SPECIFICATIONS

A265-01-01(/E)

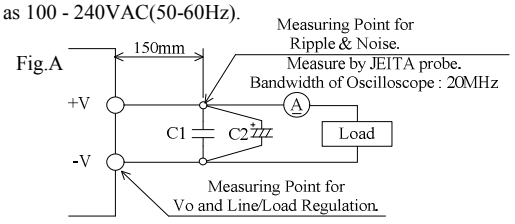
	ITEMS / MODEL			DRJ15-24-1(/E)
1	Nominal Output Voltage		V	24
2	Maximum Output Current		A	0.63
3	Maximum Output Power		W	15.1
4	Efficiency (Typ) (*1)	100VAC	%	87
		230VAC	%	87
5	Input Voltage Range	(*2)(*13)	-	85- 264VAC(47-63Hz) OR 120- 370VDC
6	Input Current (Typ)	(*1)	A	0.32/0.18
7	Inrush Current (Typ)	(*1)(*3)	-	14A at 100VAC, 33A at 230VAC, Ta=25°C, Cold Start
8	PFHC		-	-
9	Power Factor (Typ)		-	-
10	Output Voltage Range		V	21.6 - 28.5
11	Maximum Ripple & Noise	0<Ta≤70°C	mV	240
		-20≤Ta≤0°C	mV	300
	(*4)	Io≤30%	mV	300
12	Maximum Line Regulation	(*4)(*5)	mV	120
13	Maximum Load Regulation	(*4)(*6)	mV	192
14	Temperature Coefficient		-	Less than 0.02% / °C
15	Over Current Protection	(*7)	A	0.66 -
16	Over Voltage Protection	(*8)	V	30.0 - 34.8
17	Hold-up Time (Typ)	(*9)	-	20ms
18	Leakage Current	(*10)	-	Less than 0.75mA
19	Remote Control		-	-
20	Parallel Operation		-	-
21	Series Operation		-	Possible
22	Operating Temperature	(*11)(*13)	-	-20 - +70°C (-20°C:50%, -10- +55°C:100%, +70°C:50%)
23	Operating Humidity		-	30 - 95%RH (No Condensing)
24	Storage Temperature		-	-40 - +85°C
25	Storage Humidity		-	10 - 95%RH (No Condensing)
26	Cooling		-	Convection Cooling
27	Withstand Voltage		-	Input - FG : 2kVAC (20mA), Input - Output : 3kVAC (20mA) Output - FG : 500VAC (50mA) for 1min
28	Isolation Resistance		-	More than 100MΩ at 25°C and 70%RH Output to FG : 500VDC
29	Vibration		-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s^2 Constant, X,Y,Z 1hour each.
30	Shock (In package)		-	Less than 294m/s^2
31	Safety		-	Designed to meet UL60950-1, CSA60950-1, EN60950-1, UL508,CSA C22.2 No.107.1, Den-an Appendix 8 at 100VAC only.
32	Line DIP		-	Designed to meet SEMI-F47 (200VAC Line only)
33	Conducted Emission	(*12)	-	Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B
34	Radiated Emission	(*12)	-	Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B
35	Immunity	(*12)	-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11
36	Weight (Typ)		g	115
37	Size (W x H x D)		mm	21.5 x 75 x 90 (Refer to Outline Drawing)

*Read instruction manual carefully, before using the power supply unit.

=NOTES=

*1. At 100VAC/230VAC, Ta=25°C, nominal output voltage and maximum output power.
*2. For cases where conformance to various safety specs (UL, CSA) are required, to be described as 100 - 240VAC(50-60Hz).
*3. Not applicable for the in-rush current to Noise Filter for less than 0.2ms.
*4. Please refer to Fig. A for measurement of Vo, line & load regulation and ripple voltage.
*5. 85 - 264VAC, constant load.
*6. No load-Full load, constant input voltage.
*7. Hiccup with automatic recovery.
Avoid to operate at over load or short circuit condition.
*8. OVP circuit will shut down output, manual reset (Re power on).
*9. At 100VAC, Ta=25°C, nominal output voltage and 80% output power.
*10. Measured by the each measuring method of UL, CSA and Den-an(at 60Hz), Ta=25°C.
*11. Output Derating
- Derating at standard mounting. Refer to LOAD vs. AMBIENT TEMPERATURE (A265-01-02_).
- Load (%) is percent of maximum output power or maximum output current, do not exceed its derating of maximum load.
*12. The power supply is considered a component which will be installed into a final equipment.
The final equipment should be re-evaluated that it meets EMC directives.
*13. Output derating needed when input voltage less than 90VAC. Refer to LOAD vs. INPUT VOLTAGE (A265-01-02_).

Fig.A



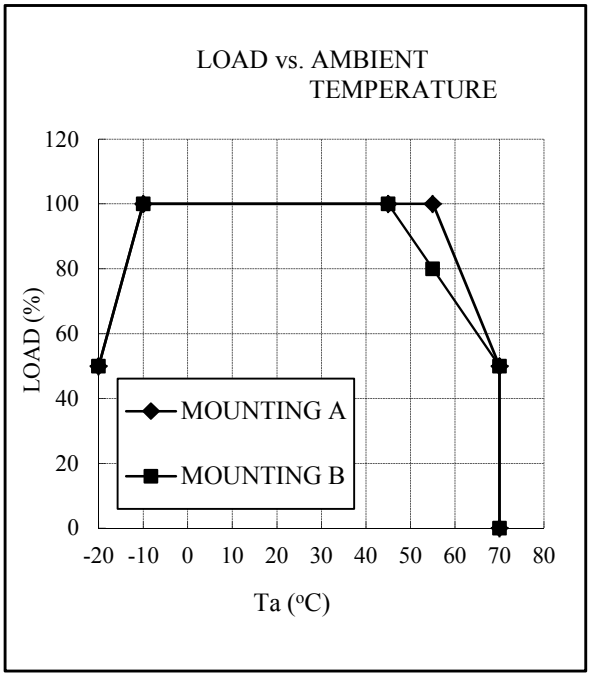
C1 : Film Cap. 0.1μF
C2 : Elect. Cap. 100μF

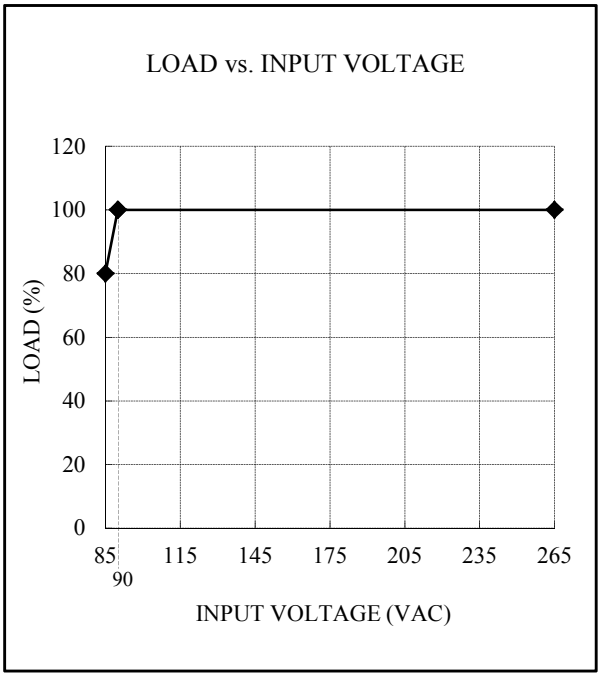
OUTPUT DERATING

A265-01-02(/E)

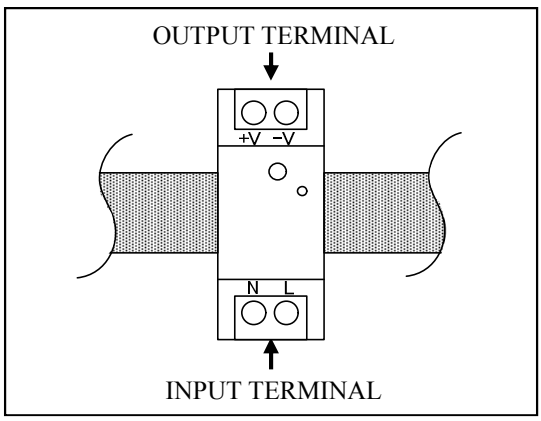
Ta (°C)	LOAD (%)	
	MOUNTING A	MOUNTING B
-20	50	50
-10 - +45	100	100
55	100	80
70	50	50

INPUT VOLTAGE (VAC)	LOAD (%)
	MOUNTING A,B
85	80
90 - 264	100

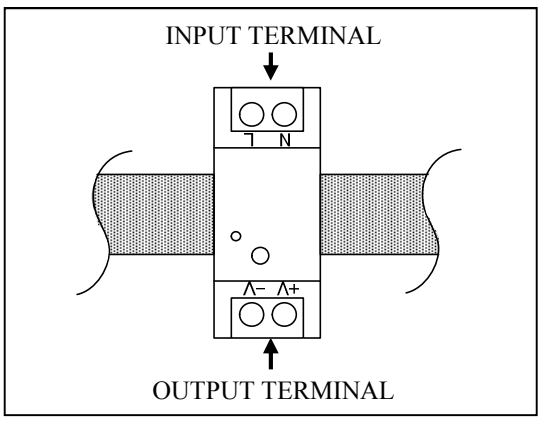




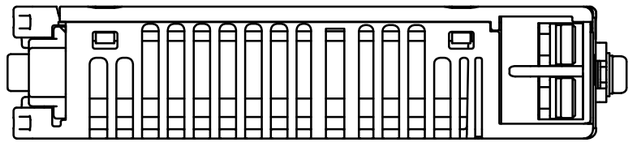
MOUNTING A
(STANDARD MOUNTING)

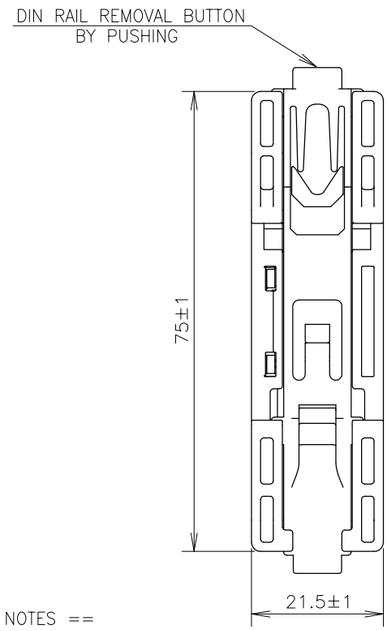


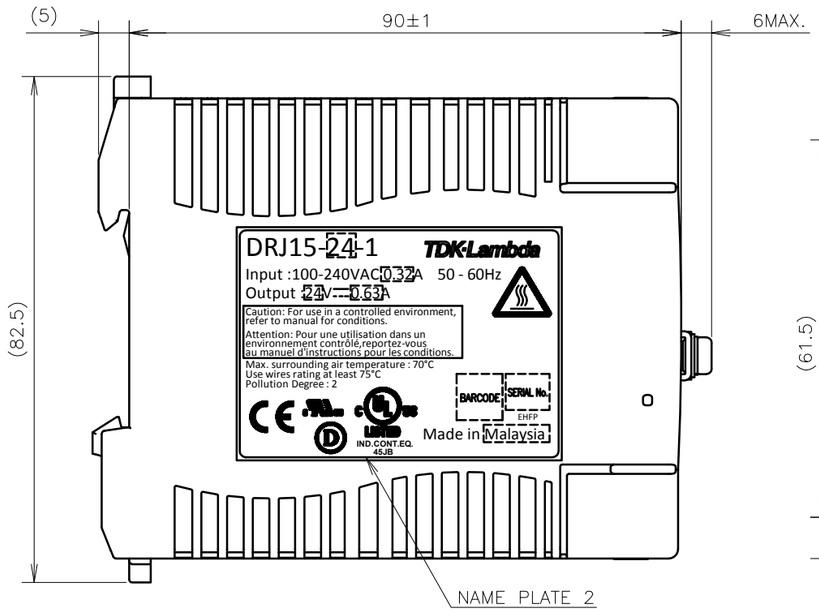
MOUNTING B

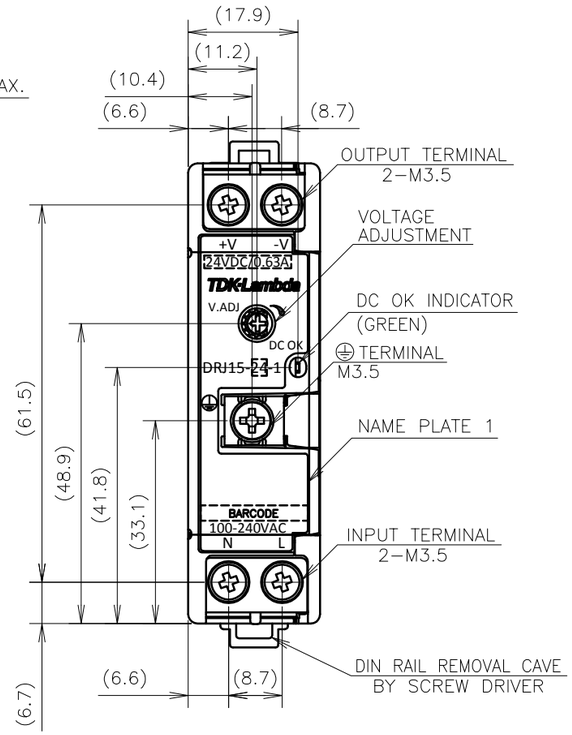


DRJ15







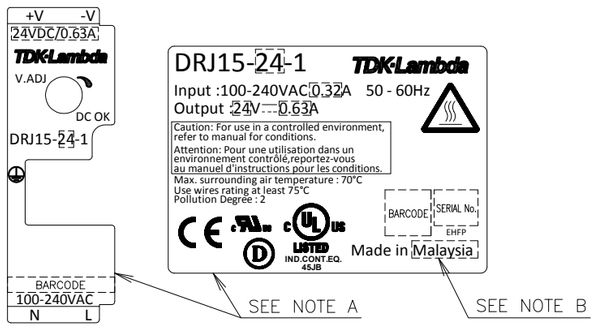


== NOTES ==

A : MODEL NAME, INPUT VOLTAGE RANGE,
NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT
ARE SHOWN HERE IN ACCORDANCE WITH
THE SPECIFICATIONS.

NAME PLATE DETAILS

NAME PLATE 1 NAME PLATE 2

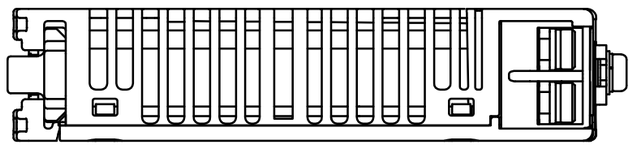


SCALE FOR NAME PLATE : 1/1

B : COUNTRY OF MANUFACTURE WILL BE SHOWN HERE.

