

20-40A DIN Rail Redundancy Module

<https://product.tdk.com/en/power/drm40>

<https://www.emea.lambda.tdk.com/drm40>



Industrial



Test



The DRM40 series of DIN rail mount redundancy modules are ideal for connecting two 20A, 10V to 30Vdc output power supplies to produce a 20A N+1 redundant configuration. Alternatively, using the load balancing option, two 20A supplies can be paralleled to deliver a 40A output. For capacitive and inductive loads, the DRM40 will support an additional 50% peak load for four seconds. The use of low-loss MOSFET reverse current protection devices reduces the internal voltage drop to just 200mV.

Features	Benefits
• Compact Size	• Occupies Less Space on the DIN rail
• Low 200mV Voltage Drop	• Reduced Voltage Drop and Power Loss
• Current Balance Indicator Option	• Ensure and Monitor Power Supply Load Sharing
• Isolated Alarm Signals	• Simplified Remote Monitoring

Model Selector						
Model	Input Voltage Range (V)	# of Inputs	Maximum Current (A)	Peak Current (A) (<4s, 35% Duty Cycle)	Monitoring Signals	
DRM40	10-30	2	40	60	Input Good and Current Balance Indicators	
DRM40B	10-30	2	40	60	None	

Related Products		
Type	Part Number(s)	Description
Buffer DIN rail modules	DBM20	20A DIN rail Buffer (hold-up) modules
Low power DIN rail power supplies	DRL10, 30, 60, 100	10 to 100W AC-DC DIN rail power supplies (Class II, No AC Ground required)
Low power DIN rail power supplies	DRB15, 30, 50, 100	15 to 100W AC-DC DIN rail power supplies (Class I, AC Ground required)
Mid to high power DIN rail power supplies	DRB120, 240, 480	120 to 480W AC-DC DIN rail power supplies
Mid to high power premium DIN rail power supplies	DRF120, 240, 480, 960	120 to 960W AC-DC DIN rail power supplies
DIN rail mount filters	RSMN	3A to 30A 250Vac 2 stage filters with pulse attenuation
DIN rail mount filters	RSEV	6A to 30A 250Vac 2 stage filters
RSEV DIN rail mounting kit	DIN-RSEV	RSEV DIN rail mounting kit

Specifications		
Model	DRM	DRM40B
Input		
Input Voltage range	Vdc	10 - 30
Number of inputs	-	Two
Maximum Input Current	A	(Two) 20, total 60 peak
Peak Input Current	A	(Two) 30 for 4s maximum, 35% duty cycle
Internal Power Loss (typ)	W	8 at 40A(1)
Input to Output Voltage Drop	Vdc	0.2 at 40A(1)
Input Good Indicators	-	Two green LEDs indicating each input is "good" None
Reverse Polarity Protection	Vdc	40 max
Immunity	-	See immunity table
Safety Certifications and Markings	-	IEC/UL/EN62368-1, UL508, CE Mark and UKCA Mark

Immunity				
Test	Standard	Test Level	Criteria	Notes
ESD	EN61000-4-2	4	A	15kV air, 8kV contact
Radiated Susceptibility	EN61000-4-3	3	A	10V/m
Electrical Fast Transient Burst	EN61000-4-4	3	A	2.4kV, 5kHz
Surge	EN61000-4-5	1-2	A	Signal pin to FG Lvl 1
Conducted Susceptibility	EN61000-4-6	3	A	10Vrms
Magnetic Fields	EN61000-4-8	3	A	10A/m

