

Dumeco DDC, 63 A to 1250 A, 1000 V d.c.

Description

The Dumeco DDC switch-disconnectors are specifically designed for Photovoltaic or low voltage DC applications: 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.

Standards/Approvals

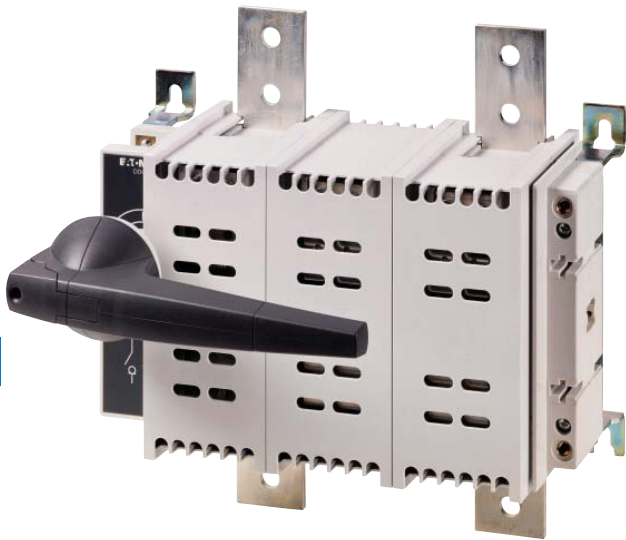
- IEC 60947-3
- CE
- RoHS
- CCC

Technical data

- Voltage: 1000 V d.c..
- Current: 63 A to 1250 A

Features

- Operator independent switch
- Specially designed self-cleaning roller contacts
- Bi-directional pole connection gives installation flexibility (non polarised)
- Suitable for rear/base plate mounting
- Operational shaft lengths up to 600 mm
- Protection degree up to IP65
- Door interlocking in OFF position by using D-Type handles
- Padlockable handles in OFF position, defeatable in ON position



Switch-disconnectors for Photovoltaic and DC applications, 63 A to 1250 A, 1000 V d.c.

Dumeco DDC, 63 A to 1250 A, 1000 V d.c.

DDC range overview

	63 A	80 A	100 A	125 A	160 A	200 A	250 A	400 A	630 A	800 A	1000 A	1250 A
Switch-disconnectors with pre-mounted grey handle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Switch-disconnectors without shaft and handle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Switch-disconnectors with 300 mm shaft and grey handle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Switch-disconnectors in Ci-K5 enclosure with red/yellow or grey handle	✓	✓	✓									

DDC with pre-mounted grey handle



6098920

Current rating	Number of poles	Frame size	Part number	Article number	Pack qty
63 A	2P	0	DDC-63/2	6098920	1
80 A	2P	0	DDC-80/2	6098923	1
100 A	2P	0	DDC-100/2	6098926	1
125 A	2P	1	DDC-125/2	6098930	1
160 A	2P	1	DDC-160/2	6098933	1
200 A	2P	1	DDC-200/2	6098936	1
250 A	2P	2	DDC-250/2	6098940	1
400 A	2P	2	DDC-400/2	6098943	1
630 A	2P	2	DDC-630/2	6098946	1
800 A	2P	3	DDC-800/2	6098950	1
1000 A	2P	3	DDC-1000/2	6098953	1
1250 A	2P	3	DDC-1250/2	6098956	1