C : RECOMMENDED SCREW TORQUE: INPUT/OUTPUT TERMINAL 1.0N.m(10.2kgf.cm).
⏚ TERMINAL 1.0N.m(10.2kgf.cm).

D : RECOMMENDED WIRE: AWG16−20.

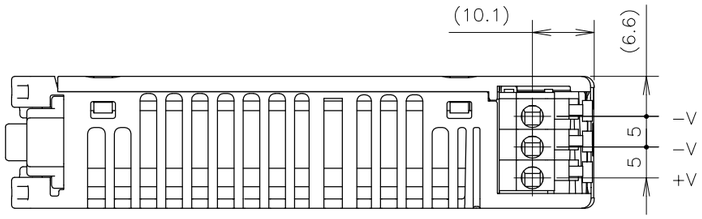


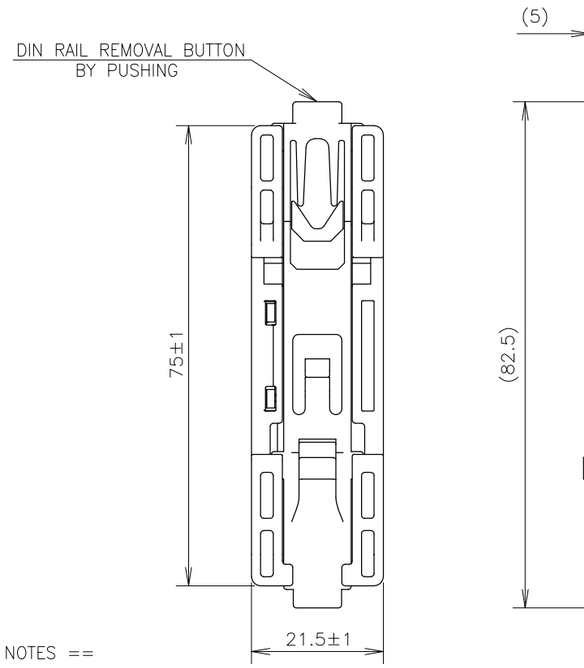
(unit : mm)

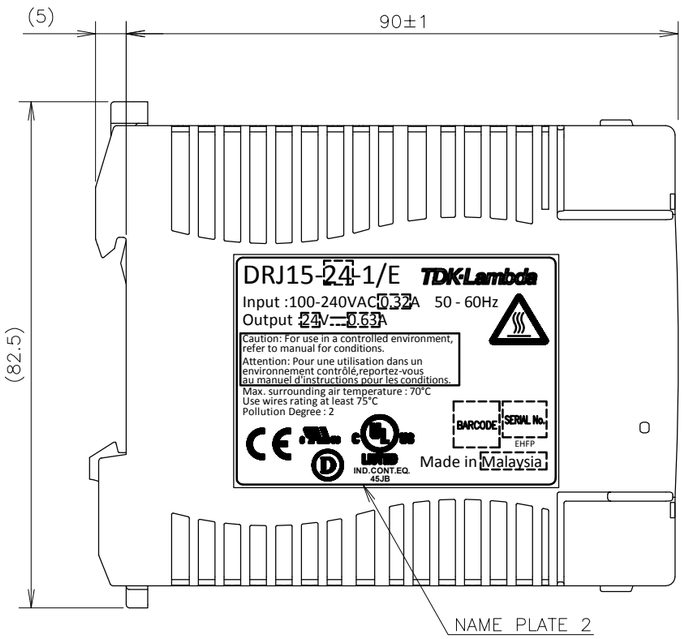
MODEL NAME	DRJ15
TDK-Lambda	

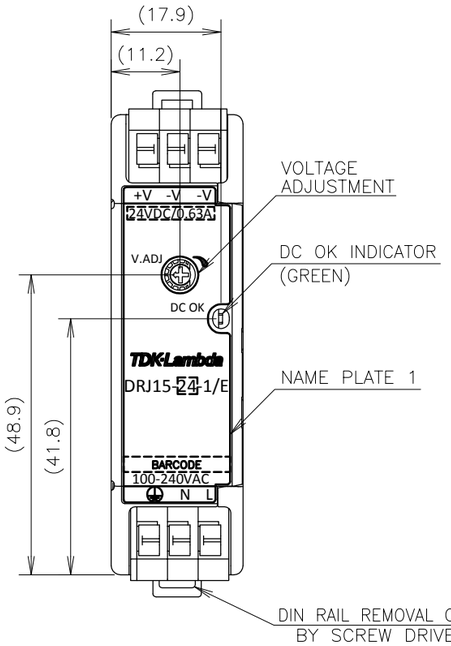
A265−02−01A

DRJ15/E







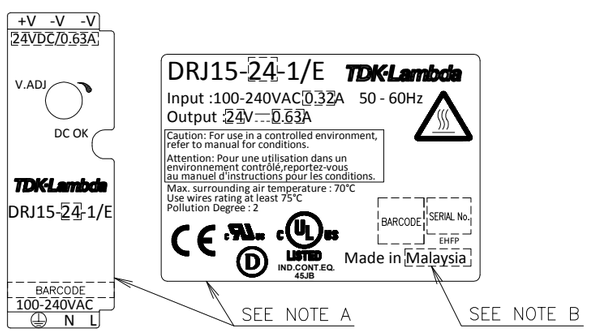


== NOTES ==

A : MODEL NAME, INPUT VOLTAGE RANGE,
NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT
ARE SHOWN HERE IN ACCORDANCE WITH
THE SPECIFICATIONS.

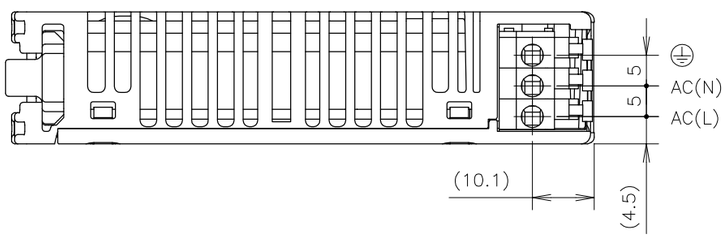
NAME PLATE DETAILS

NAME PLATE 1 NAME PLATE 2



SCALE FOR NAME PLATE : 1/1

B : COUNTRY OF MANUFACTURE WILL BE SHOWN HERE.
C : RECOMMENDED WIRE: AWG14−20, WIRE STRIP LENGTH: 8mm.



(unit : mm)

MODEL NAME	DRJ15/E
TDK-Lambda	

A265−02−01/E−A

SPECIFICATIONS

A266-01-01C(/E)

	ITEMS / MODEL			DRJ30-5-1(/E)	DRJ30-12-1(/E)	DRJ30-24-1(/E)
1	Nominal Output Voltage		V	5	12	24
2	Maximum Output Current		A	4	2.3	1.25
3	Maximum Output Power		W	20	27.6	30
4	Efficiency (Typ) (*1)	100VAC	%	81	85.5	87.5
		230VAC	%	84	87.5	90
5	Input Voltage Range (*2)(*13)		-	85 - 264VAC(47 - 63Hz) OR 120- 370VDC		
6	Input Current (Typ) (*1)		A	0.5/0.25	0.65/0.35	
7	Inrush Current (Typ) (*1)(*3)		-	14A at 100VAC, 33A at 230VAC, Ta=25°C, Cold Start		
8	PFHC		-	-		
9	Power Factor (Typ)		-	-		
10	Output Voltage Range		V	4.5 - 6.0	10.8 - 15.0	21.6 - 28.5
11	Maximum Ripple & Noise	0<Ta≤70°C	mV	50	120	240
		-20≤Ta≤0°C	mV	300	300	300
	(*4)	Io≤30%	mV	300	300	300
12	Maximum Line Regulation (*4)(*5)		mV	25	60	120
13	Maximum Load Regulation (*4)(*6)		mV	40	96	192
14	Temperature Coefficient		-	Less than 0.02% / °C		
15	Over Current Protection (*7)		A	4.2 -	2.4 -	1.3 -
16	Over Voltage Protection (*8)		V	6.2 - 7.3	16.0 - 18.8	30.0 - 34.8
17	Hold-up Time (Typ) (*9)		-	20ms		
18	Leakage Current (*10)		-	Less than 0.75mA		
19	Remote Control		-	-		
20	Parallel Operation		-	-		
21	Series Operation		-	Possible		
22	Operating Temperature (*11)(*13)		-	-20 - +70°C (-20°C:50%, -10 - +55°C:100%, +70°C:50%)		
23	Operating Humidity		-	30 - 95%RH (No Condensing)		
24	Storage Temperature		-	-40 - +85°C		
25	Storage Humidity		-	10 - 95%RH (No Condensing)		
26	Cooling		-	Convection Cooling		
27	Withstand Voltage		-	Input - FG : 2kVAC (20mA), Input - Output : 3kVAC (20mA) Output - FG : 500VAC (50mA) for 1min		
28	Isolation Resistance		-	More than 100MΩ at 25°C and 70%RH Output to FG : 500VDC		
29	Vibration		-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s^2 Constant, X,Y,Z 1hour each.		
30	Shock (In package)		-	Less than 294m/s^2		
31	Safety		-	Approved by UL60950-1, CSA60950-1, EN60950-1, UL508,CSA C22.2 No.107.1. Designed to meet Den-an Appendix 8 at 100VAC only.		
32	Line DIP		-	Designed to meet SEMI-F47 (200VAC Line only)		
33	Conducted Emission (*12)		-	Designed to meet EN55011/EN55032-B, FCC-ClassB, VCCI-B		
34	Radiated Emission (*12)		-	Designed to meet EN55011/EN55032-B, FCC-ClassB, VCCI-B		
35	Immunity (*12)		-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11		
36	Weight (Typ)		g	120		
37	Size (W x H x D)		mm	21.5 x 75 x 90 (Refer to Outline Drawing)		

*Read instruction manual carefully, before using the power supply unit.

=NOTES=

*1. At 100VAC/230VAC, Ta=25°C, nominal output voltage and maximum output power.

*2. For cases where conformance to various safety specs (UL, CSA) are required, to be described as 100 - 240VAC(50 - 60Hz).

*3. Not applicable for the in-rush current to Noise Filter for less than 0.2ms.

*4. Please refer to Fig. A for measurement of Vo, line & load regulation and ripple voltage.

*5. 85 - 264VAC, constant load.

*6. No load-Full load, constant input voltage.

*7. Hiccup with automatic recovery.
Avoid to operate at over load or short circuit condition.

*8. OVP circuit will shut down output, manual reset (Re power on).

*9. At 100VAC, Ta=25°C, nominal output voltage and 80% output power.

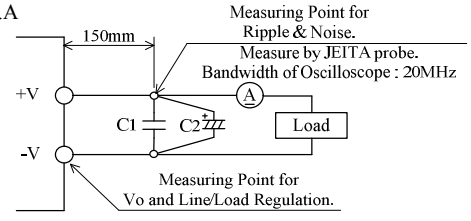
*10. Measured by the each measuring method of UL, CSA and Den-an(at 60Hz), Ta=25°C.

*11. Output Derating
- Derating at standard mounting. Refer to LOAD vs. AMBIENT TEMPERATURE (A266-01-02_).
- Load (%) is percent of maximum output power or maximum output current, do not exceed its derating of maximum load.

*12. The power supply is considered a component which will be installed into a final equipment.
The final equipment should be re-evaluated that it meets EMC directives.

*13. Output derating needed when input voltage less than 90VAC. Refer to LOAD vs. INPUT VOLTAGE (A266-01-02_).

Fig.A



C1 : Film Cap. 0.1μF
C2 : Elect. Cap. 100μF

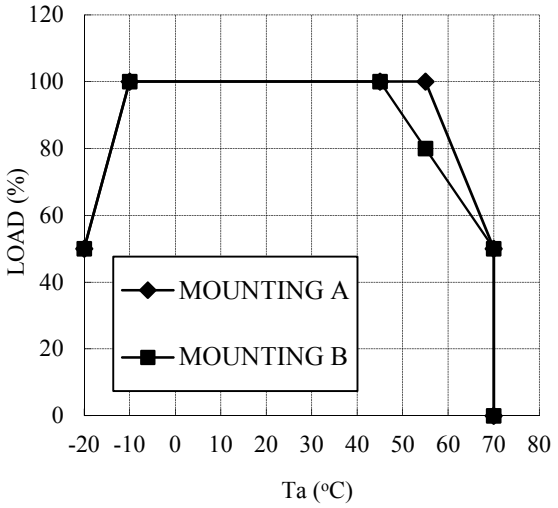
OUTPUT DERATING

A266-01-02(/E)

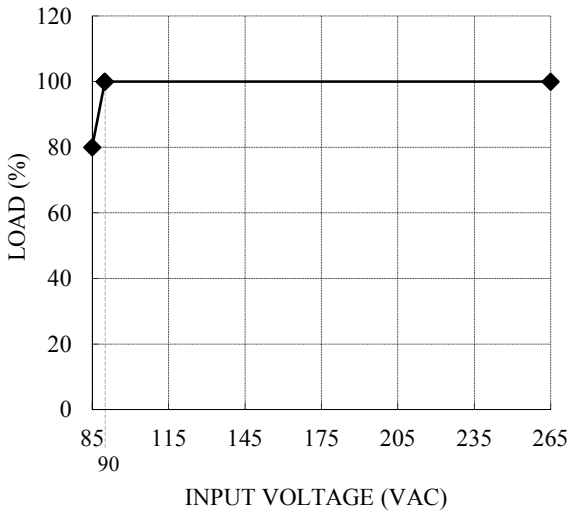
Ta (°C)	LOAD (%)	
	MOUNTING A	MOUNTING B
-20	50	50
-10 - +45	100	100
55	100	80
70	50	50

INPUT VOLTAGE (VAC)	LOAD (%)
	MOUNTING A,B
85	80
90 - 264	100

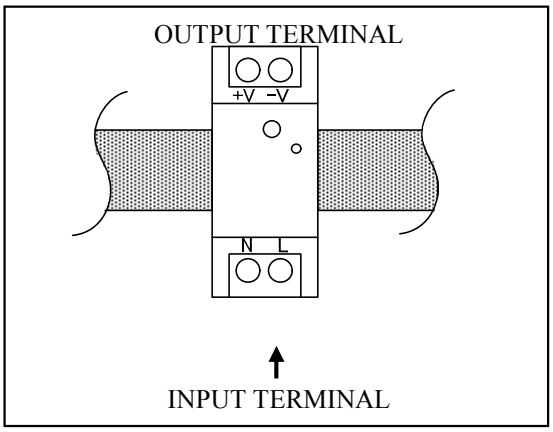
LOAD vs. AMBIENT TEMPERATURE



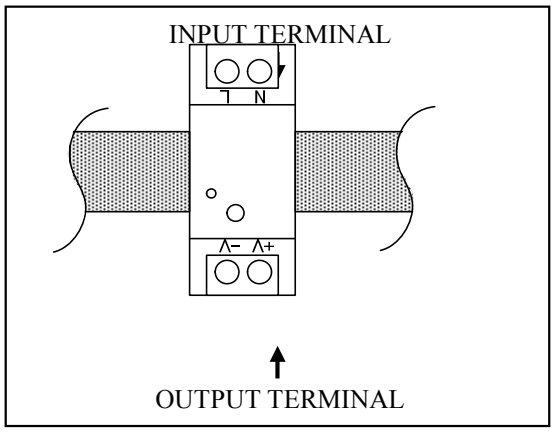
LOAD vs. INPUT VOLTAGE



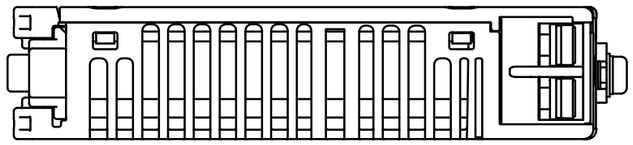
MOUNTING A
(STANDARD MOUNTING)

