



DATASHEET

Din Rail Power Supply

Item no: 3466142 (TC-YSDH120-48)

Item no: 3462540 (TC-YSDH240-24)

Item no: 3462541 (TC-YSDH240-48)

Item no: 3466143 (TC-YSDH480-24)

Item no: 3466144 (TC-YSDH480-48)

Item no: 3462542 (TC-YSDH960-24)

Item no: 3462543 (TC-YSDH960-48)

Overview

Rated input 100-240 V/AC, 50/60 Hz
(Item no.: 3466142, 3462540, 3462541, 3466143, 3466144)
200-240 V/AC, 50/60 Hz
(Item no.: 3462542, 3462543)

Item No.:	Rated output
3466142	48 V/DC 2.5 A 120 W
3462540	24 V/DC 10 A 240 W
3462541	48 V/DC 5 A 240 W
3466143	24 V/DC 20 A 480 W
3466144	48 V/DC 10 A 480 W
3462542	24 V/DC 40 A 960 W
3462543	48 V/DC 20 A 960 W

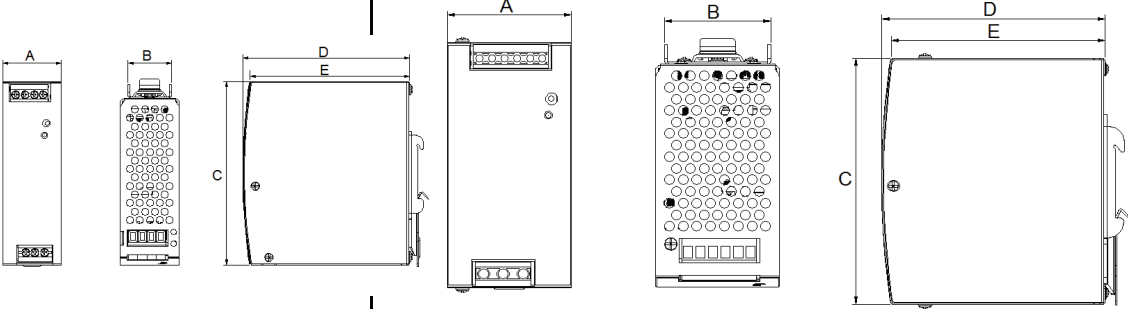
Operating conditions..... -25 to +70 °C,
(Item no.: 3466142, 3462540, 3462541, 3466143, 3466144)
-30 to +70 °C,
(Item no.: 3462542, 3462543)

Operating humidity 20 - 95 % RH (non-condensing)

Storage conditions..... -40 to +85 °C

Storage humidity 10 - 95 % RH (non-condensing)