DDC without shaft and handle



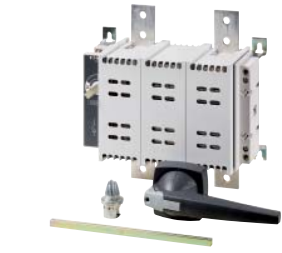
6098937

Current rating	Number of poles	Frame size	Part number	Article number	Pack qty
63 A	2P	0	DDC-63/2-SK	6098921	1
80 A	2P	0	DDC-80/2-SK	6098924	1
100 A	2P	0	DDC-100/2-SK	6098927	1
125 A	2P	1	DDC-125/2-SK	6098931	1
160 A	2P	1	DDC-160/2-SK	6098934	1
200 A	2P	1	DDC-200/2-SK	6098937	1
250 A	2P	2	DDC-250/2-SK	6098941	1
400 A	2P	2	DDC-400/2-SK	6098944	1
630 A	2P	2	DDC-630/2-SK	6098947	1
800 A	2P	3	DDC-800/2-SK	6098951	1
1000 A	2P	3	DDC-1000/2-SK	6098954	1
1250 A	2P	3	DDC-1250/2-SK	6098957	1

Switch-disconnectors for Photovoltaic and DC applications, 63 A to 1250 A, 1000 V d.c.

Dumeco DDC, 63 A to 1250 A, 1000 V d.c.

DDC with 300 mm shaft and D/P padlockable grey handle with interlock function



6098958

Current rating	Number of poles	Frame size	Part number	Article number	Pack qty
63 A	2P	0	DDC-63/2/M4/P-G	6098922	1
80 A	2P	0	DDC-80/2/M4/P-G	6098925	1
100 A	2P	0	DDC-100/2/M4/P-G	6098928	1
125 A	2P	1	DDC-125/2/M4/P-G	6098932	1
160 A	2P	1	DDC-160/2/M4/P-G	6098935	1
200 A	2P	1	DDC-200/2/M4/P-G	6098938	1
250 A	2P	2	DDC-250/2/M4/P-G	6098942	1
400 A	2P	2	DDC-400/2/M4/P-G	6098945	1
630 A	2P	2	DDC-630/2/M4/P-G	6098948	1
800 A	2P	3	DDC-800/2/M4/P-G	6098952	1
1000 A	2P	3	DDC-1000/2/M4/P-G	6098955	1
1250 A	2P	3	DDC-1250/2/M4/P-G	6098958	1

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DDC in Ci-K enclosure



184916

Current rating	Number of poles	Frame size	Handle colour	Part number	Article number	Pack qty
63 A	2P	0	Red/Yellow	DDC-63/2/15/P-R	184914	1
63 A	2P	0	Grey	DDC-63/2/15/P-G	184915	1
80 A	2P	0	Red/Yellow	DDC-80/2/15/P-R	184916	1
80 A	2P	0	Grey	DDC-80/2/15/P-G	184917	1
100 A	2P	0	Red/Yellow	DDC-100/2/15/P-R	184918	1
100 A	2P	0	Grey	DDC-100/2/15/P-G	184919	1

Handles and shafts for DDC Dumeco (Handles and shaft are to be ordered separately)

Handles mounting types overview

DDC Type	Frame size	K Type handles	A Type handles		D/P Type handles		D/C Type handles	
			Grey	Red	Grey	Red/ Yellow	Grey	Red/ Yellow
DDC without pre-mounted grey handle DDC-2/SK	0	K1	✓	✓	✓	✓		
	1	K2	✓	✓	✓	✓	✓	✓
	2	K3	✓	✓	✓	✓	✓	✓
	3	K4	✓	✓	✓	✓	✓	✓

A Type: Handle mounted directly on switch

D/P Type: Handle padlockable for mounting on hinged door, with interlock function

D/C Type: Handle with cylinder lock for mounting on hinged door, supplied with two keys, with interlock function

