



▲ Features

Ultra slim design with 70mm(4SU) width

No load power consumption < 0.3W

DIN rail TS-35/7.5 or 15 mountable

Full range AC input 85~264VAC(277VAC operational)

DC output voltage adjustable

Isolation Class II

Cooling by free air convection(Operation Temp. : -30~+70°C)

LED indicator for power ON

Protections : Short circuit/Over load/Over voltage

3 years warranty

▲ Applications

Building automation

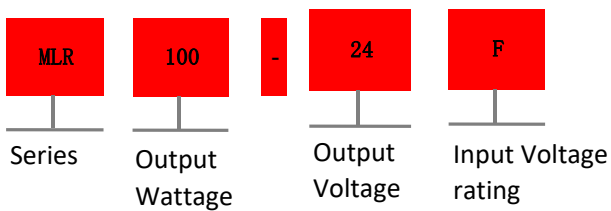
Household control system

Industrial control system

Factory automation

Electro-mechanical equipment

▲ Model encoding



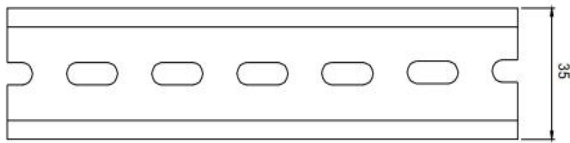
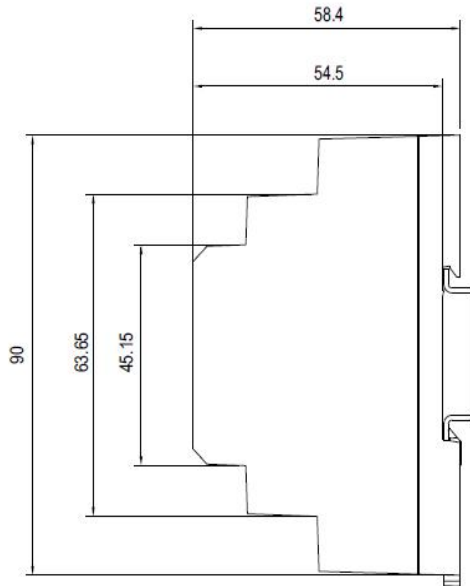
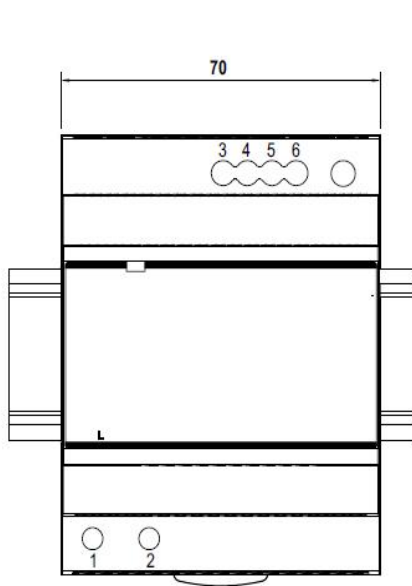


Specification

Input				
Input voltage range	85 ~ 264VAC(277VAC operational) 120 ~ 370VDC(390VDC Operational)			
Frequency range	47 ~ 63Hz			
AC current(Typ.)	3A/115VAC 1.6A/230VAC			
Inrush current (Typ.)	Cold start 35A/115VAC 70A/230VAC			
Output				
Model	MLR100-12F	MLR100-15F	MLR100-24F	MLR100-48F
Output Voltage	12V	15V	24V	48V
Efficiency(Typ.)	88%	89%	90%	90%
Voltage ADJ range	12 ~ 13V	15 ~ 17V	24 ~ 25.5V	48 ~ 48.7V
Rated current	7.1A	6.13A	3.83A	1.92A
Current range	0-7.1A	0-6.13A	0-3.83A	0-1.92A
Rated power	85.2W	92W	92W	92.2W
Ripple & Noise(Max)*2	120mVp-p	120mVp-p	150mVp-p	240mVp-p
Voltage tolerance *3	±2.0%	±1.0%	±1.0%	±1.0%
Line Regulation	±1.0%	±1.0%	±1.0%	±1.0%
Load Regulation	±1.0%	±1.0%	±1.0%	±1.0%
Setup, Rise time	500ms,60ms/230VAC 500ms,60ms/115VAC (@Full load)			
Holdup time (Typ.)	30ms/230VAC 12ms/115VAC (@Full load)			
Indicator	Green LED			
Protection				
Overload	105% ~ 160% of rated output power			
	Hiccup mode when output voltage < 50%, recovers automatically after fault condition is removed			
	Constant current limiting when output voltage between 50% ~ 100%, recovers automatically after fault condition is removed			
Over Voltage	14.2 ~ 16.2V	18.8 ~ 22.5V	30 ~ 36V	56.5 ~ 64.8V
	Shut down output voltage, re-power on to recover			
Safety & EMC				
Withstand Voltage	I/P-O/P:4KVAC			
Isolation resistance	I/P-O/P:100M Ohms/500VDC/25°C/70% RH			
Safety standards	设计参考EN IEC 62368-1、GB4943.1			
EMC Emission	Parameter	Standard	Test Level/Note	
	Conducted	EN 55032	Class B	
	Radiated	EN 55032	Class B	
	Voltage Flicker	EN 61000-3-3	Design refer to Class A	
	Harmonic Current		Design refer to Class A	
EMC Immunity	Parameter	Standard	Test Level/Note	
	ESD	EN61000-4-2	Level 3 8KV air;criteria A	
	Radiated Susceptibility	EN61000-4-3	Level 2 3V/m;criteria A	
	EFT/Burest	EN61000-4-4	Level 3 2KV;criteria A	
	Surge	EN61000-4-5	Level 3 2KV/L-N;criteria A	
	Conducted	EN61000-4-6	Level 2 3V/m;criteria A	
	Magnetic Field	EN61000-4-8	Level 2 3A/m;criteria A	
	Voltage Dips and interruptions	EN 61000-4-11	> 95% dip 0.5 periods, 30% dip 25 periods, > 95% interruptions 250 periods	
Environment				
Operating Temp.	-30 ~ +70°C(Refer to "Derating Curve")			
Operating Humidity	20 ~ 90% RH,non-condensing			
Storage Temp. & Humidity	-40 ~ +85°C,10 ~ 95% RH,non-condensing			
Temp. coefficient	±0.03%/°C (0 ~ 50°C)			
Vibration	10 ~ 500Hz, 2G 10 min/1 cycle, period for 60 min. each along X, Y, Z axes;Mounting: Compliance to IEC60068-2-6			
Operating Altitude	2000m			
Over Voltage Category	III;According to EN62368,EN61558,EN50178,EN60664-1,EN62477-1;Altitude up to 2000m			