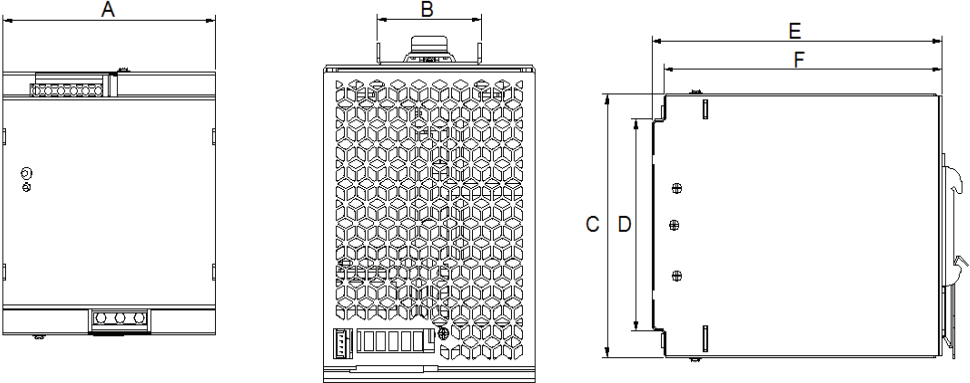
BN	3466142	3462540	3462541
Customer #	TC-YSDH120-48	TC-YSDH240-24	TC-YSDH240-48
Product name	Din Rail Power Supply 48V/DC 2.5A 120W	Din Rail Power Supply 24V/DC 10A 240W	Din Rail Power Supply 48 V/DC 5A 240W
Rated input	100-240 V/AC, 50/60Hz	100-240 V/AC, 50/60Hz	100-240 V/AC, 50/60Hz
Power consumption (standby)	0.5 W	0.5 W	0.5 W
Frequency range	47-63 Hz	47-63 Hz	47-63 Hz
Efficiency (Typ.)	89%	88%	88%
AC current (Typ.)	1.4 A/115 V/AC 0.7 A/230 V/AC	2.6 A/115 V/AC 1.3 A/230 V/AC	2.6 A/115 V/AC 1.3 A/230 V/AC
Inrush current (Typ.)	35 A/115 V/AC 70 A/230 V/AC	33 A/115 V/AC 55 A/230 V/AC	33 A/115 V/AC 55 A/230 V/AC
Leakage current	< 1 mA/240 VAC	< 0.75 mA/240 VAC	< 0.75 mA/240 VAC
Power Factor Correction (PFC)	0.96 /115 V/AC at full load 0.93 /230 V/AC at full load	0.99 /115 V/AC at full load 0.94 /230 V/AC at full load	0.99 /115 V/AC at full load 0.94 /230 V/AC at full load
Ripple & Noise (max.)	120 mVp-p	100 mVp-p	120 mVp-p
Voltage tolerance	±2.0 %	±2.0 %	±2.0 %
Line regulation	±0.5 %	±0.5 %	±0.5 %
Load regulation	±1.0 %	±1.0 %	±1.0 %
Setup, rise time	1500 ms, 60 ms/230 V/AC at full load 3000 ms, 60 ms/115 V/AC at full load	1500 ms, 60 ms/230 V/AC at full load 3000 ms, 60 ms/115 V/AC at full load	1500 ms, 60 ms/230 V/AC at full load 3000 ms, 60 ms/115 V/AC at full load
Hold up time (Typ.)	20 ms/230 V/AC at full load 20 ms/115 V/AC at full load	20 ms/230 V/AC at full load 20 ms/115 V/AC at full load	20 ms/230 V/AC at full load 20 ms/115 V/AC at full load
Voltage adjustment range	48 - 55 V/DC	24 - 28 V/DC	48 - 55 V/DC
Output voltage (min.)	48 V/DC	24 V/DC	48 V/DC
Output voltage (max)	55 V/DC	28 V/DC	55 V/DC
Output current (max)	2.5 A	10 A	5 A
Rated Power	120 W	240 W	240 W
Output power characteristic	Built-in DC OK relay contact	Built-in DC OK relay contact	Built-in DC OK relay contact
DC power good signal	YES	YES	YES
Withstand voltage	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 0.5 kVAC O/P- DC OK: 0.5 kVAC	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 0.5 kVAC O/P- DC OK: 0.5 kVAC	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 0.5 kVAC O/P- DC OK: 0.5 kVAC
Isolation resistance	I/P-O/P, I/P-FG, O/P-FG: > 100M Ohms / 500 VDC / 25 °C / 70% RH	I/P-O/P, I/P-FG, O/P-FG: > 100M Ohms / 500 VDC / 25 °C / 70% RH	I/P-O/P, I/P-FG, O/P-FG: > 100M Ohms / 500 VDC / 25 °C / 70% RH
DIN rail compatability	TS-35/7.5 or TS-35/15 EN/IEC 60715 (DIN rail)	TS-35/7.5 or TS-35/15 EN/IEC 60715 (DIN rail)	TS-35/7.5 or TS-35/15 EN/IEC 60715 (DIN rail)
Output connection type	Screw DIN terminal	Screw DIN terminal	Screw DIN terminal
Input / output connector pin count	Input: 3 poles Ouput: 4 poles	Input: 3 poles Ouput: 6 poles	Input: 3 poles Ouput: 6 poles
Outputs	1	1	1
Operating orientation	Vertical (input terminals down)	Vertical (input terminals down)	Vertical (input terminals down)
Protection mechanisms	Short circuit, over load, over voltage, over temperature	Short circuit, over load, over voltage, over temperature	Short circuit, over load, over voltage, over temperature
Overload protection behaviour	Trip Point: hiccup mode Recovery : Automatic after fault condition is removed	Trip Point: hiccup mode Recovery : Automatic after fault condition is removed	Trip Point: hiccup mode Recovery : Automatic after fault condition is removed
Over voltage protection	<u>Trip point: 56-65 V</u> Action: Output shutdown Recovery : After discharge, restart the power supply to recover	<u>Trip point: 29-33 V</u> Action: Output shutdown Recovery : After discharge, restart the power supply to recover	<u>Trip point:56-65 V</u> Action: Output shutdown Recovery : After discharge, restart the power supply to recover
Over temperature protection	Action: Output shutdown Recovery : Re-power the unit after sufficient cooling	Action: Output shutdown Recovery : Re-power the unit after sufficient cooling	Action: Output shutdown Recovery : Re-power the unit after sufficient cooling
Over voltage category	N/A	N/A	N/A

