

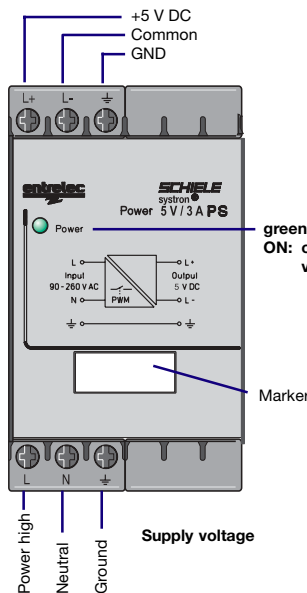
Switching Power Supply systron® PS



The switching power supplies, systron® PS, offer many advantages over conventional supplies:

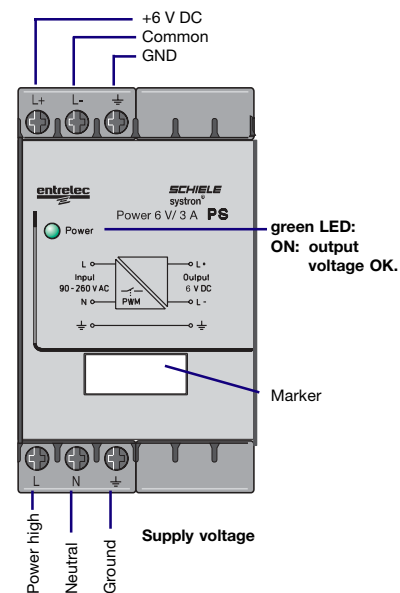
- DIN Rail mount compact modules
- Low weight
- High efficiency
- Low heating
- Wide range of supply voltage
- Constant output voltage with good regulation
- UL, CSA listed, EN 50178 (VDE 0160)
- Short-circuit and overload proof
- Fused input

5 V DC / 3 A



■ Approvals: Class I & II, Div. 2

6 V DC / 3 A



■ Approvals: Class I & II, Div. 2

Power supply systron® PS	P/N:	Power supply systron® PS	P/N:
systron® PS 5 V DC / 3 A	2 423 418 30	systron® PS 6 V DC / 3 A	2 423 418 40

Technical data

Input

Supply voltage	90...260 V AC	90...260 V AC
	105...260 V DC	105...260 V DC
Frequency, AC input	47... 400 Hz	47... 400 Hz
Output load hold time	With input voltage drop out, min. 10 ms at 100 % load	With input voltage drop out, min. 10 ms at 100 % load
Input current at nominal load	0.4 A (90 V AC) / 0.2 A (260 V AC)	0.5 A (90 V AC) / 0.25 A (260 V AC)
Inrush current 25° C (≤ 2 ms)	7.5 A	7.5 A
Internal input fuse	3.0 A (slow blow)	3.0 A (slow blow)

Output

Output voltage	5 V DC ± 3 %	6 V DC ± 3 %
Output current	3 A	3 A
Current derating at temperature > 45°C	- 25 mA/°C	- 25 mA/°C
Current derating at input voltage < 100 V AC	-	-
Residual ripple / noise	max. 50 mVpp	max. 50 mVpp
Deviation of output with input change	max. ± 0.5 %	max. ± 0.5 %
Deviation of output with static load change	max. ± 0.5 %	max. ± 0.5 %
Deviation of output with dynamic load change	max. 5 %	max. 5 %
Short circuit protection	overcurrent switch off with automatic restart	overcurrent switch off with automatic restart
Overload protection	overtemperature and overcurrent switch off	overtemperature and overcurrent switch off
Reset after thermal overload	disconnection of AC power input min. 30 s	disconnection of AC power input min. 30 s

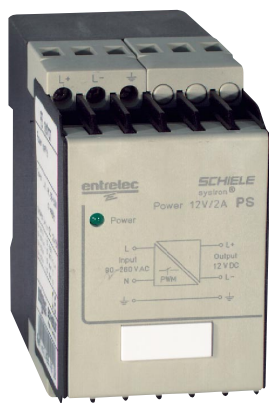
Norms, tests

Electrical safety standards	EN 50178 (VDE 0160) / UL 508 / CSA 22.2	EN 50178 (VDE 0160) / UL 508 / CSA 22.2
Galvanic isolation	reliable isolation acc. to IEC 664-1, DIN VDE 0106-101	reliable isolation acc. to IEC 664-1, DIN VDE 0106-101
Voltage withstand input <-> output	2.5 kV AC, 3 kV AC type test	2.5 kV AC, 3 kV AC type test
Clearance and creepage distances	overvoltage category 2, pollution degree 2	overvoltage category 2, pollution degree 2
Electromagnetic immunity (EM) acc. to EN 50082-2:	ESD: EN 61000-4-2 level 3 6/8 kV RF field: EN 61000-4-4 level 3 10 V/m Burst: EN 61000-4-5 level 4 4 kV Surge: EN 61000-4-5 level 3 3 kV conducted RF: EN 61000-4-6 level 3 10 V	ESD: EN 61000-4-2 level 3 6/8 kV RF field: EN 61000-4-4 level 3 10 V/m Burst: EN 61000-4-5 level 4 4 kV Surge: EN 61000-4-5 level 3 3 kV conducted RF: EN 61000-4-6 level 3 10 V
Electromagnetic compatibility (EMC) acc. EN 50081-2	radiated noise EN 55011, class B	radiated noise EN 55011, class B
Input current harmonics	no limitation	no limitation
Protection against contact		
Terminals	IP 20	IP 20
Housing	IP 50	IP 30
Protection class	1	1

General characteristics

Efficiency	approx. 81 %	approx. 85 %
Status indication	green LED, power OK	green LED, power OK
Operating temperature	0° ... +55°C	0° ... +55°C
Storage temperature	-25° ... +75°C	-25° ... +75°C
Terminals	screw terminals, 2 x 14 AWG (2.5 mm ²)	screw terminals, 2 x 14 AWG (2.5 mm ²)
Weight	approx. 0.22 kg (0.49 lb)	approx. 0.22 kg (0.49 lb)
Dimensions (W x H x D)	1.77 x 3.07 x 3.94" (45 x 78 x 100 mm)	1.77 x 3.07 x 3.94" (45 x 78 x 100 mm)
Mounting hints	Normal position: horizontal onto DIN rail. Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm	Normal position: horizontal onto DIN rail. Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm

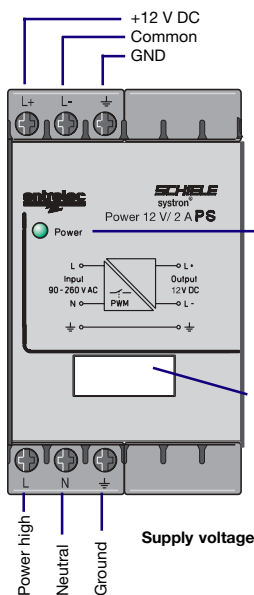
Switching Power Supply syston® PS



The switching power supplies, syston® PS, offer many advantages over conventional supplies:

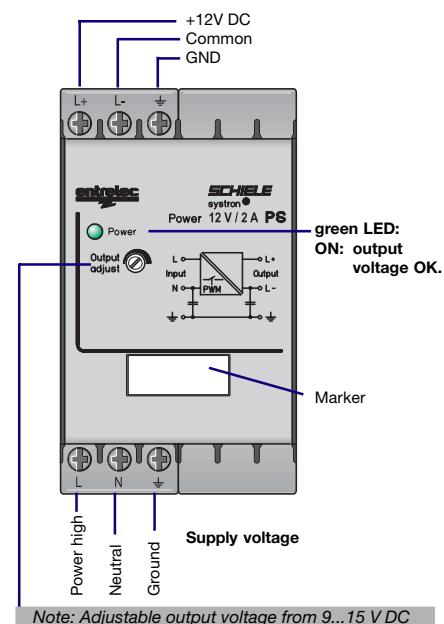
- DIN Rail mount compact modules
- Low weight
- High efficiency
- Low heating
- Wide range of supply voltage
- Constant output voltage with good regulation
- UL, CSA listed, EN 50178 (VDE 0160)
- Short-circuit and overload proof
- Fused input
- Adjustable output voltage

