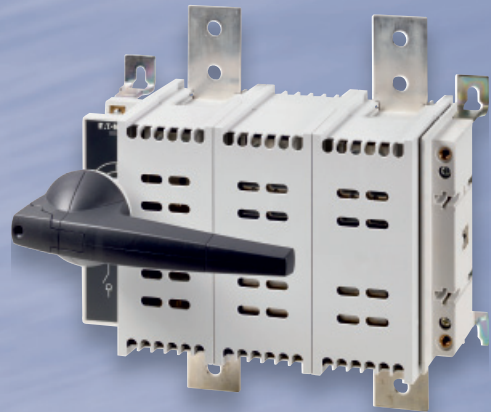


Robust Dumeco DC Switchgear

For demanding PV Applications

NEW



EATON

Powering Business Worldwide



Robust Dumeco DC Switchgear can handle the most demanding PV applications

Eaton has now added DC Switch-disconnectors to their reliable Dumeco range in order to help photovoltaic equipment manufacturers and installers gain a competitive edge within the increasingly significant solar energy market.

These new robust DC Switch-disconnectors provide safe isolation for any photovoltaic or low voltage DC circuit application and are available in four different frame sizes. Accordingly, the devices are suitable for applications ranging from residential and light commercial rooftop sites to large commercial and utility scale installations, as well as solar combiner box, inverter equipment and DC battery storage.

Eaton offers this new generation of DC switchgear in 2-pole configurations that reduce the need for bridging links between the poles. Hence, installation time and copper costs are also reduced. Furthermore its bidirectional pole connection gives installation flexibility.

The whole range of Dumeco DC Switch-disconnectors is suitable for nominal currents up to $U_e = 1000 \text{ Vdc}$. All Dumeco DC Switch-disconnectors frame sizes help saving space as they all have a relatively small footprint resulting in a more flexible assembly and additional cost savings.

The Standard assortment consists of configurations with direct handle operation and also a package that includes a 300 mm extension shaft and grey padlockable handle. Alternatively, switches and accessories can be ordered separately to create further switch/shaft/handle combinations, giving more options for the application design.

NEW

Product Series DDC-0

DC Switch-disconnectors 63 A, 80 A and 100 A

The Dumeco DC Switch-disconnectors series 0 is the smallest frame size within the DDC-range. It is available in three different options covering 63 A, 80 A and 100 A.

With a rated insulation voltage (U_i) of 1100 V per pole it is suitable for solar PV applications including combiner boxes and in DC battery systems.

With cage clamps the DDC-series 0 can be used for cables up to 35 mm².

Ordering Information

Description	Part no.	Article no.
DDC 63A 2P with pre-mounted grey handle	DDC-63/2	6098920
DDC 63A 2P without shaft & handle	DDC-63/2-SK	6098921
DDC 63A 2P with 300 mm shaft & grey handle	DDC-63/2/M4/P-G	6098922
DDC 80A 2P with pre-mounted grey handle	DDC-80/2	6098923
DDC 80A 2P without shaft & handle	DDC-80/2-SK	6098924
DDC 80A 2P with 300 mm shaft & grey handle	DDC-80/2/M4/P-G	6098925
DDC 100A 2P with pre-mounted grey handle	DDC-100/2	6098926
DDC 100A 2P without shaft & handle	DDC-100/2-SK	6098927
DDC 100A 2P with 300 mm shaft & grey handle	DDC-100/2/M4/P-G	6098928

Product Series DDC-1

DC Switch-disconnectors 125 A, 160 A and 200 A

The Dumeco DC Switch-disconnectors series 1 is available in 125 A, 160 A and 200 A versions. The products in this range are suitable for combiner boxes, inverters as well as DC battery switches.

The devices from the DDC-1 series feature a rated insulation voltage of 1200 V per pole, and a small footprint for switches of this rating.