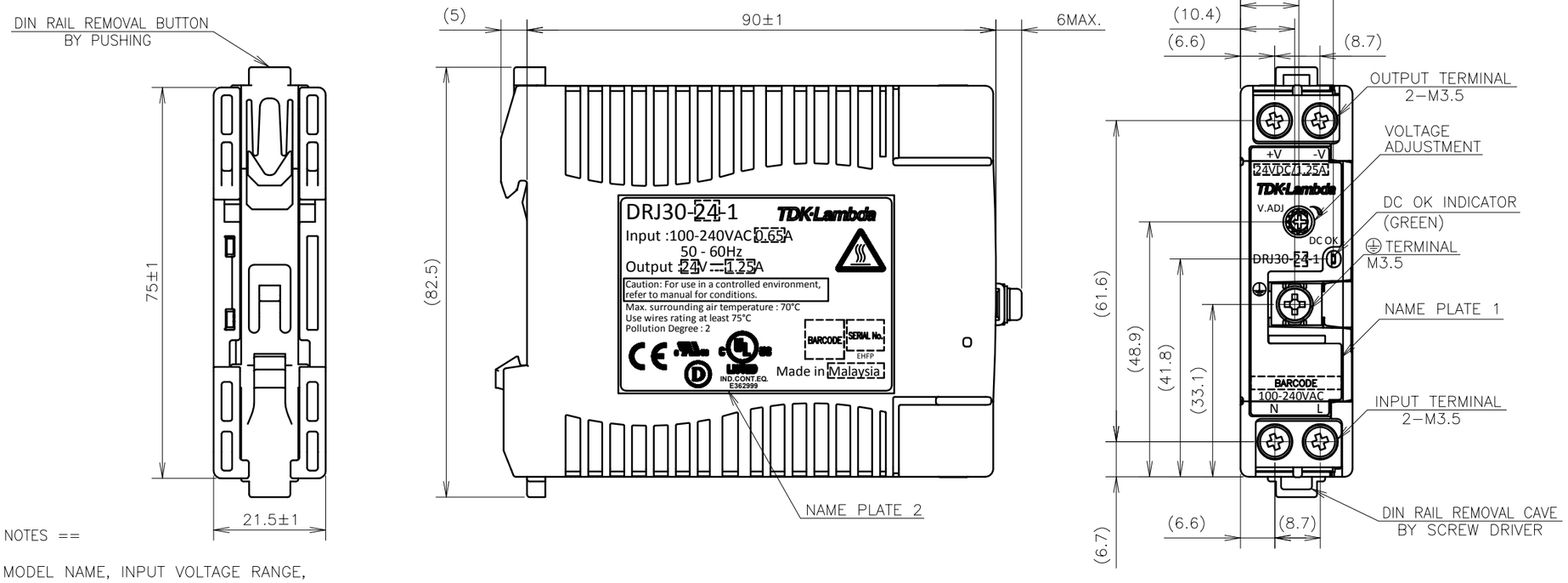


MOUNTING B



DRJ30



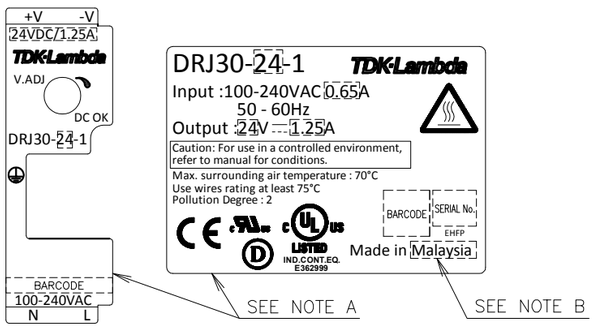


== NOTES ==

A : MODEL NAME, INPUT VOLTAGE RANGE,
NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT
ARE SHOWN HERE IN ACCORDANCE WITH
THE SPECIFICATIONS.

NAME PLATE DETAILS

NAME PLATE 1 NAME PLATE 2

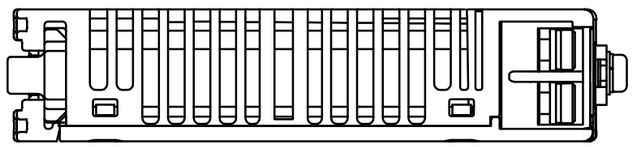


SCALE FOR NAME PLATE : 1/1

B : COUNTRY OF MANUFACTURE WILL BE SHOWN HERE.

C : RECOMMENDED SCREW TORQUE: INPUT/OUTPUT TERMINAL 1.0N.m(10.2kgf.cm).
⏚ TERMINAL 1.0N.m(10.2kgf.cm).

D : RECOMMENDED WIRE: AWG16−20.

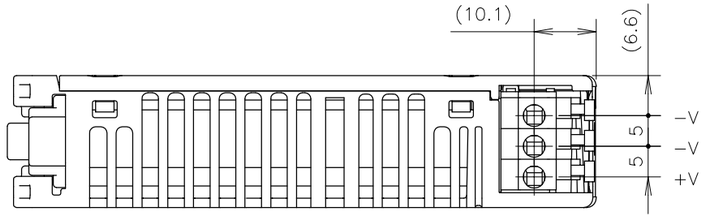


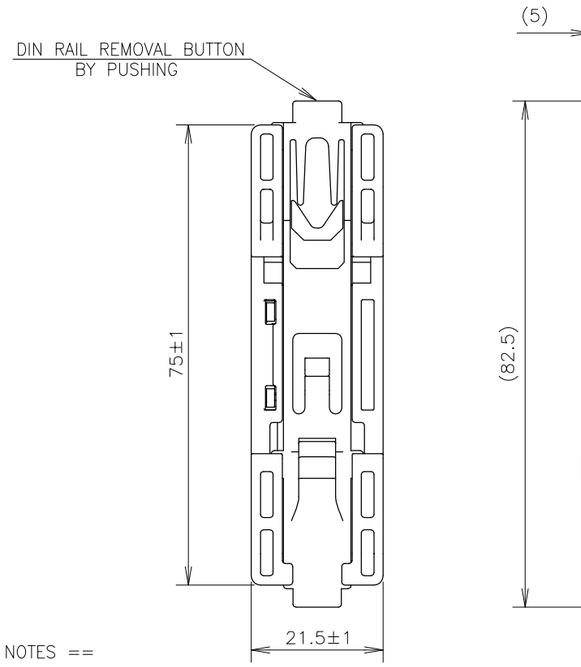
(unit : mm)

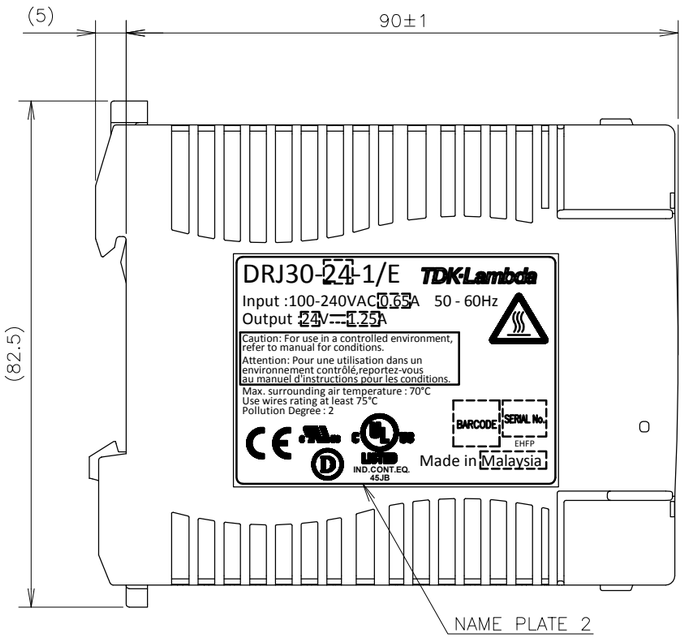
MODEL NAME	DRJ30
TDK-Lambda	

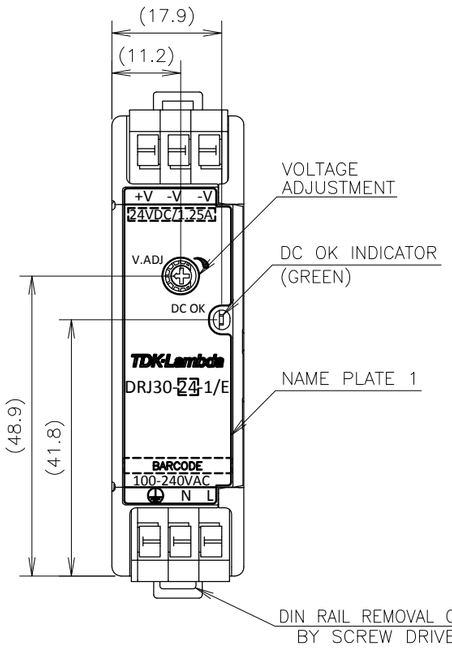
A266−02−01

DRJ30/E









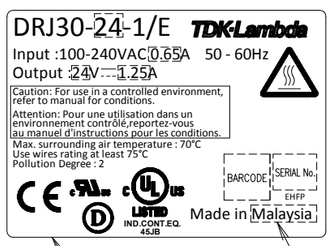
== NOTES ==

A : MODEL NAME, INPUT VOLTAGE RANGE,
NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT
ARE SHOWN HERE IN ACCORDANCE WITH
THE SPECIFICATIONS.

NAME PLATE DETAILS

NAME PLATE 1

NAME PLATE 2



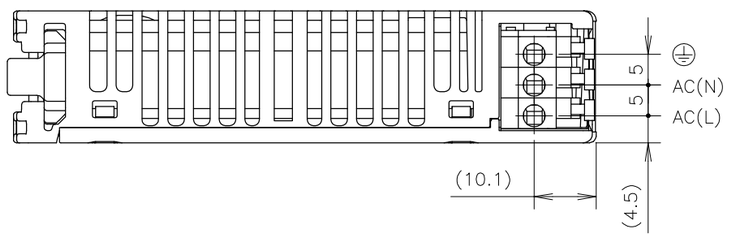
SEE NOTE A

SEE NOTE B

SCALE FOR NAME PLATE : 1/1

B : COUNTRY OF MANUFACTURE WILL BE SHOWN HERE.

C : RECOMMENDED WIRE: AWG14−20, WIRE STRIP LENGTH: 8mm.



(unit : mm)

MODEL NAME	DRJ30/E
TDK-Lambda	

A266−02−01/E−A

SPECIFICATIONS

A267-01-01(/E)

	ITEMS / MODEL			DRJ50-12-1(/E)	DRJ50-24-1(/E)
1	Nominal Output Voltage		V	12	24
2	Maximum Output Current		A	3.4	2.1
3	Maximum Output Power		W	40.8	50.4
4	Efficiency (Typ) (*1)	100VAC	%	86	87.5
		230VAC	%	88	89.5
5	Input Voltage Range (*2)(*13)		-	85- 264VAC(47-63Hz) OR 120- 370VDC	
6	Input Current (Typ) (*1)(*13)		A	0.9/0.5	1.10/0.60
7	Inrush Current (Typ) (*1)(*3)		-	24A at 100VAC, 55A at 230VAC, Ta=25°C, Cold Start	
8	PFHC		-	-	
9	Power Factor (Typ)		-	-	
10	Output Voltage Range		V	10.8 - 15.0	21.6 - 28.5
11	Maximum Ripple & Noise	0<Ta≤70°C	mV	120	240
		-20≤Ta≤0°C	mV	300	300
	(*4)	Io≤30%	mV	300	300
12	Maximum Line Regulation (*4)(*5)		mV	60	120
13	Maximum Load Regulation (*4)(*6)		mV	96	192
14	Temperature Coefficient		-	Less than 0.02% / °C	
15	Over Current Protection (*7)		A	3.6 -	2.2 -
16	Over Voltage Protection (*8)		V	16.0 - 18.8	30.0 - 34.8
17	Hold-up Time (Typ) (*9)		-	20ms	
18	Leakage Current (*10)		-	Less than 0.75mA	
19	Remote Control		-	-	
20	Parallel Operation		-	-	
21	Series Operation		-	Possible	
22	Operating Temperature (*11)(*13)		-	-20 - +70°C (-20°C:50%, -10- +55°C:100%, +70°C:50%)	
23	Operating Humidity		-	30 - 95%RH (No Condensing)	
24	Storage Temperature		-	-40 - +85°C	
25	Storage Humidity		-	10 - 95%RH (No Condensing)	
26	Cooling		-	Convection Cooling	
27	Withstand Voltage		-	Input - FG : 2kVAC (20mA), Input - Output : 3kVAC (20mA) Output - FG : 500VAC (50mA) for 1min	
28	Isolation Resistance		-	More than 100MΩ at 25°C and 70%RH Output to FG : 500VDC	
29	Vibration		-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s^2 Constant, X,Y,Z 1hour each.	
30	Shock (In package)		-	Less than 294m/s^2	
31	Safety		-	Designed to meet UL60950-1, CSA60950-1, EN60950-1, UL508,CSA C22.2 No.107.1, Den-an Appendix 8 at 100VAC only.	
32	Line DIP		-	Designed to meet SEMI-F47 (200VAC Line only)	
33	Conducted Emission (*12)		-	Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B	
34	Radiated Emission (*12)		-	Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B	
35	Immunity (*12)		-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11	
36	Weight (Typ)		g	180	
37	Size (W x H x D)		mm	30 x 75 x90 (Refer to Outline Drawing)	

*Read instruction manual carefully, before using the power supply unit.

=NOTES=

*1. At 100VAC/230VAC, Ta=25°C, nominal output voltage and maximum output power.

*2. For cases where conformance to various safety specs (UL, CSA) are required, to be described as 100 - 240VAC(50-60Hz).

*3. Not applicable for the in-rush current to Noise Filter for less than 0.2ms.

*4. Please refer to Fig. A for measurement of Vo, line & load regulation and ripple voltage.

*5. 85 - 264VAC, constant load.

*6. No load-Full load, constant input voltage.

*7. Hiccup with automatic recovery.
Avoid to operate at over load or short circuit condition.

*8. OVP circuit will shut down output, manual reset (Re power on).

