12 W Low profile Modular DC Power Supplies for electrical cabinets

Type 78.12...2400
- Output 24 V DC, 12 W, 0.63 A

Type 78.12...1200
- Output 12 V DC, 12 W, 1.25 A

- Designed for SELV system (EN 60950)
- 17.5 mm (1 module) x 61 mm deep
- Low stand-by power consumption
- Thermal protection: internal, with V_{out} shutdown - power OFF to reset
- Short circuit protection: Hiccup (auto-recovery) mode
- Overvoltage protection: Varistor
- Flyback topology
- Compliant with EN 60950-1 and EN 61204-3
- Parallel working for automatic redundancy - with OR diodes
- Dual Polarity and Series connection permissible
- 35 mm rail (EN 60715) mount

78.12
Box clamp



For outline drawing see page 28

78.12...2400



- 24 V DC, 12 W output
- SELV
- General use for 24 V DC load

78.12...1200



- 12 V DC, 12 W output
- SELV
- General use for 12 V DC load

* (see diagrams P78)
** peak to peak, 100 Hz component, with 100 V AC input
*** 88…100 V AC with output current limited to 80% I_N
**** (see derating diagrams L78)

Output specification			
Output current (–20…+40 °C, 230 V AC input)	A	0.63	1.25
Rated current I_N (50 °C, full input operating range)	A	0.50	1
Rated voltage	V	24	12
Rated power	W	12	12
Output power (–20…+40 °C, 230 V AC input)	W	15	15
Peak current capability for 3 ms*	A	2	2
Output voltage adjust	V	—	—
Voltage variation (from no-load to full-load)		< 1%	< 1%
Voltage ripple @ full load**	mV	< 200	< 200
Hold-up time @ full load: with 100 V AC input	ms	> 10	> 10
with 260 V AC input	ms	> 90	> 90
Input specification			
Nominal voltage (U_N) V AC (50/60 Hz)		110…240	110…240
V DC (not polarized)		220	220
Operating range V AC (50/60 Hz)		100…265***	100…265***
V DC		140…370	140…370
Max power consumption	VA	28.2	32
(@ 100 V AC, 50 Hz)	W	14.2	17.2
Stand-by power consumption	W	< 0.4	< 0.4
Power factor		0.50	0.53
Max current consumption (@ 88 V AC)	A	0.25	0.30
Max. inrush current (peak @ 265 V) for 3 ms	A	10	10
Technical data			
Efficiency (@ 230 V AC)	%	85	87
MTTF	h	$> 400 \cdot 10^3$	$> 400 \cdot 10^3$
Start-up delay	s	< 1	< 1
Dielectric strength between input/output	V AC	3000	3000
Ambient temperature range****	°C	–20…+60	–20…+60
Protection category		IP 20	IP 20
Approvals (according to type)		CE UK CA EAC	

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78 SERIES
Switch mode power supplies

12 W Low profile Modular DC Power Supplies for electrical cabinets

Type 78.12...2402
- Output 24 V DC, 12 W, 0.5 A
- Modular LED driver for stripes and up to 12 W, TUV certified following IEC61347-2-13
- Suitable for general use (15 W - 40 °C ,12 W - 50 °C)

- Designed for SELV system (EN 60950)
- 17.5 mm (1 module) x 61 mm deep
- Low stand-by power consumption
- Thermal protection: internal, with V_{out} shutdown - power OFF to reset
- Short circuit protection: (auto-recovery)
- Overvoltage protection: Varistor
- Flyback topology
- Compliant with EN 60950-1 and EN 61204-3
- Parallel working for automatic redundancy - with OR diodes
- Dual Polarity and Series connection permissible
- 35 mm rail (EN 60715) mount

78.12
Box clamp



For outline drawing see page 28

78.12...2402



- 24 V DC, 12 W output
- SELV
- Modular LED driver with 24 V DC output

* (see diagrams P78)
** (see derating diagrams L78)