BN	3466142	3462540	3462541
Cooling method	Convection	Convection	Convection
Fuse	T3.15A/L250	T5A/L250	T5A/L250
Max . connected products per circuit breaker	Type C16: 11 pcs Type D16: 14 pcs	Type C16: 6 pcs Type D16: 8 pcs	Type C16: 6pcs Type D16: 8 pcs
Terminal screw torque	Inputs: 0.5N·m Outputs: 0.5N·m	Inputs: 0.5N·m Outputs: 0.5N·m	Inputs: 0.5N·m Outputs: 0.5N·m
Ingress protection	N/A	N/A	N/A
Operating conditions	-25 to +70 °C	-25 to +70 °C	-25 to +70 °C
Operating humidity	20 - 95 % RH (non-condensing)	20 - 95 % RH (non-condensing)	20 - 95 % RH (non-condensing)
Storage conditions	-40 to +85 °C	-40 to +85 °C	-40 to +85 °C
Storage humidity	10 - 95 % RH (non-condensing)	10 - 95 % RH (non-condensing)	10 - 95 % RH (non-condensing)
Temperature derating	De-rating from 50 - 70 °C	De-rating from 50 - 70 °C	De-rating from 50 - 70 °C
Mean time between failures (MTBF)	280K hrs min. MIL-HDBK-217F(25 °C)	150K hrs min. MIL-HDBK-217F(25 °C)	150K hrs min. MIL-HDBK-217F(25 °C)
Weight	670 g	1 kg	1 kg
Dimensions (W x H x D)	40 x 125 x 114 mm	63 x 125 x 114 mm	63 x 125 x 114 mm
Dimension_drawing			
Dimension_data	A 125 ±1 mm B 40 ±1 mm C 32 mm D 114 ±1mm E 108 ±1 mm	A 125 ±1 mm B 63 ±1 mm C 54 mm D 114 ±1mm E 108 ±1 mm	A 125 ±1 mm B 63 ±1 mm C 54 mm D 114 ±1mm E 108 ±1 mm

