DATASHEET

Din Rail Power Supply

Item no: 2645198 (DPN-24120)
Item no: 3451147 (TC-YSDN75-12)
Item no: 3451995 (TC-YSDN75-24)
Item no: 3451996 (TC-YSDN150-12010000)
Item no: 3451997 (TC-YSDN150-48002500)
Item no: 3451998 (TC-YSDN240-24010000)
Item no: 3451999 (TC-YSDN240-48005000)
Item no: 3452000 (TC-YSDN480-24020000)
Item no: 3452001 (TC-YSDN240-48010000)

The symbol warns of hot surfaces that can result in severe burns when touched. Read the information carefully.

UK CA

This product is UK conformity assessed and meets applicable Great Britain directives.

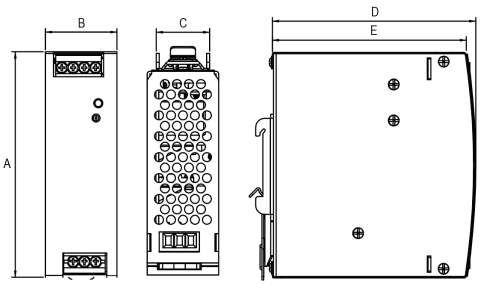
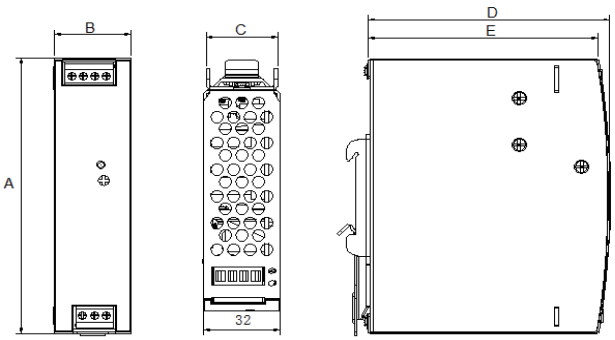
Overview

Rated input ..... 100-240 V/AC, 50/60 Hz

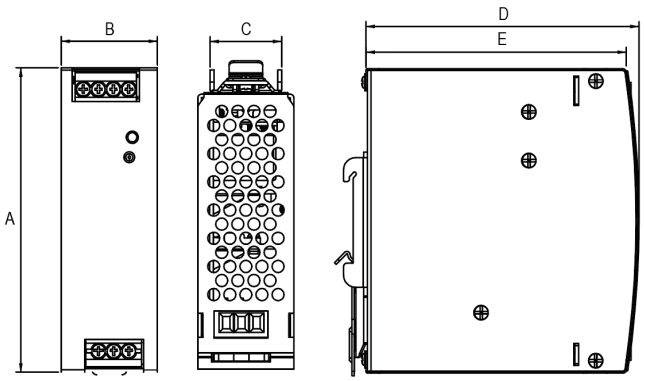
Item No.:	Rated output
2645198	24 V/DC 5.0 A 120 W
3451147	12 V/DC 6.3 A 75.6 W
3451995	24 V/DC 3.2 A 76.8 W
3451996	12 V/DC 10 A 120 W
3451997	48 V/DC 2.5 A 120 W
3451998	24 V/DC 10 A 240 W
3451999	48 V/DC 5 A 240 W
3452000	24 V/DC 20 A 480 W
3452001	48 V/DC 10 A 480 W

Operating conditions..... -20 to +70 °C, 20-95 % RH (non-condensing)
Storage conditions..... -40 to +85 °C 10-95 % RH (non-condensing)