Output specification			
Maximum continuous output	LED driver	A	0.5
current @ 40 °C, 230 V AC	General USE	A	0.63
Nominal current I_N	LED driver (40 °C)	A	0.5
–20…40…50 °C, 230 V AC	General USE (50 °C)	A	0.5
Rated voltage		V	24
Rated power		W	12
Maximum power	LED driver	W	12
@ 40 °C, 230 V AC	General USE	W	15
Peak current capability for 3 ms*		A	2
Output voltage adjust		V	—
Voltage variation (from no-load to full-load)			< 1%
Voltage ripple @ full load		mV	< 200
Hold-up time @ full load:	with 110 V AC input	ms	> 10
	with 240 V AC input	ms	> 90
Input specification			
Nominal voltage (U_N)	V AC (50/60 Hz)		110…240
	V DC (not polarized)		220
Operating range	V AC (50/60 Hz)		100…265
	V DC		140…370
Max power consumption		VA	28.2
(@ 100 V AC, 50 Hz)		W	14.2
Stand-by power consumption		W	< 0.4
Power factor			0.50
Max current consumption (@ 100 V AC)		A	0.25
Max. inrush current (peak @ 265 V) for 3 ms		A	10
Technical data			
Efficiency (@ 230 V AC)		%	85
MTTF		h	> 400 · 10^3
Start-up delay		s	< 1
Dielectric strength between input/output		V AC	3000
Ambient temperature range**		°C	–20…+40
Protection category			IP 20
Approvals (according to type)			CE UKCA EAC

V-2025, www.findernet.com

Low profile Modular DC 12 W or 25 W Power Supplies designed for OPTA and expansion modules (8A Series)

Type 78.12...2482
- Output 24 V DC - 0.5 A, 12 W
- Power supply switching for OPTA PLR - 8A Series

Type 78.25...2482
- Output 24 V DC - 1 A, 25 W
- Power supply switching for OPTA PLR - 8A Series

- Designed for SELV system (EN 60950)
- 17.5 mm (12 W) or 35 mm (25 W) x 61 mm deep
- Low stand-by power consumption
- Thermal protection: internal, with V_{out} shutdown - power OFF to reset
- Short circuit protection: (auto-recovery)
- Overvoltage protection: Varistor
- Compliant with EN 60950-1 and EN 61204-3
- Parallel working for automatic redundancy - with or diodes
- Dual Polarity and Series connection permissible
- 35 mm rail (EN 60715) mount

78.12/25
Box clamp



For outline drawing see page 28

NEW **78.12...2482**



- Output 24 V DC, 12 W SELV
- Up to 1 OPTA and 5 expansion modules

NEW **78.25...2482**



- Output 24 V DC, 25 W, SELV
- Up to 2 groups of 1 OPTA and 5 expansion modules

* (see diagrams P78)
** (see derating diagrams L78)

Output specification			
Maximum continuous output (–20…+50 °C, 230 V AC input)	A	0.50	1
Nominal current I_N (@ 70 °C)	A	0.40	0.8
Rated voltage	V	24	24
Rated power	W	12	25
Output power (–20…+50 °C)	W	12	25
Peak current capability for 3 ms*	A	2	3
Voltage variation (from no-load to full-load)		< 1%	< 1%
Voltage ripple @ full load	mV	< 200	< 200
Hold-up time @ full load: with 110 V AC input	ms	> 10	> 10
with 250 V AC input	ms	> 90	> 80
Input specification			
Nominal voltage (U_N)	V AC (50/60 Hz)	110…240	110…240
	V DC (not polarized)	220	220
Operating range	V AC (50/60 Hz)	100…265	100…265
	V DC	140…370	140…370
Max power consumption	VA	28.2	55
(@ 110 V AC, 50 Hz)	W	14.2	27
Stand-by power consumption	W	< 0.4	< 0.5
Power factor		0.50	0.48
Max current consumption (@ 110 V AC)	A	0.25	0.50
Max. inrush current (peak @ 250 V) for 3 ms	A	10	15
Technical data			
Efficiency (@ 230 V AC)	%	85	89
MTTF	h	> 400 · 10^3	> 400 · 10^3
Start-up delay	s	1	1
Dielectric strength between input/output	V AC	3000	3000
Ambient temperature range**	°C	–20…+50	–20…+50
Protection category		IP 20	IP 20
Approvals (according to type)		CE UKCA EAC cULus LISTED	CE UKCA EAC