See handles dimensions pages 96 to 99

A Type handles

Mounted directly on switch suitable for Dumeco DDC-2/SK Type



K1 A handle
1818200



K2 A handle
1818006



K3 A handle
1818202



K4 A handle
1818010



Shafts

A Type handles Metal shafts

DDC	Frame size	Handle colours		Shaft mm	Length of shafts		Pack qty
		Grey	Red		300 mm	600 mm	
DDC-63/2	0	K1AG 1818200	K1AR 1818002	6 x 6	4K6300MMK1/2S 1319831	4K6600MMK1/2S 1319832	1
DDC-80/2	0						
DDC-100/2	0						
DDC-125/2	1	K2AG 1818201	K2AR 1818006	8 x 8	4K8300MMK2 1319311	4K8600MMK2 1319301	1
DDC-160/2	1						
DDC-200/2	1						
DDC-250/2	2	K3AG 1818202	K3AR 1818111	10 x 10	4K10300MMK3 1319319	4K10600MMK3 1319322	1
DDC-400/2	2						
DDC-630/2	2						
DDC-800/2	3	K4AG 1818203	K4AR 1818010	12 x 12	4K12300MMK4 1319326	4K12600MMK4 1319329	1
DDC-1000/2	3						
DDC-1250/2	3						

Handles and shafts for DDC Dumeco (Handles and shaft are to be ordered separately)

D/P Type handles

Padlockable for mounting on hinged door, with interlock function, suitable for Dumeco DDC-2/SK Type



K1 D/P handle
1818031



K2 D/P handle
1818036



K3 D/P handle
1818069



K4 D/P handle
1818051



Shafts

D/P Type handles Metal shafts

DDC	Frame size	Handle colours		Shaft mm□	Length of shafts		Pack qty
		Grey	Red/ Yellow		300 mm	600 mm	
DDC-63/2	0			6 x 6	4K6300MMK1/2S 1319831	4K6600MMK1/2S 1319832	1
DDC-80/2	0	K1DG/P 1818031	K1DR/P 1818030				
DDC-100/2	0						
DDC-125/2	1			8 x 8	4K8300MMK2 1319311	4K8600MMK2 1319301	1
DDC-160/2	1	K2DG/P 1818037	K2DR/P 1818036				
DDC-200/2	1						
DDC-250/2	2			10 x 10	4K10300MMK3 1319319	4K10600MMK3 1319322	1
DDC-400/2	2	K3DG/P 1818069	K3DR/P 1818096				
DDC-630/2	2						
DDC-800/2	3			12 x 12	4K12300MMK4 1319326	4K12600MMK4 1319329	1
DDC-1000/2	3	K4DG/P 1818052	K4DR/P 1818051				
DDC-1250/2	3						

D/C Type handles

With cylinder lock for mounting on hinged door supplied with two keys, with interlock function, suitable for Dumeco DDC-2/SK Type



K2 D/C handle
1818043



K3 D/C handle
1818097



K4 D/C handle
1818055



Shafts

D/C Type handles Metal shafts

DDC	Frame size	Handle colours		Shaft mm□	Lengths of shafts		Pack qty
		Grey	Red/ Yellow		300 mm	600 mm	
DDC-125/2	1			8 x 8	4K8300MMK2 1319311	4K8600MMK2 1319301	1
DDC-160/2	1	K2DG/C 1818043	K2DR/C 1818042				
DDC-200/2	1						
DDC-250/2	2			10 x 10	4K10300MMK3 1319319	4K10600MMK3 1319322	1
DDC-400/2	2	K3DG/C 1818070	K3DR/C 1818097				
DDC-630/2	2						
DDC-800/2	3			12 x 12	4K12300MMK4 1319326	4K12600MMK4 1319329	1
DDC-1000/2	3	K4DG/C 1818055	K4DR/C 1818054				
DDC-1250/2	3						

Accessories for DDC Dumeco

Coupling for extending shaft length for DDC 800 A, 1000 A and 1250 A, frame size 3



6098274

DDC Type	Part number	Article number	Pack qty
Frame size 3	SC4K12/14	6098274	1

Conversion kits for locking the D Type handles in both On and Off position



1818104

DDC Type	Frame size	Part number	Article number	Pack qty
DDC-63	0			1
DDC-80	0	ADAPTORPADLOCK-K1	1818103	1
DDC-100	0			1
DDC-125	1			1
DDC-160	1	ADAPTORPADLOCK-K2	1818104	1
DDC-200	1			1
DDC-250	2			1
DDC-400	2	ADAPTORPADLOCK-K3	1818105	1
DDC-630	2			1
DDC-800	3			1
DDC-1000	3	ADAPTORPADLOCK-K4,K5,K61	1818106	1
DDC-1250	3			1