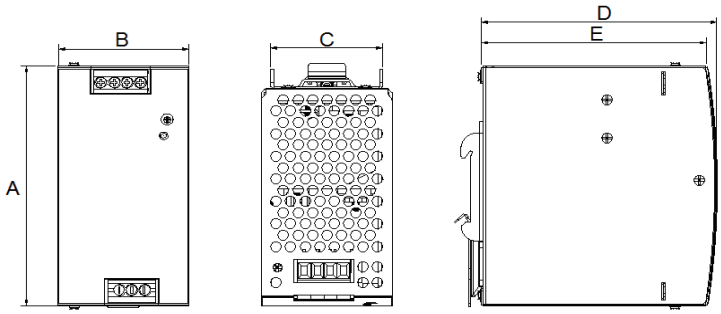
BN	2645198	3451147	3451995
FN	95021c001	95021c058	95021c059
Customer #	DPN-24120	TC-YSDN75-12	TC-YSDN75-24
Product name	Din Rail Power Supply 24 V/DC 5A 120W	Din Rail Power Supply 12V/DC 6.3A 75.6W	Din Rail Power Supply 24V/DC 3.2A 76.8W
Rated input	100-240 V/AC, 50/60Hz	100-240 V/AC, 50/60Hz	100-240 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.)	88 %	85.50%	88%
AC current (Typ.)	2.25 A/115 V/AC 1.3 A/230 V/AC	1.45 A/115 V/AC 0.9 A/230 V/AC	1.45 A/115 V/AC 0.9 A/230 V/AC
Inrush current (Typ.)	20 A/115 V/AC 35 A/230V/AC	20 A/115 V/AC 35 A/230V/AC	20 A/115 V/AC 35 A/230V/AC
Leakage current	<1 mA/240 VAC	<1 mA/240 VAC	<1 mA/240 VAC
Power Factor Correction (PFC)	NA	N/A	N/A
Ripple & Noise (max.)	120 mVp-p	80 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	1200 ms, 60 ms/230 V/AC at full load 2500 ms, 60 ms/115 V/AC at full load	1200 ms, 60 ms/230 V/AC at full load 2000 ms, 60 ms/115 V/AC at full load	1200 ms, 60 ms/230 V/AC at full load 2000 ms, 60 ms/115 V/AC at full load
Hold up time (Typ.)	16 ms/230 V/AC at full load 10 ms/115 V/AC at full load	60 ms/230 V/AC at full load 12 ms/115 V/AC at full load	60 ms/230 V/AC at full load 12 ms/115 V/AC at full load
Voltage adjustment range	24 - 28 V/DC	12 - 14 V/DC	24 - 28 V/DC
Output voltage (min.)	24 V/DC	12 V/DC	24 V/DC
Output voltage (max)	28 V/DC	14 V/DC	28 V/DC
Output current (max)	5 A	6.3A	3.2A
Rated Power	120 W	75.6 W	76.8 W
Output power characteristic	N/A	N/A	N/A
DC power good signal	N/A	N/A	N/A
Withstand voltage	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 0.5 kVAC	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 0.5 kVAC	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 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	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)	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: 4 poles	Input: 3 poles Ouput: 4 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
Overvoltage protection	Trip point: 29-33 V Action: Output shutdown Recovery: After discharge, restart the power supply to recover	Trip point: 14-17 V Action: Output shutdown Recovery: After discharge, restart the power supply to recover	Trip point: 29-33 V 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
Cooling method	Convection	Convection	Convection
Fuse	T5A/L250	T5A/L250	T5A/L250
Max. connected products per circuit breaker	Type C16:13pcs Type D16: 26 pcs	Type C16: 26 pcs Type D16: 30 pcs	Type C16: 26 pcs Type D16: 30 pcs
Terminal screw torque	Inputs: 0.5N·m Outputs: 0.5N·m	Inputs: 0.4N·m Outputs: 0.5N·m	Inputs: 0.4N·m Outputs: 0.4N·m
Ingress protection	N/A	N/A	N/A
Operating conditions	-20 to +70 °C	-20 to +70 °C	-20 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)	450K hrs min. MIL-HDBK-217F(25)	450K hrs min. MIL-HDBK-217F(25)	450K hrs min. MIL-HDBK-217F(25)

BN	2645198	3451147	3451995
Weight	600 g	510 g	510 g
Dimensions (W x H x D)	40 x 125 x 114mm	32 x 125 x 100.5mm	32 x 125 x 100.5mm
Dimension_drawing			
Dimension_data	A 125 ±1 mm B 40 ±1 mm C 30 mm D 114 ±1mm E 108 ±1 mm	A 125 ±1 mm B 32 ±1 mm C 30 mm D 101 ±1mm E 96 ±1 mm	A 125 ±1 mm B 32 ±1 mm C 30 mm D 101 ±1mm E 96 ±1 mm

