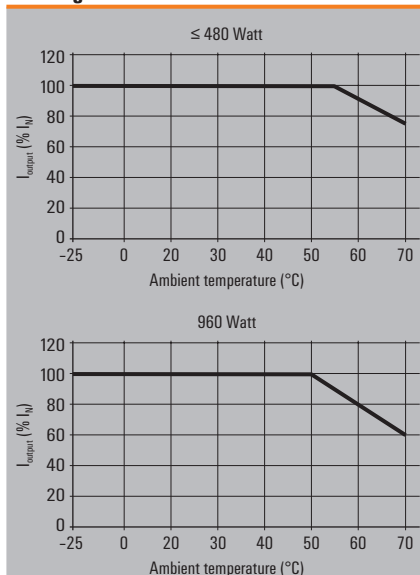


PROeco power supplies with basic functionality and a high level of reliability

- Single- and three-phase switched-mode power supply units
- Slim design
- Large temperature range from -25°C to 70°C
- The output voltage can be precisely adjusted via the potentiometer on the front
- Remote monitoring via integrated status relay
- Three-coloured LED indicators for simple error detection
- Advanced visual warning at 90% rated output current
- International approvals



Derating curves



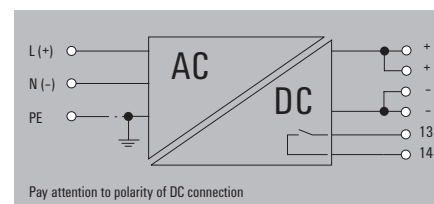
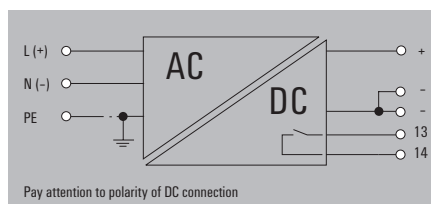
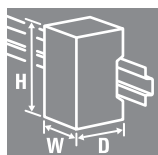
Technical data

General technical data	
Ambient temp. operating / storage temperature	-25 °C...+70 °C / -40 °C...+85 °C
Max. perm. air humidity (operation)	5 %...95 % RH
Degree of protection	IP 20
Class of protection	I, with PE connection
Pollution degree	2
Insulation voltage input/output	3 kV E/A / 2 kV E/earth / 0.5 kV A/earth
MTBF	> 500.000 h acc. to IEC 1709 (SN29500)
Parallel connection option	yes, max. 5 without diode module
Housing version	metal, corrosion resistant
Mounting position, installation notice	horizontal on mounting rail TS35, 50 mm spacing top and bottom for free air circulation
Short-circuit protection	Yes, automatic restart
Overload protection	Yes, IU characteristic curve
Overtemperature protection	Yes, automatic restart
EMC / shock / vibration	
Noise emission acc. to EN55022	Class B
Noise immunity tests acc. to	EN61000-4-2 (ESD), EN61000-4-3 and EN61000-4-8 (Fields), EN61000-4-4 (Burst), EN61000-4-5 (Surge), EN61000-4-6 (conducted), EN61000-4-11 (Dips)
Limiting of mains voltage harmonic currents	Acc. to EN61000-3-2
Resistance against vibration and shock	1 g acc. to EN50178, shock: 15 g in all directions
Electrical safety (applied standards)	
Electrical equipment of machines	Acc. to EN60204
Safety transformers for switched-mode power units	Acc. to EN61558-2-17
Machinery with electronic equipment	Acc. to EN50178 / VDE0160
Safety extra-low voltage	SELV acc. to EN60950-1, PELV acc. to EN60204-1
Protective separation / protection against electrical shock	VDE0100-410 / acc. to DIN57100-410
Protection against dangerous shock currents	Acc. to VDE0106-101