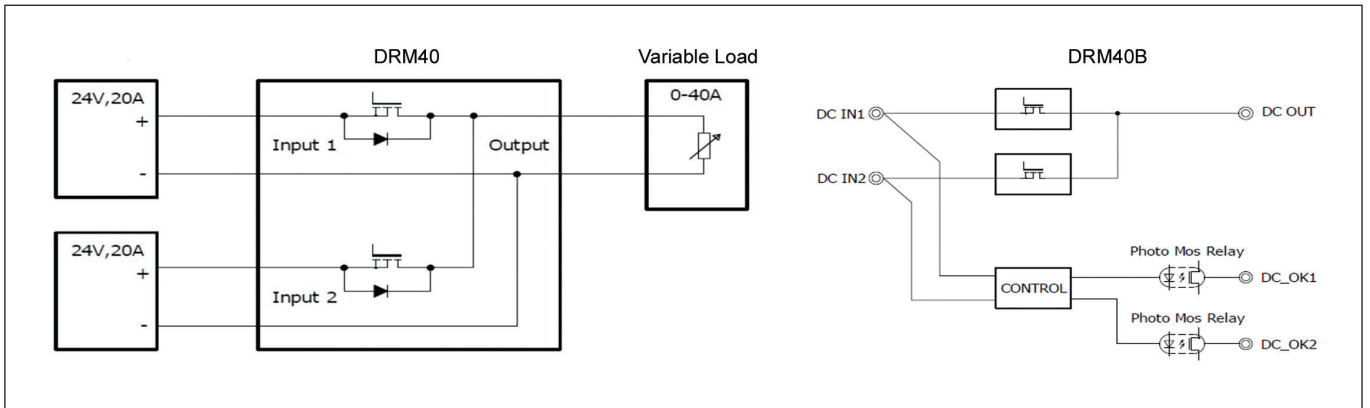
Specifications		
Model	DRM	DRM40B
Output		
Maximum Output Current	A	40
Peak Output Current	A	60A for 4s maximum, 35% duty cycle
Overcurrent Protection	-	None
Overvoltage Protection	-	None
Parallel Operation	-	Possible, see installation manual
Series Operation	-	Not possible
Environmental		
Operating Temperature	°C	-40 to +70 standard mounting orientation
Storage Temperature	°C	-40 to +85
Humidity (non condensing)	%RH	5 to 95 (operating and storage)
Cooling	-	Convection
Altitude	m	5,000
Withstand Voltage (For 1 minute)	Vdc	707 (input or output to chassis)
Isolation Resistance	MΩ	>100 at 25°C, 70%RH & 500VDC (input or output to chassis)
Vibration (Non Operating)	-	10 - 55Hz (sweep for 1 min) 19.6m/s ² (constant X, Y, Z axis for 1 hour each)
Shock (In packaging)	-	< 196m/s ² (20G)
Other		
Weight (Typ)	g	330
Size (WxHxD)	mm	35 x 124 x 125
Size (WxHxD)	Inches	1.18 x 4.87 x 4.91
Warranty	yrs	5

Notes

* /EF model has /ADJ included

Other options are available, please contact sales

Block Diagrams DRM40 Series

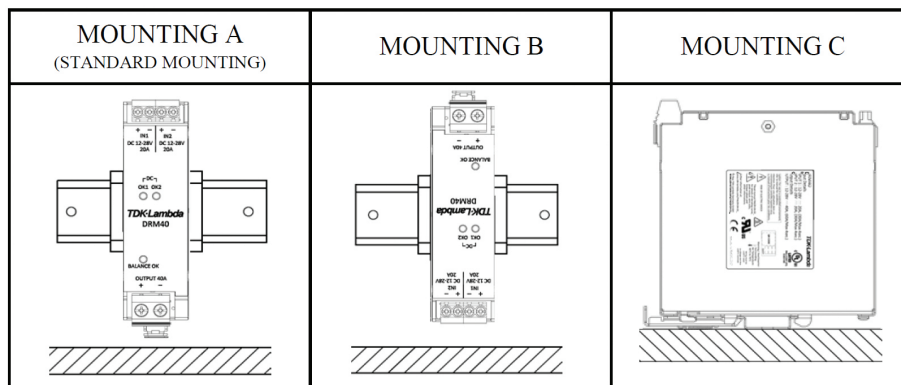
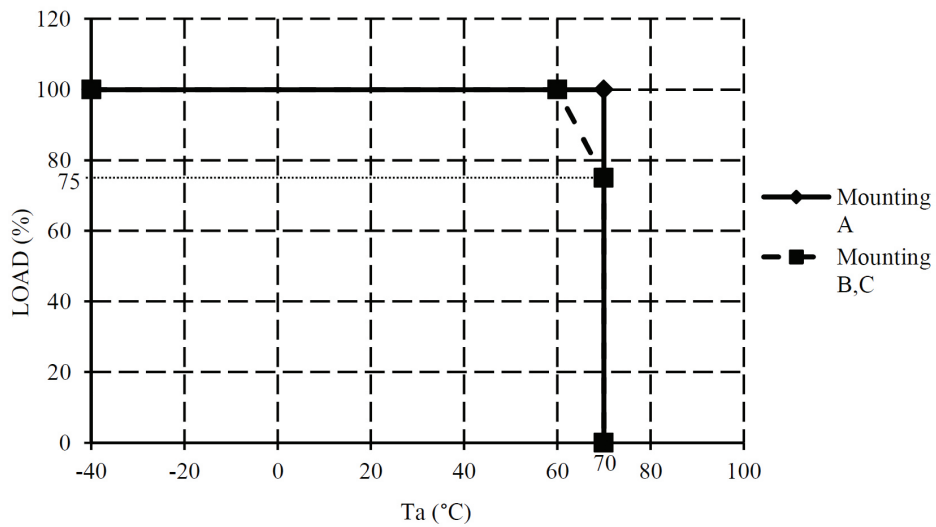