Multi locking device for accommodating up to 3 additional padlocks



1059849

DDC	Frame size	Shackle	Part number	Article number	Pack qty
DDC 63 to 100 A	0	9 mm	LOCKMULTIPLIER-K1-6	1059849	1
DDC 125 to 200 A	1	9 mm			1
DDC 250 to 630 A	2	9 mm			1
DDC 800 to 1250 A	3	9 mm			1

Connection kit



1314915

DDC	Frame size	Bolt size	Part number	Article number	Pack qty
DDC 125 to 200 A	1	M8 x 20 mm	KITM8X20	1314927	1
DDC 250 to 630 A	2	M10 x 20 mm	KITM10X20	1314915	1
		M10 x 30 mm	KITM10X30	1314648	1
DDC 800 to 1250 A	3	M12 x 35 mm	KITM12X35	1314857	1

Terminal covers



1319413

DDC	Frame size	Bolt size	Part number	Article number	Pack qty
DDC 125 to 200 A	1	M8	QSACOVER1PM8	1319411	1
DDC 250 to 630 A	2	M10	QSACOVER1PM10	1319413	1
DDC 800 to 1250 A	3	M12	QSACOVER1PM12	1319415	1

Auxiliary contact set



6028293

DDC	Frame size	Mounting	Part number	Article number	Pack qty
DDC 63 to 100 A	0	1 Auxiliary contact per switch	AUX1NO+1NC+BOX012	6028293	1
DDC 125 to 200 A	1	2 Auxiliary contacts per switch			1
DDC 250 to 630 A	2	2 Auxiliary contacts per switch			1
DDC 800 to 1250 A	3	1 Auxiliary contact per switch	AUX1NO+1NC+BOX3	6101137	1

Technical data for DDC Dumeco

DDC 63 A to 200 A, frame sizes 0 and 1

		Frame size 0			Frame size 1			
		DDC 63	DDC 80	DDC 100	DDC 125	DDC 160	DDC 200	
Conventional free air thermal current	I_{th}	63 A	80 A	100 A	125 A	160 A	200 A	
Conventional enclosed thermal current	I_{the} 35°C	63 A	80 A	100 A	125 A	160 A	200 A	
		50°C	63 A	80 A	100 A	125 A	160 A	200 A
		65°C	63 A	80 A	100 A	125 A	160 A	200 A
Rated uninterrupted current	I_u	63 A	80 A	100 A	125 A	160 A	200 A	
Rated operational voltage	U_e	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	
Rated insulation voltage	U_i	1100 V	1100 V	1100 V	1200 V	1200 V	1200 V	
Rated impulse withstand voltage	U_{imp}	8 kV	8 kV	8 kV	8 kV	8 kV	8 kV	
Rated frequency		50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	
Storage temperature		-40°C +80°C	-40°C +80°C	-40°C +80°C	-40°C +80°C	-40°C +80°C	-40°C +80°C	
Max altitude (without derating)		≤ 2000 m	≤ 2000 m	≤ 2000 m	≤ 2000 m	≤ 2000 m	≤ 2000 m	
Rated operational current								
DC-21B								
At $U_e = 480$ V DC-21B	I_e	63 A	80 A	100 A	125 A	160 A	200 A	
At $U_e = 600$ V DC-21B	I_e	63 A	80 A	100 A	125 A	160 A	200 A	
At $U_e = 1000$ V DC-21B	I_e	63 A	80 A	100 A	125 A	160 A	200 A	
Rated short-time withstand current	I_{cw}	3 kAs - 1 s	3 kAs	3 kAs	4 kAs	4 kAs	4 kAs	
Rated short-circuit making capacity	I_{cm}	4.3 kA	4.3 kA	4.3 kA	6 kA	6 kA	6 kA	
Power dissipation per pole	I_{th}	3 W	4 W	6 W	8 W	12 W	21 W	
Durability - maximum cycles (on+off)		10000	10000	10000	10000	10000	10000	
Pollution degree		III/3	III/3	III/3	III/3	III/3	III/3	
Protection class		IP20	IP20	IP20	IP20	IP20	IP20	
Terminal capacities								
Terminal bolt size		-	-	-	M8	M8	M8	
Cross section								
Stranded		6 - 35 mm ²	6 - 35 mm ²	6 - 35 mm ²	120 mm ²	120 mm ²	120 mm ²	
Flexible		6 - 25 mm ²	6 - 25 mm ²	6 - 25 mm ²	-	-	-	
Busbars		-	-	-	1 x 30 x 3 2 x 20 x 3	1 x 30 x 3 2 x 20 x 3	1 x 30 x 3 2 x 20 x 3	
Terminal tightening torque		3 Nm	3 Nm	3 Nm	14 Nm	14 Nm	14 Nm	
Standards		IEC 60947-3						
Certification		CE, RoHS, CCC						