PROeco

PRO ECO 72W 24V 3A

PRO ECO 120W 24V 5A



Technical data

Input	
Rated input voltage	
AC input voltage range	
AC frequency range	
DC input voltage range	
AC current consumption	
DC current consumption	
Input fuse (internal) / inrush current	
Recommended back-up fuse	
Output	
Rated output voltage	
Output voltage	
Ramp-up time / residual ripple, switching peaks	
Rated output current @ U_{rated}	
Continuous output current @ 24 V DC	
Power boost @ 24 V DC, 60 °C	
Capacitive load	
Protection against reverse voltages from the load	
Protection against internal surge voltage	
Signalling	
DC OK	
Alarm	
Error	
Voltage monitoring / no-voltage contact / contact load	
On/Off relay	
General data	
Efficiency	
Power loss @ idling / nominal load	
Earth discharge current	
Power factor (approx.)	
Mains buffering @ I_{rated}	
Parallel connection option	
Height x width x depth / weight	
Approvals	
Approvals	
Connection data	
Conductor connection system	
Number of terminals	
Wire cross-section, rigid min/max	mm ²
Wire cross-section, flexible min/max	mm ²
Wire cross-section, AWG/kcmil	min/max
Min./max. tightening torque range	Nm
Stripping length	mm
Note	

100 ... 240 V AC	
85 ... 264 V AC (Derating @ 100 V AC)	
47 ... 63 Hz	
80 ... 370 DC (Derating @ 120 V DC)	
0.55 A @ 230 V AC / 1.04 A @ 110 V AC	
0.22 A @ 370 V DC / 0.68 A @ 120 V DC	
Yes / max. 40	
2 A / DI, Safety fuse	
6 A, Char. B, Circuit breaker	
2...4 A, Char. C, Circuit breaker	
24 V DC \pm 1 %	
22...28 V DC (adjustable via potentiometer on front)	
< 100 ms / < 50 mVSS @ 24 V DC, I_h	
3 A up to 55 °C	
3 A @ 55 °C, 2.25 A @ 70 °C	
3.6 A for 1 min, ED = 5 %	
Unrestricted	
30...35 V DC	
35 V DC	
LED Green ($U_{output} > 21.6$ V DC)	
LED Yellow ($I_{output} > 90 \% I_h$)	
LED Red (Overload, overtemperature, short-circuit, $U_{output} < 20.4$ V DC)	
Yes / NO contact / max. 30 V AC/DC 1 A	
Output voltage > 21.6 V DC / < 20.4 V DC	
> 87 % @ 230 V AC & 3 A	
4 W / 9.5 W	
< 1 mA	
> 0.42 @ 230 V AC / > 0.45 @ 115 V AC	
> 100 ms @ 230 V AC / > 20 ms @ 115 V AC	
yes, max. 5	
125 / 34 / 100 mm / 0.5 kg	
CE, TÜV (EN/IEC 60950-1), cULus (Pending)	
Input	Output
Screw connection	Screw connection
3 for L/N/PE	5 (13, 14, +, -)
0.5/6	0.5/6
0.5/2.5	0.5/2.5
26/12	26/12
0.5/0.6	0.5/0.6
6	6

100 ... 240 V AC	
85 ... 264 V AC (Derating @ 100 V AC)	
47 ... 63 Hz	
80 ... 370 DC (Derating @ 120 V DC)	
1.26 A @ 230 V AC / 2.24 A @ 110 V AC	
0.39 A @ 370 V DC / 1.16 A @ 120 V DC	
Yes / max. 40	
4 A / DI, Safety fuse	
6 A, Char. B, Circuit breaker	
3...5 A, Char. C, Circuit breaker	
24 V DC \pm 1 %	
22...28 V DC (adjustable via potentiometer on front)	
< 100 ms / < 50 mVSS @ 24 V DC, I_h	
5 A up to 55 °C	
5 A @ 55 °C, 3.75 A @ 70 °C	
6 A for 1 min, ED = 5 %	
Unrestricted	
30...35 V DC	
35 V DC	
LED Green ($U_{output} > 21.6$ V DC)	
LED Yellow ($I_{output} > 90 \% I_h$)	
LED Red (Overload, overtemperature, short-circuit, $U_{output} < 20.4$ V DC)	
Yes / NO contact / max. 30 V AC/DC 1 A	
Output voltage > 21.6 V DC / < 20.4 V DC	
> 87 % @ 230 V AC & 5 A	
4 W / 15 W	
< 1 mA	
> 0.47 @ 230 V AC / > 0.56 @ 115 V AC	
> 80 ms @ 230 V AC / > 20 ms @ 115 V AC	
yes, max. 5	
125 / 40 / 100 mm / 0.6 kg	
CE, TÜV (EN/IEC 60950-1), cULus (Pending)	
Input	Output
Screw connection	Screw connection
3 for L/N/PE	6 (13, 14, +, -)
0.5/6	0.5/6
0.5/2.5	0.5/2.5
26/12	26/12
0.5/0.6	0.5/0.6
6	6

