16A AC Inrush Current Limiter ICL-16R

■ Features

- 23A inrush limiting current, 16A continuous
- 180~264VAC AC input
- Integrated bypass relay, no simple NTC
- Internal thermal protection
- Installed on DIN Rail TS-35/7.5 or 15 (ICL-16R)
- -30~+70°C wide working temperature

■ Applications

- Allow connecting multiple power supply at same line
- Allows smaller and faster Circuit Breaker
- Inductive and capacitive load
- Protects against unintended trigger of Circuit Breaker

■ Description

The ICL-16 is a 16A inrush current limiter that can be used to reduce the high starting current due to capacitive load or inductive causing the circuit breaker to be false triggered. Several power supplies can be installed on the same AC line after the implementation of an ICL-16.

■ Model Encoding

ICL - 16 - R

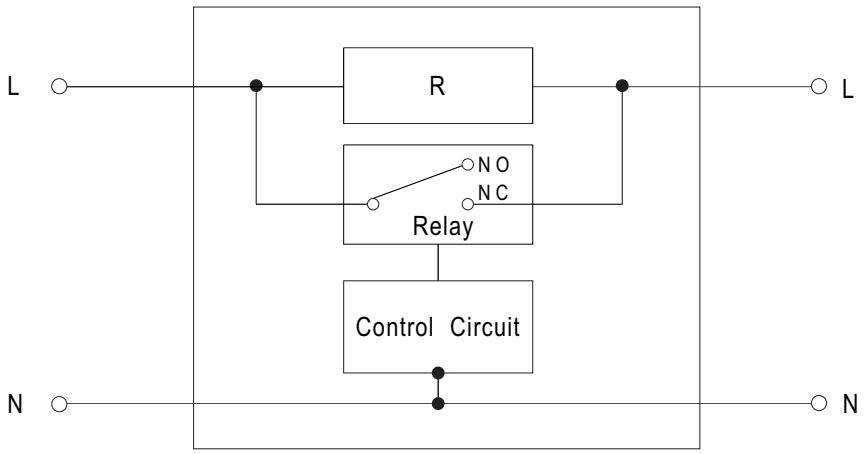
- Shape { R: DIN Rail type (Rail mounted) / L: Linear type (Terminal block mounted) }
- Inrush current
- Series name