*9. At 100VAC, Ta=25°C, nominal output voltage and 80% output power.

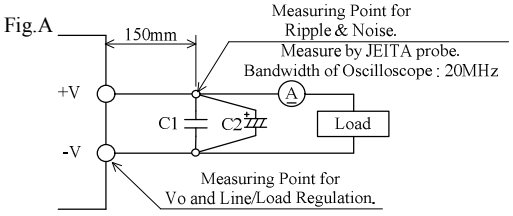
*10. Measured by the each measuring method of UL, CSA and Den-an(at 60Hz), Ta=25°C.

*11. Output Derating
- Derating at standard mounting. Refer to LOAD vs. AMBIENT TEMPERATURE (A267-01-02_).
- Load (%) is percent of maximum output power or maximum output current, do not exceed its derating of maximum load.

*12. The power supply is considered a component which will be installed into a final equipment.
The final equipment should be re-evaluated that it meets EMC directives.

*13. Output derating needed when input voltage less than 90VAC. Refer to LOAD vs. INPUT VOLTAGE (A267-01-02_).

Fig.A



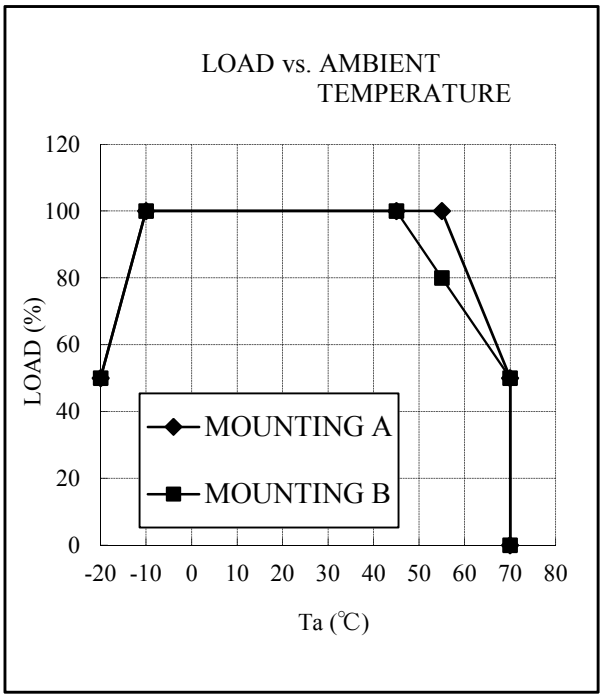
C1 : Film Cap. 0.1μF
C2 : Elect. Cap. 100μF

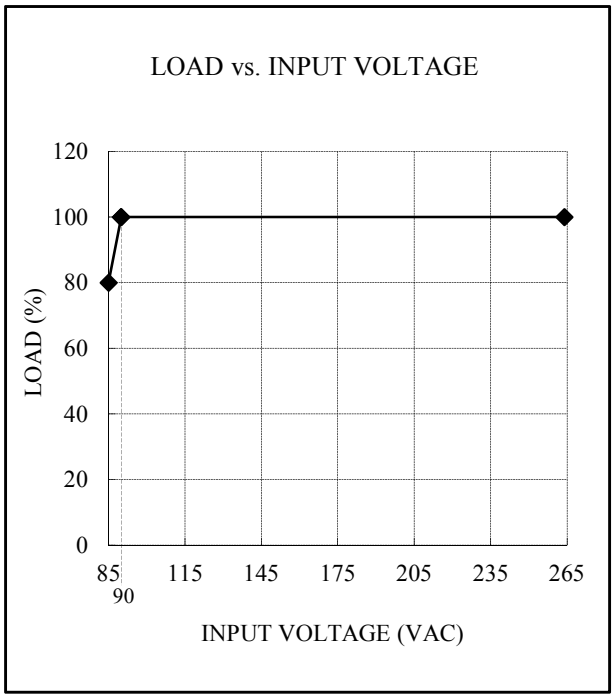
OUTPUT DERATING

A267-01-02(/E)

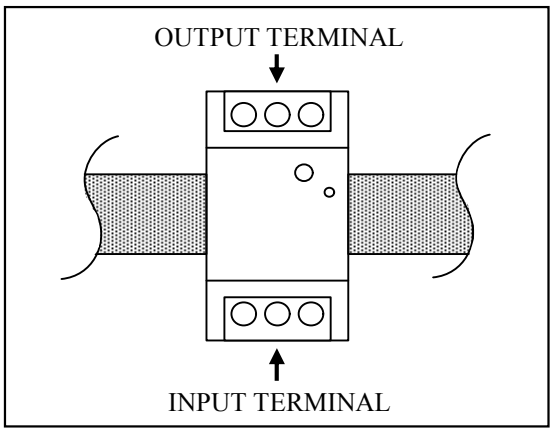
Ta (°C)	LOAD (%)	
	MOUNTING A	MOUNTING B
-20	50	50
-10 - +45	100	100
55	100	80
70	50	50

INPUT VOLTAGE (VAC)	LOAD (%)
	MOUNTING A,B
85	80
90 - 264	100

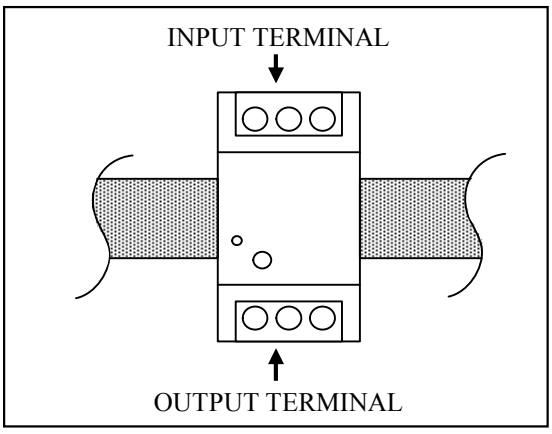




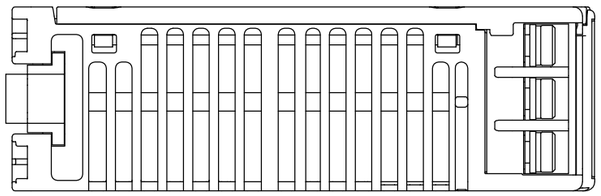
MOUNTING A
(STANDARD MOUNTING)

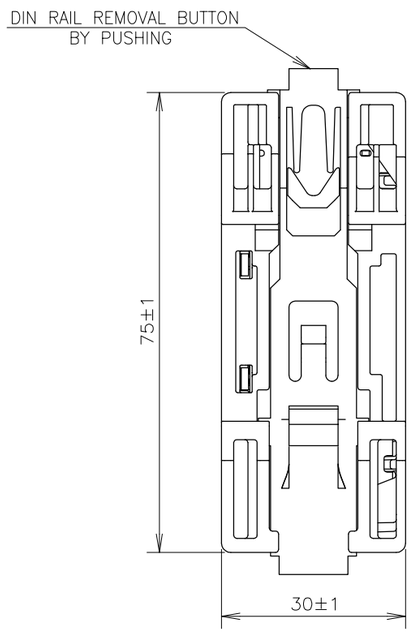


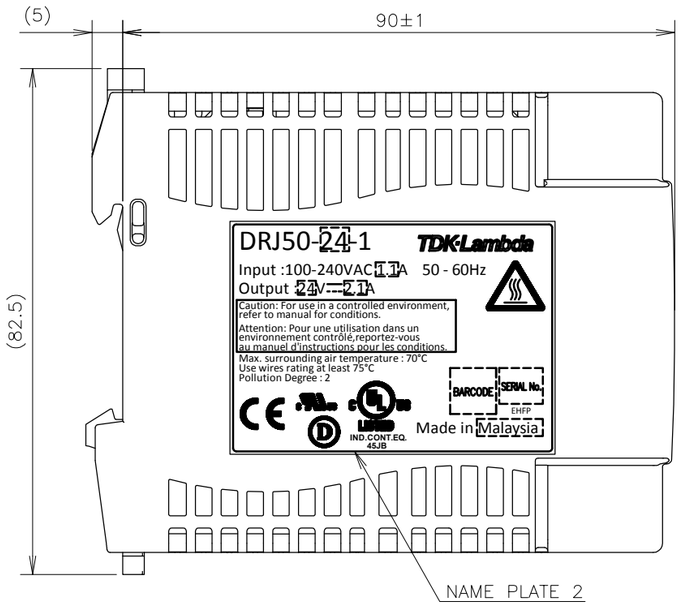
MOUNTING B

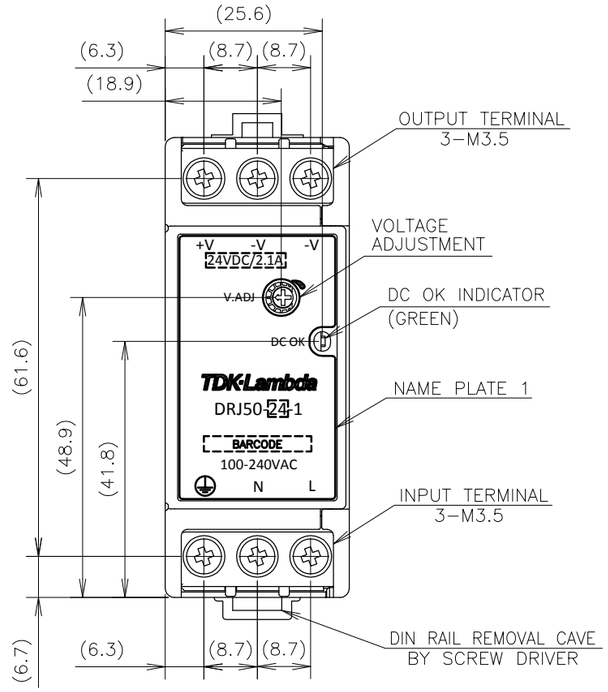


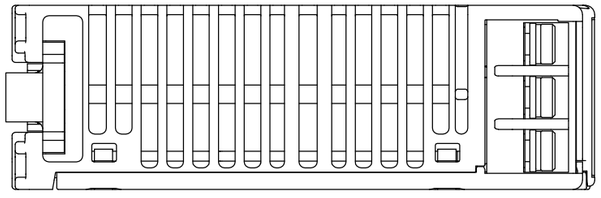
DRJ50









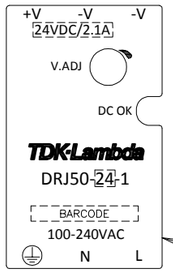


== NOTES ==

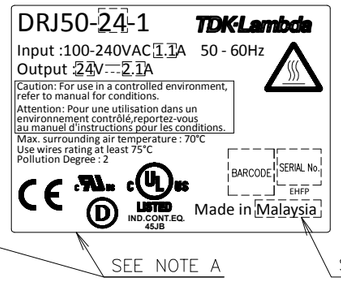
A : MODEL NAME, INPUT VOLTAGE RANGE,
NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT
ARE SHOWN HERE IN ACCORDANCE WITH
THE SPECIFICATIONS.

NAME PLATE DETAILS

NAME PLATE 1



NAME PLATE 2



SCALE FOR NAME PLATE : 1/1

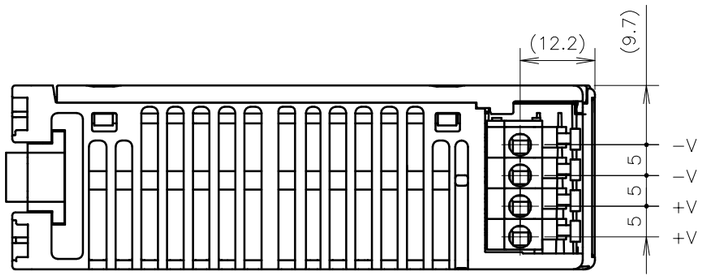
B : COUNTRY OF MANUFACTURE WILL BE SHOWN HERE.
C : RECOMMENDED SCREW TORQUE(M3.5): 1.0−1.4N.m(10.2−14.2kgf.cm).
D : RECOMMENDED WIRE: AWG16−20.

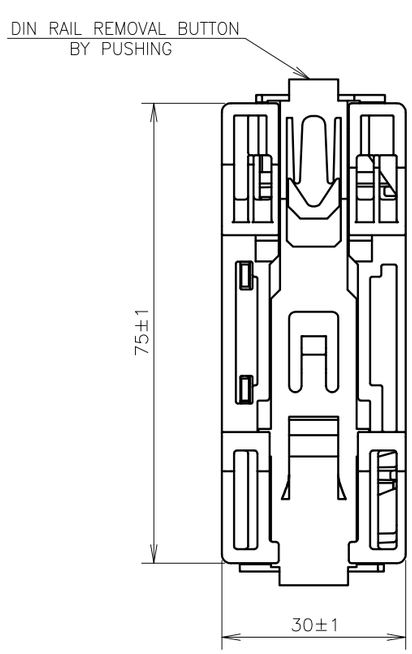
(unit : mm)

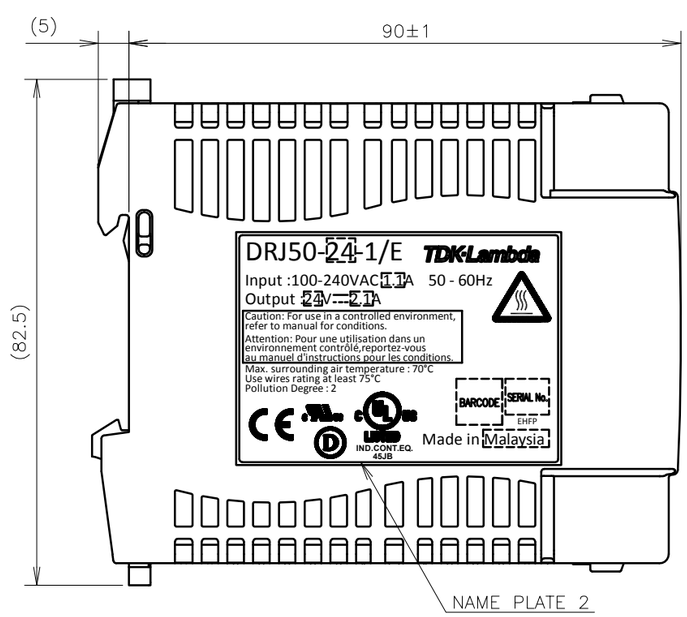
MODEL NAME	DRJ50
TDK-Lambda	

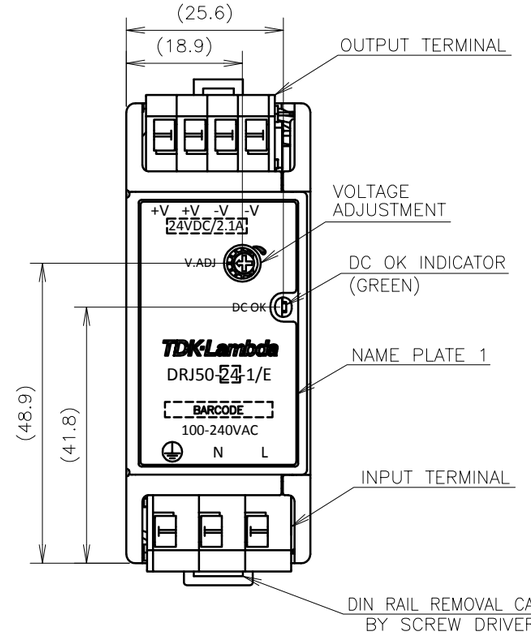
A267−02−01A

DRJ50/E







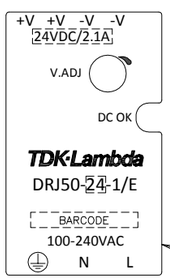


== NOTES ==

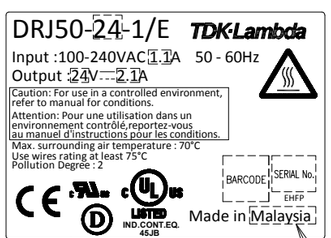
A : MODEL NAME, INPUT VOLTAGE RANGE,
NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT
ARE SHOWN HERE IN ACCORDANCE WITH
THE SPECIFICATIONS.