Ordering data

Type	Qty.	Order No.
PRO ECO 72W 24V 3A	1	1469470000
The internal varistor found in a switch-mode power unit does not replace the necessary surge protection in a system.		
Note		

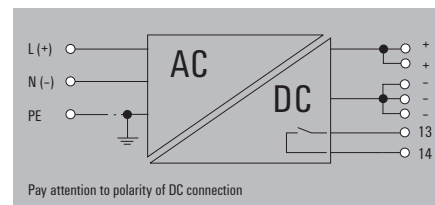
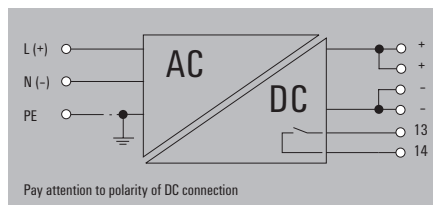
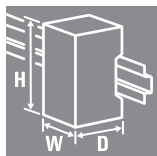
Type	Qty.	Order No.
PRO ECO 72W 24V 3A	1	1469470000
The internal varistor found in a switch-mode power unit does not replace the necessary surge protection in a system.		

Type	Qty.	Order No.
PRO ECO 120W 24V 5A	1	1469480000
The internal varistor found in a switch-mode power unit does not replace the necessary surge protection in a system.		

PROeco

PRO ECO 240W 24V 10A

PRO ECO 480W 24V 20A



Technical data

Input	
Rated input voltage	100 ... 240 V AC
AC input voltage range	85 ... 264 V AC (Derating @ 100 V AC)
AC frequency range	47 ... 63 Hz
DC input voltage range	80 ... 370 DC (Derating @ 120 V DC)
AC current consumption	1.23 A @ 230 V AC / 2.47 A @ 110 V AC
DC current consumption	1.18 A @ 370 V DC / 2.4 A @ 120 V DC
Input fuse (internal) / inrush current	Yes / max. 15 A
Recommended back-up fuse	4 A / DI, Safety fuse 10 A, Char. B, Circuit breaker 3...4 A, Char. C, Circuit breaker
Output	
Rated output voltage	24 V DC \pm 1 %
Output voltage	22...28 V DC (adjustable via potentiometer on front)
Ramp-up time / residual ripple, switching peaks	< 100 ms / < 50 mVSS @ 24 V DC, I _h
Rated output current @ U _{rated}	10 A up to 55 °C
Continuous output current @ 24 V DC	10 A @ 55 °C, 7.5 A @ 70 °C
Power boost @ 24 V DC, 60 °C	12 A for 1 min, ED = 5 %
Capacitive load	Unrestricted
Protection against reverse voltages from the load	30...35 V DC
Protection against internal surge voltage	35 V DC
Signalling	
DC OK	LED Green (U _{output} > 21.6 V DC)
Alarm	LED Yellow (I _{output} > 90 % I _h)
Error	LED Red (Overload, overtemperature, short-circuit, U _{output} < 20.4 V DC)
Voltage monitoring / no-voltage contact / contact load	Yes / NO contact / max. 30 V AC/DC 1 A
On/Off relay	Output voltage > 21.6 V DC / < 20.4 V DC
General data	
Efficiency	> 90 % @ 230 V AC & 10 A
Power loss @ idling / nominal load	3 W / 24 W
Earth discharge current	< 1 mA
Power factor (approx.)	> 0.93 @ 230 V AC / > 0.99 @ 115 V AC
Mains buffering @ I _{rated}	> 20 ms @ 230 V AC / > 20 ms @ 115 V AC
Parallel connection option	yes, max. 5
Height x width x depth / weight	125 / 60 / 100 mm / 1 kg
Approvals	
Approvals	CE, TÜV (EN/IEC 60950-1), cULus (Pending)
Connection data	
Conductor connection system	Input Output
Number of terminals	Screw connection Screw connection
Wire cross-section, rigid min/max	3 for L/N/PE 6 (13,14,+,+,-,-)
Wire cross-section, flexible min/max	0.5/6 0.5/6
Wire cross-section, AWG/kcmil	0.5/2.5 0.5/2.5
Min./max. tightening torque range	26/12 26/12
Stripping length	0.5/0.6 0.5/0.6
Note	6 6

