

MTR240-□ Series



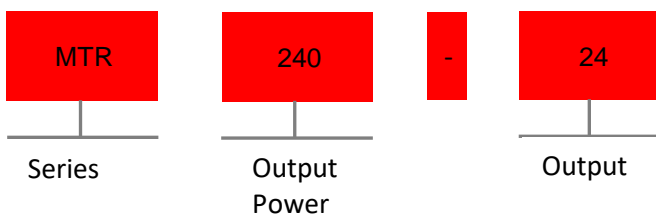
▲ Features

- 340 ~ 550V 3-phase wide range input(2-phase input is possible)
- Width only 63mm
- Built-in active PFC function compliance to EN61000-3-2
- High efficiency 92% and low power dissipation
- Protetions: Short-circuit/Overload/Over voltage/Over temperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- Install on DIN rail TS-35/7.5 or 15
- DC OK relay contact(optional)
- 3 years warranty

▲ Applications

- Industrial control system
- Semi-conductor manufacturing equipment
- Factory automation
- Mechanical equipment

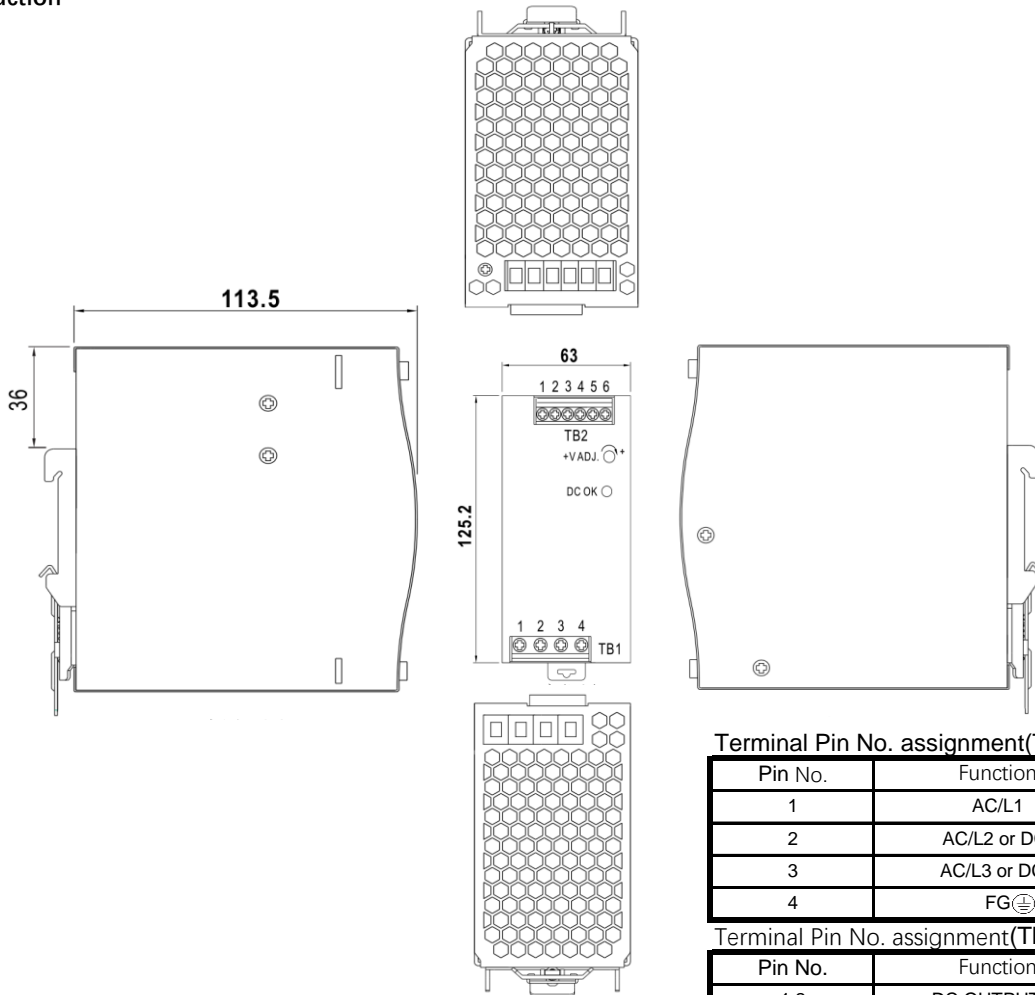
▲ Model Encoding



Specification

| Input | | |
|----------------------------|--|-----------|
| Input Voltage note1 | 3-phase 340~550VAC(2-phase operation is possible when connecting L1,L3,FG or L2,L3,FG) or 480~780VDC | |
| Input Current(Typ.) | 0.69A/400VAC 0.6A/500VAC | |
| Input Frequency | 47-63Hz | |
| Inrush Current(Max.)(Typ.) | Cold start: 50A | |
| Power factor(Typ.) | PF≥0.53/400VAC PF≥0.52/500VAC(Full load) | |
| Leakage Current | < 2.0mA/530VAC | |
| Output | | |
| DC Voltage (V) | 24V | 48V |
| Rated Current (A) | 10A | 5A |
| Current Range (A) | 0-10A | 0-5A |
| Rated Power (W) | 240W | 240W |
| Ripple & Noise (Max.) *2 | 100mVp-p | 120mVp-p |
| Voltage ADJ Range | 24-28V | 48-55V |
| Voltage Tolerance *3 | ±1% | ±1% |
| Line Regulation | ±0.5% | ±0.5% |
| Load Regulation | ±1% | ±1% |
| Efficiency | 92.0% | 92% |
| Start Rise Time | 2000ms 60ms/400VAC ; 1500ms 60ms/500VAC(Full load) | |
| Hold Up Time | 20ms/400VAC 40ms/500VAC(Full load) | |
| Status Indicator | Green | |
| Protections | | |
| Overload | 105%-130% of rated output power | |
| | Protection type: Constant current limiting, then Hiccup mode after 3sec. | |
| Over Voltage (V) | 30-36V | 56-65V |
| | Protection type: Hiccup mode, recovers automatically after fault condition is removed | |
| DC OK Output Capacity | 60VDC/0.3A,30VDC/1A,30VAC/0.5A resistive load | |
| Safety & EMC | | |
| Withstand voltage | I/P-O/P:4.87KVAC I/P-FG:2.4KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC | |
| Isolation resistance | I/P-O/P, I/P-FG, O/P-FG:>100M Ohms/500VDC/25°C/70%RH | |
| Safety standards | UL61010-1, UL61010-2-201, EN61558-1, EN61558-2-16, AS/NZS 62368.1 | |
| EMC emission | EN55032 (CISPR32), EN61204-3 ClassB,EN61000-3-2,-3 | |
| EMC immunity | EN61000-4-2,3,4,5,6,8,11,EN55024,EN61000-6-2(EN50082-2), EN61204-3,A class heavy industrial standard | |
| Environmental | | |
| Working Temp. note5 | - 30 ~ +70 °C (Refer to Derating curve) | |
| Storage Temp.& Humidity | - 40 ~ +85°C, 10 ~ 95%RH non-condensing | |
| Working Humidity | 20 ~ 95%RH,non-condensing | |
| Temp.coefficient | ±0.05%/°C(0-50°C) | |
| Vibration | 10-500Hz,2G 10min/1 Cycle, 60min each along X,Y,Z axes | |
| Altitude | 5000m | |
| Others | | |
| MTBF | ≥515.4Khrs MIL-HDBK-217F(25°C) | |
| Protection class | IP20 | |
| Weight | ~1kg | |
| Dimension | 63*125.2*113.5mm | |
| Data | Description | Model |
| | MTR 240W 10A/24V | MTR240-24 |
| | MTR 240W 5A/48V | MTR240-48 |

Installation Instruction



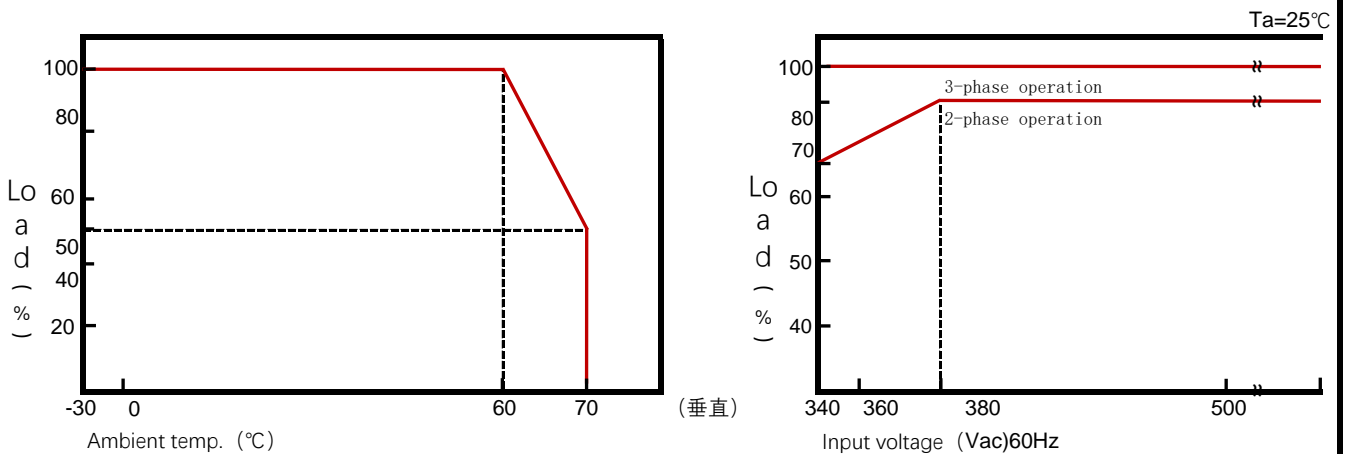
Terminal Pin No. assignment(TB1)

| Pin No. | Function |
|---------|--------------|
| 1 | AC/L1 |
| 2 | AC/L2 or DC- |
| 3 | AC/L3 or DC+ |
| 4 | FG |

Terminal Pin No. assignment(TB2)

| Pin No. | Function |
|---------|---------------------|
| 1,2 | DC OUTPUT+V |
| 3,4 | DC OUTPUT-V |
| 5,6 | DC OK Relay contact |

Derating Curve



Note:1.It should be derating output if the input voltage is lower, please refer to Derating Curve for details.

2.Ripple & noise are measured at 20MHZ of bandwidth by using a "12"twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.

3.Tolerance:includes set up tolerance,line regulation and load regulation.

4.All parameters are measured at 400VAC input, rated load, 25°C of ambient temperature if not specially mentioned,

5. Installation clearances: 40mm on top,20mm on bottom and 5mm on left and right are recommended if operating in permanently full load.

6.The ambient temperature derating of 3.5°C/1000m with non-fan models and of 5°C/1000m with fan models for operating in altitude higher than 2000m (6500ft)