12 V DC / 2 A



■ Approvals: Class I & II, Div. 2

12 V DC / 2 A



■ Approvals: Class I & II, Div. 2

Power supply syston® PS	P/N:
syston® PS 12 V DC / 2 A	2 423 418 10

Power supply syston® PS	P/N:
syston® PS 12 V DC / 2 A	2 423 418 11

Technical data

Input

Supply voltage	90...260 V AC	90...260 V AC
	105...260 V DC	105...260 V DC
Frequency, AC input	47... 400 Hz	47... 400 Hz
Output load hold time	With input voltage drop out, min. 10 ms at 100 % load	With input voltage drop out, min. 10 ms at 100 % load
Input current at nominal load	0.6 A (90 V AC) / 0.27 A (260 V AC)	0.7 A (90 V AC) / 0.3 A (260 V AC)
Inrush current 25° C (≤ 2 ms)	7.5 A	33 A
Internal input fuse	3.0 A (slow blow)	3.0 A (slow blow)
Output		
Output voltage	12 V DC ± 3 %	12 V DC ± 3 % (9...15 V DC adjustable with pot. max. 36 W)
Output current	2 A	2 A / 48 W
Current derating at temperature > 45°C	- 20 mA / °C	- 0.3 W / °C
Current derating at input voltage < 100 V AC	- 20 mA / V	-
Residual ripple / noise	max. 300 mVpp	max. 200 mVpp
Deviation of output with input change	max. ± 0.1 %	max. ± 0.5 %
Deviation of output with static load change	max. ± 0.5 %	max. ± 0.5 %
Deviation of output with dynamic load change	max. 5 %	max. 5 %
Short circuit protection	overcurrent switch off with automatic restart	overcurrent switch off with automatic restart
Overload protection	overtemperature and overcurrent switch off	overtemperature and overcurrent switch off
Reset after thermal overload	disconnection of AC power input min. 30 s	disconnection of AC power input min. 30 s

Norms, tests

Electrical safety standards	EN 50178 (VDE 0160) / UL 508 / CSA 22.2	EN 50178 (VDE 0160) / UL 508 / CSA 22.2
Galvanic isolation	reliable isolation acc. to IEC 664-1, DIN VDE 0106-101	reliable isolation acc. to IEC 664-1, DIN VDE 0106-101
Voltage withstand input <-> output	2.5 kV AC, 3 kV AC type test	2.5 kV AC, 3 kV AC type test
Clearance and creepage distances	overvoltage category 2, pollution degree 2	overvoltage category 2, pollution degree 2
Electromagnetic immunity (EM) acc. to EN 50082-2:		
ESD:	EN 61000-4-2 level 3 6/8 kV	EN 61000-4-2 level 3 6/8 kV
RF field:	EN 61000-4-4 level 3 10 V/m	EN 61000-4-4 level 3 10 V/m
Burst:	EN 61000-4-5 level 4 4 kV	EN 61000-4-5 level 4 4 kV
Surge:	EN 61000-4-5 level 3 3 kV	EN 61000-4-5 level 3 3 kV
conducted RF:	EN 61000-4-6 level 3 10 V	EN 61000-4-6 level 3 10 V
Electromagnetic compatibility (EMC) acc. EN 50081-2	radiated noise EN 55011, class B	radiated noise EN 55011, class B
Input current harmonics	no limitation	no limitation
Protection against contact		
Terminals	IP 20	IP 20
Housing	IP 50	IP 30
Protection class	1	1

General characteristics

Efficiency	approx. 80...83 %	approx. 79...84 %
Status indication	green LED, power OK	green LED, power OK
Operating temperature	0° ... +55°C	0° ... +55°C
Storage temperature	-25° ... +75°C	-25° ... +75°C
Terminals	screw terminals, 2 x 14 AWG (2.5 mm ²)	screw terminals, 2 x 14 AWG (2.5 mm ²)
Weight	approx. 0.22 kg (0.49 lb)	approx. 0.22 kg (0.49 lb)
Dimensions (W x H x D)	1.77 x 3.07 x 3.94" (45 x 78 x 100 mm)	1.77 x 3.07 x 3.94" (45 x 78 x 100 mm)
Mounting hints	Normal position: horizontal onto DIN rail. Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm	Normal position: horizontal onto DIN rail. Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm

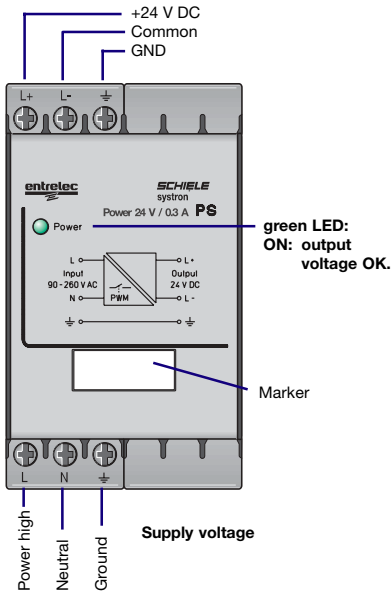
Switching Power Supply systron® PS



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- DIN Rail mount compact modules
- Low weight
- High efficiency
- Low heating
- Wide range of supply voltage
- Constant output voltage with good regulation
- UL, CSA listed, EN 50178 (VDE 0160)
- Short-circuit and overload proof
- Fused input

24 V DC / 0.3 A



■ Approvals: Class I & II, Div. 2

Power supply systron® PS	P/N:
systron® PS 24 V DC / 0.3 A	2 423 418 20

Technical data

Input

Supply voltage	90...260 V AC 105...260 V DC
Frequency, AC input	47... 440 Hz
Output load hold time	With input voltage drop out, min.10 ms at 100 % load
Input current at nominal load	0.2 A (90 V AC) / 0.1 A (260 V AC)
Inrush current at 25° C (≤ 2 ms)	7.5 A
Internal input fuse	3.0 A (slow blow)

Output

Output voltage	24 V DC ± 3 %
Output current / power	0,3 A
Current derating at temperature > 45° C	-
Current derating at input voltage < 100 V AC	-
Residual ripple / noise	max. 100 mVpp
Deviation of output with input change	max. ± 0.5 %
Deviation of output with static load change	max. ± 0.5 %
Deviation of output with dynamic load change 10-90 %	max. 5 %
Short circuit protection	overcurrent switch off with automatic restart
Overload protection	overtemperature and overcurrent switch off
Reset after thermal overload	disconnection of AC power input min. 30 s

Norms, tests

Electrical safety standards	EN 50178 (VDE 0160) / UL 508 / CSA 22.2
Galvanic isolation	reliable isolation acc. to IEC 664-1, DIN VDE 0106-101
Voltage withstand input <-> output	2.5 kV AC, 3 kV AC type test
Clearance and creepage distances	overvoltage category 2, pollution degree 2
Electromagnetic immunity acc. to EN 50082-2:	
ESD:	EN 61000-4-2 level 3 6/8 kV
RF field:	EN 61000-4-4 level 3 10 V/m
Burst:	EN 61000-4-5 level 4 4 kV
Surge:	EN 61000-4-5 level 3 3 kV
conducted RF:	EN 61000-4-6 level 3 10 V