Ordering data

Type	Qty.	Order No.
PRO ECO 240W 24V 10A	1	1469490000
The internal varistor found in a switch-mode power unit does not replace the necessary surge protection in a system.		
Note		

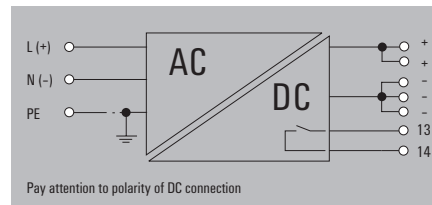
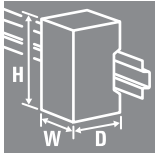
Input	
Rated input voltage	100 ... 240 V AC
AC input voltage range	85 ... 264 V AC (Derating @ 100 V AC)
AC frequency range	47 ... 63 Hz
DC input voltage range	80 ... 370 DC (Derating @ 120 V DC)
AC current consumption	2.37 A @ 230 V AC / 5.2 A @ 110 V AC
DC current consumption	1.55 A @ 370 V DC / 4.65 A @ 120 V DC
Input fuse (internal) / inrush current	Yes / max. 3 A
Recommended back-up fuse	6 A / DI, Safety fuse 16 A, Char. B, Circuit breaker 6...8 A, Char. C, Circuit breaker
Output	
Rated output voltage	24 V DC \pm 1 %
Output voltage	22...28 V DC (adjustable via potentiometer on front)
Ramp-up time / residual ripple, switching peaks	< 100 ms / < 50 mVSS @ 24 V DC, I _h
Rated output current @ U _{rated}	20 A up to 55 °C
Continuous output current @ 24 V DC	20 A @ 55 °C, 15 A @ 70 °C
Power boost @ 24 V DC, 60 °C	24 A for 1 min, ED = 5 %
Capacitive load	Unrestricted
Protection against reverse voltages from the load	30...35 V DC
Protection against internal surge voltage	35 V DC
Signalling	
DC OK	LED Green (U _{output} > 21.6 V DC)
Alarm	LED Yellow (I _{output} > 90 % I _h)
Error	LED Red (Overload, overtemperature, short-circuit, U _{output} < 20.4 V DC)
Voltage monitoring / no-voltage contact / contact load	Yes / NO contact / max. 30 V AC/DC 1 A
On/Off relay	Output voltage > 21.6 V DC / < 20.4 V DC
General data	
Efficiency	> 91 % @ 230 V AC & 20 A
Power loss @ idling / nominal load	5 W / 43 W
Earth discharge current	< 1 mA
Power factor (approx.)	> 0.97 @ 230 V AC / > 0.99 @ 115 V AC
Mains buffering @ I _{rated}	> 20 ms @ 230 V AC / > 20 ms @ 115 V AC
Parallel connection option	yes, max. 3
Height x width x depth / weight	125 / 100 / 120 mm / 1.6 kg
Approvals	
Approvals	CE, TÜV (EN/IEC 60950-1), cULus (Pending)
Connection data	
Conductor connection system	Input Output
Number of terminals	Screw connection Screw connection
Wire cross-section, rigid min/max	3 for L/N/PE 7 (13,14,+,+,-,-,-)
Wire cross-section, flexible min/max	0.5/6 0.18/6
Wire cross-section, AWG/kcmil	0.5/2.5 0.5/2.5
Min./max. tightening torque range	26/12 26/10
Stripping length	0.5/0.6 0.5/0.6
Note	6 7

