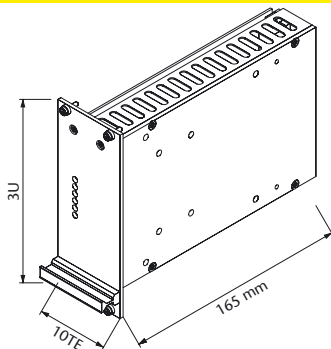
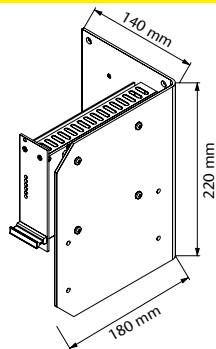


Series M 200 with multi-output

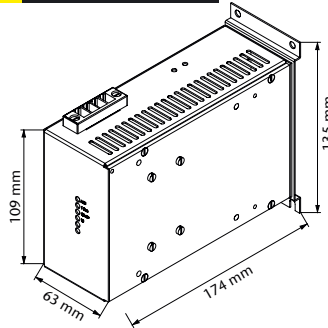
www.schaeferpower.com



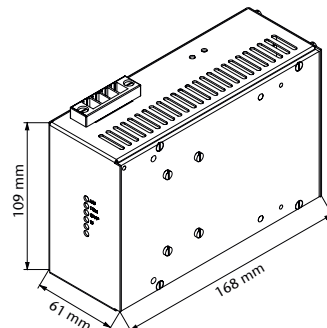
Eurocassette / approx. 0.7 kg
(pluggable module for 19" sub-rack)



Wall mount / approx. 2.2 kg



NEW
Chassis mount / approx. 1.05 kg



NEW
DIN rail mount / approx. 1.0 kg



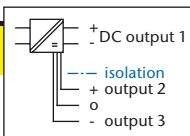
DC / DC Converters

▶ 30 W				▶ 40 W						
Input VDC									Output 1 VDC	
10–16 VDC	Max. Output Amps	18–36 VDC	36–75 VDC	45–90 VDC	80–160 VDC	160–320 VDC	320–380 ¹⁾ VDC	Max. Output Amps	Adj.	Range
M 200	3	M 220	M 230	M 240	M 250	M 270	M 280 Z	4	5	5– 5.5
M 201	1.5	M 221	M 231	M 241	M 251	M 271	M 281 Z	2	9	8– 10
M 202	1.2	M 222	M 232	M 242	M 252	M 272	M 282 Z	1.5	12	11– 13
M 203	2.5	M 223	M 233	M 243	M 253	M 273	M 283 Z	1.3	15	14– 16
M 204	1	M 224	M 234	M 244	M 254	M 274	M 284 Z	0.8	24	23– 26
M 205	0.6	M 225	M 235	M 245	M 255	M 275	M 285 Z	0.7	28	26– 30
M 209	0.5	M 229	M 239	M 249	M 259	M 279	M 289 Z	0.4	48	45– 55
M 206	0.3	M 226	M 236	M 246	M 256	M 276	M 286 Z	0.3	60	58– 68



AC / DC Converters

▶ 40 W					
Input VAC, 1-Phase				Output 1 VDC	
115 ±20%	230 ^{+15%} _{-20%}	115 ±20% / 230 ^{+15%} _{-20%}	Max. Output Amps	Adj.	Range
M 260	M 280	M 290	4	5	5– 5.5
M 261	M 281	M 291	2	9	8– 10
M 262	M 282	M 292	1.5	12	11– 13
M 263	M 283	M 293	1.3	15	14– 16
M 264	M 284	M 294	0.8	24	23– 26
M 265	M 285	M 295	0.7	28	26– 30
M 269	M 289	M 299	0.4	48	45– 55
M 266	M 286	M 296	0.3	60	58– 68



Additional DC outputs

+ output 2		- output 3	
common return			
5 V	2 A max.	5 V	0.5 A max.
12 V		12 V	
15 V		15 V	

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:

- 1 Select the column for input voltage range.
- 2 Select the row for the appropriate main output voltage.
- 3 The intersection of both results in the module required.
- 4 Additional outputs can be chosen, considering that the max. output power of 30/40 W will not be exceeded.

For example:

- 1 input voltage = 48 VDC
- 2 output voltage = 24 VDC @ 0.8 A
- 3 results in a M 234 module.
- 4 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
 Marking CE

Options

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
- Wall mount
- Chassis mount
- DIN rail mount
- Increased mechanical strength
- Tropical protection
- Extended temperature range to $-40\text{ }^\circ\text{C}$

