

Basic Functionality at the Highest Level

PRObas Power Supply – High-efficiency, Reliable and Affordable



Weidmüller 



Robust and Reliable PRObas Power Supply

Optimal combination of all basic functions in a compact design

A safe and stable DC supply voltage is at the heart of many automation applications. The single-phase switched-mode power supply units of the PRObas series meet the high requirements of mechanical engineering in a cost-effective way. The know-how of the successful PROeco, PROmax and PROtop series flows into this attractive product series.

High performance, compact design and a good price-performance ratio are the main characteristics of the new PRObas power supplies. The product family comprises 12 variants with 5, 12, 24 or 48 V DC output voltage and a wide-range input. All units have comprehensive safety functions and are internationally approved. Due to compatibility with our electronic fuses, DC UPS and diode modules, they are also suitable for setting up power management systems.

Industries and Applications

The single phase power supply is the heart of the automation machines which are requiring the stable and safe DC control voltage. The new series of power supply PRObas fit optimally in machine construction applications where space, efficiency and cost effectiveness are the top priorities.

Machine & Factory Automation

- Consumer Goods & Packaging
- Elevators & Escalators
- Intralogistics

Energy

- Photovoltaics
- Traditional Power

Process

- Water Treatment

Building Infrastructure

- Office Buildings
- Industrial Buildings
- Commercial Buildings





PRObas Power Supply

Ordering Data

Type	Description	Order Number
PRO BAS 30W 24V 1.3A	Switch-mode power supply unit, 24 V, 1.3A, Class 2 Power	2838500000
PRO BAS 30W 12V 2.6A	Switch-mode power supply unit, 12 V, 2.6A, Class 2 Power	2838510000
PRO BAS 30W 5V 6A	Switch-mode power supply unit, 5 V, 6A, Class 2 Power	2838400000
PRO BAS 60W 24V 2.5A	Switch-mode power supply unit, 24 V, 2.5A, Class 2 Power	2838410000
PRO BAS 60W 12V 5A	Switch-mode power supply unit, 12 V, 5A, Class 2 Power	2838420000
PRO BAS 90W 24V 3.8A	Switch-mode power supply unit, 24 V, 3.8A, Class 2 Power	2838430000
PRO BAS 120W 24V 5A	Switch-mode power supply unit, 24 V, 5A	2838440000
PRO BAS 120W 12V 10A	Switch-mode power supply unit, 12 V, 10A	2838450000
PRO BAS 240W 24V 10A	Switch-mode power supply unit, 24 V, 10A	2838460000
PRO BAS 240W 48V 5A	Switch-mode power supply unit, 48 V, 5A	2838470000
PRO BAS 480W 24V 20A	Switch-mode power supply unit, 24 V, 20A	2838480000
PRO BAS 480W 48V 10A	Switch-mode power supply unit, 48 V, 10A	2838490000

Features & Benefits

- Robust and reliable
- Operates in a wide temperature range from -25°C-70°C
- Flexible mounting, either on mounting rails or directly screwed to the cabinet wall
- High MTBF value
- Extremely compact and energy-efficient
- High-cost efficiency, strong performance and compact design
- Universal use due to a wide range of variants and international approvals (e.g. cULus, NEC Class 2 and cCSAus)