Electromagnetic compatibility (EMC) acc. to EN 50081-2	radiated noise EN 55011, class B
Input current harmonics	no limitation
Protection against contact	
Terminals	IP 20
Housing	IP 50
Protection class	1

General characteristics

Efficiency	approx. 70 %
Status indication	green LED, power OK
Operating temperature	0° ... +55°C
Storage temperature	-25° ... +75°C
Terminals	screw terminals, 2 x 14 AWG (2.5 mm ²)
Weight	approx. 0.22 kg (0.49 lb)
Dimensions (W x H x D)	1.77 x 3.07 x 3.94" (45 x 78 x 100 mm)
Mounting hints	Normal position: horizontal onto DIN rail. Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm

Switching Power Supply systron® PS

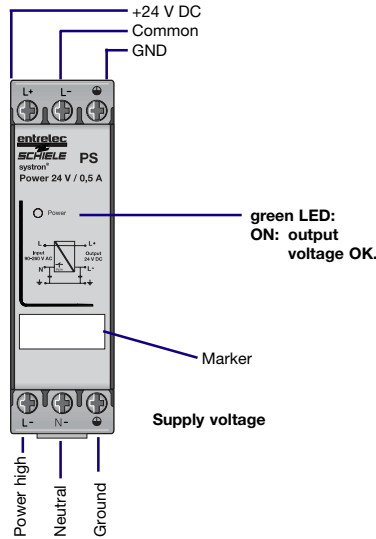


24 V DC / 0.5 A



The switching power supplies, systron® PS, offer many advantages over conventional supplies:

- DIN Rail mount compact modules
- Low weight
- High efficiency
- Low heating
- Wide range of supply voltage
- Constant output voltage with good regulation
- UL, CSA listed, EN 50178 (VDE 0160)
- Short-circuit and overload proof
- Fused input



■ Approvals: Class I & II, Div. 2

Power supply systron® PS	P/N:
systron® PS 24 V DC / 0.5 A	2 423 414 00

Technical data

Input

Supply voltage	90...260 V AC 105...260 V DC
Frequency, AC input	47... 440 Hz
Output load hold time	With input voltage drop out, min.10 ms at 100% load
Input current at nominal load	0.3 A (90 V AC) 0.15 A (260 V AC)
Inrush current 25° C (≤ 2 ms)	33 A
Internal input fuse	3.0 A (slow load)

Output

Output voltage	24 V DC ± 3 %
Output current / power	0.5 A / 7.2 W
Current derating at temperature > 45°C	-
Current derating at input voltage < 105 V AC	-
Residual ripple / noise	max. 100 mVpp
Deviation of output with input change	max. ± 0.5 %
Deviation of output with static load change 10-90%	max. ± 0.5 %
Deviation of output with dynamic load change	max. 5 %
Short circuit protection	overcurrent switch off with automatic restart
Overload protection	overtemperature and overcurrent switch off
Reset after thermal overload	Disconnection of AC power input 30 s min.

Norms, tests

Electrical safety standards	EN 50178 (VDE 0160)/UL 508/CSA 22.2	
Galvanic isolation	reliable isolation acc. to IEC 664-1, DIN VDE 0106-101	
Voltage withstand input <-> output	2.5 kV AC, 3 kV AC type test	
Clearance and creepage distances	overvoltage category 2, pollution degree 2	
Electromagnetic immunity (EM) in acc. to EN 50082-2:	ESD:	EN 61000-4-2 level 3 6/8 kV
	RF field:	EN 61000-4-3 level 3 10 V/m
	Burst:	EN 61000-4-4 level 4 4 kV
	Surge:	EN 61000-4-5 3 kV
	conducted RF:	EN 61000-4-6 level 3 10 V

Electromagnetic compatibility (EMC) in acc. EN 50081-2

Input current harmonics	no limitation
Protection against contact	
Terminals	IP 20
Housing	IP 50
Protection class	1

General characteristics

Efficiency (nominal load)	approx. 84 %
Status indication	Green LED, power OK
Operating temperature	0° ... 55°C
Storage temperature	-25° ... +75°C
Terminals	screw terminals, 2 x 14 AWG (2.5 mm ²)
Weight	approx. 0.22 kg (0.49 lb)
Dimensions (W x H x D)	0.89 x 3.07 x 4.72" (22.5 x 78 x 120 mm)
Mounting hints	Normal position: horizontal onto DIN rail. Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm

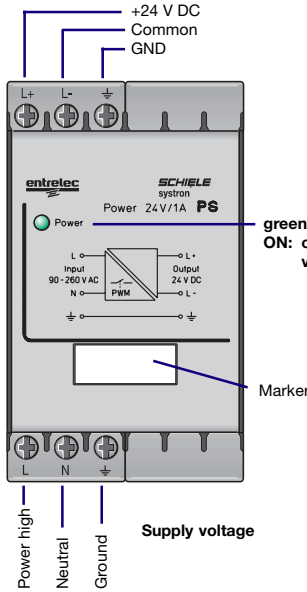
Switching Power Supply systron® PS



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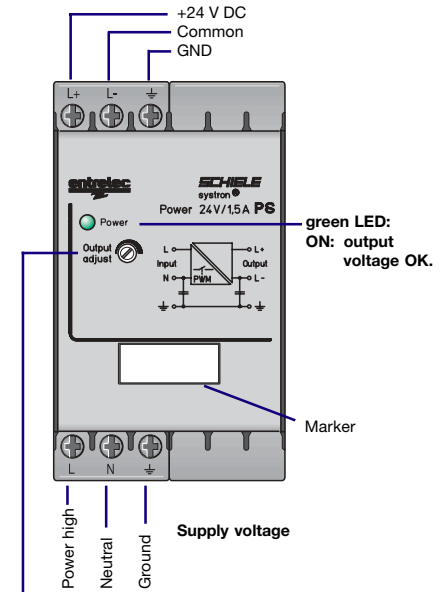
- DIN Rail mount compact modules
- Low weight
- High efficiency
- Low heating
- Wide range of supply voltage
- Constant output voltage with good regulation
- UL, CSA listed, EN 50178 (VDE 0160)
- Short-circuit and overload proof
- Fused input
- Adjustable output voltage