NEW

Ordering Information

Description	Part no.	Article no.
DDC 125A 2P with pre-mounted grey handle	DDC-125/2	6098930
DDC 125A 2P without shaft & handle	DDC-125/2-SK	6098931
DDC 125A 2P with 300 mm shaft & grey handle	DDC-125/2/M4/P-G	6098932
DDC 160A 2P with pre-mounted grey handle	DDC-160/2	6098933
DDC 160A 2P without shaft & handle	DDC-160/2-SK	6098934
DDC 160A 2P with 300 mm shaft & grey handle	DDC-160/2/M4/P-G	6098935
DDC 200A 2P with pre-mounted grey handle	DDC-200/2	6098936
DDC 200A 2P without shaft & handle	DDC-200/2-SK	6098937
DDC 200A 2P with 300 mm shaft & grey handle	DDC-200/2/M4/P-G	6098938

NEW

Product Series DDC-2

DC Switch-disconnectors 250 A, 400 A and 630 A

The Dumeco range is expanded further with the DC Switch-disconnectors series 2. It comprises 250 A, 400 A and 630 A devices featuring high short-circuit ratings (I_{cw}) of 15 kA (1 sec.).

The DDC-2 devices are available with a rated insulation voltage (U_i) of 1200 V per pole, suitable for combiner boxes, inverter and UPS systems.

Ordering Information

Description	Part no.	Article no.
DDC 250A 2P with pre-mounted grey handle	DDC-250/2	6098940
DDC 250A 2P without shaft & handle	DDC-250/2-SK	6098941
DDC 250A 2P with 300 mm shaft & grey handle	DDC-250/2/M4/P-G	6098942
DDC 400A 2P with pre-mounted grey handle	DDC-400/2	6098943
DDC 400A 2P without shaft & handle	DDC-400/2-SK	6098944
DDC 400A 2P with 300 mm shaft & grey handle	DDC-400/2/M4/P-G	6098945
DDC 630A 2P with pre-mounted grey handle	DDC-630/2	6098946
DDC 630A 2P without shaft & handle	DDC-630/2-SK	6098947
DDC 630A 2P with 300 mm shaft & grey handle	DDC-630/2/M4/P-G	6098948

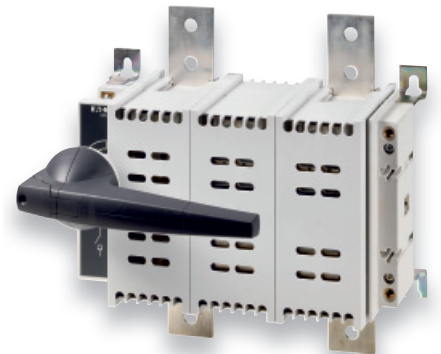
Product Series DDC-3

DC Switch-disconnectors 800 A, 1000 A and 1250 A

Series 3 from the Dumeco DC Switch-disconnector range provides the largest offer featuring 800 A, 1000 A and 1250 A versions.

They are delivered with a rated insulation voltage (U_i) of 1200 V per pole.

The DDC-3 series are extremely compact high Amp DC Switch-disconnectors and are suitable for UPS systems and inverters.



Ordering Information

Description	Part no.	Article no.
DDC 800A 2P with pre-mounted grey handle	DDC-800/2	6098950
DDC 800A 2P without shaft & handle	DDC-800/2-SK	6098951
DDC 800A 2P with 300 mm shaft & grey handle	DDC-800/2/M4/P-G	6098952
DDC 1000A 2P with pre-mounted grey handle	DDC-1000/2	6098953
DDC 1000A 2P without shaft & handle	DDC-1000/2-SK	6098954
DDC 1000A 2P with 300 mm shaft & grey handle	DDC-1000/2/M4/P-G	6098955
DDC 1250A 2P with pre-mounted grey handle	DDC-1250/2	6098956
DDC 1250A 2P without shaft & handle	DDC-1250/2-SK	6098957
DDC 1250A 2P with 300 mm shaft & grey handle	DDC-1250/2/M4/P-G	6098958