Approvals



NEC CLASS 2 for units up to 90W

Technical Data



	PRO BAS 30W 5 V / 6 A 2838400000	PRO BAS 30W 12 V / 2.6 A 2838510000	PRO BAS 30W 24 V / 1.3 A 2838500000
Input Data			
Nominal input voltage, AC / DC	100...240 V AC / 120...340 V DC	100...240 V AC / 120...340 V DC	100...240 V AC / 120...340 V DC
Input voltage range, AC / DC (derating -1%/V @ < 100 V AC, < 120 V DC)	85...264 V AC / 110...370 V DC	85...264 V AC / 110...370 V DC	85...264 V AC / 110...370 V DC
Frequency range, AC	45...65 Hz	45...65 Hz	45...65 Hz
Input current typ., AC / DC	0.34 A @ 230 V AC, 0.56 A @ 115 V AC, 0.28 A @ 120 V DC	0.33 A @ 230 V AC, 0.56 A @ 115 V AC, 0.29 A @ 120 V DC	0.33 A @ 230 V AC, 0.55 A @ 115 V AC, 0.29 A @ 120 V DC
Max. start-up current	40 A @ 230 V AC, 25°C	40 A @ 230 V AC, 25°C	40 A @ 230 V AC, 25°C
Input fuse (internal)	yes	yes	yes
Recommended back-up fuse 1), Safety cut- out fuse / Miniature circuit breaker	2 A / 6 A, 2...4 A	2 A / 6 A, 2...4 A	2 A / 6 A, 2...4 A
Output Data			
Nominal output voltage (adjustable via po- tentiometer)	5 V DC (3...8 V DC)	12 V DC (9...16 V DC)	24 V DC (22...28 V DC)
Residual ripple, switching peaks (20 MHz)	≤ 50 mVPP @ full load	≤ 50 mV _{pp} @ full load	≤ 50 mV _{pp} @ full load
Nominal output current @ Unom	6 A @ 55 °C	2.6 A @ 55 °C	1.3 A @ 55 °C
Continuous output current @ Unom (2.5 %/K derating above 55 °C)	6 A @ 55 °C, 3.75 A @ 70 °C	2.6 A @ 55 °C, 1.625 A @ 70 °C	1.3 A @ 55 °C, 0.812 A @ 70 °C
Output characteristic curve / current limit	IU, ILimit: 110 - 130 %	IU, ILimit: 110 - 130 %	IU, ILimit: 110 - 130 %
Start-up period, max.	< 300 ms	< 300 ms	< 300 ms
Capacitive load	unlimited	unlimited	unlimited
Status Indicator			
DC OK: LED green	U _{out} > 0.9 U _{nom_min}	U _{out} > 0.9 U _{nom_min}	U _{out} > 0.9 U _{nom_min}
Environmental Conditions			
Ambient temperature, operational / storage, transport	-25...+70 °C / -40...+85 °C	-25...+70 °C / -40...+85 °C	-25...+70 °C / -40...+85 °C
Max. permitted humidity (operational)	5 %...95 % RH	5 %...95 % RH	5 %...95 % RH
General Data			
Power dissipation typ. @ 230 V AC, no- load / rated load	0.3 W / 4.5 W	0.3 W / 4.3 W	0.3 W / 3.9 W
Efficiency degree, typ. @ 230 V AC	86 %	88 %	89 %
Power factor, typ.	0.54 @ 120 V AC, 0.45 @ 230 V AC	0.54 @ 120 V AC, 0.47 @ 230 V AC	0.54 @ 120 V AC, 0.47 @ 230 V AC
Mains failure bridging @ I _{nom}	> 20ms @ 120V AC, > 80ms @ 230V AC	> 20ms @ 120V AC, > 80ms @ 230V AC	> 20ms @ 120V AC, > 80ms @ 230V AC
Protection class	IP20	IP20	IP20
Protection class	II	II	II
Pollution degree	2	2	2
Insulation voltage, input-output	3.5 kV AC, 1 min.	3.5 kV AC, 1 min.	3.5 kV AC, 1 min.
Earth discharge current	< 3.5 mA	< 3.5 mA	< 3.5 mA
MTBF acc. to IEC 61709 (SN29500) @ 40°C	> 1200000 h	> 950000 h	> 950000 h
Short-circuit protection	yes	yes	yes
Protection against inverse voltages from the load	< 9 V DC	< 18 V DC	< 35 V DC
Parallel capability	yes	yes	yes
Plastic housing	yes	yes	yes
Dimensions (Height x Width x Depth) in mm	90 x 36 x 85 mm	90 x 23 x 85 mm	90 x 23 x 85 mm
Weight	245 g	163 g	162 g
Approvals / Markings / Standards / Directives	CE, cULus, cCSAus, NEC Class 2	CE, cULus, cCSAus, NEC Class 2	CE, cULus, cCSAus, NEC Class 2
Connection Data, Input / Output			
Number of terminals, input / output	2 (L+, N-) / 4 (+, +, -, -)	2 (L+, N-) / 3 (+, -, -)	2 (L+, N-) / 3 (+, -, -)
Rigid wire cross-section	0.2 ...6 mm²	0.2 ...6 mm²	0.2 ...6 mm²
Flexible wire cross-section	0.5 2.5 mm²	0.5 2.5 mm²	0.5 2.5 mm²
Wire cross-section AWG	26...12	26...12	26...12
Insulation stripping length	6 mm	6 mm	6 mm
Torque, min. / max.	0.5 Nm / 0.6 Nm	0.5 Nm / 0.6 Nm	0.5 Nm / 0.6 Nm
Screwdriver blade	0.6 x 3.5 mm	0.6 x 3.5 mm	0.6 x 3.5 mm
EMC / shock / vibration			
Interference radiation acc. to EN 55032 (Class)	B	B	B
Shock resistance (in all directions) acc. to IEC 60068-2-27 / Vibration resistance acc. to IEC 60068-2-6	30 g / 0.7 g	30 g / 0.7 g	30 g / 0.7 g
Electrical Safety			
Extra-low safety voltage according to	SELV: IEC 61010-1, PELV: IEC 61010-2-201		
Note: For AC operation, the max. permissible operating voltage must be observed in any case.			