Input	
Rated input voltage	100 ... 240 V AC
AC input voltage range	85 ... 264 V AC (Derating @ 100 V AC)
AC frequency range	47 ... 63 Hz
DC input voltage range	80 ... 370 DC (Derating @ 120 V DC)
AC current consumption	2.37 A @ 230 V AC / 5.2 A @ 110 V AC
DC current consumption	1.55 A @ 370 V DC / 4.65 A @ 120 V DC
Input fuse (internal) / inrush current	Yes / max. 3 A
Recommended back-up fuse	6 A / DI, Safety fuse 16 A, Char. B, Circuit breaker 6...8 A, Char. C, Circuit breaker
Output	
Rated output voltage	24 V DC \pm 1 %
Output voltage	22...28 V DC (adjustable via potentiometer on front)
Ramp-up time / residual ripple, switching peaks	< 100 ms / < 50 mVSS @ 24 V DC, I _h
Rated output current @ U _{rated}	20 A up to 55 °C
Continuous output current @ 24 V DC	20 A @ 55 °C, 15 A @ 70 °C
Power boost @ 24 V DC, 60 °C	24 A for 1 min, ED = 5 %
Capacitive load	Unrestricted
Protection against reverse voltages from the load	30...35 V DC
Protection against internal surge voltage	35 V DC
Signalling	
DC OK	LED Green (U _{output} > 21.6 V DC)
Alarm	LED Yellow (I _{output} > 90 % I _h)
Error	LED Red (Overload, overtemperature, short-circuit, U _{output} < 20.4 V DC)
Voltage monitoring / no-voltage contact / contact load	Yes / NO contact / max. 30 V AC/DC 1 A
On/Off relay	Output voltage > 21.6 V DC / < 20.4 V DC
General data	
Efficiency	> 91 % @ 230 V AC & 20 A
Power loss @ idling / nominal load	5 W / 43 W
Earth discharge current	< 1 mA
Power factor (approx.)	> 0.97 @ 230 V AC / > 0.99 @ 115 V AC
Mains buffering @ I _{rated}	> 20 ms @ 230 V AC / > 20 ms @ 115 V AC
Parallel connection option	yes, max. 3
Height x width x depth / weight	125 / 100 / 120 mm / 1.6 kg
Approvals	
Approvals	CE, TÜV (EN/IEC 60950-1), cULus (Pending)
Connection data	
Conductor connection system	Input Output
Number of terminals	Screw connection Screw connection
Wire cross-section, rigid min/max	3 for L/N/PE 7 (13,14,+,+,-,-,-)
Wire cross-section, flexible min/max	0.5/6 0.18/6
Wire cross-section, AWG/kcmil	0.5/2.5 0.5/2.5
Min./max. tightening torque range	26/12 26/10
Stripping length	0.5/0.6 0.5/0.6
Note	6 7

Type	Qty.	Order No.
PRO ECO 480W 24V 20A	1	1469510000
The internal varistor found in a switch-mode power unit does not replace the necessary surge protection in a system.		
Note		

PROeco

PRO ECO 960W 24V 40A



Technical data

Input

Rated input voltage
AC input voltage range
AC frequency range
DC input voltage range
AC current consumption
DC current consumption
Input fuse (internal) / inrush current
Recommended back-up fuse

100 ... 240 V AC
85 ... 264 V AC (Derating @ 100 V AC)
47 ... 63 Hz
80 ... 370 DC (Derating @ 120 V DC)
4.6 A @ 230 V AC / 9.9 A @ 110 V AC
2.9 A @ 370 V DC / 9 A @ 120 V AC
Yes / max. 3 A
16 A / DI, Safety fuse
20 A, Char. B, Circuit breaker
16 A, Char. C, Circuit breaker

Output

Rated output voltage
Output voltage
Ramp-up time / residual ripple, switching peaks
Rated output current @ U_{rated}
Continuous output current @ 24 V DC
Power boost @ 24 V DC, 60 °C
Capacitive load
Protection against reverse voltages from the load
Protection against internal surge voltage

24 V DC $\pm 1\%$
22...28 V DC (adjustable via potentiometer on front)
< 100 ms / < 50 mVSS @ 24 V DC, I_R
40 A up to 50 °C
40 A @ 50 °C, 24 A @ 70 °C
48 A for 1 min, ED = 5 %
Unrestricted
30...35 V DC
35 V DC

Signalling

DC OK
Alarm
Error
Voltage monitoring / no-voltage contact / contact load
On/Off relay

LED Green ($U_{output} > 21.6$ V DC)
LED Yellow ($I_{output} > 90\% I_R$)
LED Red (Overload, overtemperature, short-circuit, $U_{output} < 20.4$ V DC)
Yes / NO contact / max. 30 V AC/DC 1 A
Output voltage > 21.6 V DC / < 20.4 V DC