Technical data for DDC Dumeco

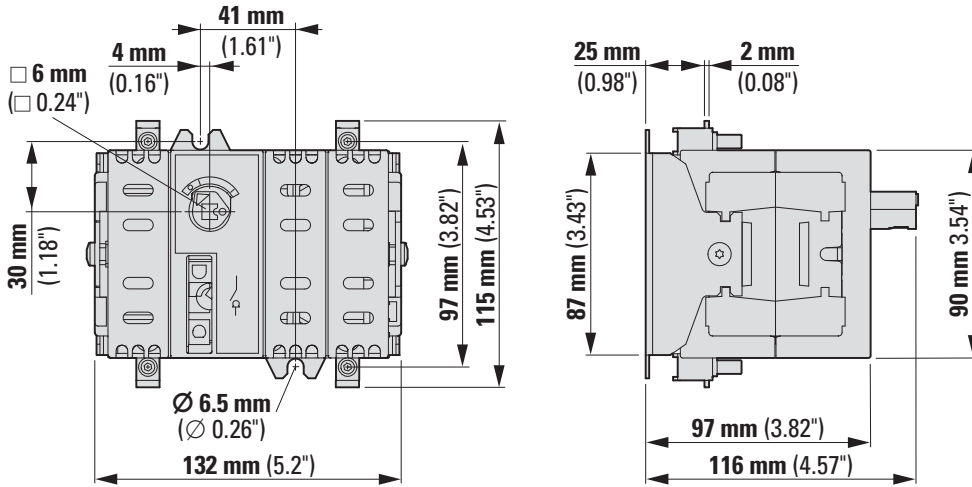
DDC 250 A to 1250 A, frame sizes 2 and 3