Technical Data



	PRO BAS 60W 12V 5A 2838420000	PRO BAS 60W 24V 2.5A 2838410000	PRO BAS 90W 24V 3.8A 2838430000
Input Data			
Nominal input voltage, AC / DC	100...240 V AC / 120...340 V DC	100...240 V AC / 120...340 V DC	100...240 V AC / 120...340 V DC
Input voltage range, AC / DC (derating -1%/V @ < 100 V AC, < 120 V DC)	85...264 V AC / 110...370 V DC	85...264 V AC / 110...370 V DC	85...264 V AC / 110...370 V DC
Frequency range, AC	45...65 Hz	45...65 Hz	45...65 Hz
Input current typ., AC / DC	0.62 A @ 230 V AC, 1.04 A @ 115 V AC, 0.55 A @ 120 V DC	0.61 A @ 230 V AC, 1.01 A @ 115 V AC, 0.54 A @ 120 V DC	0.89 A @ 230 V AC, 1.54 A @ 115 V AC, 0.83 A @ 120 V DC
Max. start-up current	40 A @ 230 V AC, 25°C	40 A @ 230 V AC, 25°C	40 A @ 230 V AC, 25 °C
Input fuse (internal)	yes	yes	yes
Recommended back-up fuse 1), Safety cut-out fuse / Miniature circuit breaker	2 A / 6 A, 2...4 A	2 A / 6 A, 2...4 A	4 A / 6 A, 2...4 A
Output Data			
Nominal output voltage (adjustable via po- tentiometer)	12 V DC (9...16 V DC)	24 V DC (22...28 V DC)	24 V DC (22...25 V DC)
Residual ripple, switching peaks (20 MHz)	≤ 50 mV _{pp} @ full load	≤ 50 mV _{pp} @ full load	≤ 50 mV _{pp} @ full load
Nominal output current @ Unom	5 A @ 55 °C	2.5 A @ 55 °C	3.8 A @ 55 °C
Continuous output current @ Unom (2.5 %/K derating above 55 °C)	5 A @ 55 °C, 3.125 A @ 70 °C	2.5 A @ 55 °C, 1.65 A @ 70 °C	3.8 A @ 55 °C, 2.375 A @ 70 °C
Output characteristic curve / current limit	I _U , I _{Limit} : 110 - 130 %	I _U , I _{Limit} : 110 - 130 %	I _U , I _{Limit} : 105 - 110 %
Start-up period, max.	< 300 ms	< 300 ms	< 300 ms
Capacitive load	unlimited	unlimited	unlimited
Status Indicator			
DC OK: LED green	U _{out} > 0.9 U _{nom_min}	U _{out} > 0.9 U _{nom_min}	U _{out} > 0.9 U _{nom_min}
Environmental Conditions			
Ambient temperature, operational / storage, transport	-25...+70 °C / -40...+85 °C	-25...+70 °C / -40...+85 °C	-25...+70 °C / -40...+85 °C
Max. permitted humidity (operational)	5 %...95 % RH	5 %...95 % RH	5 %...95 % RH
General Data			
Power dissipation typ. @ 230 V AC, no- load / rated load	0.3 W / 6.5 W	0.3 W / 6.6 W	0.3 W / 10.8 W
Efficiency degree, typ. @ 230 V AC	90 %	90 %	89 %
Power factor, typ.	0.56 @ 120 V AC, 0.47 @ 230 V AC	0.56 @ 120 V AC, 0.47 @ 230 V AC	0.58 @ 120 V AC, 0.49 @ 230 V AC
Mains failure bridging @ I _{nom}	> 20ms @ 120V AC, > 80ms @ 230V AC	> 20ms @ 120V AC, > 80ms @ 230V AC	> 20ms @ 120 VAC, > 80ms @ 230V AC
Protection class	IP20	IP20	IP20
Protection class	II	II	II
Pollution degree	2	2	2
Insulation voltage, input-output	3.5 kV AC, 1 min.	3.5 kV AC, 1 min.	3.5 kV AC, 1 min.
Earth discharge current	< 3.5 mA	< 3.5 mA	< 3.5 mA
MTBF acc. to IEC 61709 (SN29500) @ 40°C	> 850000 h	> 750000 h	> 750000 h
Short-circuit protection	yes	yes	yes
Protection against inverse voltages from the load	< 18 V DC	< 35 V DC	< 35 V DC
Parallel capability	yes	yes	yes
Plastic housing	yes	yes	yes
Dimensions (Height x Width x Depth) in mm	90 x 36 x 85 mm	90 x 36 x 85 mm	90 x 47 x 85 mm
Weight	259 g	258 g	376 g
Approvals / Markings / Standards / Directives	CE, cULus, cCSAus, NEC Class 2	CE, cULus, cCSAus, NEC Class 2	CE, cULus, cCSAus, NEC Class 2
Connection Data, Input / Output			
Number of terminals, input / output	2 (L+, N-) / 4 (+, +, -, -)	2 (L+, N-) / 4 (+, +, -, -)	2 (L+, N-) / 4 (+, +, -, -)
Rigid wire cross-section	0.2 ...6 mm²	0.2 ...6 mm²	0.2 ...6 mm²
Flexible wire cross-section	0.5 2.5 mm²	0.5 2.5 mm²	0.5 2.5 mm²
Wire cross-section AWG	26...12	26...12	26...12
Insulation stripping length	6 mm	6 mm	6 mm
Torque, min. / max.	0.5 Nm / 0.6 Nm	0.5 Nm / 0.6 Nm	0.5 Nm / 0.6 Nm
Screwdriver blade	0.6 x 3.5 mm	0.6 x 3.5 mm	0.6 x 3.5 mm
EMC / shock / vibration			
Interference radiation acc. to EN 55032 (Class)	B	B	B
Shock resistance (in all directions) acc. to IEC 60068-2-27 / Vibration resistance acc. to IEC 60068-2-6	30 g / 0.7 g	30 g / 0.7 g	30 g / 0.7 g
Electrical Safety			
Extra-low safety voltage according to	SELV: IEC 61010-1, PELV: IEC 61010-2:201		
Note: For AC operation, the max. permissible operating voltage must be observed in any case.			