BN	3466143	3466144
Customer #	TC-YSDH480-24	TC-YSDH480-48
Product name	Din Rail Power Supply 24 V/DC 20 A 480 W	Din Rail Power Supply 48 V/DC 10 A 480 W
Rated input	100-240 V/AC, 50/60 Hz	100-240 V/AC, 50/60 Hz
Power consumption (standby)	0.5 W	0.5 W
Frequency range	47-63 Hz	47-63 Hz
Efficiency (Typ.)	89%	89%
AC current (Typ.)	5 A/115 V/AC 2.5 A/230 V/AC	5 A/115 V/AC 2.5 A/230 V/AC
Inrush current (Typ.)	40 A/115 V/AC 80 A/230 V/AC	40 A/115 V/AC 80 A/230 V/AC
Leakage current	< 0.75 mA/240 VAC	< 0.75 mA/240 VAC
Power Factor Correction (PFC)	0.99 /115 V/AC at full load 0.94 /230 V/AC at full load	0.99 /115 V/AC at full load 0.94 /230 V/AC at full load
Ripple & Noise (max.)	100 mVp-p	120 mVp-p
Voltage tolerance	±2.0 %	±2.0 %
Line regulation	±0.5 %	±0.5 %
Load regulation	±1.0 %	±1.0 %
Setup, rise time	1500 ms, 150 ms/230 V/AC at full load 3000 ms, 150 ms/115 V/AC at full load	1500 ms, 100 ms/230 V/AC at full load 3000 ms, 100 ms/115 V/AC at full load
Hold up time (Typ.)	14 ms/230 V/AC at full load	14 ms/230 V/AC at full load
Voltage adjustment range	24-28 V/DC	48 - 55 V/DC
Output voltage (min.)	24 V/DC	48 V/DC
Output voltage (max)	28 V/DC	55 V/DC
Output current (max)	20 A	10 A
Rated Power	480 W	480 W
Output power characteristic	Built-in DC OK relay contact	Built-in DC OK relay contact
DC power good signal	YES	YES
Withstand voltage	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 0.5 kVAC O/P- DC OK: 0.5 kVAC	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 0.5 kVAC O/P- DC OK: 0.5 kVAC
Isolation resistance	I/P-O/P, I/P-FG, O/P-FG: > 100M Ohms / 500VDC / 25 °C / 70% RH	I/P-O/P, I/P-FG, O/P-FG: > 100M Ohms / 500VDC / 25 °C / 70% RH
DIN rail compatability	TS-35/7.5 or TS-35/15 EN/IEC 60715 (DIN rail)	TS-35/7.5 or TS-35/15 EN/IEC 60715 (DIN rail)
Output connection type	Screw DIN terminal	Screw DIN terminal
Input / output connector pin count	Input: 3 poles Ouput: 8 poles	Input: 3 poles Ouput: 8 poles
Outputs	1	1
Operating orientation	Vertical (input terminals down)	Vertical (input terminals down)
Protection mechanisms	Short circuit, over load, over voltage, over temperature	Short circuit, over load, over voltage, over temperature
Overload protection behaviour	Trip Point: hiccup mode Recovery: Automatic after fault condition is removed	Trip Point: hiccup mode Recovery: Automatic after fault condition is removed
Over voltage protection	<u>Trip point: 29-33 V</u> Action: Output shutdown Recovery: After discharge, restart the power supply to recover	<u>Trip point: 56-65 V</u> Action: Output shutdown Recovery: After discharge, restart the power supply to recover
Over temperature protection	Action: Output shutdown Recovery: Re-power the unit after sufficient cooling	Action: Output shutdown Recovery: Re-power the unit after sufficient cooling
Over voltage category	N/A	N/A

BN	3466143	3466144
Cooling method	Convection	Convection
Fuse	T8A/L250	T8A/L250
Max . connected products per circuit breaker	Type C16: 3 pcs Type D16: 4 pcs	Type C16: 3pcs Type D16: 4pcs
Terminal screw torque	Inputs: 0.5N·m Outputs: 0.5N·m	Inputs: 0.5N·m Outputs: 0.5N·m
Ingress protection	N/A	N/A
Operating conditions	-25 to +70 °C	-25 to +70 °C
Operating humidity	20 - 95 % RH (non-condensing)	20 - 95 % RH (non-condensing)
Storage conditions	-40 to +85 °C	-40 to +85 °C
Storage humidity	10 - 95 % RH (non-condensing)	10 - 95 % RH (non-condensing)
Temperature derating	De-rating from 50 - 70 °C	De-rating from 50 - 70 °C
Mean time between failures (MTBF)	100K hrs min. MIL-HDBK-217F(25 °C)	100K hrs min. MIL-HDBK-217F(26 °C)
Weight	1.6 kg	1.6 kg
Dimensions (W x H x D)	85.5 x 125 x 129 mm	85.5 x 125 x 129 mm
Dimension_drawing		
Dimension_data	A 125 ±1 mm B 85.5 ±1 mm C 54 mm D 129 ±1mm E 123 ±1 mm	A 125 ±1 mm B 85.5 ±1 mm C 54 mm D 129 ±1mm E 123 ±1 mm