		Frame size 2			Frame size 3			
		DDC 250	DDC 400	DDC 630	DDC 800	DDC 1000	DDC 1250	
Conventional free air thermal current	I_{th}	250 A	400 A	630 A	800 A	1000 A	1250 A	
Conventional enclosed thermal current	I_{the} 35°C	250 A	400 A	630 A	800 A	1000 A	1250 A	
		50°C	250 A	400 A	560 A	800 A	1000 A	1250 A
		65°C	250 A	380 A	480 A	700 A	900 A	1000 A
Rated uninterrupted current	I_u	250 A	400 A	630 A	800 A	1000 A	1250 A	
Rated operational voltage	U_e	1000	1000	1000	1000	1000	1000	
Rated insulation voltage	U_i	1200 V	1200 V	1200 V	1200 V	1200 V	1200 V	
Rated impulse withstand voltage	U_{imp}	12 kV	12 kV	12 kV	12 kV	12 kV	12 kV	
Rated frequency		50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	
Storage temperature		-40°C +80°C	-40°C +80°C	-40°C +80°C	-40°C +80°C	-40°C +80°C	-40°C +80°C	
Max altitude (without derating)		≤ 2000 m	≤ 2000 m	≤ 2000 m	≤ 2000 m	≤ 2000 m	≤ 2000 m	
Rated operational current								
DC-21B								
At $U_e = 480$ V DC-21B	I_e	250 A	400 A	630 A	800 A	1000 A	1250 A	
At $U_e = 600$ V DC-21B	I_e	250 A	400 A	630 A	800 A	1000 A	1250 A	
At $U_e = 1000$ V DC-21B	I_e	250 A	400 A	630 A	800 A	1000 A	1250 A	
Rated short-time withstand current	I_{cw}	15 kAs	15 kAs	15 kAs	25 kAs	25 kAs	25 kAs	
Rated short-circuit making capacity	I_{cm}	25 kA	25 kA	25 kA	54.5 kA	54.5 kA	54.5 kA	
Power dissipation per pole	I_{th}	15 W	39 W	97 W	34 W	53 W	83 W	
Durability - maximum cycles (on+off)		10000	10000	10000	5000	5000	5000	
Pollution degree		III/3	III/3	III/3	III/3	III/3	III/3	
Protection class		IP20	IP20	IP20	IP20	IP20	IP20	
Terminal capacities								
Terminal bolt size		M10	M10	M10	M12	2 x M12	2 x M12	
Cross section								
Stranded		240 mm ²	240 mm ²	185 mm ² x 2	240 mm ² x 2	-	-	
Busbars		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	
Terminal tightening torque		20 Nm	20 Nm	20 Nm	28 Nm	28 Nm	28 Nm	
Standards		IEC 60947-3						
Certification		CE, RoHS, CCC						

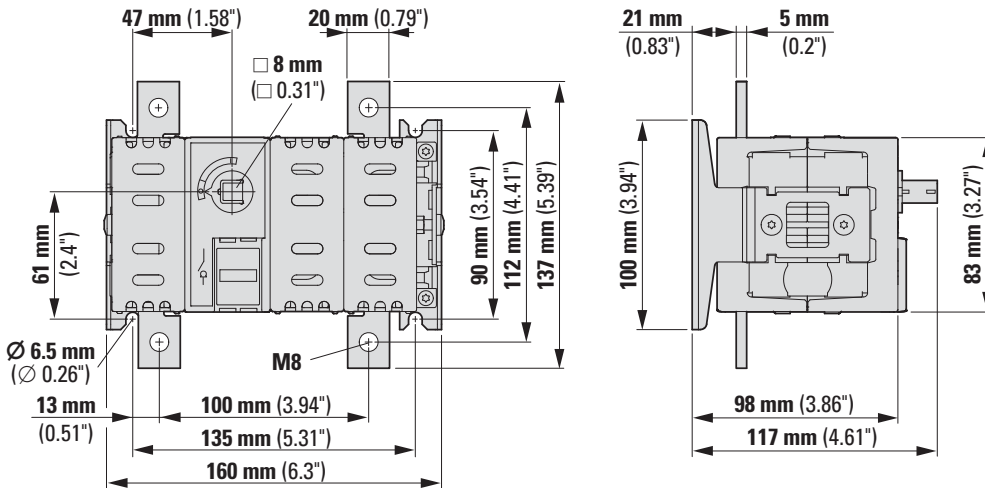
Switch-disconnectors for Photovoltaic and DC applications, 63 A to 1250 A, 1000 V d.c.