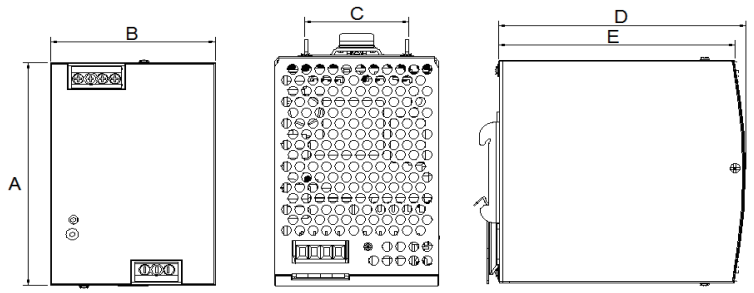
BN	3451996	3451997
FN	95021c060	95021c061
Customer #	TC-YSDN150-12010000	TC-YSDN150-48002500
Product name	Din Rail Power Supply 12 V/DC 10 A 120 W	Din Rail Power Supply 48 V/DC 2.5 A 120 W
Rated input	100-240 V/AC, 50/60 Hz	100-240 V/AC, 50/60 Hz
Power consumption (standby)	0.5 W	0.5 W
Frequency range	47-63 Hz	47-63 Hz
Efficiency (Typ.)	85.50%	89%
AC current (Typ.)	2.25 A/115 V/AC 1.3 A/230 V/AC	2.25 A/115 V/AC 1.3 A/230 V/AC
Inrush current (Typ.)	20 A/115 V/AC 35 A/230 V/AC	20 A/115 V/AC 35 A/230 V/AC
Leakage current	<1 mA/240 VAC	<1 mA/240 VAC
Power Factor Correction (PFC)	N/A	N/A
Ripple & Noise (max.)	100 mVp-p	150 mVp-p
Voltage tolerance	±2.0 %	±2.0 %
Line regulation	±0.5 %	±0.5 %
Load regulation	±1.0 %	±1.0 %
Setup, rise time	1200 ms, 60 ms/230 V/AC at full load 2500 ms, 60 ms/115 V/AC at full load	1200 ms, 60 ms/230 V/AC at full load 2500 ms, 60 ms/115 V/AC at full load
Hold up time (Typ.)	16 ms/230 V/AC at full load 10 ms/115 V/AC at full load	16 ms/230 V/AC at full load 10 ms/115 V/AC at full load
Voltage adjustment range	12 - 14 V/DC	48 - 55 V/DC
Output voltage (min.)	12 V/DC	48 V/DC
Output voltage (max)	14 V/DC	55 V/DC
Output current (max)	10 A	2.5A
Rated Power	120 W	120 W
Output power characteristic	N/A	N/A
DC power good signal	N/A	N/A
Withstand voltage	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 0.5 kVAC	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 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
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: 4 poles	Input: 3 poles Ouput: 4 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
Overvoltage protection	Trip point: 14-17 V Action: Output shutdown Recovery: After discharge, restart the power supply to recover	Trip point: 56-65 V 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
Cooling method	Convection	Convection
Fuse	T5A/L250	T5A/L250
Max. connected products per circuit breaker	Type C16: 13 pcs Type D16: 16 pcs	Type C16: 14 pcs Type D16: 18 pcs
Terminal screw torque	Inputs: 0.5 N·m Outputs: 0.5 N·m	Inputs: 0.5 N·m Outputs: 0.5 N·m
Ingress protection	N/A	N/A
Operating conditions	-20 to +70 °C	-20 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)	450K hrs min. MIL-HDBK-217F(25)	450K hrs min. MIL-HDBK-217F(25)
Weight	600 g	600 g
Dimensions (W x H x D)	40 x 125 x 114mm	40 x 125 x 114mm