NAME PLATE DETAILS

NAME PLATE 1



NAME PLATE 2



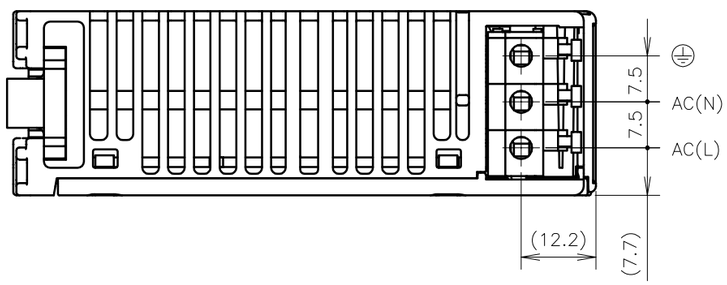
SEE NOTE A

SEE NOTE B

SCALE FOR NAME PLATE : 1/1

B : COUNTRY OF MANUFACTURE WILL BE SHOWN HERE.

C : RECOMMENDED WIRE: AWG14−20, WIRE STRIP LENGTH: 8mm.



(unit : mm)

MODEL NAME	DRJ50/E
TDK-Lambda	

A267−02−01/E−A

SPECIFICATIONS

A268-01-01(/E)

	ITEMS / MODEL			DRJ100-24-1(/E)
1	Nominal Output Voltage		V	24
2	Maximum Output Current		A	4.2
3	Maximum Output Power		W	100.8
4	Efficiency (Typ) (*1)	100VAC	%	88
		230VAC	%	90
5	Input Voltage Range	(*2)(*13)	-	85- 264VAC(47-63Hz) OR 120- 370VDC
6	Input Current (Typ)	(*1)(*13)	A	1.2/0.55
7	Inrush Current (Typ)	(*1)(*3)	-	14A at 100VAC, 33A at 230VAC, Ta=25°C, Cold Start
8	PFHC		-	Designed to meet IEC61000-3-2
9	Power Factor (Typ)	(*1)(*13)	-	0.97/0.92
10	Output Voltage Range		V	21.6 - 28.5
11	Maximum Ripple & Noise	0<Ta≤70°C	mV	240
		-20≤Ta≤0°C	mV	300
	(*4)	Io≤30%	mV	300
12	Maximum Line Regulation	(*4)(*5)	mV	120
13	Maximum Load Regulation	(*4)(*6)	mV	192
14	Temperature Coefficient		-	Less than 0.02% / °C
15	Over Current Protection	(*7)	A	4.4 -
16	Over Voltage Protection	(*8)	V	30.0 - 34.8
17	Hold-up Time (Typ)	(*9)	-	20ms
18	Leakage Current	(*10)	-	Less than 0.75mA
19	Remote Control		-	-
20	Parallel Operation		-	-
21	Series Operation		-	Possible
22	Operating Temperature	(*11)(*13)	-	-20 - +70°C (-20°C:50%, -10- +55°C:100%, +70°C:50%)
23	Operating Humidity		-	30 - 95%RH (No Condensing)
24	Storage Temperature		-	-40 - +85°C
25	Storage Humidity		-	10 - 95%RH (No Condensing)
26	Cooling		-	Convection Cooling
27	Withstand Voltage		-	Input - FG : 2kVAC (20mA), Input - Output : 3kVAC (20mA) Output - FG : 500VAC (50mA) for 1min
28	Isolation Resistance		-	More than 100MΩ at 25°C and 70%RH Output to FG : 500VDC
29	Vibration		-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s^2 Constant, X,Y,Z 1hour each.
30	Shock (In package)		-	Less than 294m/s^2
31	Safety		-	Designed to meet UL60950-1, CSA60950-1, EN60950-1, UL508,CSA C22.2 No.107.1, Den-an Appendix 8 at 100VAC only.
32	Line DIP		-	Designed to meet SEMI-F47 (200VAC Line only)
33	Conducted Emission	(*12)	-	Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B
34	Radiated Emission	(*12)	-	Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B
35	Immunity	(*12)	-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11
36	Weight (Typ)		g	320
37	Size (W x H x D)		mm	45 x 75 x 105 (Refer to Outline Drawing)

*Read instruction manual carefully, before using the power supply unit.

=NOTES=

*1. At 100VAC/230VAC, Ta=25°C, nominal output voltage and maximum output power.

*2. For cases where conformance to various safety specs (UL, CSA) are required, to be described as 100 - 240VAC(50-60Hz).

*3. Not applicable for the in-rush current to Noise Filter for less than 0.2ms.

*4. Please refer to Fig. A for measurement of Vo, line & load regulation and ripple voltage.

*5. 85 - 264VAC, constant load.

*6. No load-Full load, constant input voltage.

*7. Hiccup with automatic recovery.
Avoid to operate at over load or short circuit condition.

*8. OVP circuit will shut down output, manual reset (Re power on).

*9. At 100VAC, Ta=25°C, nominal output voltage and 80% output power.

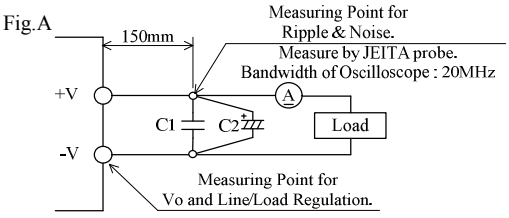
*10. Measured by the each measuring method of UL, CSA and Den-an(at 60Hz), Ta=25°C.

*11. Output Derating
- Derating at standard mounting. Refer to LOAD vs. AMBIENT TEMPERATURE (A268-01-02_).
- Load (%) is percent of maximum output power or maximum output current, do not exceed its derating of maximum load.

*12. The power supply is considered a component which will be installed into a final equipment.
The final equipment should be re-evaluated that it meets EMC directives.

*13. Output derating needed when input voltage less than 90VAC. Refer to LOAD vs. INPUT VOLTAGE (A268-01-02_).

Fig.A



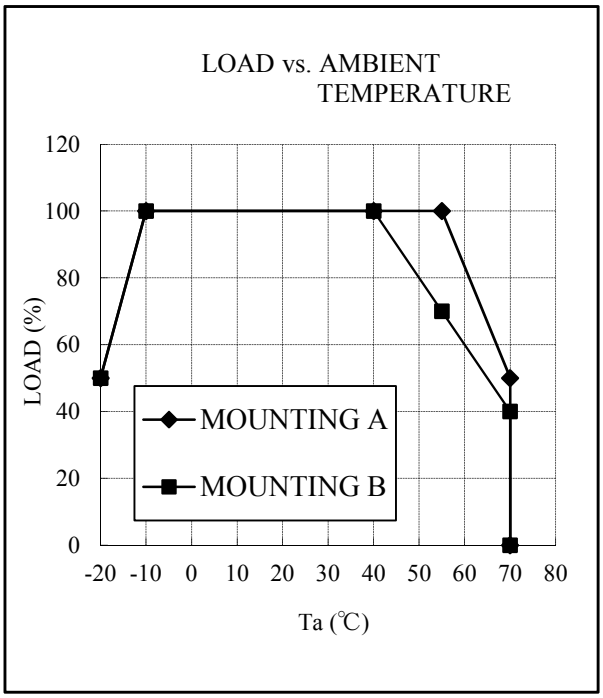
C1 : Film Cap. 0.1μF
C2 : Elect. Cap. 100μF

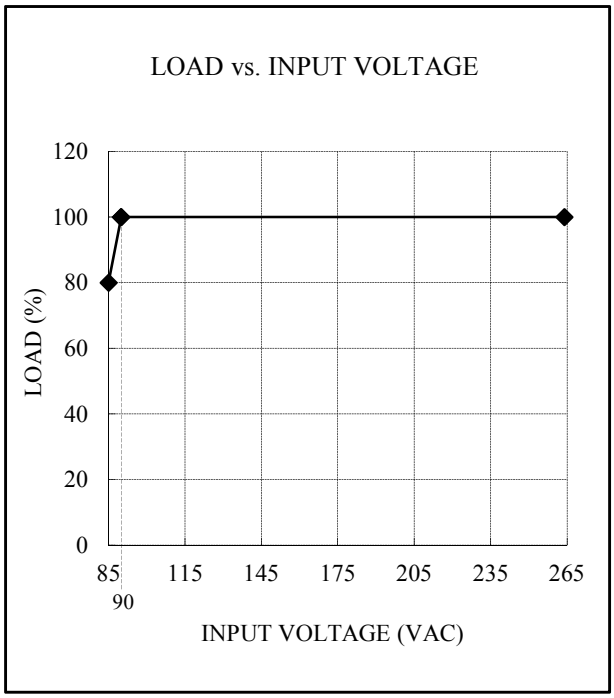
OUTPUT DERATING

A268-01-02(/E)

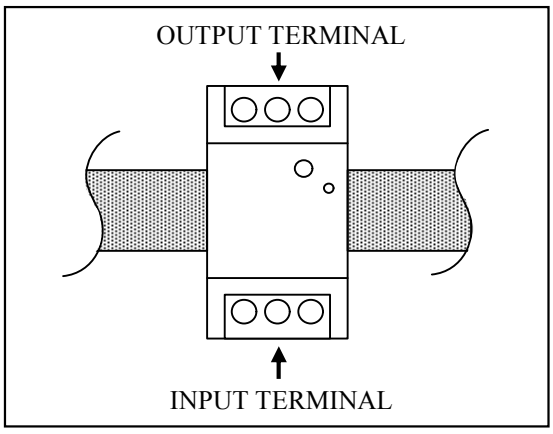
Ta (°C)	LOAD (%)	
	MOUNTING A	MOUNTING B
-20	50	50
-10 - +40	100	100
55	100	70
70	50	40

INPUT VOLTAGE (VAC)	LOAD (%)
	MOUNTING A,B
85	80
90 - 264	100

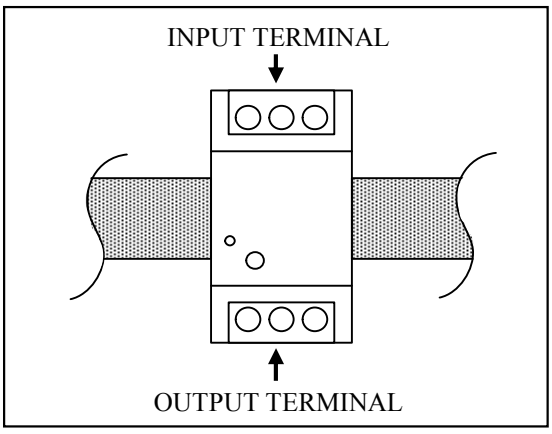




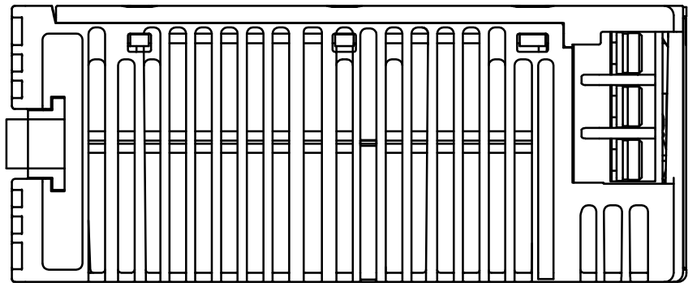
MOUNTING A
(STANDARD MOUNTING)

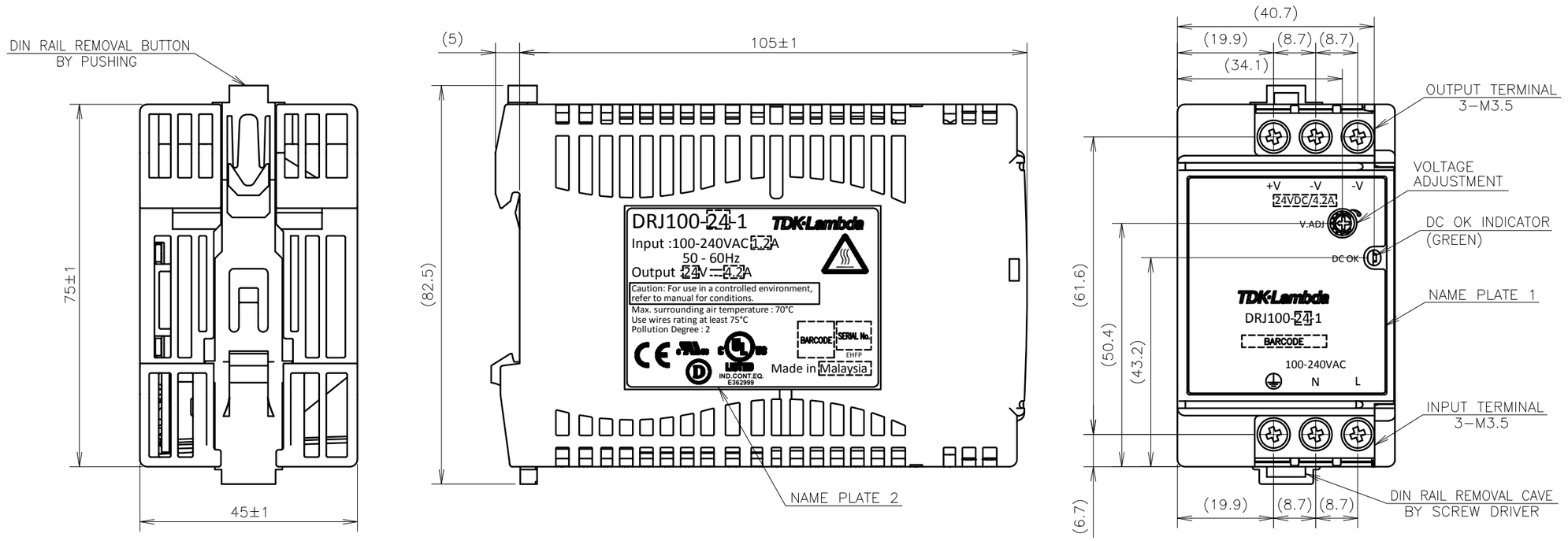


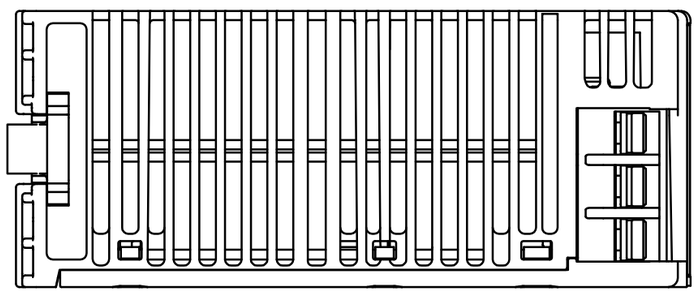
MOUNTING B



DRJ100





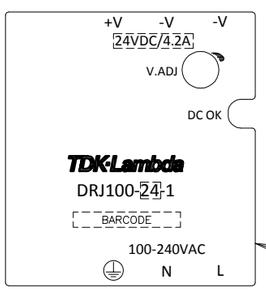


== NOTES ==

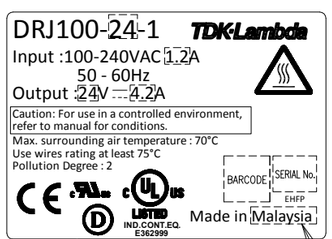
A : MODEL NAME, INPUT VOLTAGE RANGE,
NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT
ARE SHOWN HERE IN ACCORDANCE WITH
THE SPECIFICATIONS.