General data

Efficiency
Power loss @ idling / nominal load
Earth discharge current
Power factor (approx.)
Mains buffering @ I_{rated}
Parallel connection option
Height x width x depth / weight

> 93 % @ 230 V AC & 40 A
6 W / 76 W
< 1 mA
> 0.97 @ 230 V AC / > 0.99 @ 115 V AC
> 20 ms @ 230 V AC / > 20 ms @ 115 V AC
yes, max. 3
125 / 160 / 120 mm / 2.9 kg

Approvals

Approvals

CE, TÜV (EN/IEC 60950-1), cULus (Pending)

Connection data

Conductor connection system
Number of terminals
Wire cross-section, rigid min/max mm²
Wire cross-section, flexible min/max mm²
Wire cross-section, AWG/kcmil min/max
Min./max. tightening torque range Nm
Stripping length mm

Input	Output
Screw connection	Screw connection
3 for L/N/PE	7 (13, 14, +, +, +, -)
0.18/6	0.5/16
0.5/2.5	2.5/10
26/10	22/8
0.5/0.6	1.2/1.5
7	12

Note

Ordering data

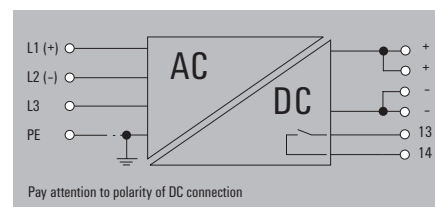
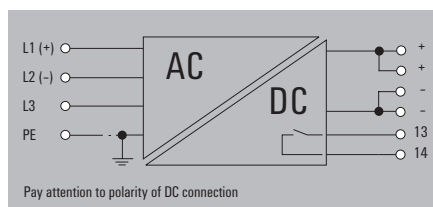
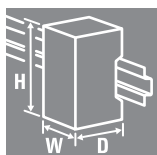
Note

Type	Qty.	Order No.
PRO ECO 960W 24V 40A	1	1469520000
The internal varistor found in a switch-mode power unit does not replace the necessary surge protection in a system.		

PROeco

PRO ECO3 120W 24V 5A

PRO ECO3 240W 24V 10A



Technical data

Input	
Rated input voltage	3 x 400...3 x 500 V AC (Wide-range input)
AC input voltage range	3 x 340...3 x 575 V AC / 2 x 360...2 x 575 V AC
AC frequency range	47...63 Hz
DC input voltage range	450...800 V DC (max. 500 V DC in accordance with UL508)
AC current consumption	0.3 A @ 3 x 500 V AC / 0.4 A @ 3 x 400 V AC
DC current consumption	0.2 A @ 800 V DC / 0.4 A @ 450 V DC
Input fuse (internal) / inrush current	Yes / max. 40 A
Recommended back-up fuse	2 A / DI, Safety fuse
	2...3 A, Char. C, Circuit breaker
Output	
Rated output voltage	24 V DC \pm 1 %
Output voltage	22...28 V DC (adjustable via potentiometer on front)
Ramp-up time / residual ripple, switching peaks	< 100 ms / < 50 mVSS @ 24 V DC, I _h
Rated output current @ U _{rated}	5 A up to 55 °C
Continuous output current @ 24 V DC	5 A @ 55 °C, 3.75 A @ 70 °C
Power boost @ 24 V DC, 60 °C	6 A for 1 min, ED = 5 %
Capacitive load	Unrestricted
Protection against reverse voltages from the load	30...35 V DC
Protection against internal surge voltage	35 V DC
Signalling	
DC OK	LED Green (U _{output} > 21.6 V DC)
Alarm	LED Yellow (I _{output} > 90 % I _h)
Error	LED Red (Overload, overtemperature, short-circuit, U _{output} < 20.4 V DC)
Voltage monitoring / no-voltage contact / contact load	Yes / NO contact / max. 30 V AC/DC 1 A
On/Off relay	Output voltage > 21.6 V DC / < 20.4 V DC
General data	
Efficiency	87 % @ 3 x 500 V AC / 88 % @ 3 x 400 V AC
Power loss @ idling / nominal load	6 W / 13 W
Earth discharge current	< 1 mA
Power factor (approx.)	> 0.4 @ 3 x 500 V AC / > 0.45 @ 3 x 400 V AC
Mains buffering @ I _{rated}	> 40 ms @ 3 x 500 V AC / > 20 ms @ 3 x 400 V AC
Parallel connection option	yes, max. 5
Height x width x depth / weight	125 / 40 / 100 mm / 0.6 kg
Approvals	
Approvals	CE, TÜV (EN/IEC 60950-1), cULus (Pending)
Connection data	
Conductor connection system	Input Output
Number of terminals	Screw connection Screw connection
Wire cross-section, rigid min/max	4 for L1/L2/L3/PE 6 (13,14,+, -, -)
Wire cross-section, flexible min/max	0.18/6 0.5/6
Wire cross-section, AWG/kcmil	0.5/2.5 0.5/2.5
Min./max. tightening torque range	26/10 26/12
Stripping length	0.5/0.6 0.5/0.6
Note	8 6