24 V DC / 1 A



■ Approvals: Class I & II, Div. 2

24 V DC / 1.5 A



Note: Adjustable output voltage from 21 to 28 V DC

■ Approvals: Class I & II, Div. 2

Technical data

Input	Power supply systron® PS	P/N:	Power supply systron® PS	P/N:
Supply voltage	90...260 V AC	2 423 418 00	90...260 V AC	2 423 418 50
Frequency, AC input	105...260 V DC		105...260 V DC	
Output load hold time	47... 440 Hz		47... 440 Hz	
Input current at nominal load	With input voltage drop out, min. 10 ms at 100% load		With input voltage drop out, min. 20 ms at 100% load	
Inrush current 25° C (≤ 2 ms)	max. 0.58 A (90 V AC)/typ. 0.45 A (115 V AC)/typ. 0.27 A (230 V AC)		max. 0.8 A (90 V AC)/typ. 0.7 A (115 V AC)/typ. 0.39 A (230 V AC)	
Internal input fuse	7.5 A (260 V)		33 A (260 V)	
Output	3.0 A (slow blow)		3.0 A (slow blow)	
Output voltage	24 V DC ± 3 %		24 V DC ± 3 % (21...28 V DC adjustable with pot. (max. 36 W))	
Output current / power	1 A		1.5 A / 36 W	
Power derating at temperature > 45°C	-		- 0.3 W / °C	
Current derating at input voltage < 100 V AC	- 10 mA / V		-	
Power derating at input voltage < 105 V AC / 120 V DC	-		-0.2 W / V	
Residual ripple / noise	max. 300 mVpp		max. 300 mVpp	
Deviation of output with input change	max. ± 0.1 %		max. ± 0.5 %	
Deviation of output with static load change	max. ± 0.5 %		max. ± 0.5 %	
Deviation of output with dynamic load change	max. 5 %		max. 5 %	
Short circuit protection	overcurrent switch off with automatic restart		overcurrent switch off with automatic restart	
Overload protection	overtemperature and overcurrent switch off		overtemperature and overcurrent switch off	
Reset after thermal overload	disconnection of AC power input min. 30 s		disconnection of AC power input min. 30 s	
Norms, tests				
Electrical safety standards	EN 50178 (VDE 0160)/UL 508/CSA 22.2		EN 50178 (VDE 0160)/UL 508/CSA 22.2	
Galvanic isolation	reliable isolation acc. to IEC 664-1, DIN VDE 0106-101		reliable isolation acc. to IEC 664-1, DIN VDE 0106-101	
Voltage withstand input <-> output	2.5 kV AC, 3 kV AC type test		2.5 kV AC, 3 kV AC type test	
Clearance and creepage distances according to	overvoltage category 2, pollution degree 2		overvoltage category 2, pollution degree 2	
Electromagnetic immunity (EM) in acc. to EN 50082-2:	ESD: EN 61000-4-2 level 3 6/8 kV		ESD: EN 61000-4-2 level 3 6/8 kV	
	RF field: EN 61000-4-3 level 3 10 V/m		RF field: EN 61000-4-3 level 3 10 V/m	
	Burst: EN 61000-4-4 level 4 4 kV		Burst: EN 61000-4-4 level 4 4 kV	
	Surge: EN 61000-4-5 3 kV		Surge: EN 61000-4-5 3 kV	
	conducted RF: EN 61000-4-6 level 3 10 V		conducted RF: EN 61000-4-6 level 3 10 V	
Electromagnetic compatibility (EMC) in acc. EN 50081-2	radiated noise EN 55011, class B		radiated noise EN 55011, class B	
Input current harmonics	no limitation		no limitation	
Protection against contact				
Terminals	IP 20		IP 20	
Housing	IP 50		IP 30	
Protection class	1		1	
General characteristics				
Efficiency (nominal load)	approx. 82...84 % (90...260 V AC)		approx. 83...86 % (102...260 V AC)	
Status indication	green LED, power OK		green LED, power OK	
Operating temperature	0° ... 55°C		0° ... 55°C	
Storage temperature	-25° ... +75°C		-25° ... +75°C	
Terminals	screw terminals, 2 x 14 AWG (2.5 mm ²)		screw terminals, 2 x 14 AWG (2.5 mm ²)	
Weight	approx. 0.22 kg (0.49 lb)		approx. 0.22 kg (0.49 lb)	
Dimensions (W x H x D)	1.77 x 3.07 x 3.94" (45 x 78 x 100 mm)		1.77 x 3.07 x 3.94" (45 x 78 x 100 mm)	
Mounting hints	Normal position: horizontal onto DIN rail. Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm		Normal position: horizontal onto DIN rail. Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm	

Switching Power Supply syston® PS



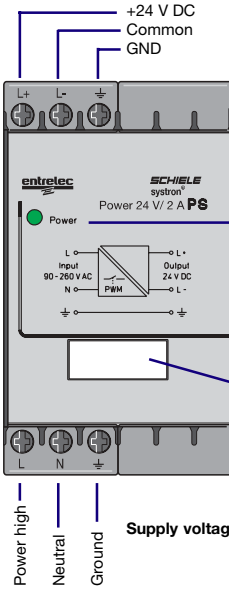
The switching power supplies, syston® PS, offer many advantages over conventional supplies:

- DIN Rail mount compact modules
- Low weight
- High efficiency
- Low heating
- Wide range of supply voltage
- Constant output voltage with good regulation
- UL listed, CSA approved, complies with VDE 0160
- Short-circuit and overload proof
- Fused input
- Adjustable output voltage

Technical data

Input		24 V DC / 2 A		24 V DC / 2 A	
Supply voltage		¹⁾ 90...140 V AC	²⁾ 140...260 V AC / 160...260 V DC	140...260 V AC / 160...260 V DC	
Frequency, AC input		¹⁾ 47...63 Hz	²⁾ 47...440 Hz	47...440 Hz	
Output load hold tim		With input voltage drop out, min. 10 ms at 100% load		With input voltage drop out, min. 10 ms at 100% load	
Input current at nominal load		¹⁾ max. 1.0 A (90 V AC)	²⁾ max. 0.8 A (140 V AC)	max. 0.8 A (90 V AC) / typ. 0.45 A (260 V AC)	
Inrush current at 25° C (<=2 ms)		¹⁾ 23 A (140 V AC)	²⁾ 9 A (260 V AC)	33 A (260 V AC)	
Internal input fuse		3.0 A (slow blow)		3.0 A (slow blow)	
Output					
Output voltage		24 V DC ± 3 %		24 V DC ± 3 % (21...28 V DC adjustable with pot (max. 48 W))	
Output current / power		2 A / 48 W		2 A / 48 W	
Current derating at temperature > 45° C		-		-	
Current derating at input voltage < 90 V AC or 140 V AC		-		-	
Residual ripple / noise		max. 300 mVpp		max. 100 mVpp	
Deviation of output with input change		max. ± 0.2 %		max. ± 0.5 %	
Deviation of output with static load change		max. ± 0.5 %		max. ± 0.5 %	
Deviation of output with dynamic load change		max. 5 %		max. 5 %	
Short circuit protection		overcurrent switch off with automatic restart		overcurrent switch off with automatic restart	
Overload protection		overtemperature and overcurrent switch off		overtemperature and overcurrent switch off	
Reset after thermal overload		disconnection of AC power input min. 30 s		disconnection of AC power input min. 30 s	
Norms, tests					
Electrical safety standards		EN 50178 (VDE 0160)/UL 508/CSA 22.2		EN 50178 (VDE 0160)/UL 508/CSA 22.2	
Galvanic isolation		reliable isolation acc. to IEC 664-1, DIN VDE 0106-101		reliable isolation acc. to IEC 664-1, DIN VDE 0106-101	
Voltage withstand input <-> output		2.5 kV AC, 3 kV AC type test		2.5 kV AC, 3 kV AC type test	
Clearance and creepage distances according to		overvoltage category 2, pollution degree 2		overvoltage category 2, pollution degree 2	
Electromagnetic immunity (EM) in acc. to EN 50082-2:		ESD: EN 61000-4-2 level 3	6/8 kV	ESD: EN 61000-4-2 level 3	6/8 kV
		RF field: EN 61000-4-3 level 3	10 V/m	RF field: EN 61000-4-3 level 3	10 V/m
		Burst: EN 61000-4-4 level 4	4 kV	Burst: EN 61000-4-4 level 4	4 kV
		Surge: EN 61000-4-5	3 kV	Surge: EN 61000-4-5	3 kV
		conducted RF: EN 61000-4-6 level 3	10 V	conducted RF: EN 61000-4-6 level 3	10 V
Electromagnetic compatibility (EMC) in acc. EN 50081-2		radiated noise EN 55011, class B		radiated noise EN 55011, class B	
Input current harmonics		no limitation		no limitation	
Protection against contact					
Terminals		IP 20		IP 20	
Housing		IP 20		IP 30	
Protection class		1		1	
General characteristics					
Efficiency (nominal load)		approx. 82...86 % (90...260 V AC)		approx. 83...86 % (140...260 V AC)	
Status indication		green LED, power OK		green LED, power OK	
Operating temperature		0° ... 55°C		0° ... 55°C	
Storage temperature		-25° ... +75°C		-25° ... +75°C	
Terminals		screw terminals, 2 x 14 AWG (2.5 mm ²)		screw terminals, 2 x 14 AWG (2.5 mm ²)	
Weight		approx. 0.3 kg (0.66 lb)		approx. 0.28 kg (0.62 lb)	
Dimensions (W x H x D)		1.77 x 3.07 x 4.72" (45 x 78 x 120 mm)		1.77 x 3.07 x 4.72" (45 x 78 x 120 mm)	
Mounting hints		Normal position: horizontal onto DIN rail. Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm		Normal position: horizontal onto DIN rail. Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm	

