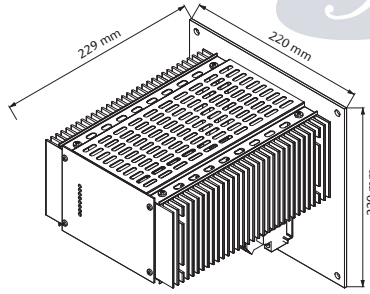
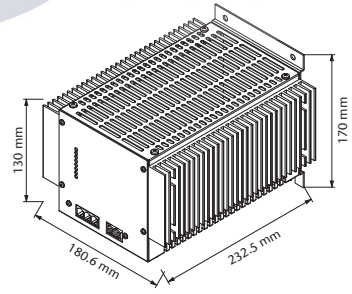


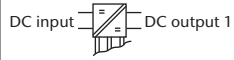
Eurocassette / approx. 4.0 kg
(pluggable module for 19" sub-rack)



Wall mount / approx. 6.0 kg

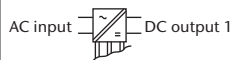


NEW
Chassis mount / approx. 4.6 kg



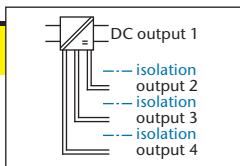
DC / DC Converters

▶ 600 W		▶ 700 W							
Input VDC								Output 1 VDC	
18–36 VDC	Max. Output Amps	36–75 VDC	45–90 VDC	80–160 VDC	160–320 VDC	320–380 ¹⁾ VDC	Max. Output Amps	Adj.	Range
M 2620	60	M 2630	M 2640	M 2650	M 2670	M 2680 Z	60	5	5– 5.5
M 2621	39	M 2631	M 2641	M 2651	M 2671	M 2681 Z	45	9	8– 10
M 2622	30	M 2632	M 2642	M 2652	M 2672	M 2682 Z	36	12	11– 13
M 2623	25.2	M 2633	M 2643	M 2653	M 2673	M 2683 Z	30	15	14– 16
M 2624	15	M 2634	M 2644	M 2654	M 2674	M 2684 Z	18	24	23– 26
M 2625	13.2	M 2635	M 2645	M 2655	M 2675	M 2685 Z	16.2	28	26– 30
M 2629	7.2	M 2639	M 2649	M 2659	M 2679	M 2689 Z	9	48	45– 55
M 2626	6	M 2636	M 2646	M 2656	M 2676	M 2686 Z	7.2	60	58– 68



AC / DC Power Supplies

▶ 700 W					
Input VAC, 1-Phase				Output 1 VDC	
115 ±20%	230 ^{+15%} _{-20%}	115 ±20% / 230 ^{+15%} _{-20%}	Max. Output Amps	Adj.	Range
M 2660	M 2680	M 2690	60	5	5– 5.5
M 2661	M 2681	M 2691	45	9	8– 10
M 2662	M 2682	M 2692	36	12	11– 13
M 2663	M 2683	M 2693	30	15	14– 16
M 2664	M 2684	M 2694	18	24	23– 26
M 2665	M 2685	M 2695	16.2	28	26– 30
M 2669	M 2689	M 2699	9	48	45– 55
M 2666	M 2686	M 2696	7.2	60	58– 68



Additional DC outputs

output 2		output 3		output 4			
linear regulator				linear regulator		switch mode regulator	
5 V	3 A max.	5 V	3 A max.	5 V	3 A max.	5 V	15 A max.
12 V		12 V		3 A max.	12 V	15 A max.	
15 V		15 V		3 A max.	15 V	12 A max.	
				24 V	1.2 A max.	24 V	8 A max.

The modules require a minimum load of 10...20 % at the main output in order to generate sufficient voltage for the additional outputs.

Assistance in table use:

- Select the column for input voltage range.
- Select the row for the appropriate main output voltage.
- The intersection of both results in the module required.
- Additional outputs can be chosen, considering that the max. output power of 600/700 W will not be exceeded.

For example:

- input voltage = 115 VAC
- output voltage = 5 VDC @ 60 A
- results in a M 2660 module.
- Additional outputs to be specified.

¹⁾ input supply from PFC also suitable

Features

- DC input: 10 - 380 V
- AC input: 115 / 230 V, 47 - 400 Hz
- Up to 4 DC outputs: 5 / ... / 60 V
- Power: 30 / ... / 700 W
- Continuous short circuit protection for main output
- Overvoltage protection for main output
- Industrial grade components
- Compact and robust design

Specifications

Input

Voltage range see table, unit switches off at under- and overvoltage
 No-load input power. 3 - 6 W
 Switch-on time 0.5 - 2 s
 Inrush current AC input: limited by thermistor
 Hold-up time AC input: 10 ms typical

Immunity

- ESD. acc. to DIN / EN 61000-4-2 level 3
 - Fast transients acc. to DIN / EN 61000-4-4 level 3
 - Surges acc. to DIN / EN 61000-4-5 level 3

Main output

Line regulation ($\pm 10\%$) 0.1 %
 Load regulation (10-90 %) 0.2 %
 Load transient (10-90-10 %) 6 % typical
 Response time to $\pm 1\%$ 2 - 3 ms
 Turn-on rise time Soft-start, 100 ms typical
 Ripple. $\leq 1\% + 30\text{ mV}_{\text{p-p}}$
 Overload protection current limited to 105 - 110 % of I_{nom}
 Overvoltage protection OVP switches off module with automatic return to operation
 Remote sense. compensation up to 10 % of U_{nom}

Additional outputs

Line regulation ($\pm 10\%$) 0.1 %
 Load regulation (10-90 %) 2 % typical
 Ripple. 0.5 % typical
 Overload protection current limited

General

Efficiency 70 - 85 %
 Operating temperature. -20 to $+75\text{ }^\circ\text{C}$
 Load derating 2.5% / $^\circ\text{C}$ from $+55\text{ }^\circ\text{C}$
 Storage temperature -40 to $+85\text{ }^\circ\text{C}$
 Humidity up to 95 % RH, non-condensing
 Cooling natural convection
 Temperature coefficient 0.02% / $^\circ\text{C}$ typical
 Safety / Construction. acc. to DIN / EN 60950-1: 2003
 Protection category. IP 20, others or NEMA upon request
 EMI. acc. to EN 55022, class A, optionally class B
 MTBF approx. 100,000 h @ $40\text{ }^\circ\text{C}$
 acc. to MIL - HDBK - 217 E (notice 1)
 Connector for eurocassette - std. design H 15 (details see page 103)
 Marking CE

Options (details see page 90 – 92)

Input

- Inrush current limiting for DC input
- Reverse polarity protection for DC input
- Autoranging for 115 / 230 VAC input

Output

- Parallel operation
- Redundant operation
- Inhibit (remote on / off)

Signals

via open collector or relay contacts
 ■ Power ok (input)
 ■ DC ok (outputs)

Monitoring

Input / output voltage or current via
 - analog signal
 - interface card RS232 or IEEE488 (external)

Mechanics / environment:

- 19" sub-rack for eurocassette, refer to page 93
- Wall mount
- Chassis mount
- DIN rail mount
- Increased mechanical strength
- Tropical protection
- Extended temperature range to $-40\text{ }^\circ\text{C}$