Derating Curve (DRM40 and DRM 40B)

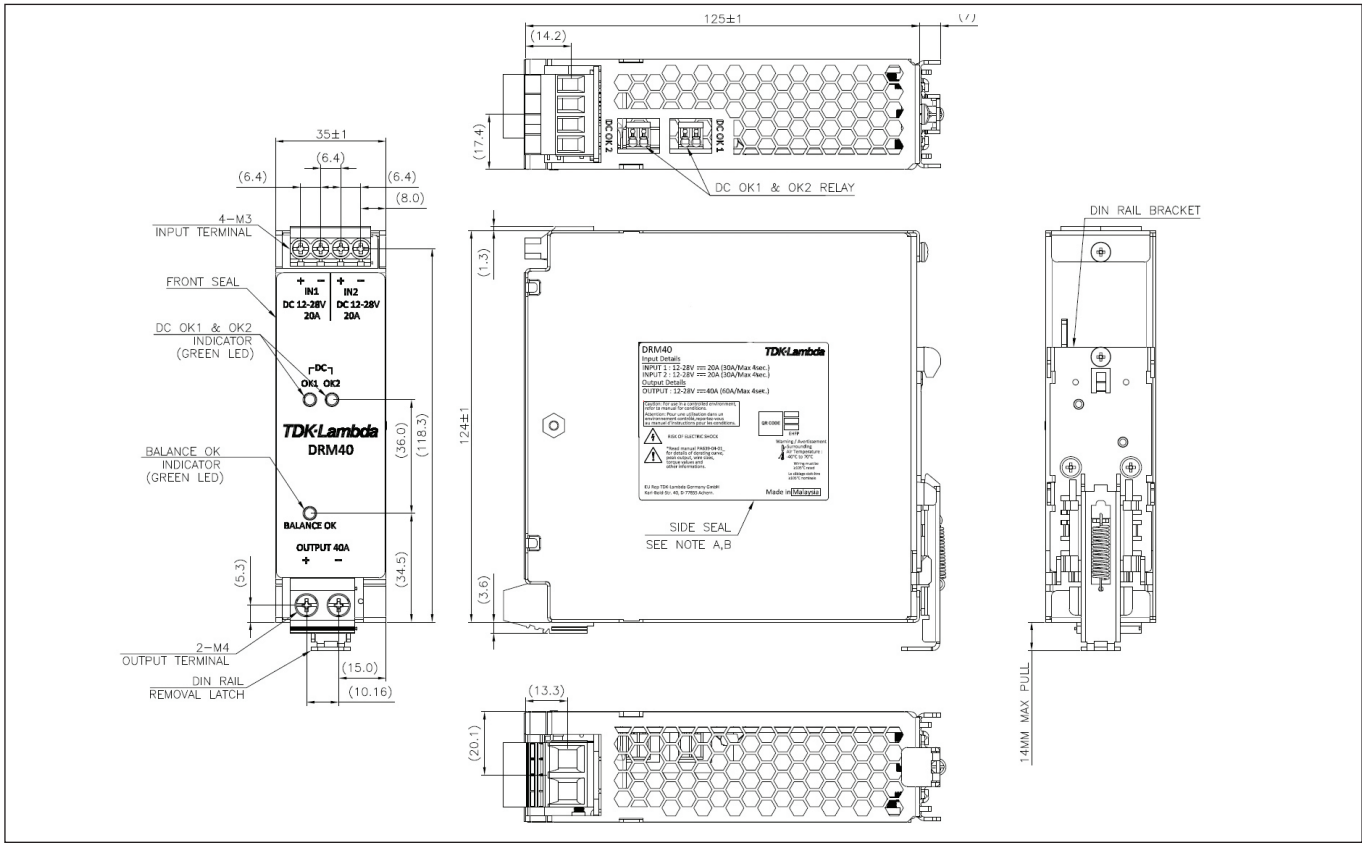
***COOLING : CONVECTION COOLING**

Ta (°C)	LOAD (%)		
	MOUNTING A (STANDARD MOUNTING)	MOUNTING B	MOUNTING C
-40 ~ +60	100	100	100
70	100	75	75

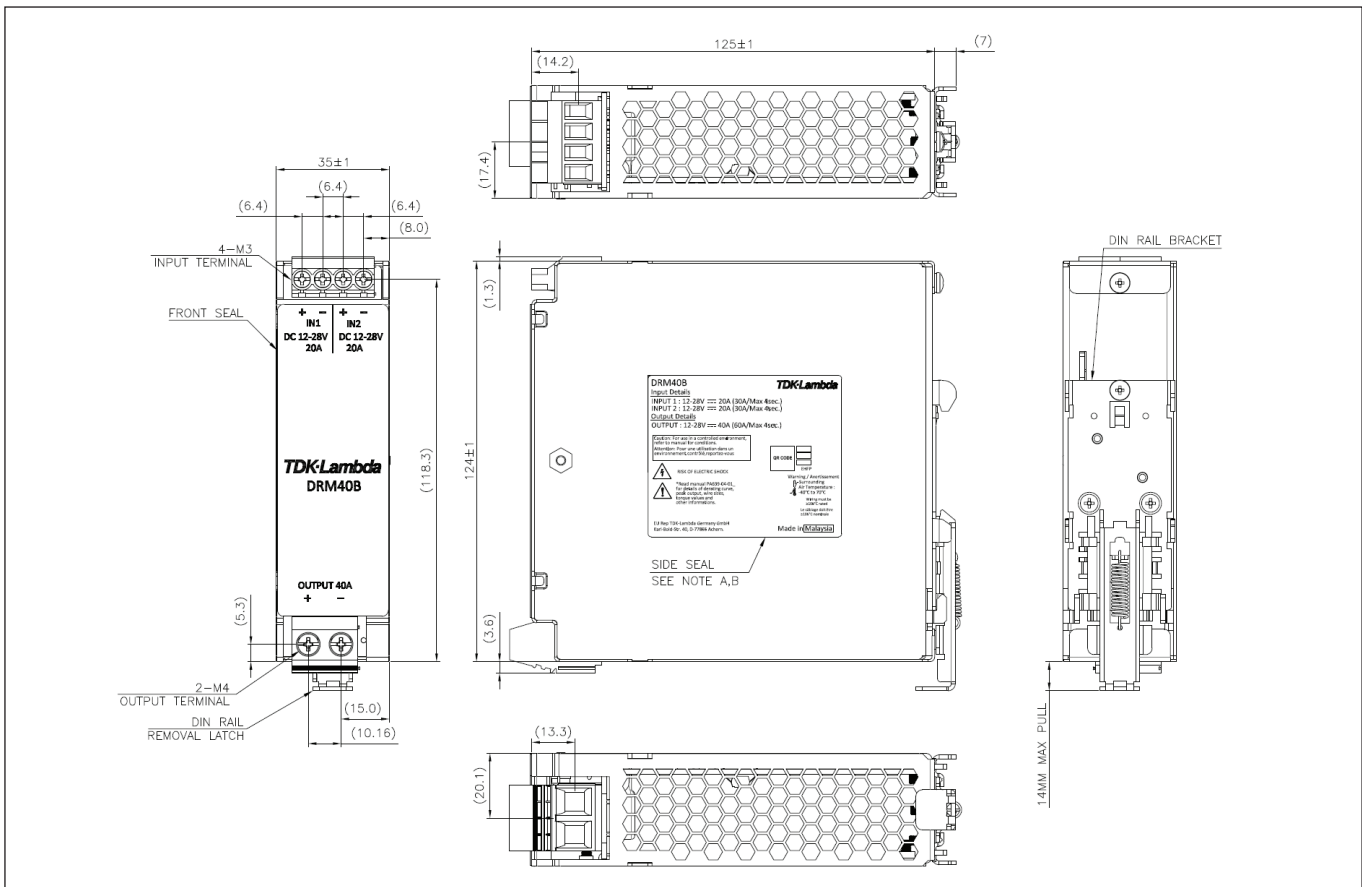
OUTPUT DERATING CURVE



Outline Drawing DRM40 Series



Outline Drawing DRM40B Series





TDK-Lambda France SAS

Tel: +33 1 60 12 71 65
france@fr.tdk-lambda.com
www.emea.lambda.tdk.com/fr



Italy Sales Office

Tel: +39 02 61 29 38 63
info.italia@it.tdk-lambda.com
www.emea.lambda.tdk.com/it



Netherlands

info@nl.tdk-lambda.com
www.emea.lambda.tdk.com/nl



TDK-Lambda Germany GmbH

Tel: +49 7841 666 0