Technical Data



	PRO BAS 120W 12V 10A 2838450000	PRO BAS 120W 24V 5A 2838440000	PRO BAS 240W 24V 10A 2838460000
Input Data			
Nominal input voltage, AC / DC	100...240 V AC / 120...340 V DC	100...240 V AC / 120...340 V DC	100...240 V AC / 120...340 V DC
Input voltage range, AC / DC (derating -1%/V @ < 100 V AC, < 120 V DC)	85...264 V AC / 110...370 V DC	85...264 V AC / 110...370 V DC	85...264 V AC / 110...370 V DC
Frequency range, AC	45...65 Hz	45...65 Hz	45...65 Hz
Input current typ., AC / DC	1.14 A @ 230 V AC, 2.04 A @ 115 V AC, 1.12 A @ 120 V DC	1.134 A @ 230 V AC, 2.02 A @ 115 V AC, 1.11 A @ 120 V DC	1.135 A @ 230 V AC, 2.30 A @ 115 V AC, 2.22 A @ 120 V DC
Max. start-up current	40 A @ 230 V AC, 25 °C	40 A @ 230 V AC, 25 °C	20 A @ 230 V AC, 25 °C
Input fuse (internal)	yes	yes	yes
Recommended back-up fuse 1), Safety cut-out fuse / Miniature circuit breaker	4 A / 6 A, 3...5 A	4 A / 6 A, 3...5 A	4 A / 6 A, 3...5 A
Output Data			
Nominal output voltage (adjustable via po- tentiometer)	12 V DC (9...12 V DC)	24 V DC (22...28 V DC)	24 V DC (22...28 V DC)
Residual ripple, switching peaks (20 MHz)	≤ 50 mV _{pp} @ full load	≤ 50 mV _{pp} @ full load	≤ 100 mV _{pp} @ full load
Nominal output current @ Unom	10 A @ 55 °C	5 A @ 55 °C	10 A @ 55 °C
Continuous output current @ Unom (2.5 %/K derating above 55 °C)	10 A @ 55 °C, 6.25 A @ 70 °C	5 A @ 55 °C, 3.125 A @ 70 °C	10 A @ 55 °C, 6.25 A @ 70 °C
Output characteristic curve / current limit	I _U , I _{Limit} : 110 - 130 %	I _U , I _{Limit} : 110 - 130 %	Hiccup, I _{Limit} : 110 - 130 %
Start-up period, max.	< 400 ms	< 400 ms	< 400 ms
Capacitive load	unlimited	unlimited	5500 µF
Status Indicator/ Status Relay			
DC OK: LED green , Relay: ON	> 0.9 U _{out}	> 0.9 U _{out}	> 0.9 U _{out}
Max. contact switching power	30 V AC / DC, 1 A	30 V AC / DC, 1 A	30 V AC / DC, 1 A
Contact type	N. O. (SPST)	N. O. (SPST)	N. O. (SPST)
Environmental Conditions			
Ambient temperature, operational / storage, transport	-25...+70 °C / -40...+85 °C	-25...+70 °C / -40...+85 °C	-25...+70 °C / -40...+85 °C
Max. permitted humidity (operational)	5 %...95 % RH	5 %...95 % RH	5 %...95 % RH
General Data			
Power dissipation typ. @ 230 V AC, no- load / rated load	1.2 W / 15.4 W	1.5 W / 14.5 W	2 W / 19.5 W
Efficiency degree, typ. @ 230 V AC	90 %	90 %	94 %