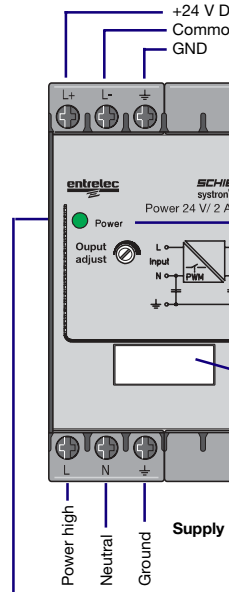
24 V DC / 2 A



■ Approvals: Class I & II, Div. 2

Power supply syston® PS	P/N:
syston® PS 24 V DC / 2 A, 90...140 V AC ¹⁾	2 423 417 00
syston® PS 24 V DC / 2 A, 140...260 V AC ²⁾	2 423 417 10
	160...260 V DC ²⁾

24 V DC / 2 A



■ Approvals: Class I & II, Div. 2

Power supply syston® PS	P/N:
syston® PS 24 V DC / 2 A, 140...260 V AC	2 423 417 11
	160...260 V DC

Note: Adjustable output voltage from 21 to 28 V DC

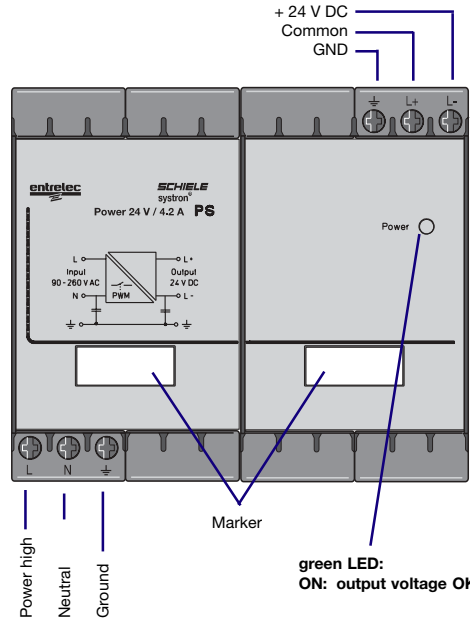
Switching Power Supply systron® PS



The switching power supplies, systron® PS, offer many advantages over conventional supplies:

- DIN Rail mount compact modules
- Low weight
- High efficiency
- Low heating
- Wide range of supply voltage
- Constant output voltage
- UL, CSA listed, EN 50178 (VDE 0160)
- Short-circuit and overload proof
- Fused input

24 V DC / 4.2 A



Supply voltage
 Approvals: Class I & II, Div. 2

Power supply systron® PS	P/N:
systron® PS 24 V DC / 4.2 A	2 423 416 10

Technical data

Input	
Supply voltage	90...260 V AC 127...260 V DC
Frequency, AC input	47... 63 Hz
Output load hold time	With input voltage drop out, min. 10 ms at 100% load (90 V AC)
Input current at nominal load	max. 1.5 A (90 V AC)/typ. 1.1 A (115 V AC)/0.52 A (230 V AC)
Inrush current 25° C (≤ 2 ms)	40 A (260 V)
Internal input fuse	2 A (slow blow)
Output	
Output voltage	24 V DC ± 3 %
Output current / power at...	T ≤ 55°C
V _{in} = 90...260 V AC	4.2 A
V _{in} = 127...260 V DC	4.2 A
Residual ripple / noise	max. 200 mVpp
Deviation of output with input change	max. ± 0.05 %
Deviation of output with static load change	max. ± 0.5 %
Deviation of output with dynamic load change	max. 5 %
Short circuit protection	overcurrent switch off with automatic restart
Overload protection	overtemperature and overcurrent switch off
Reset after thermal overload	disconnection of AC power input min. 30 s
Norms, tests	
Electrical safety standards, approvals	EN 50178 (VDE 0160)/EN 60950/UL 508/CSA 22.2
Galvanic isolation	reliable isolation acc. to EN 60950, DIN VDE 0106-101
Voltage withstand input <-> output	1.5 kV AC, 3 kV AC type test
Clearance and creepage distances according to	overvoltage category 3, pollution degree 2
Electromagnetic immunity (EMI) in acc. to EN 50082-2:	ESD: EN 61000-4-2 level 3 6/8 kV
	RF field: EN 61000-4-3 level 3 10 V/m
	Burst: EN 61000-4-4 level 3 2 kV
	Surge: EN 61000-4-5 2 kV
	conducted RF: EN 61000-4-6 level 3 10 V
Electromagnetic compatibility (EMC) in acc. EN 50081-2	radiated noise EN 55011, class A
Input current harmonics	-
Protection against contact	-
Terminals	IP 20
Housing	IP 20
Protection class	1
General characteristics	
Efficiency (nominal load)	77...85 % (90...260 V AC)
Status indication	green LED, power OK
Operating temperature	0° ... 55°C
Storage temperature	-25° ... +75°C
Terminals	screw terminals, 2 x 14 AWG (2.5 mm ²)
Weight	approx. 0.58 kg (1.3 lb)
Dimensions (W x H x D)	3.54 x 3.07 x 4.72" (90 x 78 x 120 mm)
Mounting hints	Normal position: horizontal onto DIN rail. Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm

Switching Power Supply systron® PS



The switching power supplies, systron® PS, offer many advantages over conventional supplies:

- DIN Rail mount compact modules
- Low weight
- High efficiency
- Low heating
- Wide range of supply voltage
- Constant output voltage with good regulation
- UL, CSA listed, EN 50178 (VDE 0160)
- Short-circuit and overload proof
- Fused input
- Adjustable output voltage
- Power factor correction

Technical data

Input

Supply voltage	90...260 V AC
Frequency, AC input	47... 63 Hz
Output load hold time	With input voltage drop out, min. 10 ms at 100% load (90 V AC)
Input current at nominal load	max. 1.8 A (90 V AC)/typ. 1.3 A (115 V AC)/0.63 A (230 V AC)
Inrush current 25° C (≤ 2 ms)	40 A (260 V)
Internal input fuse	2 A (slow blow)

Output

Output voltage	24 V DC ± 3 %
Output current / power at...	T ≤ 40°C T > 40°C T = 55°C
V _{in} = 90...260 V AC	5 A -0.054 A/°C 4.2 A
V _{in} = 127...260 V DC	5 A -0.054 A/°C 4.2 A
Residual ripple / noise	max. 200 mVpp
Deviation of output with input change	max. ± 0.05 %
Deviation of output with static load change	max. ± 0.5 %
Deviation of output with dynamic load change	max. 5 %
Short circuit protection	overcurrent switch off with automatic restart
Overload protection	overtemperature and overcurrent switch off
Reset after thermal overload	disconnection of AC power input min. 30 s