info@de.tdk-lambda.com
www.emea.lambda.tdk.com/de



Austria Sales Office

Tel: +43 2256 655 84
info@at.tdk-lambda.com
www.emea.lambda.tdk.com/at



Switzerland Sales Office

Tel: +41 44 850 53 53
info@ch.tdk-lambda.com
www.emea.lambda.tdk.com/ch



Nordic Sales Office

Tel: +45 8853 8086
info@dk.tdk-lambda.com
www.emea.lambda.tdk.com/dk



TDK-Lambda UK Ltd.

Tel: +44 (0) 12 71 85 66 66
info@uk.tdk-lambda.com
www.emea.lambda.tdk.com/uk



TDK-Lambda Ltd.

Tel: +9 723 902 4333
info@tdk-lambda.co.il
www.emea.lambda.tdk.com/il



C.I.S.

Commercial Support:

Tel: +7 (495) 665 2627

Technical Support:

Tel: +7 (812) 658 0463
info@tdk-lambda.ru
www.emea.lambda.tdk.com/ru



TDK-Lambda Americas

Tel: +1 800-LAMBDA-4 or 1-800-526-2324
powersolutions@us.tdk-lambda.com
www.us.lambda.tdk.com



TDK Electronics do Brasil Ltda

Tel: +55 11 3289-9599
sales.br@tdk-electronics.tdk.com
www.tdk-electronics.tdk.com/en



TDK-Lambda Corporation

Tel: +81-3-6778-1113
www.jp.lambda.tdk.com



TDK-Lambda (China) Electronics Co. Ltd.

Tel: +86 21 6485-0777
powersolutions@cn.tdk-lambda.com
www.lambda.tdk.com.cn



TDK-Lambda Singapore Pte Ltd.

Tel: +65 6251 7211
tts.mkt@sg.tdk-lambda.com
www.sg.lambda.tdk.com



TDK India Private Limited, Power Supply Division

Tel: +91 80 4039-0660
mathew.philip@in.tdk-lambda.com
www.sg.lambda.tdk.com

