

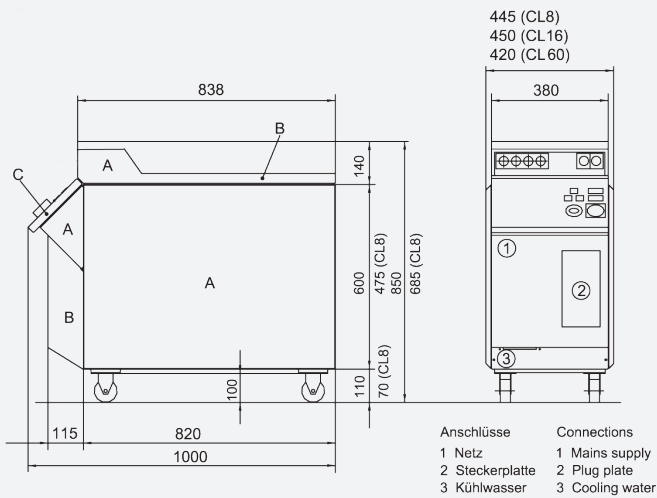
## SLS 200 CL

Pulsed Nd: YAG Laser  
10 to 300 W average / 10 kW peak output



- High precision welding of challenging materials
- Excellent pulse to pulse stability down to  $\pm 0.5\%$  through real-time controlled power supply
- Long pulses up to 200 ms and high pulse energy, even for SHADOW® welding
- High resolution pulse forming with pulse-on-demand and powerburst features





## SLS 200 CL

Laser sources	CL8	CL16	CL60	CL60HP
Laser type	pulsed Nd:YAG solid state laser			
Wavelength	1064 nm	1064 nm	1064 nm	1064 nm
Pulse length <sup>1)</sup>	0.1 – 100 ms	0.1 – 100 ms	0.1 – 200 ms	0.1 – 200 ms
Pulse repetition rate	0.1– 200 Hz	0.1– 500 Hz	0.1– 500 Hz	0.1– 500 Hz
Pulse energy max. <sup>2)</sup>	8 J	40 J	70 J	110 J
Peak power at 3 ms max. <sup>2)</sup>	2.0 kW	7.0 kW	7.0 kW	10 kW
Average power max. <sup>2)</sup>	10 W	50 W	220 W	300 W
<sup>1)</sup> Min. pulse length for controlled pulse is 0.5 ms <sup>2)</sup> Measured without beam delivery with new flash lamp				
<b>Fiber Optic Beam Delivery</b>				
Number of outputs	1 port	1–6 ports	1–6 ports	1-3 ports
Modes	n/a	energy or time sharing or combined		
Fiber core diameter NA 0.11 [µm]	50 - 400	100 - 400	400/600	-
Fiber core diameter NA 0.22 [µm]	100 - 600	100 - 600	200/400/600	-
HP Fiber core diameter NA 0.2 [µm]	-	-	-	400/600
Fiber length [m]	standard 3/5/10 m, max. 80 m			
<b>Line Power</b>				
Configuration	1-ph. P/N/E ±10%	3-phase P/N/E ±10%		
Multitap transformer for	110 V, 230 V	3 x 200 V, 208 V, 230 V, 380 V, 400 V, 480 V		
Power consumption	2.2 kVA	4 kVA	11 kVA	11 kVA
Line frequency	50 Hz or 60 Hz			
<b>Cooling</b>				
Type of chiller	built-in water to air chiller		external chiller needed	
Water inlet max.	n/a	n/a	20°C / 8 bar	20°C / 8 bar
Pressure drop to outlet, min.	n/a	n/a	4 bar	4 bar
Cooling power max.	n/a	n/a	8.5 kW	8.5 kW
<b>Weight</b> / Laser unit	140 kg	180 kg	230 kg	230 kg
<b>Ambient conditions</b>				
Ambient temperature max.	10 – 35 °C			
Relative humidity max.	80 %			
<b>Emissions</b>				
Heat dissipation approx.	1.25 kW	2.5 kW	n/a	n/a
Noise at 1m, idle	65 dBA	70 dBA	60 dBA	60 dBA
<b>Compliance with standards</b>	CE compliant, FDA compliant			

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