Norms, tests

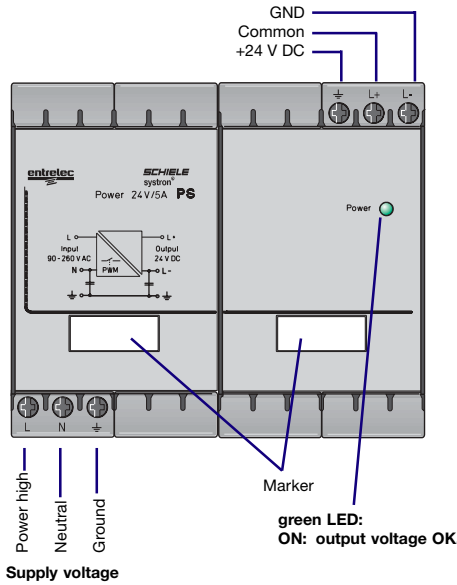
Electrical safety standards, approvals	EN 50178 (VDE 0160)/EN 60950/UL 508/CSA 22.2
Galvanic isolation	reliable isolation acc. to EN 60950, DIN VDE 0106-101
Voltage withstand input <-> output	1.5 kV AC, 3 kV AC type test
Clearance and creepage distances according to	overvoltage category 3, pollution degree 2
Electromagnetic immunity (EMI) in acc. to EN 50082-2:	ESD: EN 61000-4-2 level 3 6/8 kV
	RF field: EN 61000-4-3 level 3 10 V/m
	Burst: EN 61000-4-4 level 3 2 kV
	Surge: EN 61000-4-5 2 kV
	conducted RF: EN 61000-4-6 level 3 10 V

Electromagnetic compatibility (EMC) in acc. EN 50081-2	radiated noise EN 55011, class A
Input current harmonics	limited according to EN 61000-3-2, class A

General characteristics

Efficiency (nominal load)	77...85 % (90...260 V AC)
Status indication	green LED, power OK
Operating temperature	0° ... 55°C
Storage temperature	-25° ... +75°C
Terminals	screw terminals, 2 x 14 AWG (2.5 mm ²)
Weight	approx. 0.58 kg (1.3 lb)
Dimensions (W x H x D)	3.54 x 3.07 x 4.72" (90 x 78 x 120 mm)
Mounting hints	Normal position: horizontal onto DIN rail. Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm

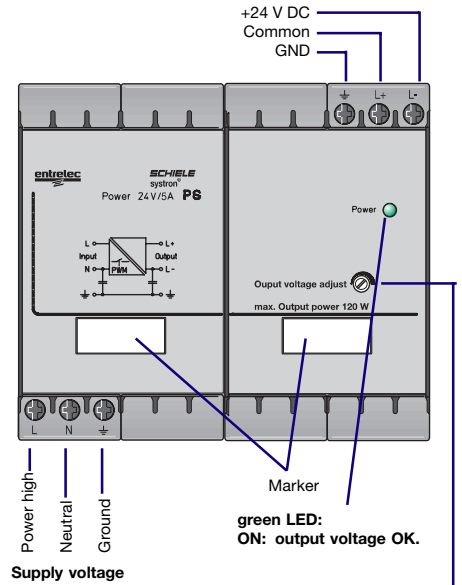
24 V DC / 5 A



Approvals: Class I & II, Div. 2

Power supply systron® PS	P/N:
systron® PS 24 V DC / 5 A	2 423 416 00

24 V DC / 5 A



Approvals: Class I & II, Div. 2

Power supply systron® PS	P/N:
systron® PS 24 V DC / 5 A	2 423 416 01

Note: Adjustable output voltage from 23 to 28 V DC

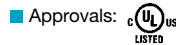
Power supply systron® PS	P/N:
systron® PS 24 V DC / 5 A	2 423 416 01

Switching Power Supply systron® PS TSL



The switching power supplies, systron® PS TSL, offer many advantages over conventional power supplies:

- DIN Rail mount compact modules
- Low weight
- High efficiency
- Low heating
- Wide range of supply voltage
- Constant output voltage
- UL, cUL listed, EN 50178 (VDE 0160)
- Short-circuit and overload protection
- Fused input
- Adjustable output voltage
- Parallel operation up to 5 power supplies

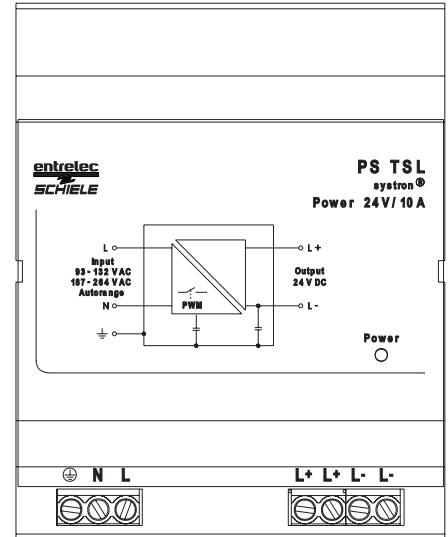


Power supply systron® PS TSL	P/N:
systron® PS TSL 24 V DC / 10 A	2 423 415 00

Technical data

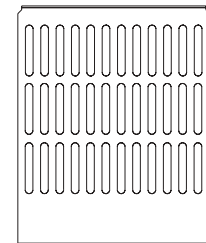
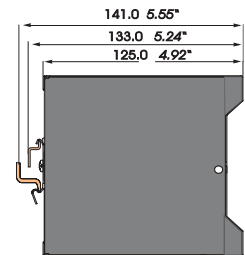
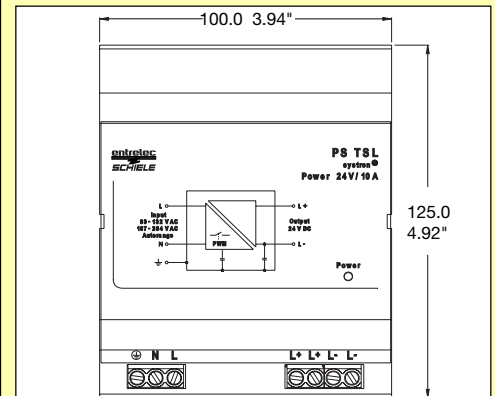
Input			
Supply voltage	93...132 / 187...264 V AC autorange		
Frequency, AC input	47... 63 Hz		
Output load hold time	With input voltage drop out, min. 20 ms at 100% load		
Input current at nominal load	max. 4.3 A (93 V)/typ. 3.5 A (115 V)/typ. 1.7 A (230 V)		
Inrush current 25° C (≤ 1 ms)	69 A (230 V)		
Internal input fuse	4 A (slow blow)		
Output			
Output voltage	24 V DC ± 1 % (24...28 V adjustable with insulated screwdriver)		
Output current / power at...	T ≤ 60°C	T > 60°C	T = 70°C
V _{in} = 93...132 V AC	10 A	-2 %/°C	8 A
V _{in} = 187...264 V AC	10 A	-2 %/°C	8 A
Residual ripple / noise	max. 50 mVpp		
Deviation of output with input change	max. ± 0.2 %		
Deviation of output with load change 10-90 %	max. ± 0.3 % (± 1.5 % parallel operation)		
Short circuit protection	overcurrent limiting with automatic restart		
Overload protection	overcurrent limiting (constant current typ. 110 % I _{out})		
Overvoltage protection	triggerpoint at typ. 140 % nom. output voltage		
Parallel operation (option)	up to 5 modules (must be enabled by internal jumper)		
Norms, tests			
Electrical safety standards, approvals	EN 50178 (VDE 0160)/EN 60950/UL 508/UL 1950		
Galvanic isolation	reliable isolation acc. to EN 60950		
Voltage withstand input <-> output	3 kV AC type test		
Clearance and creepage distances according to	overvoltage category 2, pollution degree 2		
Electromagnetic immunity (EMI) in acc. to EN 50082-2:	ESD:	EN 61000-4-2 level 3	6/8 kV
	RF field:	EN 61000-4-3 level 3	10 V/m
	Burst:	EN 61000-4-4 level 3	2 kV
	Surge:	EN 61000-4-5 level 4	2/4 kV
	conducted RF:	EN 61000-4-6 level 3	10 V
Electromagnetic compatibility (EMC) in acc. EN 50081-2	radiated noise EN 55011/EN 50022, class B		
Input current harmonics	-		
Protection against contact	-		
Terminals	IP 20		
Housing	IP 20		
Protection class	1		
General characteristics			
Efficiency (nominal load)	typ. 90 % (230 V)		
Status indication	green LED, power OK		
Operating temperature	-25° ... +70°C		
Storage temperature	-25° ... +85°C		
Terminals	screw terminals, 12 AWG (2.5 mm ²)		
Weight	approx. 1.05 kg (2.32 lb)		
Dimensions (W x H x D)	3.94 x 4.92 x 4.92" (100 x 125 x 125 mm)		
Mounting hints	Normal position: horizontal onto DIN rail. Spacing to other modules: both sides min. 5 cm, vertical distances min. 8 cm		