Power factor, typ.	0.58 @ 120 V AC, 0.5 @ 230 V AC	0.58 @ 120 V AC, 0.5 @ 230 V AC	0.98 @ 120 V AC full load, 0.96 @ 230 V AC full load
Mains failure bridging @ I _{nom}	> 20ms @ 120V AC, > 60ms @ 230V AC	> 20ms @ 120V AC, > 60ms @ 230V AC	>25ms @ 120V AC, >25ms @ 230V AC
Protection class	IP20	IP20	IP20
Protection class	I	I	I
Pollution degree	2	2	2
Insulation voltage, input-output	3.5 kV AC / 3.0 kV AC / 0.5 kV AC, 1 min.	3.5 kV AC / 3.0 kV AC / 0.5 kV AC, 1 min.	3.5 kV AC / 3.0 kV AC / 0.5 kV AC, 1 min.
Earth discharge current	< 3.5 mA	< 3.5 mA	< 3.5 mA
MTBF acc. to IEC 61709 (SN29500) @ 40°C	> 600000 h	> 600000 h	> 590000 h
Short-circuit protection	yes	yes	yes
Protection against inverse voltages from the load	< 18 V DC	< 35 V DC	< 35 V DC
Parallel capability	yes	yes	yes
Plastic housing	yes	yes	yes
Dimensions (Height x Width x Depth) in mm	130 x 40 x 100 mm	130 x 40 x 100 mm	130 x 52 x 100 mm
Weight	488 g	490 g	629 g
Approvals / Markings / Standards / Directives	CE, cULus, cCSAus	CE, cULus, cCSAus	CE, cULus, cCSAus
Connection Data, Input / Output			
Number of terminals, input / output/ N. O. relay (PUSH IN)	3 (L+, N-, PE) / 4 (+, +, -, -) / 2 (13,14)	3 (L+, N-, PE) / 4 (+, +, -, -) / 2 (13,14)	3 (L+, N-, PE) / 4 (+, +, -, -) / 2 (13,14)
Rigid wire cross-section	0.2...6mm² / 0.2...6mm² / 0.2...1.5mm²	0.2...6mm² / 0.2...6mm² / 0.2...1.5mm²	0.2 ...6 mm² / 0.2 ...6 mm² / 0.2 1.5 mm²
Flexible wire cross-section	0.5 ...2.5mm² / 0.5...2.5mm² /0.5...0.75mm²	0.5 ...2.5mm² / 0.5...2.5mm² /0.5...0.75mm²	0.5...2.5mm² / 0.5...2.5mm² / 0.2 0.75mm²
Wire cross-section AWG	26...12 / 26...12 / 28...14	26...12 / 26...12 / 28...14	26...12 / 26...12 / 28...14
Insulation stripping length	6 mm / 6 mm / 10 mm	6 mm / 6 mm / 10 mm	6 mm / 6 mm / 10 mm
Torque, min. / max.	0.5 Nm / 0.6 Nm	0.5 Nm / 0.6 Nm	0.5 Nm / 0.6 Nm
Screwdriver blade	0.6 x 3.5 mm	0.6 x 3.5 mm	0.6 x 3.5 mm
EMC / shock / vibration			
Interference radiation acc. to EN 55032 (Class)	B	B	B
Shock resistance (in all directions) acc. to IEC 60068-2-27 / Vibration resistance acc. to IEC 60068-2-6	30 g / 0.7 g	30 g / 0.7 g	30 g / 0.7 g
Electrical Safety			
Extra-low safety voltage according to	SELV: IEC 61010-1, PELV: IEC 61010-2:201		
Note: For AC operation, the max. permissible operating voltage must be observed in any case.			