NAME PLATE DETAILS

NAME PLATE 1



NAME PLATE 2



SEE NOTE A

SEE NOTE B

SCALE FOR NAME PLATE : 1/1

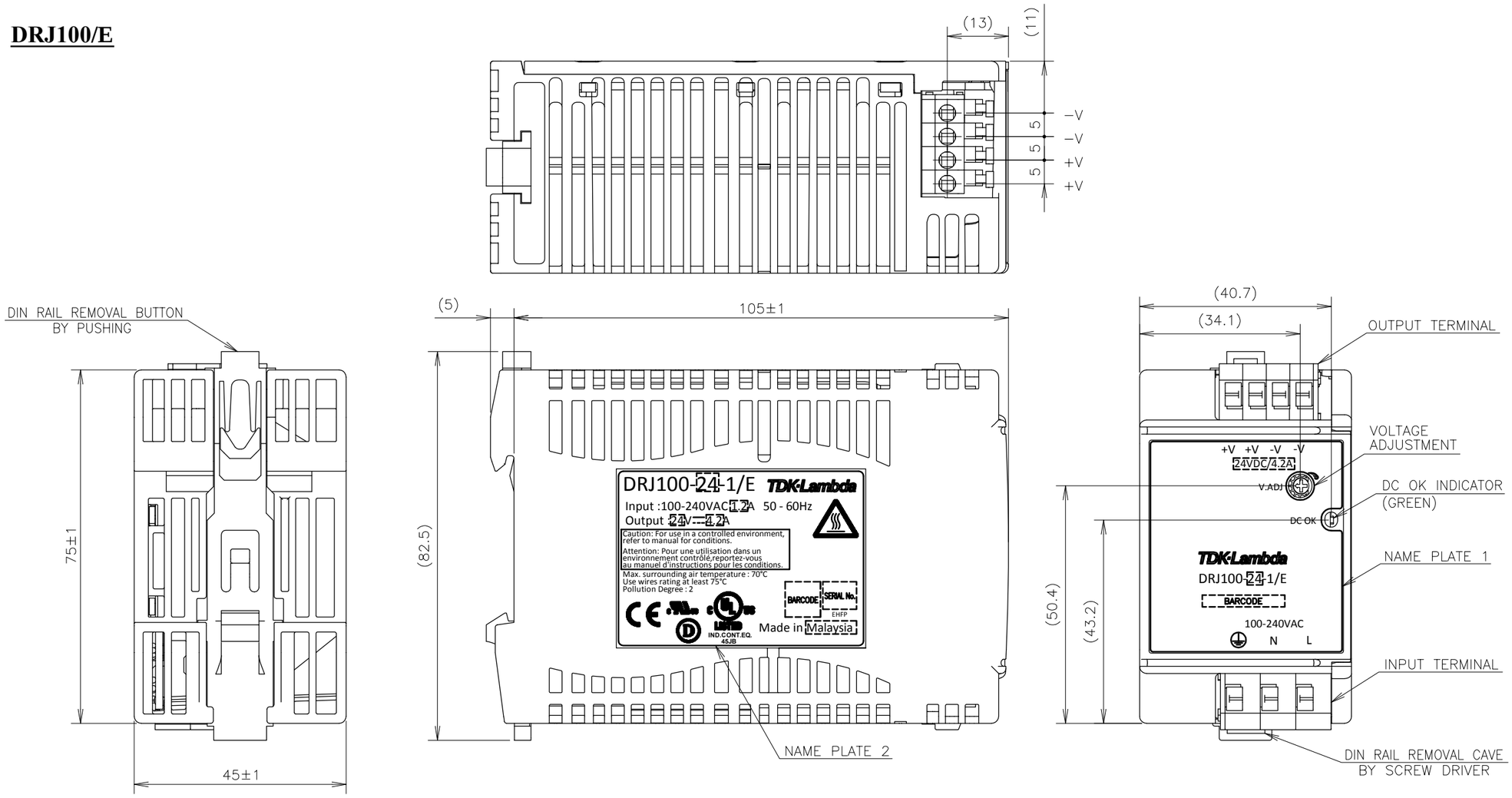
B : COUNTRY OF MANUFACTURE WILL BE SHOWN HERE.
C : RECOMMENDED SCREW TORQUE(M3.5): 1.0−1.4N.m(10.2−14.2kgf.cm).
D : RECOMMENDED WIRE: AWG16−20.

(unit : mm)

MODEL NAME	DRJ100
TDK-Lambda	

A268−02−01

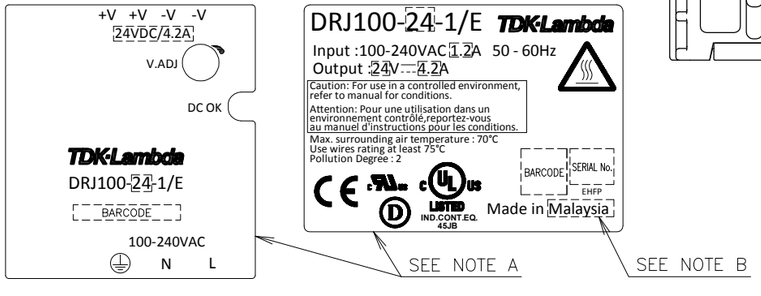
DRJ100/E



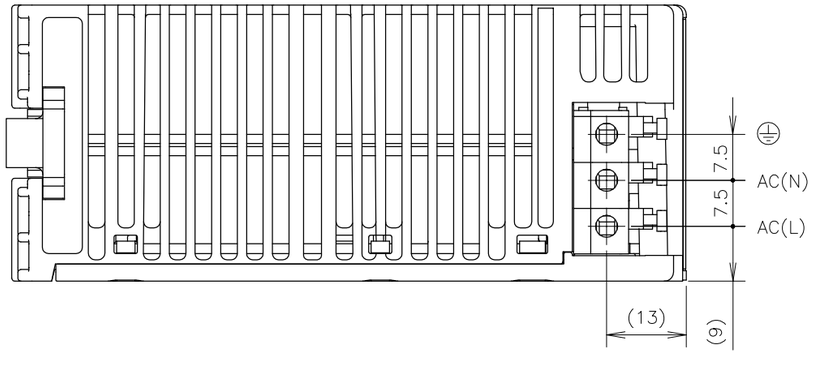
== NOTES ==

A : MODEL NAME, INPUT VOLTAGE RANGE,
NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT
ARE SHOWN HERE IN ACCORDANCE WITH
THE SPECIFICATIONS.

NAME PLATE DETAILS



SCALE FOR NAME PLATE : 1/1



B : COUNTRY OF MANUFACTURE WILL BE SHOWN HERE.
C : RECOMMENDED WIRE: AWG14−20, WIRE STRIP LENGTH: 8mm.

(unit : mm)

MODEL NAME	DRJ100/E
TDK-Lambda	

A268−02−01/E−A

DRJ120(/E)

SPECIFICATIONS

PA637-01-01B(/E)

	ITEMS / MODEL			DRJ120-24-1(/E)
1	Nominal Output Voltage		V	24
2	Maximum Output Current		A	5
3	Peak Output Current	(*12)	A	6
4	Maximum Output Power		W	120
5	Peak Output Power	(*12)	W	144
6	Efficiency (Typ)	(*1)	%	91/93
7	Input Voltage Range	(*2)	-	85 - 264VAC (47-63Hz), OR 120 - 370VDC (Withstand 300VAC Surge for 5 seconds)
8	Input Current (Typ)	(*1)	A	1.2/0.7
9	Inrush Current (Typ)	(*3)	-	55A at 230VAC, Ta=25°C, Cold Start
10	PFHC		-	Designed To Meet IEC61000-3-2
11	Power Factor (Typ)	(*1)	-	0.98/0.92
12	Output Voltage Range		V	24 - 28
13	Maximum Ripple & Noise	(*1)(*4)(*5)	mV	240
14	Maximum Line Regulation	(*5)(*6)	mV	24
15	Maximum Load Regulation	(*5)(*7)	mV	240
16	Temperature Coefficient		-	Less than 0.02% / °C
17	Over Current Protection	(*8)	-	> 101% of Peak Output Power
18	Over Voltage Protection	(*9)	V	30 - 35
19	Hold-up Time (Typ)	(*1)	ms	20
20	Leakage Current	(*10)	-	< 1mA at 230VAC (60Hz)
21	Monitoring Signal		-	DC OK LED
22	Series Operation		-	Possible
23	Parallel Operation		-	No
24	Operating Temperature	(*11)	-	-25 ~ +70°C (-25 ~ +55°C : 100%, +70°C : 50%)
25	Operating Humidity		-	5 - 95%RH (No dewdrop)
26	Storage Temperature		-	-40 ~ +85°C
27	Storage Humidity		-	5 - 95%RH (No dewdrop)
28	Cooling		-	Convection Cooling
29	Withstand Voltage		-	Input - Output : 3kVAC (20mA), Input - FG : 1.77kVAC (20mA) Output - FG : 500VAC (100mA) for 1min
30	Isolation Resistance		-	Output - FG More than 100MΩ (500VDC) at 25°C and 70%RH
31	Vibration		-	At no operating, 10 - 55Hz (sweep for 1min) 19.6m/s^2 (2G) Constant, X,Y,Z 1hour each.
32	Shock (In package)		-	Less than 196m/s^2 (20G)
33	Safety		-	Approved by UL60950-1, CSA22.2 No. 60950-1 IEC/EN60950-1, UL 62368-1, CSA C22.2 No. 62368-1, IEC/EN 62368-1, CSA C22.2 No.107.1, UL508, IEC/EN 62477-1 OVC III
34	EMI	(*1)(*14)	-	Designed To Meet EN55011/EN55032-B
35	Immunity	(*14)	-	Designed To Meet IEC61000-6-2, IEC61000-4-2, -3, -4, -5, -6, -8, -11
36	Weight (Typ)		g	500
37	Size (W x H x D)		mm	35 x 124 x 125 (Refer to Outline Drawing)

*Read instruction manual carefully, before using the power supply unit.

=NOTES=

*1. At 115VAC/230VAC, Ta=25°C, nominal output voltage and maximum output power.

*2. For cases where conformance to various safety specs (UL, CSA, EN) are required, to be described as 100-240VAC, 50/60Hz on name plate.

*3. Not applicable for the in-rush current to Noise Filter for less than 0.2ms.

*4. Ripple & noise are measured at 20MHz by using a 300mm twisted pair of load wires terminated with a 0.1uF Film Capacitor and a 47uF Electrolytic Capacitor.

*5. Please refer to Figure A for measurement of Vo, line, and load regulation and ripple voltage.

*6. 85 - 264VAC, constant load.

*7. No load - Full load, constant input voltage.

*8. Hiccup with automatic recovery. Avoid operating at over load or short circuit condition.

*9. Output latched shut down. Manual reset by AC cycle.

*10. Measured by each measuring method of UL and EN (at 60Hz), Ta = 25°C.

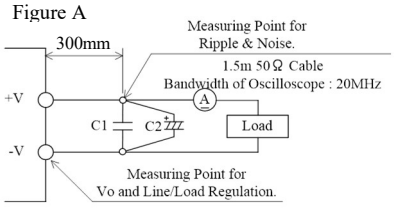
*11. Refer to Output Derating Curve (PA637-01-02_) for details of output derating versus ambient temperature.
- Load (%) is percent of maximum output power or maximum output current, do not exceed its derating of maximum load.

*12. Operating period at peak output current is D ≤ 35%,<10sec and 5Arms max. Refer to PA637-01-03_

*13. All parameters not specifically mentioned are measured at 230VAC input, rated load and Ta = 25°C.

*14. The power supply is considered a component which will be installed into a final equipment.
The final equipment should be re-evaluated that it meets EMC directives.