24 V DC / 10 A

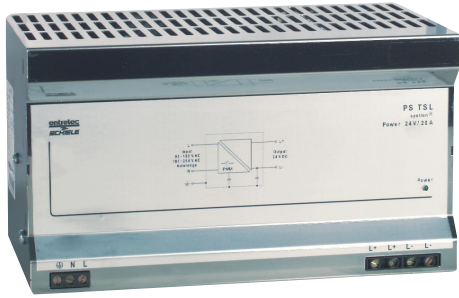


Note: Adjustable output voltage from 24 to 28 V DC

Dimensions

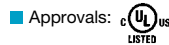


Switching Power Supply systron® PS TSL



The switching power supplies, systron® PS TSL, offer many advantages over conventional power supplies:

- DIN Rail mount compact modules
- Low weight
- High efficiency
- Low heating
- Wide range of supply voltage
- Constant output voltage
- UL, cUL listed, EN 50178 (VDE 0160)
- Short-circuit and overload protection
- Fused input
- Adjustable output voltage
- Parallel operation up to 5 power supplies

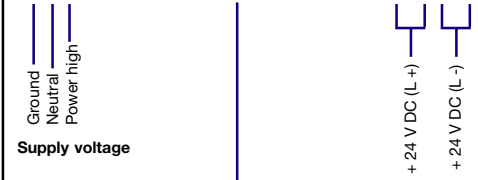
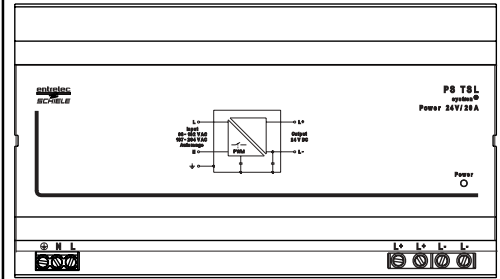


Power supply systron® PS TSL	P/N:
systron® PS TSL 24 V DC / 20 A	2 423 415 10

Technical data

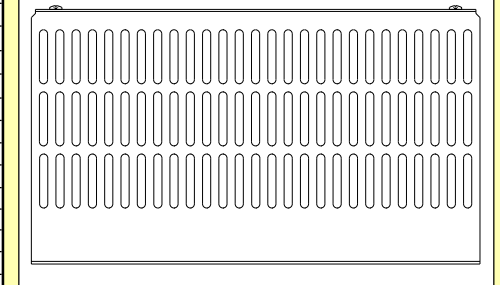
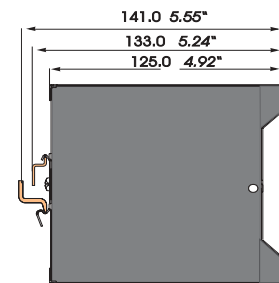
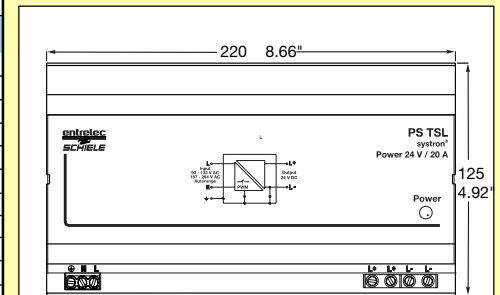
Input			
Supply voltage	93...132 / 187...264 V AC autorange		
Frequency, AC input	47... 63 Hz		
Output load hold time	With input voltage drop out, min. 15 ms at 100% load		
Input current at nominal load	max. 8.9 A (93 V)/typ. 7.2 A (115 V)/typ. 3.5 A (230 V)		
Inrush current 25° C (≤ 2 ms)	max. 65 A (230 V)		
Internal input fuse	10 A (slow blow)		
Output			
Output voltage	24 V DC ± 1 % (24...28 V adjustable with insulated screwdriver)		
Output current / power at...	T ≤ 60°C	T > 60°C	T = 70°C
V _{in} = 93...132 V AC	20 A	-2 %/°C	16 A
V _{in} = 187...264 V AC	20 A	-2 %/°C	16 A
Residual ripple / noise	max. 50 mVpp		
Deviation of output with input change	max. ± 0.2 %		
Deviation of output with load change 10-90 %	max. ± 0.3 % (± 1.5 % parallel operation)		
Short circuit protection	overcurrent limiting with automatic restart		
Overload protection	overcurrent limiting (constant current typ. 110 % I _{out})		
Overvoltage protection	trigger point at typ. 140 % nom. output voltage		
Parallel operation (option)	up to 5 modules (must be enabled by internal jumper)		
Norms, tests			
Electrical safety standards, approvals	EN 50178 (VDE 0160)/EN 60950/UL 508/UL 1950		
Galvanic isolation	reliable isolation acc. to EN 60950		
Voltage withstand input <-> output	3 kV AC type test		
Clearance and creepage distances according to	overvoltage category 2, pollution degree 2		
Electromagnetic immunity (EMI) in acc. to EN 50082-2:	ESD:	EN 61000-4-2 level 3	6/8 kV
	RF field:	EN 61000-4-3 level 3	10 V/m
	Burst:	EN 61000-4-4 level 3	2 kV
	Surge:	EN 61000-4-5 level 4	2/4 kV
	conducted RF:	EN 61000-4-6 level 3	10 V
Electromagnetic compatibility (EMC) in acc. EN 50081-2	radiated noise EN 55011/EN 50022, class B		
Input current harmonics	-		
Protection against contact	IP 20		
Terminals	IP 20		
Housing	IP 20		
Protection class	1		
General characteristics			
Efficiency (nominal load)	typ. 88 % (230 V)		
Status indication	green LED, power OK		
Operating temperature	-25° ... +70°C		
Storage temperature	-25° ... +85°C		
Terminals	screw terminals, 12 AWG (2.5 mm ²)		
Weight	approx. 2.2 kg (5 lb)		
Dimensions (W x H x D)	8.66 x 4.92 x 4.92" (220 x 125 x 125 mm)		
Mounting hints	Normal position: horizontal onto DIN rail. Spacing to other modules: both sides min. 5 cm, vertical distances min. 8 cm		