Outline drawings for DDC Dumeco (Dimensions are in mm)

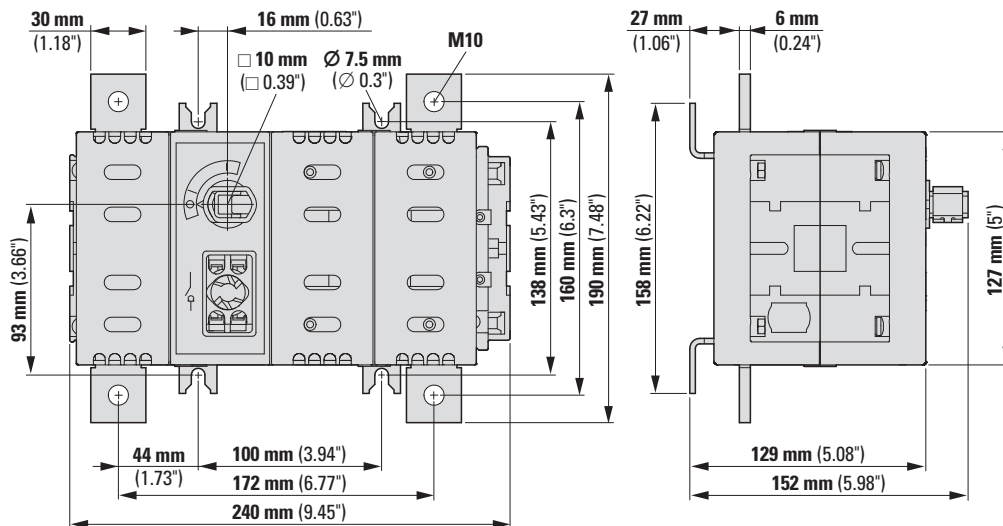
DDC Frame size 0 - 63 A, 80 A and 100 A



DDC Frame size 1 - 125 A, 160 A and 200 A

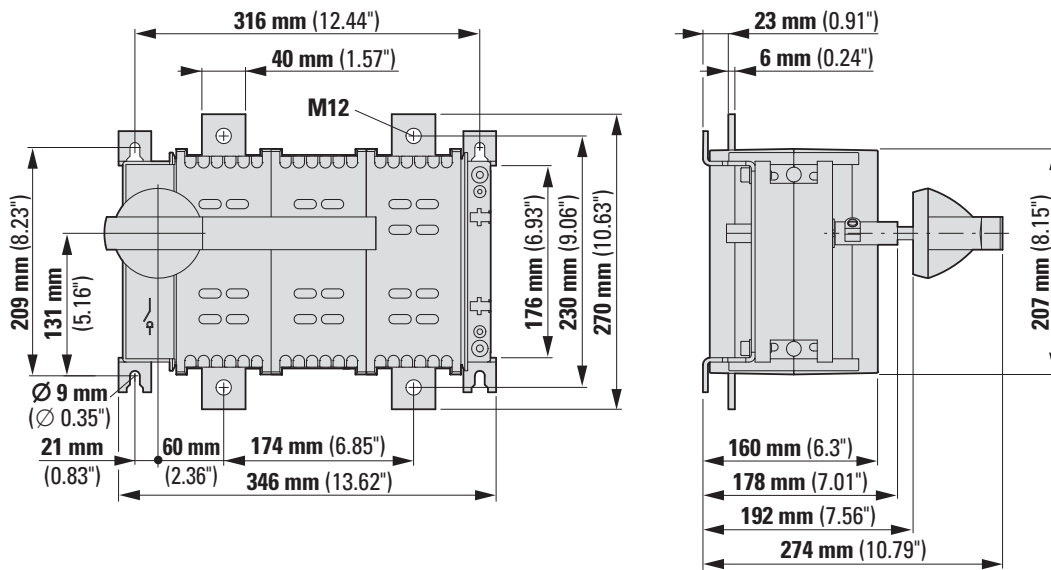


DDC Frame size 2 - 250 A, 400 A and 630 A



Outline drawings for DDC Dumeco (Dimensions are in mm)

DDC Frame size 3 - 800 A



DDC Frame size 3 - 1000 A and 1250 A