Technical Data

	PRO BAS 240W 48V 5A 2838470000	PRO BAS 480W 24V 20A 2838480000	PRO BAS 480W 48V 10A 2838490000
Input Data			
Nominal input voltage, AC / DC	100...240 V AC / 120...340 V DC	100...240 V AC / 120...340 V DC	100...240 V AC / 120...340 V DC
Input voltage range, AC / DC (derating -1%/V @ < 100 V AC, < 120 V DC)	85...264 V AC / 110...370 V DC	85...264 V AC / 110...370 V DC	85...264 V AC / 110...370 V DC
Frequency range, AC	45...65 Hz	45...65 Hz	45...65 Hz
Input current typ., AC / DC	1.129 A @ 230 V AC, 2.287 A @ 115 V AC, 2.296 A @ 120 V DC	2.26 A @ 230 V AC, 4.584 A @ 115 V AC, 4.42 A @ 120 V DC	2.23 A @ 230 V AC, 4.576 A @ 115 V AC, 4.39 A @ 120 V DC
Max. start-up current	20 A @ 230 V AC, 25 °C	20 A @ 230 V AC, 25 °C	20 A @ 230 V AC, 25 °C
Input fuse (internal)	yes	yes	yes
Recommended back-up fuse 1), Safety cut- out fuse / Miniature circuit breaker	4 A / 6 A, 3...5 A	6 A / 16 A, 6...8 A	6 A / 16 A, 6...8 A
Output Data			
Nominal output voltage (adjustable via po- tentiometer)	48 V DC (36...56 V DC)	24 V DC (22...28 V DC)	48 V DC (36...56 V DC)
Residual ripple, switching peaks (20 MHz)	≤ 100 mV _{pp} @ full load	≤ 100 mV _{pp} @ full load	≤ 100 mV _{pp} @ full load
Nominal output current @ Unom	5 A @ 55 °C	20 A @ 55 °C	10 A @ 55 °C
Continuous output current @ Unom (2.5 %/K derating above 55 °C)	5 A @ 55 °C, 3.125 A @ 70 °C	20 A @ 55 °C, 12.5 A @ 70 °C	10 A @ 55 °C, 6.25 A @ 70 °C
Output characteristic curve / current limit	Hiccup, ILimit: 110 - 130 %	Hiccup, ILimit: 110 - 130 %	Hiccup, ILimit: 110 - 130 %
Start-up period, max.	< 400 ms	< 300 ms	< 300 ms
Capacitive load	5500 µF	5500 µF	5500 µF
Status Indicator/ Status Relay			
DC OK: LED green , Relay: ON	> 0.9 Uout	> 0.9 Uout	> 0.9 Uout
Max. contact switching power	30 V AC / DC, 1 A	30 V AC / DC, 1 A	30 V AC / DC, 1 A
Contact type	N. O. (SPST)	N. O. (SPST)	N. O. (SPST)
Environmental Conditions			
Ambient temperature, operational / storage, transport	-25...+70 °C / -40...+85 °C	-25...+70 °C / -40...+85 °C	-25...+70 °C / -40...+85 °C
Max. permitted humidity (operational)	5 %...95 % RH	5 %...95 % RH	5 %...95 % RH
General Data			
Power dissipation typ. @ 230 V AC, no- load / rated load	2 W / 19.2 W	2.0 W / 30.0 W	2.0 W / 30.0 W
Efficiency degree, typ. @ 230 V AC	95 %	95 %	95 %
Power factor, typ.	0.98 @ 120 V AC full load, 0.96 @ 230 V AC full load	0.99 @ 120 V AC full load, 0.96 @ 230 V AC full load	0.99 @ 120 V AC full load, 0.96 @ 230 V AC full load
Mains failure bridging @ I _{nom}	>25ms @ 120 V AC, >25ms @ 230 V AC	> 20ms @ 120 V AC, > 20ms @ 230 V AC	> 20ms @ 120 V AC, > 20ms @ 230 V AC
Protection class	IP20	IP20	IP20
Protection class	I	I	I
Pollution degree	2	2	2