Others					
MTBF	≥856.5K hrs,MIL-HDBK-217F(25°C)				
Weight	0.31Kg				
Dimension	105*90*54.5mm(W*H*D)				
Ordering	Model	Output power	Output Voltage/current	Efficiency	Max. Capacitive Load
	MLR100-12F	85.2W	12V/7.1A	88%	5000uF
	MLR100-15F	92W	15V/6.13A	89%	4000uF
	MLR100-24F	92W	24V/3.83A	90%	3300uF
	MLR100-48F	92.2W	48V/1.92A	90%	1800uF
Accessory	Parameter		Model		

Installation instruction

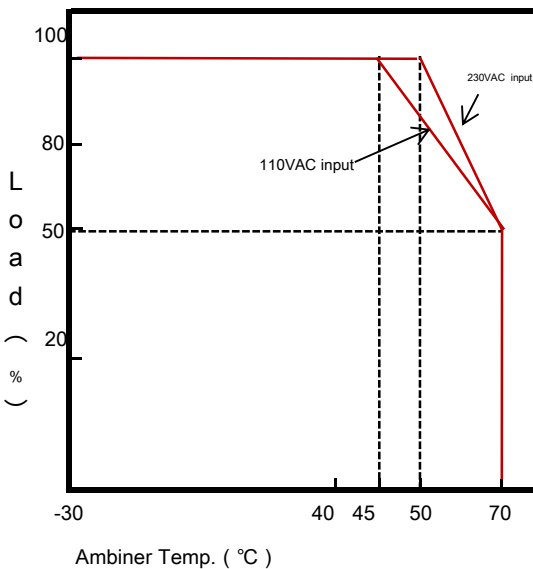


ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15

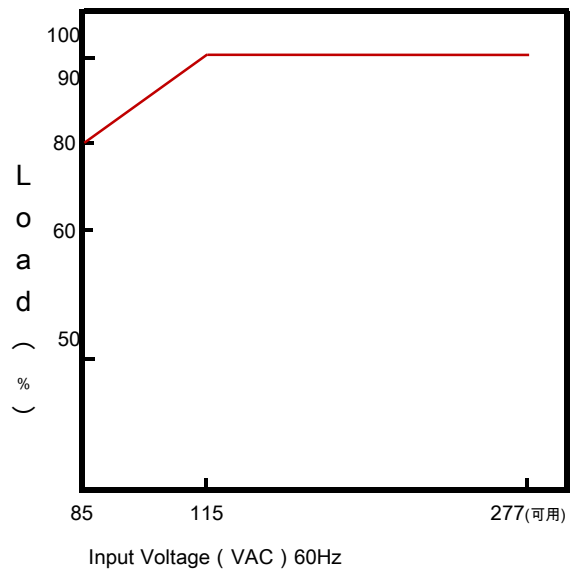
Terminal Pin No. assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	3,4	-V
2	AC/N	5,6	+V

Derating Curve



Output Derating VS Input Voltage



- Note:**
- 1: All paramets are measured at 230VAC input, rated load at 25°C of ambient temp. if not special mentioned
 - 2: Ripple & Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μf & 47uf parallel capacitor
 - 3: Tolerance: includes set up tolerance, line regulation and load regulation
 - 4: The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft)