

Наличие и актуальные цены на

TDR-960-24

https://www.mean-well.ru/store/TDR-960-24/

User's Manual





MW Search: https://www.meanwell.com/serviceGTIN.aspx

■ Features :

- Three-Phase 340 ~ 550VAC wide range input (Dual phase operation possible)
- Width only 110mm
- Built-in active PFC function compliance to BS EN/ EN61000-3-2
- High efficiency 94.5% and low power dissipation
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- * Built-in constant current limiting circuit
- Can be installed on DIN rail TS-35/7.5 or 15
- UL508(industrial control equipment)approved
- * BS EN/EN61000-6-2(BS EN/EN50082-2) industrial immunity level
- Current sharing up to 3840W(3+1)
- Built-in DC OK relay contact
- 100% full load burn-in test
- 3 years warranty

Parallel P & UL508 FFTC004 IEC62368-1

SPECIFICATION

GTIN CODE

MODEL		TDR-960-24	TDR-960-48	
	DC VOLTAGE	24V	48V	
ОИТРИТ	RATED CURRENT	40A	20A	
	CURRENT RANGE	0 ~ 40A	0 ~ 20A	
	RATED POWER	960W	960W	
	RIPPLE & NOISE (max.) Note.2		250mVp-p	
	VOLTAGE ADJ. RANGE	24 ~ 28V	48 ~ 55V	
	VOLTAGE TOLERANCE Note.3		±1.0%	
	LINE REGULATION	±0.5%	±0.5%	
	LOAD REGULATION	±1.0%	±1.0%	
	SETUP, RISE TIME	1000ms, 100ms/400VAC 800ms, 100ms/500VAC at full load		
	HOLD UP TIME (Typ.)	12ms / 400VAC 14ms / 500VAC at full load		
	VOLTAGE RANGE Note.4	Three-Phase 340 ~ 550VAC (Dual phase operation possible) 480 ~ 780VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	PF≥0.88/400VAC PF≥0.86/500VAC at full load		
INPUT	EFFICIENCY (Typ.)	94%	94.5%	
	AC CURRENT (Typ.)	2A/400VAC 1.4A/500VAC		
	INRUSH CURRENT (Typ.)	COLD START 60A		
	LEAKAGE CURRENT	<3.5mA / 530VAC		
	OVERLOAD.	105 ~ 130% rated output power		
	OVERLOAD	Protection type: Constant current limiting, unit will shut down after 3 sec. ,re-power on to recover		
PROTECTION		29 ~ 33V	56 ~ 65V	
T KOTEOTION	OVER VOLTAGE	Protection type : Shut down o/p voltage, re-power on to recover		
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down		
FUNCTION	DC OK REALY CONTACT RATINGS (max.)) 60Vdc/0.3A, 30Vdc/1A, 30Vac/0.5A resistive load		
FUNCTION	JNCTION CURRENT SHARING Please refer to function manual			
	WORKING TEMP. Note.5	-30 ~ +70 $^{\circ}\mathrm{C}$ (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 95% RH non-condensing		
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 \sim +85 $^{\circ}$ C, 10 \sim 95% RH non-condensing		
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)		
	VIBRATION	Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6		
	SAFETY STANDARDS	UL508, AS/NZS62368.1, EAC TP TC 004 approved, IEC62368-1 CB approved by SIQ; Design refer to BS EN/EN62368-1		
SAFETY & EMC (Note 6)	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC 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		
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32), BS EN/EN61204-3 Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020		
	EMC IMMUNITY	$\label{lem:compliance} Compliance to BS EN/EN61000-4-2, 3, 4, 5, 6, 8, 11, BS EN/EN55024, BS EN/EN61000-6-2 (BS EN/EN50082-2), BS EN/EN61204-3, heavy industry level, EAC TP TC 020$		
	MTBF	647.1K hrs min. Telcordia SR-332 (Bellcore) ; 59.5K hrs min.	MIL-HDBK-217F (25°C)	
OTHERS	DIMENSION	110*125.2*150mm (W*H*D)		
	PACKING	2.47Kg; 6pcs/15.8Kg/1.47CUFT		
NOTE		parameters NOT specially mentioned are measured at 400VAC input, rated load and 25 $^{\circ}$ C of ambient temperature. pple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ F & 47 μ F parallel capacitor.		

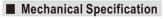
- Tolerance : includes set up tolerance, line regulation and load regulation.
 Dual phase operation is allowed under certain derating to output load.

- Please refer to derating curves for details.

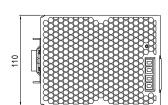
 5. Installation clearances: 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended.
- 6. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. (as available on https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)
 7. 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).
- ※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

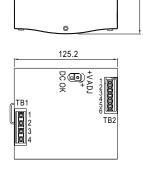
Case No.214A





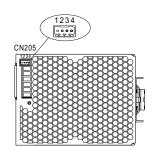
(Unit: mm , tolerance ± 1mm)

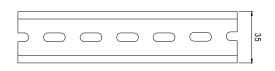




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ADMISSIBLE DIN-RAIL:TS35/7.5 OR TS35/15

Terminal Pin No. Assignment (TB1)

Pin No.	Assignment
1	FG 🖶
2	AC/L3
3	AC/L2
4	AC/L1

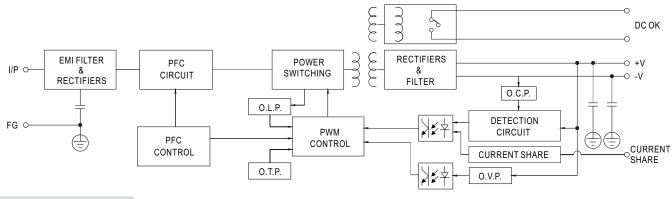
Terminal Pin No. Assignment (TB2)

Pin No.	Assignment			
1,2,3	DC OUTPUT +V			
4,5,6	DC OUTPUT -V			

Control Pin (CN205): DINKLE ECH250R-04P or equivalent

Pin No.	Assignment	Mating Housing	Wire Diameter
1	P-(Current Share)	DINKLE ESC250V-04P	0.081~0.517mm ²
2	P+(Current Share)	or equivalent (Including in the	(28~20AWG)
3,4	DC OK Relay Contact	single package)	

■ Block Diagram



■ DC OK Relay Contact

Contact Close	PSU turns on / DC OK.
Contact Open	PSU turns off / DC Fail.
Contact Ratings (max.)	30V/1A resistive load.

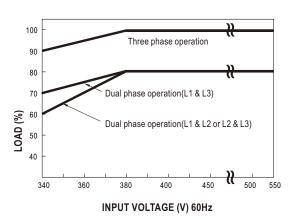
PFC fosc: 65KHz PWM fosc: 60KHz



■ Derating Curve

100 80 60 -30 0 10 20 30 40 50 60 70 (VERTICAL) AMBIENT TEMPERATURE (°C)

■ Output derating VS input voltage



■ Function Manual

- 1. Current sharing
- (1) Parallel operation is available by connecting the units shown as below (P+,P- are connected mutually in parallel).
- (2) Difference of output voltages among parallel units should be less than 0.2V.
- (3) The total output current must not exceed the value determined by the following equation (Output current at parallel operation)=(The rated current per unit) x (Number of unit) x 0.9.
- (4) In parallel operation 4 units is the maximum, please consult the manufacture for other applications.
- (5) The power supplies should be paralleled using short and large diameter wiring and then connected to the load.
- (6) When in parallel operation, the minimum output load should be greater than 5% of total output load.

 (Min. load >5% rated current per unit x number of unit)
- (7) In parallel connection, maybe only one unit (master) operate if the total output load is less than 5% of rated load condition. The other PSUs (slaves) may go into standby mode and their output LEDs & relays will not turn on.
- (8) Some minor noise may be heard at light load condition under parallel operation.

This is a normal phenomenon and the performance of the PSU will not be influenced.

