

ICL series

INRUSH CURRENT LOAD



Inrush Current Load ICL 1000

- ✓ Verification of inrush current capability of the source according to IEC 61000-4-11, IEC 61000-4-29 and IEC 61000-4-34
- ✓ Monitor signal for current measurement available
- ✓ Fast discharge for high repetition rate (≥ 5 s)

The relating standards:*

IEC/EN 61000-3-2
IEC/EN 61000-3-3
IEC/EN 61000-3-11
IEC/EN 61000-3-12
IEC/EN 60146-1-1
IEC/EN 61000-2-2
IEC/EN 61000-4-8
IEC/EN 61000-4-11
IEC/EN 61000-4-13
IEC/EN 61000-4-14
IEC/EN 61000-4-17
IEC/EN 61000-4-27
IEC/EN 61000-4-28
IEC/EN 61000-4-29
IEC/EN 61000-4-34
IEC/EN 61131-2
IEC/EN 61496-1
IEC/EN 61800-3
IEC/EN 62040-2
RTCA DO-160
SEMI F47-0706
IEC TR 61547-1
German. Lloyd

** The Inrush Current Load can be used for certain tests within these standards. Additional equipment might be required. For detailed information, please contact sales@spitzenberger.de.*

VERIFICATION OF INRUSH CURRENT CAPABILITY

ICL FUNCTIONAL PRINCIPLE

The ICL is used to verify the inrush current capability of a source according to IEC 61000-4-11, IEC 61000-4-29 and IEC 61000-4-34 standard. The arrangement corresponds to a typical circuit at the input of a power supply unit that is connected to the mains.

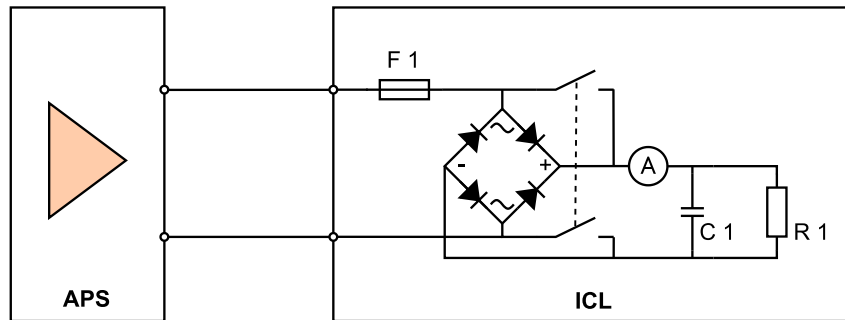


Fig. 1: Inrush Current Load principle schematic

TECHNICAL DATA – INRUSH CURRENT LOAD

	ICL 500	ICL 1000
Max. input voltage (RMS)	300 V	
Nominal input voltage (RMS)	220 V ... 240 V	
Capacitance C1	1700 µF ± 20 %	
Resistance R1	560 Ω	
Fuse F1	32 A	
Current measurement range	0 ... 500 A	0 ... 1000 A
Current measurement ratio	10 mV / A	
Current measurement accuracy	± 2 %	
Ambient temperature	+10 °C up to +40 °C	
Storage temperature	-25 °C up to +60 °C	
Relative humidity	non condensing, max. 80 % for temperature < 31 °C, decreasing linearly to 50 % at 40 °C	
Ingress protection	IP20	
Power supply (±10 %, 50/60 Hz)	230 V	
Line protection, connection	2 A, Schuko	
Housing	plug-in unit or desktop, light grey (RAL 7035)	
Inrush unit approx. dimensions (H x W x D)	19", 4 U 178 x 483 x 350 mm	
Weight (approx.)	15 kg	