. 50 V / 0.05 A; for low voltage only!	NCC, max. 50 V / 0.05 A; for low voltage only!
Signalling delay	3.5 ms typically	3.5 ms typically
General data		
Operating temperature	0°C…+55°C (fitted)	0°C…+55°C (fitted)
Storage temperature	-20 °C…+85 °C	-20 °C…+85 °C
Status indication	LED green: OK, LED red: Tripped	LED green: OK, LED red: Tripped
Standards	EN 50178	EN 50178
EMC standards	EN 61000-6-1, 2, 4; EN 55011	EN 61000-6-1, 2, 4; EN 55011
Sliding switch	OFF - wait 10 s - ON; on / off	OFF - wait 10 s - ON; on / off
Approvals	CE / cURus	CE / cURus

Dimensions		**Screw connection**	**Tension clamp connection**	**Screw connection**	**Tension clamp connection**
Clamping range (rating- / min. / max.)	mm^2	2.5 / 0.5 / 2.5	1.5 / 0.5 / 2.5	2.5 / 0.5 / 2.5	1.5 / 0.5 / 2.5
Length x width x height	mm	92.4 x 22.5 x 72	92.4 x 22.5 x 72	92.4 x 22.5 x 72	92.4 x 22.5 x 72
Note		Periodic auto-reset not permitted; Tu=23°C, single module		Periodic auto-reset not permitted; Tu=23°C, single module	

Ordering data

Connection system	**Type**	**Qty.**	**Order No.**	**Type**	**Qty.**	**Order No.**
Screw connection	WGS 24Vdc 1.6A	1	**8618890000**	WGS 24Vdc 3.15A	1	**8618910000**
Tension clamp connection	WGZ 24Vdc 1.6A	1	**8621040000**	WGZ 24Vdc 3.15A	1	**8621030000**
Note						

Accessories

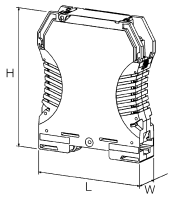
Note

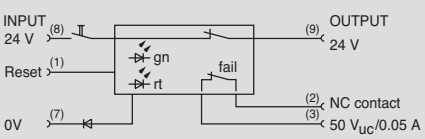
Fuse for 24V DC electric circuits

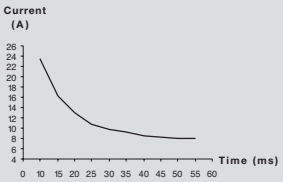
WAVEGUARD

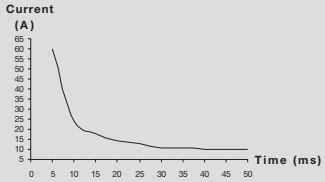
24 V DC 6.3 A

24 V DC 8 A









Technical data

Input		
Rated voltage	24 V DC	24 V DC
Rated current	6.3 A	8 A
Reset	Pulse > 100 ms +24 V, falling edge ON	Pulse > 100 ms +24 V, falling edge ON
Output		
Status relay / Change-over contact	NCC, max. 50 V / 0.05 A; for low voltage only!	NCC, max. 50 V / 0.05 A; for low voltage only!
Signalling delay	3.5 ms typically	3.5 ms typically
General data		
Operating temperature	0°C…+55°C (fitted)	0°C…+55°C (fitted)
Storage temperature	-20 °C…+85 °C	-20 °C…+85 °C
Status indication	LED green: OK, LED red: Tripped	LED green: OK, LED red: Tripped
Standards	EN 50178	EN 50178
EMC standards	EN 61000-6-1, 2, 4; EN 55011	EN 61000-6-1, 2, 4; EN 55011
Sliding switch	OFF - wait 10 s - ON; on / off	OFF - wait 10 s - ON; on / off
Approvals	CE / cURus	CE / cURus

Dimensions		**Screw connection**	**Tension clamp connection**	**Screw connection**	**Tension clamp connection**
Clamping range (rating- / min. / max.)	mm^2	2.5 / 0.5 / 2.5	1.5 / 0.5 / 2.5	2.5 / 0.5 / 2.5	1.5 / 0.5 / 2.5
Length x width x height	mm	92.4 x 22.5 x 72	92.4 x 22.5 x 72	92.4 x 22.5 x 72	92.4 x 22.5 x 72
Note		Periodic auto-reset not permitted; Tu=23°C, single module		Periodic auto-reset not permitted; Tu=23°C, single module	

Ordering data

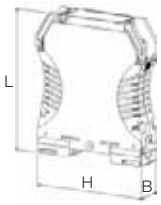
Connection system	**Type**	**Qty.**	**Order No.**	**Type**	**Qty.**	**Order No.**
Screw connection	WGS 24Vdc 6.3A	1	**8618930000**	WGS 24Vdc 8.0A	1	**8618940000**
Tension clamp connection	WGZ 24Vdc 6.3A	1	**8621020000**	WGZ 24VDC 8.0A	1	**8621010000**
Note						

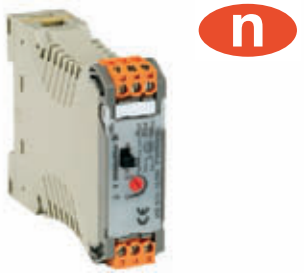
Accessories

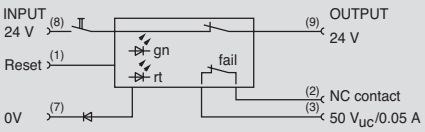
Note

WAVEGUARD

24 V DC 0.5…5 A







Technical data

Input	
Rated voltage	24 V DC
Rated current	0.5…5 A adjustable
Reset	Pulse > 100 ms +24 V, falling edge ON
Output	
Status relay / Change-over contact	NCC, max. 50 V / 0.05 A; for low voltage only!
Signalling delay	3.5 ms typically
General data	
Operating temperature	0°C…+55°C (fitted)
Storage temperature	-20 °C…+85 °C
Status indication	LED green: OK, LED red: Tripped
Standards	EN 50178
EMC standards	EN 61000-6-1, 2, 4; EN 55011
Sliding switch	OFF - wait 10 s - ON; on / off
Approvals	n.a.

Dimensions		**Screw connection**	**Tension clamp connection**
Clamping range (rating- / min. / max.)	mm²	2.5 / 0.5 / 2.5	1.5 / 0.5 / 2.5
Length x width x height	mm	92.4 x 22.5 x 72	92.4 x 22.5 x 72

Note

Periodic auto-reset not permitted; Tu=23°C, single module

Ordering data

Connection system	**Type**	**Qty.**	**Order No.**
Screw connection	WGS 24Vdc 0.5…5A	1	**8710270000**
Tension clamp connection	WGZ 24Vdc 0.5…5A	1	**8727630000**

Note

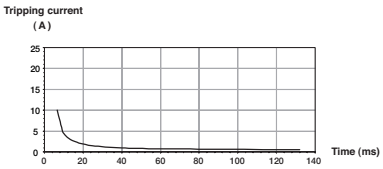
Accessories

Note

Derating curve

Dynamic tripping characteristic

Tripping current: 0.5 A



Tripping current: 5.0 A