BN	3451996	3451997
Dimension_drawing		
Dimension_data	A 125 ±1 mm B 40 ±1 mm C 30 mm D 114 ±1mm E 108 ±1 mm	A 125 ±1 mm B 40 ±1 mm C 30 mm D 114 ±1mm E 108 ±1 mm

BN	3451998	3451999
FN	95021c062	95021c063
Customer #	TC-YSDN240-24010000	TC-YSDN240-48005000
Product name	Din Rail Power Supply 24 V/DC 10 A 240 W	Din Rail Power Supply 48 V/DC 5 A 240 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.)	87%	88%
AC current (Typ.)	2.5 A/115 V/AC 1.3 A/230 V/AC	2.5 A/115 V/AC 1.3 A/230 V/AC
Inrush current (Typ.)	20 A/115 V/AC 35 A/230 V/AC	20 A/115 V/AC 35 A/230 V/AC
Leakage current	<1 mA/240 VAC	<1 mA/240 VAC
Power Factor Correction (PFC)	N/A	N/A
Ripple & Noise (max.)	150 mVp-p	150 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, 100 ms/230 V/AC at full load 3000 ms, 100 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.)	16 ms/230 V/AC at full load 12 ms/115 V/AC at full load	16 ms/230 V/AC at full load 12 ms/115 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)	10 A	5 A
Rated Power	240 W	240 W
Output power characteristic	N/A	N/A
DC power good signal	N/A	N/A
Withstand voltage	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 0.5 kVAC	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 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
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: 4 poles	Input: 3 poles Ouput: 4 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
Overvoltage protection	Trip point: 29-33 V Action: Output shutdown Recovery: After discharge, restart the power supply to recover	Trip point: 56-65 V 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
Cooling method	Convection	Convection
Fuse	T5A/L250	T5A/L250
Max. connected products per circuit breaker	Type C16: 6 pcs Type D16: 8 pcs	Type C16: 6 pcs Type D16: 8 pcs
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	-20 to +70 °C	-20 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)	200K hrs min. MIL-HDBK-217F(25)	200K hrs min. MIL-HDBK-217F(25)
Weight	1 kg	1 kg
Dimensions (W x H x D)	63 x 125 x 114 mm	63 x 125 x 114 mm

BN	3451998	3451999
Dimension_drawing		
Dimension_data	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	3452000	3452001
FN	95021c064	95021c065
Customer #	TC-YSDN480-24020000	TC-YSDN240-48010000
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.)	92%	92%
AC current (Typ.)	4.8 A/115 V/AC 2.4 A/230 V/AC	4.8 A/115 V/AC 2.4 A/230 V/AC
Inrush current (Typ.)	20 A/115 V/AC 35 A/230 V/AC	20 A/115 V/AC 35 A/230 V/AC
Leakage current	<2 mA/240 VAC	<2 mA/240 VAC
Power Factor Correction (PFC)	N/A	N/A
Ripple & Noise (max.)	150 mVp-p	150 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, 100 ms/230 V/AC at full load 3000 ms, 100 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.)	16 ms/230 V/AC at full load 10 ms/115 V/AC at full load	16 ms/230 V/AC at full load 10 ms/115 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	N/A	N/A
DC power good signal	N/A	N/A
Withstand voltage	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 0.5 kVAC	I/P-O/P: 3 kVAC I/P-FG: 2 kVAC O/P- FG: 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
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: 4 poles	Input: 3 poles Ouput: 4 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
Overvoltage protection	Trip point: 29-33 V Action: Output shutdown Recovery: After discharge, restart the power supply to recover	Trip point: 56-65 V 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
Cooling method	Convection	Convection
Fuse	T8A/L250	T8A/L250
Max. connected products per circuit breaker	Type C16: 2 pcs Type D16: 3 pcs	Type C16: 2 pcs Type D16: 3 pcs
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	-20 to +70 °C	-20 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)	150K hrs min. MIL-HDBK-217F(25)	150K hrs min. MIL-HDBK-217F(25)
Weight	1.5 kg	1.5 kg
Dimensions (W x H x D)	85.5 x 125 x 129mm	85.5 x 125 x 129mm

BN	3452000	3452001
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