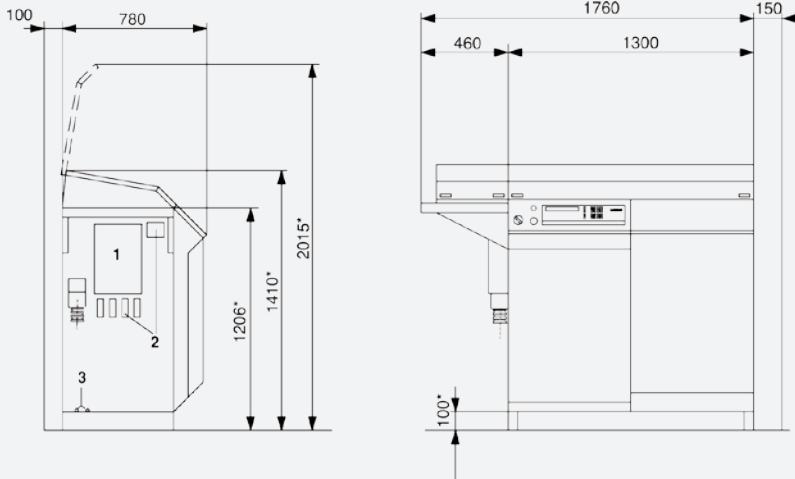


FLS CL

Pulsed Nd:YAG Laser
for highspeed welding

- Deep penetration welding of challenging materials and material combinations
- High throughput
- High speed SHADOW® welding
- Single shot contour welding
- Ideal for battery and solar collector welding





FLS CL

Laser source	542CL	542CL-HP	542CL	542CL-HP
Cavity	307	307	502	502
Laser type	pulsed Nd:YAG solid state laser			
Wavelength	1064 nm	1064 nm	1064 nm	1064 nm
Pulse length	0.2 – 100 ms	0.2 – 200 ms	0.2 – 100 ms	0.2 – 200 ms
Pulse repetition rate	0.1– 1000 Hz	0.1– 1000 Hz	0.1– 1000 Hz	0.1– 1000 Hz
Pulse energy max.	60 J	110 J	70 J	110 J
Peak power at 1 ms max.	8 kW	16 kW	10 kW	16 kW
Average power max.	400 W	400 W	500 W	500 W
Fiber Optic Beam Delivery				
Number of outputs	1–4 ports			
Modes	energy or time sharing			
Fiber core diameter	400/600 µm	400/600 µm	600 µm	600 µm
Fiber length	5/10 m, max. 80 m			
Line Power				
Configuration	3-phase + ground ±10%			
Multitap transformer for	380 V, 400 V, 480 V			
Power consumption	19 kVA			
Line frequency	50 Hz or 60 Hz			
Cooling				
Water inlet max.	20°C / 8 bar			
Pressure drop to outlet, min.	4 bar			
Cooling power max.	15 kW			
Weight				
Laser unit	600 kg			
Ambient conditions				
Ambient temperature max.	10 – 35 °C			
Relative humidity max.	80 %			
Emissions				
Heat dissipation approx.	0.4 kW + beam power			
Noise at 1m, idle	65 dBA			
Compliance with standards				
CE compliant, FDA compliant				

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Specifications subject to change without notice