Figure A



C1 : Film Cap. 0.1μF
C2 : Elect. Cap. 47μF

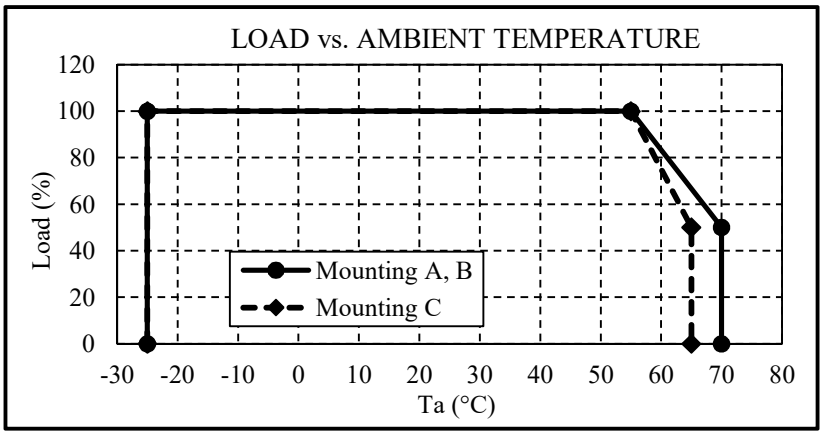
DRJ120(/E)

PA637-01-02A(/E)

OUTPUT DERATING

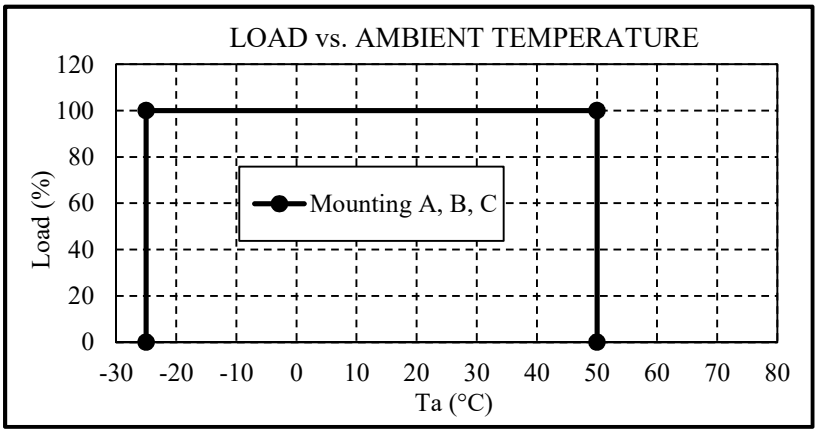
AC input and DC input 120V < Vin ≦300V dc

Ta (°C)	Load (%)		
	Mounting A	Mounting B	Mounting C
-25 ~ +55	100		100
65	66		50
70	50		-

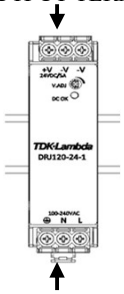
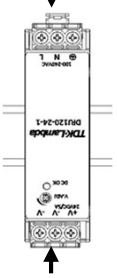


DC input 300V < Vin ≦370V dc

Ta (°C)	Load (%)		
	Mounting A	Mounting B	Mounting C
-25 ~ +50	100		



STANDARD MOUNTING

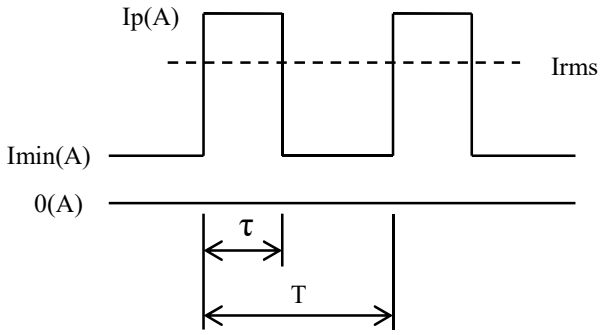
Mounting A	Mounting B	Mounting C
OUTPUT TERMINAL  INPUT TERMINAL	INPUT TERMINAL  OUTPUT TERMINAL	INPUT TERMINAL OUTPUT TERMINAL 

DRJ120(/E)

PA637-01-03(/E)

Peak current

Use this product so that relationship among Duty, Rms output current (Irms) and peak output power (Ip) satisfy conditions defined by expression below.
Also Peak output current pulse width (τ) should be 10 sec or less, Duty should be 35% or less.

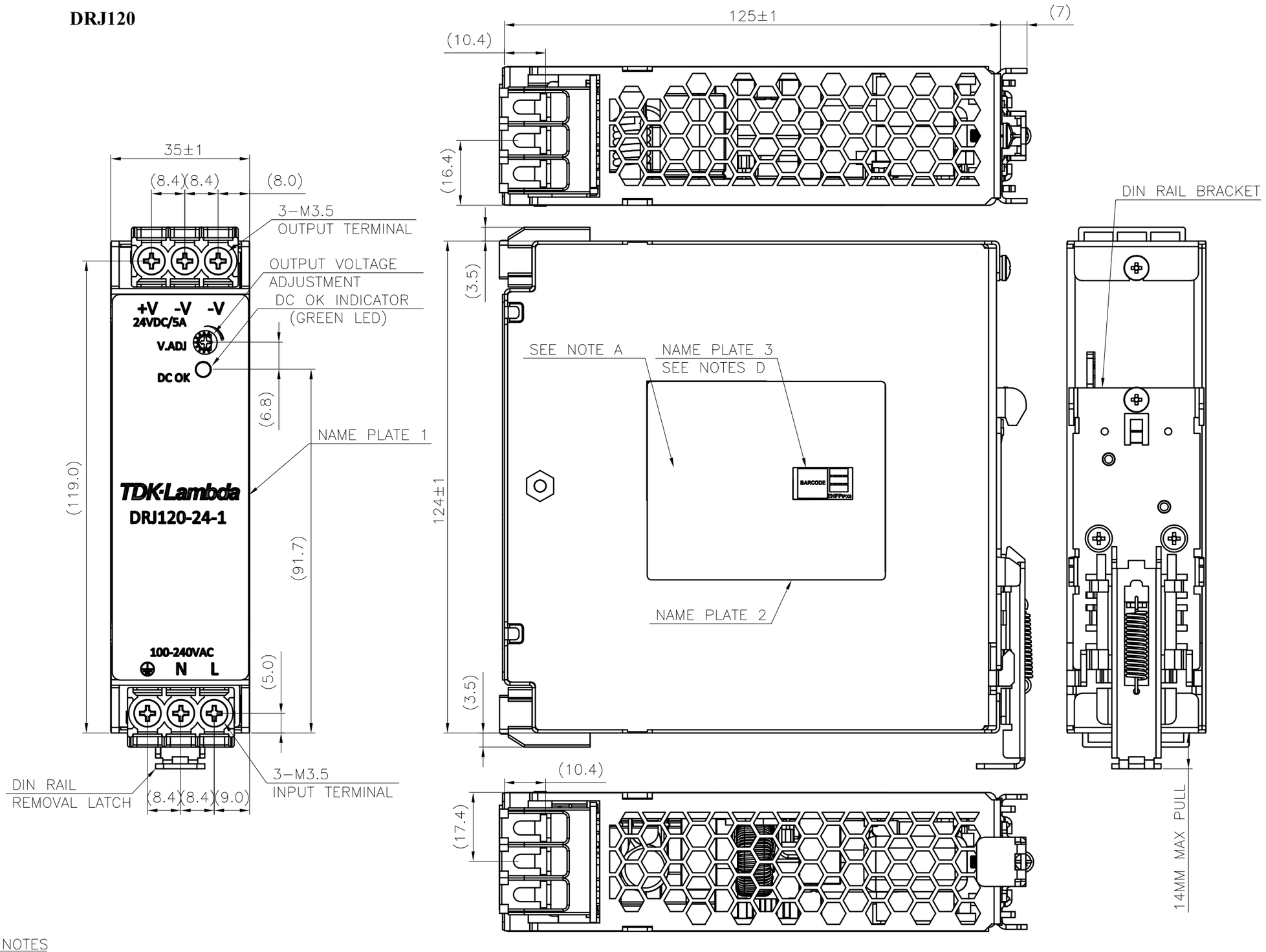


Ip	: Peak output current (A)
Irms	: RMS output current (A)
Imin	: Minimum output current (A)
τ	: Peak output current pulse width(sec) (Operating time at peak output)
T	: Period (sec)
Duty	: The duty is pulse width of peak output current of one period (%)

$$5.0\ (A) \geq Irms = \sqrt{Ip^2 \times Duty + Imin^2 \times (1 - Duty)}$$

$$Duty = \frac{\tau}{T} \times 100\ (\%) \qquad \tau \leq 10\ (sec)$$

DRJ120



NOTES

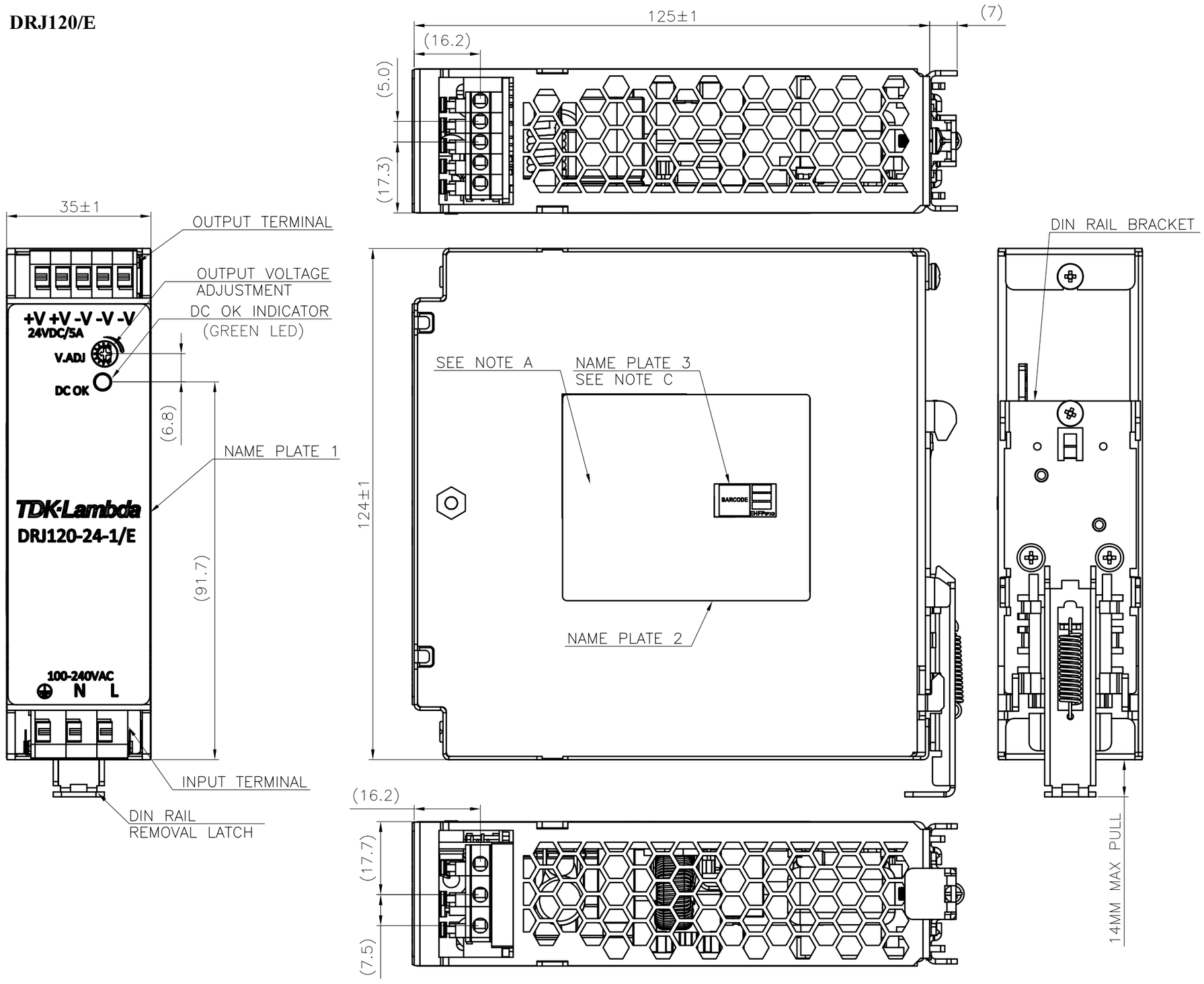
A. MODEL NAME , INPUT VOLTAGE RANGE , NOMINAL OUTPUT VOLTAGE , MAXIMUM OUTPUT CURRENT & COUNTRY OF MANUFACTURE ARE SHOWN HERE IN ACCORDANCE WITH THE SPECIFICATION.
B. RECOMMENDED SCREW TORQUE M3.5: 1.0−1.6NM (10.2−16.3KGF.CM).
C. RECOMMENDED WIRE: AWG14−20.
D. BARCODE, SERIAL NO. ARE SHOWN HERE.

(unit : mm)

MODEL NAME	DRJ120−24−1
TDK-Lambda	

PA637−02−01H

DRJ120/E



NOTES

A. MODEL NAME , INPUT VOLTAGE RANGE , NOMINAL OUTPUT VOLTAGE , MAXIMUM OUTPUT CURRENT & COUNTRY OF MANUFACTURE ARE SHOWN HERE IN ACCORDANCE WITH THE SPECIFICATION.
B. RECOMMENDED WIRE: AWG14–20, WIRE STRIP LENGTH: 8–10MM.
C. BARCODE, SERIAL NO. ARE SHOWN HERE.

(unit : mm)

MODEL NAME	DRJ120–24–1/E
TDK-Lambda	

PA637–02–01/E–H

DRJ240(/E)

SPECIFICATIONS

PA638-01-01A(/E)

	ITEMS / MODEL			DRJ240-24-1(/E)
1	Nominal Output Voltage		V	24
2	Maximum Output Current		A	10
3	Peak Output Current	(*12)	A	12
4	Maximum Output Power		W	240
5	Peak Output Power	(*12)	W	288
6	Efficiency (Typ)	(*1)	%	91/93
7	Input Voltage Range	(*2)	-	85 - 264VAC (47-63Hz), OR 120 - 370VDC (Withstand 300VAC Surge for 5 seconds)
8	Input Current (Typ)	(*1)	A	2.4/1.4
9	Inrush Current (Typ)	(*3)	-	55A at 230VAC, Ta=25°C
10	PFHC		-	Designed To Meet IEC61000-3-2
11	Power Factor (Typ)	(*1)	-	0.98/0.92
12	Output Voltage Range		V	24 - 28
13	Maximum Ripple & Noise	(*1)(*4)(*5)	mV	240
14	Maximum Line Regulation	(*5)(*6)	mV	24
15	Maximum Load Regulation	(*5)(*7)	mV	240
16	Temperature Coefficient		-	Less than 0.02% / °C
17	Over Current Protection	(*8)	-	> 101% of Peak Output Power
18	Over Voltage Protection	(*9)	V	30 - 35
19	Hold-up Time (Typ)	(*1)	ms	20
20	Leakage Current	(*10)	-	< 1mA at 230VAC (60Hz)
21	Monitoring Signal		-	DC OK LED
22	Series Operation		-	Possible
23	Parallel Operation		-	No
24	Operating Temperature	(*11)	-	-25 ~ +70°C (-25 ~ +55°C : 100%, +70°C : 50%)
25	Operating Humidity		-	5 - 95%RH (No dewdrop)
26	Storage Temperature		-	-40 ~ +85°C
27	Storage Humidity		-	5 - 95%RH (No dewdrop)
28	Cooling		-	Convection Cooling
29	Withstand Voltage		-	Input - Output : 3kVAC (20mA), Input - FG : 1.77kVAC (20mA) Output - FG : 500VAC (100mA) for 1min
30	Isolation Resistance		-	Output - FG More than 100MΩ (500VDC) at 25°C and 70%RH
31	Vibration		-	At no operating, 10 - 55Hz (sweep for 1min) 19.6m/s^2 (2G) Constant, X,Y,Z 1hour each.
32	Shock (In package)		-	Less than 196m/s^2 (20G)
33	Safety		-	Approved by UL60950-1, CSA22.2 No. 60950-1 IEC/EN60950-1, UL 62368-1, CSA C22.2 No. 62368-1, IEC/EN 62368-1, CSA C22.2 No.107.1, UL508, IEC/EN 62477-1 OVC III
34	EMI	(*1) (*14)	-	Designed To Meet EN55011/EN55032-B
35	Immunity	(*14)	-	Designed To Meet IEC61000-6-2, IEC61000-4-2, -3, -4, -5, -6, -8, -11
36	Weight (Typ)		g	750
37	Size (W x H x D)		mm	41 x 124 x 125 (Refer to Outline Drawing)

*Read instruction manual carefully, before using the power supply unit.