BN	3462542	3462543
Customer #	TC-YSDH960-24	TC-YSDH960-48
Product name	Din Rail Power Supply 24 V/DC 40 A 960 W	Din Rail Power Supply 48 V/DC 20 A 960 W
Rated input	200-240 V/AC, 50/60 Hz	200-240 V/AC, 50/60 Hz
Power consumption (standby)	0.5 W	0.5 W
Frequency range	47-63 Hz	47-63 Hz
Efficiency (Typ.)	93%	93%
AC current (Typ.)	6A/230 V/AC	6A/230 V/AC
Inrush current (Typ.)	50 A/230 V/AC Cold start	50 A/230 V/AC Cold start
Leakage current	< 3.5 mA/240 VAC	< 3.5 mA/240 VAC
Power Factor Correction (PFC)	0.95/230 VAC at full load	0.95/230 VAC at full load
Ripple & Noise (max.)	180 mVp-p	250 mVp-p
Voltage tolerance	±1.0 %	±1.0 %
Line regulation	±0.5 %	±0.5 %
Load regulation	±1.0 %	±1.0 %
Setup, rise time	1000 ms, 100 ms/230 VAC at full load	1000 ms, 100 ms/230 VAC at full load
Hold up time (Typ.)	14 ms/230 V/AC at full load	14 ms/230 V/AC at full load
Voltage adjustment range	24-28 V/DC	48 - 55 V/DC
Output voltage (min.)	24 V/DC	48 V/DC
Output voltage (max.)	28 V/DC	55 V/DC
Output current (max.)	40 A	20 A
Rated Power	960 W	960 W
Output power characteristic	Built-in DC OK relay contact	Built-in DC OK relay contact
DC power good signal	YES	YES
Withstand voltage	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 0.5 kVAC O/P- DC OK: 0.5 kVAC	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 0.5 kVAC O/P- DC OK: 0.5 kVAC
Isolation resistance	I/P-O/P, I/P-FG, O/P-FG: > 100M Ohms / 500VDC / 25 °C / 70% RH	I/P-O/P, I/P-FG, O/P-FG: > 100M Ohms / 500VDC / 25 °C / 70% RH
DIN rail compatability	TS-35/7.5 or TS-35/15 EN/IEC 60715 (DIN rail)	TS-35/7.5 or TS-35/15 EN/IEC 60715 (DIN rail)
Output connection type	Screw DIN terminal	Screw DIN terminal
Input / output connector pin count	Input: 3 poles Ouput: 6 poles	Input: 3 poles Ouput: 6 poles
Outputs	1	1
Operating orientation	Vertical (input terminals down)	Vertical (input terminals down)
Protection mechanisms	Short circuit, over load, over voltage, over temperature	Short circuit, over load, over voltage, over temperature
Overload protection behaviour	Trip Point: hiccup mode Recovery: Automatic after fault condition is removed	Trip Point: hiccup mode Recovery: Automatic after fault condition is removed
Over voltage protection	<u>Trip point: 29-33 V</u> Action: Output shutdown Recovery: After discharge, restart the power supply to recover	<u>Trip point: 56-65 V</u> Action: Output shutdown Recovery: After discharge, restart the power supply to recover
Over temperature protection	Action: Output shutdown Recovery: Re-power the unit after sufficient cooling	Action: Output shutdown Recovery: Re-power the unit after sufficient cooling
Over voltage category	N/A	N/A

BN	3462542	3462543
Cooling method	Convection	Convection
Fuse	T10A/L250	T10A/L250
Max . connected products per circuit breaker	Type C16: 1 pcs Type D16: 2 pcs	Type C16: 1pcs Type D16: 2pcs
Terminal screw torque	Inputs: 0.5N·m Outputs: 0.5N·m	Inputs: 0.5N·m Outputs: 0.5N·m
Ingress protection	N/A	N/A
Operating conditions	-30 to +70 °C	-30 to +70 °C
Operating humidity	20 - 95 % RH (non-condensing)	20 - 95 % RH (non-condensing)
Storage conditions	-40 to +85 °C	-40 to +85 °C
Storage humidity	10 - 95 % RH (non-condensing)	10 - 95 % RH (non-condensing)
Temperature derating	De-rating from 50 - 70 °C	De-rating from 50 - 70 °C
Mean time between failures (MTBF)	82K hrs min. MIL-HDBK-217F(25 °C)	82K hrs min. MIL-HDBK-217F(25 °C)
Weight	2.47 kg	2.47 kg
Dimensions (W x H x D)	110 x 125 x 150 mm	110 x 125 x 150 mm
Dimension_drawing		
Dimension_data	A 110 ±1 mm B 54 mm C 125 ±1 mm D 100 ±1mm E 150 ±1 mm F 144 ±1mm	A 110 ±1 mm B 54 mm C 125 ±1 mm D 100 ±1mm E 150 ±1 mm F 144 ±1mm