Ordering data

Type	Qty.	Order No.
PRO ECO3 120W 24V 5A	1	1469530000
The internal varistor found in a switch-mode power unit does not replace the necessary surge protection in a system.		
Note		

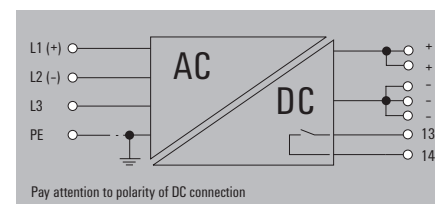
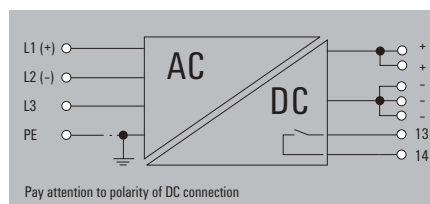
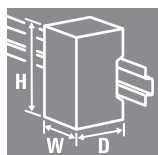
Type	Qty.	Order No.
PRO ECO3 240W 24V 10A	1	1469540000
The internal varistor found in a switch-mode power unit does not replace the necessary surge protection in a system.		
Note		

Type	Qty.	Order No.
PRO ECO3 240W 24V 10A	1	1469540000
The internal varistor found in a switch-mode power unit does not replace the necessary surge protection in a system.		
Note		

PROeco

PRO ECO3 480W 24V 20A

PRO ECO3 960W 24V 40A



Technical data

Input	
Rated input voltage	
AC input voltage range	
AC frequency range	
DC input voltage range	
AC current consumption	
DC current consumption	
Input fuse (internal) / inrush current	
Recommended back-up fuse	
Output	
Rated output voltage	
Output voltage	
Ramp-up time / residual ripple, switching peaks	
Rated output current @ U_{rated}	
Continuous output current @ 24 V DC	
Power boost @ 24 V DC, 60 °C	
Capacitive load	
Protection against reverse voltages from the load	
Protection against internal surge voltage	
Signalling	
DC OK	
Alarm	
Error	
Voltage monitoring / no-voltage contact / contact load	
On/Off relay	
General data	
Efficiency	
Power loss @ idling / nominal load	
Earth discharge current	
Power factor (approx.)	
Mains buffering @ I_{rated}	
Parallel connection option	
Height x width x depth / weight	
Approvals	
Approvals	
Connection data	
Conductor connection system	
Number of terminals	
Wire cross-section, rigid min/max	mm ²
Wire cross-section, flexible min/max	mm ²
Wire cross-section, AWG/kcmil	min/max
Min./max. tightening torque range	Nm
Stripping length	mm
Note	