=NOTES=

*1. At 115VAC/230VAC, Ta=25°C, nominal output voltage and maximum output power.

*2. For cases where conformance to various safety specs (UL, CSA, EN) are required, to be described as 100-240VAC, 50/60Hz on name plate.

*3. Not applicable for the in-rush current to Noise Filter for less than 0.2ms.

*4. Ripple & noise are measured at 20MHz by using a 300mm twisted pair of load wires terminated with a 0.1uF Film Capacitor and a 47uF Electrolytic Capacitor.

*5. Please refer to Figure A for measurement of Vo, line and load regulation and ripple voltage.

*6. 85 - 264VAC, constant load.

*7. No load - Full load, constant input voltage.

*8. Hiccup with automatic recovery. Avoid operating at over load or short circuit condition.

*9. Output latched shut down. Manual reset by AC cycle.

*10. Measured by each measuring method of UL and EN (at 60Hz), Ta = 25°C.

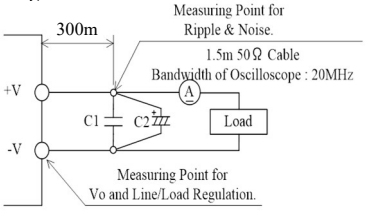
*11. Refer to Output Derating Curve (PA638-01-02_) for details of output derating versus ambient temperature.
- Load (%) is percent of maximum output power or maximum output current,
Do not exceed its derating of maximum load.

*12. Operating period at peak output current is D ≤ 35%,<10sec and 7.5Arms max.Refer to PA638-01-03_

*13. All parameters not specifically mentioned are measured at 230VAC input, rated load and Ta = 25°C.

*14. The power supply is considered a component which will be installed into a final equipment.
The final equipment should be re-evaluated that it meets EMC directives.

Figure A



C1 : Film Cap. 0.1μF
C2 : Elect. Cap. 47μF

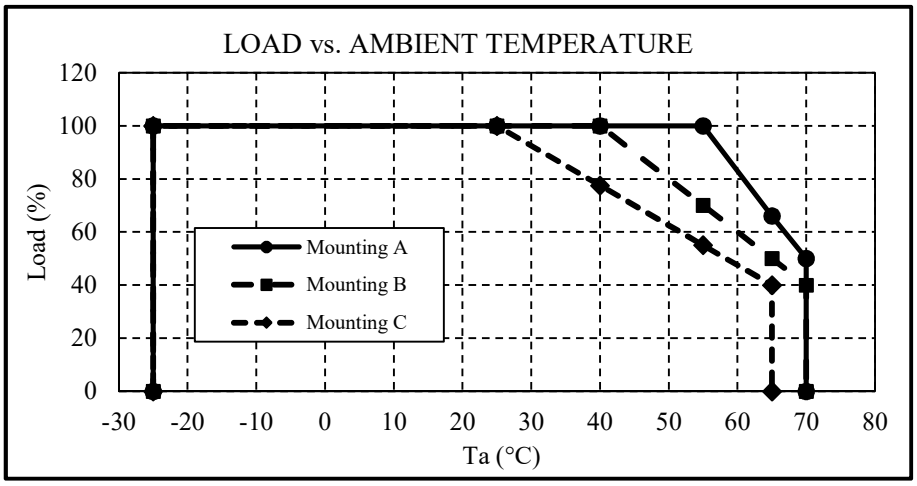
DRJ240(/E)

PA638-01-02A(/E)

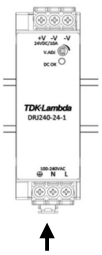
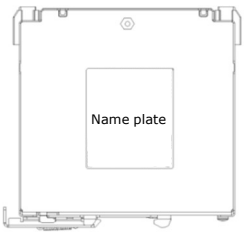
OUTPUT DERATING

AC input and DC input

Ta (°C)	Load (%)		
	Mounting A	Mounting B	Mounting C
-25 ~ +25	100	100	100
40	100	100	77.5
55	100	70	55
65	66	50	40
70	50	40	-



STANDARD MOUNTING

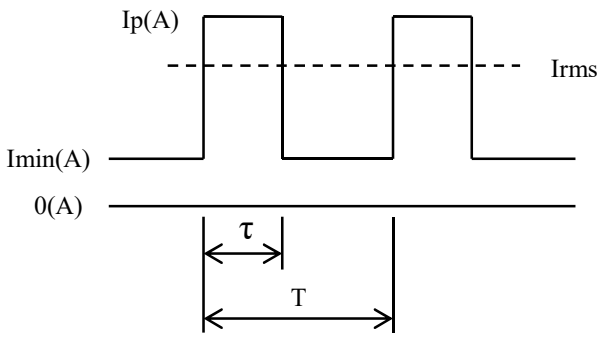
Mounting A	Mounting B	Mounting C
OUTPUT TERMINAL  INPUT TERMINAL	INPUT TERMINAL  OUTPUT TERMINAL	INPUT TERMINAL OUTPUT TERMINAL 

DRJ240(/E)

PA638-01-03(/E)

Peak current

Use this product so that relationship among Duty, Rms output current (Irms) and peak output power (Ip) satisfy conditions defined by expression below.
Also Peak output current pulse width (τ) should be 10 sec or less, Duty should be 35% or less.

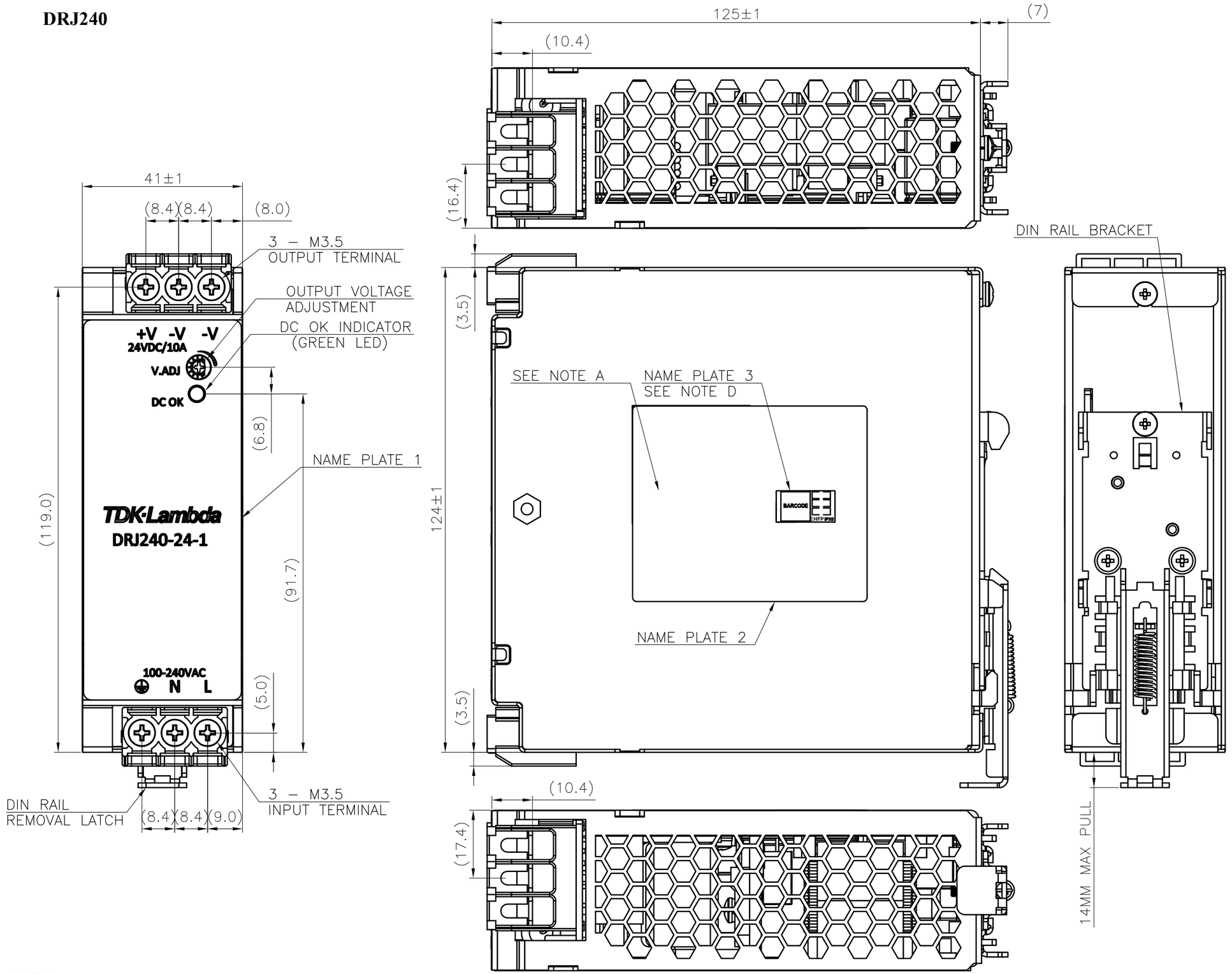


Ip	: Peak output current (A)
Irms	: RMS output current (A)
Imin	: Minimum output current (A)
τ	: Peak output current pulse width(sec) (Operating time at peak output)
T	: Period (sec)
Duty	: The duty is pulse width of peak output current of one period (%)

$$7.5\ (A) \geq Irms = \sqrt{Ip^2 \times Duty + Imin^2 \times (1 - Duty)}$$

$$Duty = \frac{\tau}{T} \times 100\ (\%) \qquad \tau \leq 10\ (sec)$$

DRJ240



NOTES

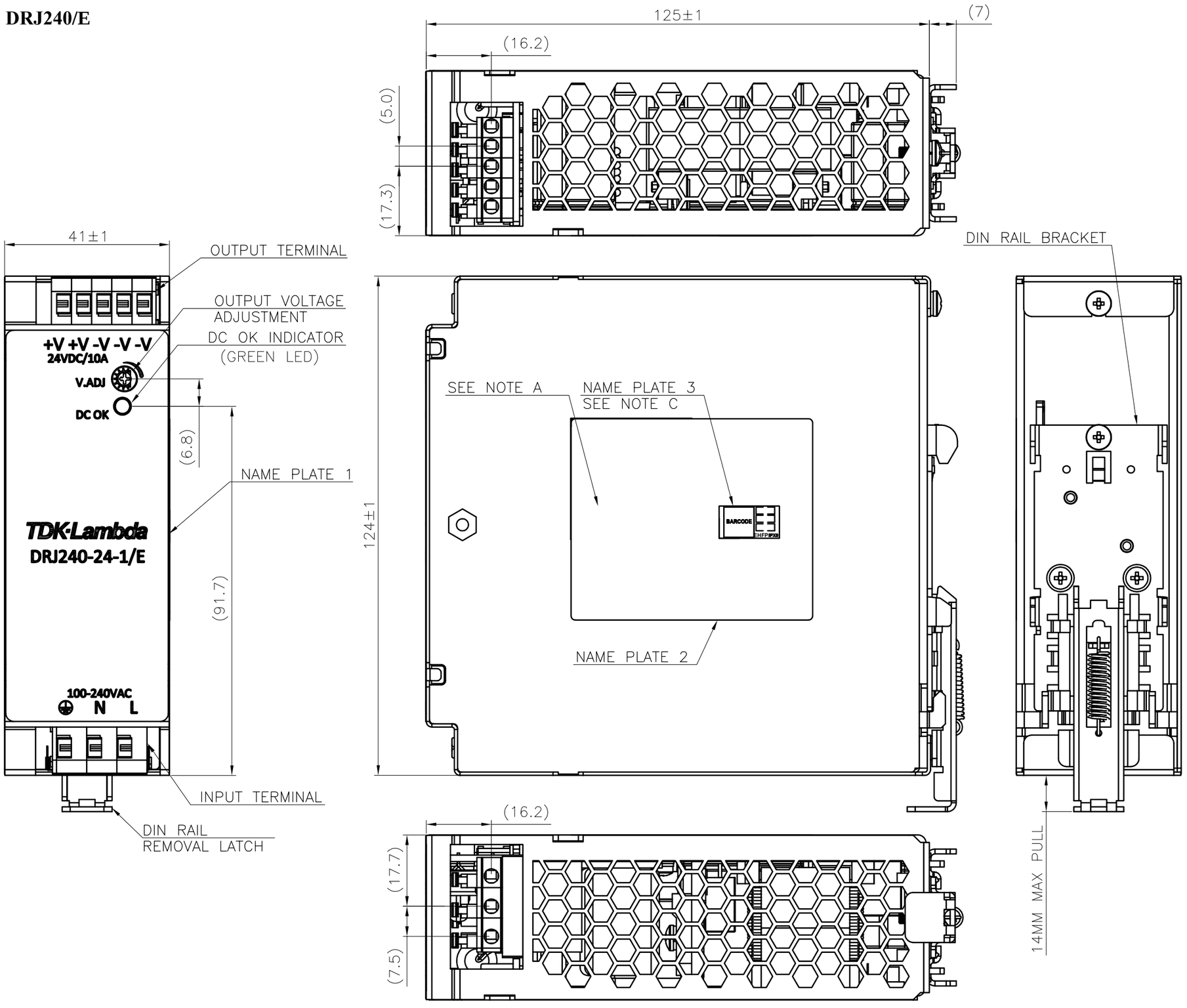
A. MODEL NAME , INPUT VOLTAGE RANGE , NOMINAL OUTPUT VOLTAGE , MAXIMUM OUTPUT CURRENT & COUNTRY OF MANUFACTURE WILL BE SHOWN IN NAME PLATE 2 IN ACCORDANCE WITH SPECIFICATION.
B. RECOMMENDED SCREW TORQUE M3.5: 1.0–1.6NM (10.2–16.3KGF.CM).
C. RECOMMENDED WIRE: AWG14–20.
D. BARCODE, SERIAL NO. ARE SHOWN HERE.

(unit : mm)

MODEL NAME	DRJ240–24–1
TDK-Lambda	

PA638–02–01F

DRJ240/E



NOTES

A. MODEL NAME , INPUT VOLTAGE RANGE , NOMINAL OUTPUT VOLTAGE , MAXIMUM OUTPUT CURRENT & COUNTRY OF MANUFACTURE WILL BE SHOWN IN NAME PLATE 2 IN ACCORDANCE WITH SPECIFICATION.
B. RECOMMENDED WIRE: AWG14–20, WIRE STRIP LENGTH: 8–10MM.
C. BARCODE, SERIAL NO. ARE SHOWN HERE.
D. OUTPUT CURRENT OF EACH TERMINAL MUST BE LESS THAN 10A.

(unit : mm)

MODEL NAME	DRJ240-24-1/E
TDK-Lambda	

PA638-02-01/E-F