

DCX-M technical characteristics

Technical characteristics

According to IEC / EN 60947-3			400 A	630 A	800 A	1000 A	1250 A	1600 A	
Rated thermal current Ith (A)	Ambient temperature	40 °C	400	630	800	1000	1250	1600	
		50 °C	-	-	-	-	-	1600	
		65 °C	-	-	-	-	-	1600	
Rated thermal current in enclosure Ithe (A)			400	630	800	1000	1250	-	
Rated insulation voltage Ui (V)			1000	1000	1000	1000	1000	1000	
Rated dielectric strength (V)			50 Hz 1 min.						
Rated impulse withstand voltage Uimp (kV)			8	12	12	12	12	12	
AC rated operational current ⁽¹⁾ at 50/60 Hz Ie (A)	400 V	AC21A	400	630	800	1000	1250	1600	
		AC22A	400 ⁽⁷⁾	630	800 ⁽⁷⁾	1000	1250 ⁽⁷⁾	1600	
		AC23A	250	500	630	1000	1250	1000	
	500 V	AC21A	400	630	800	1000	1250	1600	
		AC22A	400 ⁽⁷⁾	630	800 ⁽⁷⁾	1000	1250 ⁽⁷⁾	1250	
		AC23A	200	315	400	800	1000	900	
	690 V	AC20A	-	-	-	-	-	1600	
		AC21A	400	630	800	1000	1250	1600	
		AC22A	315 ⁽⁷⁾	500	630 ⁽⁷⁾	800	1000 ⁽⁷⁾	1000	
	800 V	AC23A	160	250	315	630	800	630	
		AC20A	400	630	800	1000	1250	1600	
	1000 V	AC20A	-	630	800	1000	1250	1600	
	DC rated operational current ⁽²⁾ Ie (A)	48 V	DC23A (II)	-	-	-	-	-	2000
			DC21A (II)	-	-	-	-	-	1600
		110 V	DC23A (I)	-	-	-	-	-	1600
DC21A (I)			-	-	-	-	-	1600	
230 V		DC23A (I)	-	-	-	-	-	1000	
		DC21A (I)	-	-	-	-	-	1600	
400 V		DC23A (I)	-	-	-	-	-	800	
		DC20A (II)	-	-	-	-	-	2500	
500 V		DC23A (I)	-	-	-	-	-	800	
		AC23A	-	-	-	-	-	318.6	
AC rated operational power ⁽³⁾ Pe (kW)	3 x 230 V	AC23A	125	250	315	501	626	554.2	
	3 x 400 V	AC23A	125	197	250	501	626	623.5	
	3 x 500 V	AC23A	138	216	272	544	691	602.3	
	3 x 690 V	AC23A	166	262	333	416	520	450.3	
Rated capacitor power (kVA _r)			400 V	2000	4000	4000	8000	10000	
Rated breaking capacity (A)			400 V	2500	5000	5000	10000	10000	
Rated making capacity (A)			400 V	2500	5000	5000	10000	10000	

Short-circuit behaviour

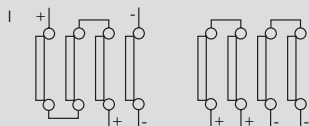
			400 A	630 A	800 A	1000 A	1250 A	1600 A
Short - circuit making capacity ⁽⁴⁾ - peak value Icm (kA)			12	20	20	32	32	75
Short - time withstand current - 1 sec Icw (kA ms)			8	13	13	25	25	50
Conditional short - circuit current rms value ⁽⁵⁾ (kA ms)			-	-	-	-	-	-
Maximum cut - off current (peak value)			-	-	-	-	-	-
Maximum power dissipation I ² t (A ² /s x 10 ³)			-	-	-	-	-	-
Minimum number of mechanical operations ⁽⁶⁾ (Cycles)			10000	10000	10000	10000	10000	10000
Minimum number of electrical operations ⁽⁶⁾ (Cycles)	400 V	AC23	-	-	-	-	-	500
		AC22A	200 ⁽⁷⁾	1000	100 ⁽⁷⁾	500	100 ⁽⁷⁾	-
Maximum weight (kg)	3P		5	11.5	11.9	22.5	24.3	42.9
	4P		5.5	12.6	13.2	25	27.3	47.3

Connecting capacity

			400 A	630 A	800 A	1000 A	1250 A	1600 A
Rigid cable	Cu	mm ²	240	2 x 240	2 x 240	-	-	-
Bar	Thickness / Wid		2 x 5 / 30	2 x 6 / 45	2 x 6 / 45	2 x 10 / 60	2 x 10 / 60	2 x 7 / 80
Tightening torque			Nm		24	45	45	55

- 1: Other voltages and / or utilization categories: please consult us
- 2: For series (I) or Parallel (II) connection of 4P switches, see diagrams
- 3: Indicative values: current values vary from one motor manufacturer to another
- 4: Without limiting protective device (short - circuit maintained 50... 100 ms)
- 5: With a protective device limiting the cut - off current and the joule integral to the indicated values
- 6: Please consult us for more operations
- 7: Rated operational current AC22B

Series connection of 4P switches up to up to 160 A (DC)



Parallel connection of 4P switches up to up to 160 A (DC)