16A AC Inrush Current Limiter ICL-16R

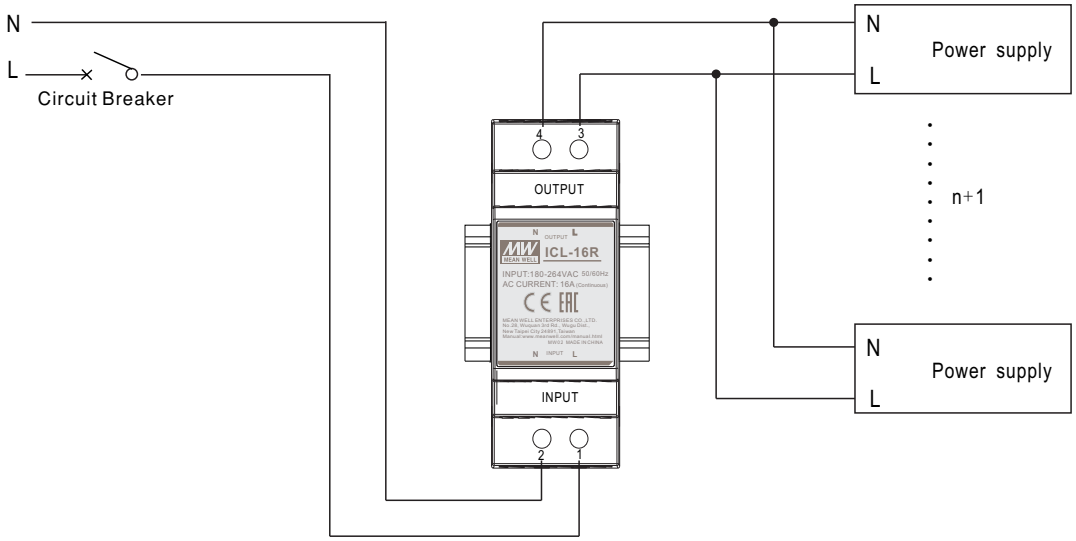
SPECIFICATION

MODEL		ICL-16R		
AC INPUT VOLTAGE		180 ~ 264VAC		
AC LINE FREQUENCY		47 ~ 63Hz		
INRUSH CURRENT LIMITING		23A		
AC CONTINUOUS RATED CURRENT		16A continuous		
AC INPUT POWER		3680VA (16A x 230VAC)		
AC INPUT CONSUMPTION		<1.5W at 264VAC,50Hz input		
INTERNAL RELAY LIMITING TIME (TON POWER ON)		300±50ms		
INTERNAL RELAY	LIMITING CYCLES	PSU Set up time<250ms	PSU Set up time 250 ~ 350ms	PSU Set up time >350ms
		1 cycle / 5 min	1 cycle / 1 min	5 cycle / 1 min (>1500ms per cycle)
	RELEASE TIME	500±50ms		
INTERNAL PROTECTION		Thermal fuse protects overload and fire		
ALLOWED CAPACITIVE LOAD		2500 μF max.		
AC PEAK CURRENT		165A for 20ms / 800A for 200 μs (even while switching internal bypass relay)		
WORKING TEMP.		-30 ~ +70℃		
WORKING HUMIDITY		20 ~ 90% RH non-condensing		
STORAGE TEMP.		-40 ~ +85℃		
TEMP. COEFFICIENT		±0.03%/℃ (0 ~ 50℃) RH non-condensing		
VIBRATION		10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes;		
		Mounting: Compliance to IEC60068-2-6		
OPERATING ALTITUDE (NOTE 2)		5000 meters		
OVER VOLTAGE CATEGORY		Ⅲ; According to IEC62368-1; altitude up to 5000 meters		
POLLUTION DEGREE		2		
SAFETY STANDARDS		IEC62368-1(LVD)		
SAFETY & EMC (Note.3)	EMC EMISSION	**Parameter**	**Standard**	**Test Level / Note**
		Conducted	EN55032	Class B
		Radiated	EN55032	Class B
		Harmonic Current	EN61000-3-2	Class A
		Voltage Flicker	EN61000-3-3	-------
	EMC IMMUNITY	EN55024, EN55035,EN61000-6-2		
		Parameter	**Standard**	**Test Level /Note**
		ESD	EN61000-4-2	Level 3, 8KV air; Level 2, 4KV contact, criteria A
		Radiated Susceptibility	EN61000-4-3	Level 3, criteria A
		EFT/Burest	EN61000-4-4	Level 3, criteria A
		Surge	EN61000-4-5	Level 4,2KV/L-N, criteria A
		Conducted	EN61000-4-6	Level 3, criteria A
		Magnetic Field	EN61000-4-8	Level 4, criteria A
		Voltage Dips and interruptions	EN61000-4-11	>95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods
MTBF		2433.76K hrs min. MIL-HDBK-217F (25℃)		
DIMENSION		35*90*54.5mm (L*W*H)		
PACKING		0.116Kg; 96pcs/12.2Kg/1.04CUFT		
NOTE		1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft). 3. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www. meanwell. com)		

■ BLOCK DIAGRAM



■ APPLICATION DIAGRAM

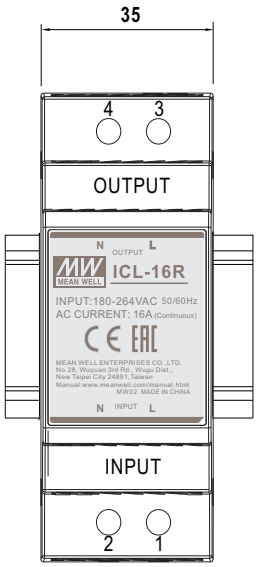


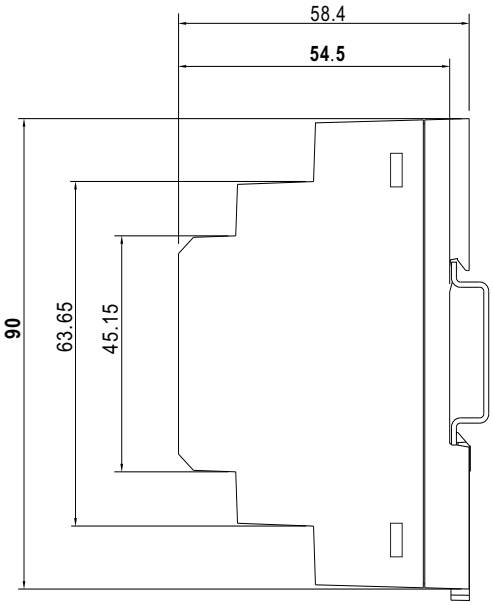
※ How many power supplys can be connected behind ICL-16R/ICL-16L?
Please refer to : http://www.meanwell.com/manual.html

■ MECHANICAL SPECIFICATION

◎ ICL-16R(DIN Rail type)

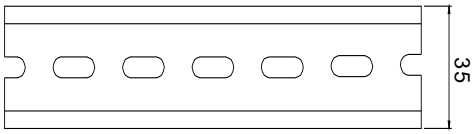
Case No.ICL-16R Unit:mm





Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L Input	3	AC/L Output
2	AC/N Input	4	AC/N Output



ADMISSIBLE DIN-RAIL:TS35/7.5 OR TS35/15