24 V DC / 20 A



Note: Adjustable output voltage from 24 to 28 V DC

Dimensions



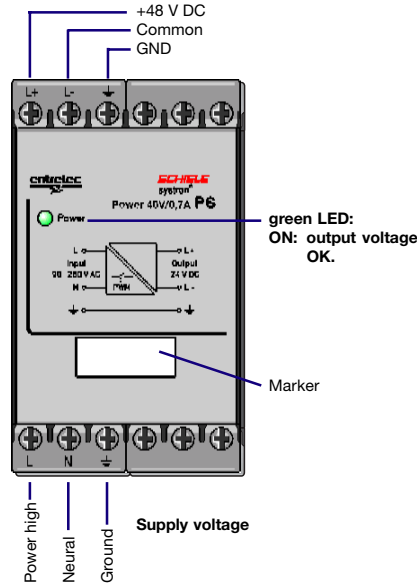
Switching Power Supply systron® PS



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- DIN Rail mount compact modules
- Low weight
- High efficiency
- Low heating
- Wide range of supply voltage
- Constant output voltage with good regulation
- UL, CSA listed, EN 50178 (VDE 0160)
- Short-circuit and overload proof
- Fused input

48 V DC / 0.7 A



Approvals: Class I & II, Div. 2

Power supply systron® PS	P/N:
systron® PS 48 V DC / 0.7 A	2 423 418 60

Technical data

Input	
Supply voltage	90...260 V AC 105...260 V DC
Frequency, AC input	47... 440 Hz
Output load hold time	With input voltage drop out, min. 10 ms at 100% load
Input current at nominal load	max. 0.8 A (90 V AC)/typ. 0.7 A (115 V AC)/typ. 0.35 A (230 V AC)
Inrush current 25° C (≤ 2 ms)	33 A (260 V AC)
Internal input fuse	3.0 A (slow blow)
Output	
Output voltage	48 V DC ± 3 %
Output current / power at...	0.7 A
Current derating at temperature > 45°C	- 10 mA/°C
Current derating at input voltage < 105 V AC / 120 V DC	- 6,667 mA/V
Residual ripple / noise	max. 300 mVpp
Deviation of output with input change	max. ± 0.5 %
Deviation of output with static load change	max. ± 0.5 %
Deviation of output with dynamic load change	max. 5 %
Short circuit protection	overcurrent switch off with automatic restart
Overload protection	overtemperature and overcurrent switch off
Reset after thermal overload	disconnection of AC power input min. 30 s
Norms, tests	
Electrical safety standards	EN 50178 (VDE 0160)/EN 60950/UL 508/CSA 22.2
Galvanic isolation	reliable isolation acc. to EN 60950, DIN VDE 0106-101
Voltage withstand input <-> output	2.5 kV AC, 3 kV AC type test
Clearance and creepage distances according to	overvoltage category 2, pollution degree 2
Electromagnetic immunity (EM) in acc. to EN 50082-2:	ESD: EN 61000-4-2 level 3 6/8 kV RF field: EN 61000-4-3 level 3 10 V/m Burst: EN 61000-4-4 level 4 4 kV Surge: EN 61000-4-5 3 kV conducted RF: EN 61000-4-6 level 3 10 V
Electromagnetic compatibility (EMC) in acc. EN 50081-2	radiated noise EN 55011, class B
Input current harmonics	no limitation
Protection against contact	
Terminals	IP 20
Housing	IP 30
Protection class	1
General characteristics	
Efficiency (nominal load)	approx. 83...85 % (90...260 V AC)
Status indication	green LED, power OK
Operating temperature	0° ... 55°C
Storage temperature	-25° ... +75°C
Terminals	screw terminals, 2 x 14 AWG (2.5 mm ²)
Weight	approx. 0.22 kg (0.49 lb)
Dimensions (W x H x D)	1.77 x 3.07 x 3.94" (45 x 78 x 100 mm)
Mounting hints	Normal position: horizontal onto DIN rail. Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm

Redundant Power Supply Switching Module



Operation

Monitors two Entrelec-Schiele switching power supplies, each up to 5 A maximum. If one power supply fails, the module automatically switches to the alternate supply without interruption of load current. Allow for one volt drop across module. 22.5 mm W x 78 mm H.

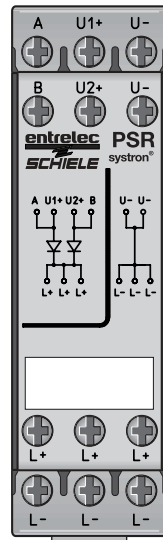
Approvals:

Type

Redundant Power Supply Switching Module PSR

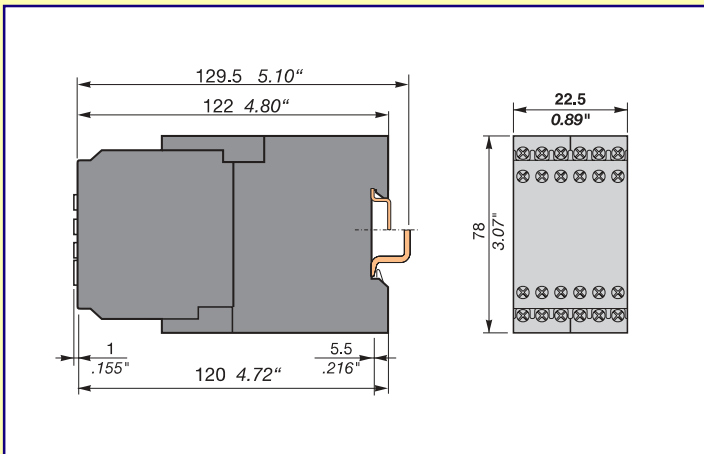
P/N:

2 423 418 90

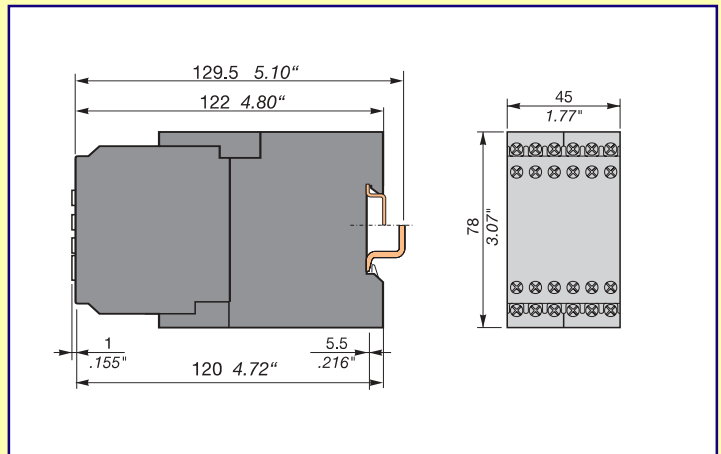


Mechanical Configuration of Power Supplies

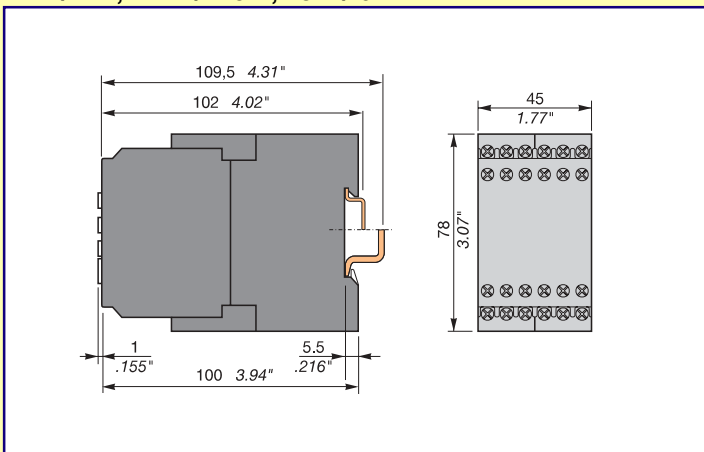
24 V / 0.5 A



24 V / 2 A



5 V / 3 A, 6 V / 3 A, 12 V / 2 A, 24 V / 0.3 A, 24 V / 1 A, 24 V / 1.5 A, 48 V / 0.7 A



24 V / 4.2 A, 24 V / 5 A