Insulation voltage, input-output	3.5 kV AC / 3.0 kV AC / 0.5 kV AC, 1 min.	3.5 kV AC / 3.0 kV AC / 0.5 kV AC, 1 min.	3.5 kV AC / 3.0 kV AC / 0.5 kV AC, 1 min.
Earth discharge current	< 3.5 mA	< 3.5 mA	< 3.5 mA
MTBF acc. to IEC 61709 (SN29500) @ 40°C	> 610000 h	> 540000 h	> 520000 h
Short-circuit protection	yes	yes	yes
Protection against inverse voltages from the load	< 60 V DC	< 35 V DC	< 60 V DC
Parallel capability	yes	yes	yes
Plastic housing	yes	yes	yes
Dimensions (Height x Width x Depth) in mm	130 x 52 x 100 mm	130 x 59 x 125 mm	130 x 59 x 125 mm
Weight	633 g	1368 g	1368 g
Approvals / Markings / Standards / Directives	CE, cULus, cCSAus	CE, cULus, cCSAus	CE, cULus, cCSAus
Connection Data, Input / Output			
Number of terminals, input / output/ N. O. relay (PUSH IN)	3 (L+, N-, PE) / 4 (+, +, -, -) / 2 (13,14)	3 (L+, N-, PE) / 4 (+, +, -, -) / 2 (13,14)	3 (L+, N-, PE) / 4 (+, +, -, -) / 2 (13,14)
Rigid wire cross-section	0.2 ...6 mm² / 0.2 ...6 mm² / 0.2 1.5 mm²	0.2 ...6 mm² / 0.2 ... 6 mm² / 0.2 1.5 mm²	0.2 ...6 mm² / 0.2 ... 6 mm² / 0.2 1.5 mm²
Flexible wire cross-section	0.5...2.5mm² / 0.5...2.5mm² / 0.2 0.75mm²	0.5 ...2.5mm² / 0.5 ...2.5mm² / 0.2 0.75mm²	0.5...2.5mm² / 0.5...2.5mm² / 0.2 0.75mm²
Wire cross-section AWG	26...12 / 26...12 / 28...14	26...10 / 26...10 / 28...14	26...10 / 26...10 / 28...14
Insulation stripping length	6 mm / 6 mm / 10 mm	6 mm / 6 mm / 10 mm	6 mm / 6 mm / 10 mm
Torque, min. / max.	0.5 Nm / 0.6 Nm	0.5 Nm / 0.6 Nm	0.5 Nm / 0.6 Nm
Screwdriver blade	0.6 x 3.5 mm	0.6 x 3.5 mm	0.6 x 3.5 mm
EMC / shock / vibration			
Interference radiation acc. to EN 55032 (Class)	B	B	B
Shock resistance (in all directions) acc. to IEC 60068-2-27 / Vibration resistance acc. to IEC 60068-2-6	30 g / 0.7 g	30 g / 0.7 g	30 g / 0.7 g
Electrical Safety			
Extra-low safety voltage according to	SELV: IEC 61010-1, PELV: IEC 61010-2:201		
Note: For AC operation, the max. permissible operating voltage must be observed in any case.			

Weidmuller – Your Solution Partner in Industrial Connectivity

Be it automotive manufacturing, electricity generation or water management – there's hardly any industry that can do without electronics and electrical connectivity today. As experienced experts we support our customers and partners around the world with products, solutions and services in the industrial environment of power, signal and data. We are continuously developing innovative, sustainable and useful products and solutions for our customer's individual needs. We are a true partner with extensive knowledge and understanding of its customer and their application. Together we set standards in Industrial Connectivity.

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