Input	
3 x 400...3 x 500 V AC (Wide-range input)	
3 x 340...3 x 575 V AC / 2 x 360...2 x 575 V AC	
47...63 Hz	
450...800 V DC (max. 500 V DC in accordance with UL508)	
1.2 A @ 3 x 500 V AC / 1.5 A @ 3 x 400 V AC	
0.7 A @ 800 V DC / 1.2 A @ 450 V DC	
Yes / max. 50 A	
4 A / DI, Safety fuse	
3...5 A, Char. C, Circuit breaker	
Output	
24 V DC \pm 1 %	
22...28 V DC (adjustable via potentiometer on front)	
< 100 ms / < 50 mVSS @ 24 V DC, I_b	
20 A up to 55 °C	
20A @ 55 °C, 15 A @ 70 °C	
24 A for 1 min, ED = 5 %	
Unrestricted	
30...35 V DC	
35 V DC	
Signalling	
LED Green ($U_{output} > 21.6$ V DC)	
LED Yellow ($I_{output} > 90 \% I_b$)	
LED Red (Overload, overtemperature, short-circuit, $U_{output} < 20.4$ V DC)	
Yes / NO contact / max. 30 V AC/DC 1 A	
Output voltage > 21.6 V DC / < 20.4 V DC	
General data	
89 % @ 3 x 500 V AC / 90 % @ 3 x 400 V AC	
8 W / 48 W	
< 0.5 mA	
> 0.41 @ 3 x 500 V AC / > 0.43 @ 3 x 400 V AC	
> 30 ms @ 3 x 500 V AC / > 20 ms @ 3 x 400 V AC	
yes, max. 3	
125 / 100 / 120 mm / 1.3 kg	
Approvals	
CE, TÜV (EN/IEC 60950-1), cULus (Pending)	
Connection data	
Input	Output
Screw connection	Screw connection
4 for L1/L2/L3/PE	7 (13,14,+,+,-,-)
0.18/6	0.18/6
0.5/2.5	0.5/2.5
26/10	26/10
0.5/0.6	0.5/0.6
7	7
Note	

Input	
3 x 400...3 x 500 V AC (Wide-range input)	
3 x 340...3 x 575 V AC / 2 x 360...2 x 575 V AC	
47...63 Hz	
450...800 V DC (max. 500 V DC in accordance with UL508)	
2.15 A @ 3 x 500 V AC / 2.68 A @ 3 x 400 V AC	
1.37 A @ 800 V DC / 2.37 A @ 450 V DC	
Yes / max. 40 A	
6 A / DI, Safety fuse	
10 A, Char. B, Circuit breaker	
6...8 A, Char. C, Circuit breaker	
Output	
24 V DC \pm 1 %	
22...28 V DC (adjustable via potentiometer on front)	
< 100 ms / < 50 mVSS @ 24 V DC, I_b	
40 A up to 50 °C	
40 A @ 50 °C, 12 A @ 70 °C	
48 A for 1 min, ED = 5 %	
Unrestricted	
30...35 V DC	
35 V DC	
Signalling	
LED Green ($U_{output} > 21.6$ V DC)	
LED Yellow ($I_{output} > 90 \% I_b$)	
LED Red (Overload, overtemperature, short-circuit, $U_{output} < 20.4$ V DC)	
Yes / NO contact / max. 30 V AC/DC 1 A	
Output voltage > 21.6 V DC / < 20.4 V DC	
General data	
90 % @ 3 x 500 V AC / 91 % @ 3 x 400 V AC	
5 W / 95 W	
< 1 mA	
> 0.56 @ 3 x 500 V AC / > 0.56 @ 3 x 400 V AC	
> 25 ms @ 3 x 500 V AC / > 20 ms @ 3 x 400 V AC	
yes, max. 3	
125 / 160 / 120 mm / 2.5 kg	
Approvals	
CE, TÜV (EN/IEC 60950-1), cULus (Pending)	
Connection data	
Input	Output
Screw connection	Screw connection
4 for L1/L2/L3/PE	7 (13,14,+,+,-,-)
0.18/6	0.5/16
0.5/2.5	2.5/10
26/10	22/8
0.5/0.6	1.2/1.5
7	12
Note	

Ordering data

Type	Qty.	Order No.
PRO ECO3 480W 24V 20A	1	1469550000
The internal varistor found in a switch-mode power unit does not replace the necessary surge protection in a system.		
Note		

Type	Qty.	Order No.
PRO ECO3 960W 24V 40A	1	1469560000
The internal varistor found in a switch-mode power unit does not replace the necessary surge protection in a system.		
Note		

Type	Qty.	Order No.
PRO ECO3 960W 24V 40A	1	1469560000
The internal varistor found in a switch-mode power unit does not replace the necessary surge protection in a system.		
Note		