Technical datasheet

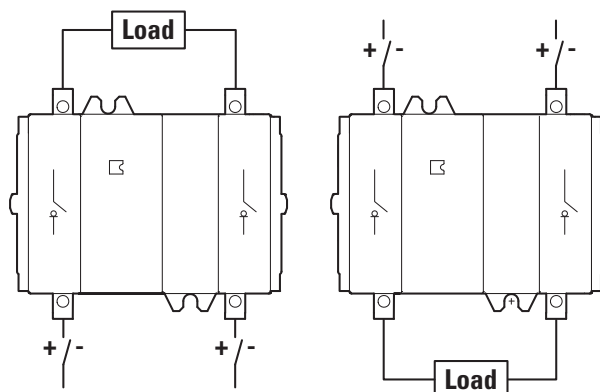
Dumeco – DDC-63A to DDC-1250A

Type			DDC-0			DDC-1			DDC-2			DDC-3		
General			63A	80A	100A	125A	160A	200A	250A	400A	630A	800A	1000A	1250A
Free-air thermal current I _{th}		A	63	80	100	125	160	200	250	400	630	800	1000	1250
Enclosed thermal current I _{the}	35 °C	A	63	80	100	125	160	200	250	400	630	800	1000	1250
	50 °C	A	63	80	100	125	160	200	250	400	560	800	1000	1200
	65 °C	A	63	80	100	125	160	200	250	380	480	700	900	1000
Pole Configuration			2P			2P			2P			2P		
Standards			IEC 60947-3			IEC 60947-3			IEC 60947-3			IEC 60947-3		
Approvals			CE, RoHs, EAC, CCC			CE, RoHs, EAC, CCC			CE, RoHs, EAC, CCC			CE, RoHs, EAC, CCC		
Rated operational voltage	U _e	Vdc	1000			1000			1000			1000		
Pollution Degree I Protection Class			III/3 IP20			III/3 IP20			III/3 IP20			III/3 IP20		
Rated insulation voltage per pole	U _i	Vdc	1100			1200			1200			1200		
Rated impulse withstand voltage	U _{imp}	kV	8			8			12			12		
Storage temperature (min/max)			-40 °C...+80 °C			-40 °C...+80 °C			-40 °C...+80 °C			-40 °C...+80 °C		

IEC Contact rating														
Rated operational current I _e (DC-21B)	U _e =480V	A	63	80	100	125	160	200	250	400	630	800	1000	1250
	U _e =600V	A	63	80	100	125	160	200	250	400	630	800	1000	1250
	U _e =1000V	A	63	80	100	125	160	200	250	400	630	800	1000	1250
Switching category			B			B			B			B		

Product characteristics															
Rated short-time withstand current	I _{cw} (1sec.)	kAs	3			4			15			25			
Rated short circuit making capacity	I _{cm}	kA	4.3			6			25			54.5			
Power dissipation per contact at I _{th}		W	3	4	6	8	13	21	15	39	97	34	53	83	
Durability - maximum cycles (on+off)			10,000			10,000			10,000			5,000			
Terminal tightening torque		Nm	3			14			20			28			
Terminal bolt size		mm	-			M8			M10			M10	2x M12		
Cross Section	Stranded	mm ²	6 - 35			1 x 120			1 x 240		2 x 185		2 x 240	-	-
	Flexible	mm ²	6 - 25			-			-		-		-	-	-
	Bus bars	mm ²	-			1 x 30 x 3 / 2 x 20 x 3			1 x 25 x 6	2 x 25 x 6	2 x 40 x 5	2 x 50 x 5	2 x 60 x 5	2 x 80 x 5	
Auxiliary contacts (M22-CK11)	1NO+1NC	pcs	1			2			2			1			
Weight		kg	1.5			2			5			13.5	14		
Dimensions	Width	mm	132			160			240			346			
	Height	mm	90			83			127			207			
	Depth	mm	97			98			129			160			

Wiring Diagram for DDC-series



Eaton is dedicated to ensuring that reliable, efficient and safe power is available when it's needed most. With unparalleled knowledge of electrical power management across industries, experts at Eaton deliver customized, integrated solutions to solve our customers' most critical challenges.

Our focus is on delivering the right solution for the application. But, decision makers demand more than just innovative products. They turn to Eaton for an unwavering commitment to personal support that makes customer success a top priority. For more information, **visit www.eaton.eu**.

To contact an Eaton salesperson or local distributor/agent, please visit www.eaton.eu/electrical/customersupport

Changes to the products, to the information contained in this document, and to prices are reserved; so are errors and omissions. Only order confirmations and technical documentation by Eaton is binding. Photos and pictures also do not warrant a specific layout or functionality. Their use in whatever form is subject to prior approval by Eaton. The same applies to Trademarks (especially Eaton, Moeller, Cutler-Hammer, Cooper, Bussmann). The Terms and Conditions of Eaton apply, as referenced on Eaton internet pages and Eaton order confirmations.

Eaton Industries GmbH
Hein-Moeller-Str. 7-11
D-53115 Bonn/Germany

© 2015 by Eaton Corporation
All rights reserved
Publication No.: FL038009EN
ip October 2015