



Brushless Servomotors

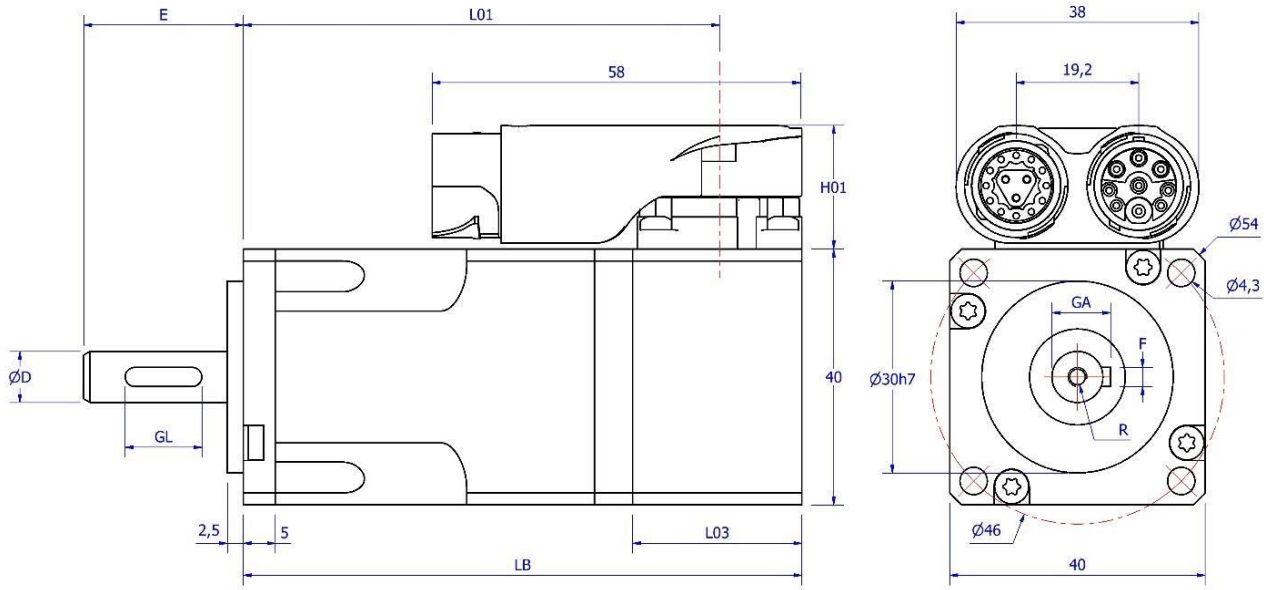
Performance and efficiency

9MDSM504xx - 9MDSM505xx

	9MDSM5041xx	9MDSM5043xx	9MDSM5051xx	9MDSM5053xx
Stall Torque (Nm)	0,19		0,38	
Peak Torque (Nm)	0,6	0,6	1,3	1,3
Stall Current (A)	0,78	1,52	1,2	3,0
Peak Current (A)	3,12	6,08	4,8	12
Max Mechanical Speed (rpm)	8500		8500	
Max Speed @ 230 Vac (rpm)	8000	-	8000	-
Max Speed @ 50 Vac (rpm)	-	3600	-	4100
Voltage Constant (V/Krpm)	14,7	7,4	19	7,7
Torque Constant (Nm/A)	0,25	0,122	0,32	0,13
Rotor Inertia (kgcm ²)	0,037		0,061	
Resistance @ 20°C (ohm)	27	6,8	14	2,4
Inductance @ 1 kHz (mH)	11	2,6	7,9	1,25
Thermal Sensor	PTC			
Operating Temperature (°C)	0 .. 40 (derating 1%/K in a range of 40°C to 50°C)			
Storage Temperature (°C)	-25 .. +70			
Humidity	5% .. 95% not condensing			
Altitude	Up to 1000 m sea level			
Weight (kg)	0,53		0,68	
Protection degree	IP64			
Certifications	2014/35/UE - 2014/30/UE - 2011/65/UE - EN 60034-1:2010 - EN 60034-2-1:2014 - EN 60204- 1:2006/A1:2009 - EN 60204-1:2006/A1:2010			
UL	Yes			



DIMENSIONS:



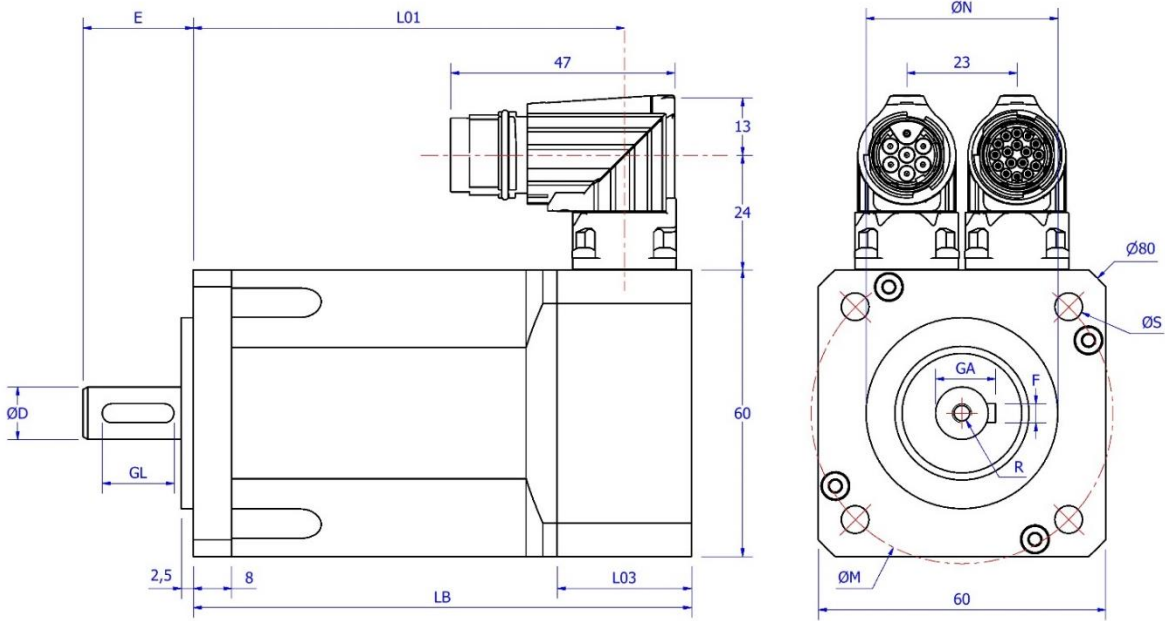


9MDSM521xx - 9MDSM522xx

	9MDSM5211xx	9MDSM5212xx	9MDSM5221xx	9MDSM5222xx
Stall Torque (Nm)	0,7		1,4	
Peak Torque (Nm)	2,5	2,5	4,7	4,9
Stall Current (A)	1,6	1,0	2,8	1,7
Peak Current (A)	6,4	4,0	11	7
Max Mechanical Speed (rpm)	8500		8500	
Max Speed @ 230 Vac (rpm)	6200	3600	6300	3900
Max Speed @ 400 Vac (rpm)	8000	6000	8000	6000
Voltage Constant (V/Krpm)	27	44	30	49
Torque Constant (Nm/A)	0,45	0,73	0,5	0,82
Rotor Inertia (kgcm ²)	0,13		0,23	
Resistance @ 20°C (ohm)	8,6	23	3,2	8,4
Inductance @ 1 kHz (mH)	1	27	5,6	13
Thermal Sensor	PTC			
Operating Temperature (°C)	0 .. 40 (derating 1%/K in a range of 40°C to 50°C)			
Storage Temperature (°C)	-25 .. +70			
Humidity	5% .. 95% not condensing			
Altitude	Up to 1000 m sea level			
Weight (kg)	1,2		1,7	
Protection degree	IP64			
Certifications	2014/35/UE - 2014/30/UE - 2011/65/UE - EN 60034-1:2010 - EN 60034-2-1:2014 - EN 60204- 1:2006/A1:2009 - EN 60204-1:2006/A1:2010			
UL	Yes			



DIMENSIONS:





9MDSM531xx - 9MDSM532xx

	9MDSM5311xx	9MDSM5312xx	9MDSM5321xx	9MDSM5322xx
Stall Torque (Nm)	1,5		2,9	
Peak Torque (Nm)	5,1	4,8	10	10
Stall Current (A)	1,65	1,1	3,2	2
Peak Current (A)	6,6	4	13	8
Max Mechanical Speed (rpm)	7000		7000	
Max Speed @ 230 Vac (rpm)	3100	1800	3200	1900
Max Speed @ 400 Vac (rpm)	6000	3500	6000	3500
Voltage Constant (V/Krpm)	55	86	55	88
Torque Constant (Nm/A)	0,91	1,42	0,91	1,45
Rotor Inertia (kgcm ²)	0,92		1,72	
Resistance @ 20°C (ohm)	9	23	3,4	8,3
Inductance @ 1 kHz (mH)	16	35	7	18
Thermal Sensor	PTC			
Operating Temperature (°C)	0 .. 40 (derating 1%/K in a range of 40°C to 50°C)			
Storage Temperature (°C)	-25 .. +70			
Humidity	5% .. 95% not condensing			
Altitude	Up to 1000 m sea level			
Weight (kg)	2,4		3,5	
Protection degree	IP64			
Certifications	2014/35/UE - 2014/30/UE - 2011/65/UE - EN 60034-1:2010 - EN 60034-2-1:2014 - EN 60204- 1:2006/A1:2009 - EN 60204-1:2006/A1:2010			
UL	Yes			

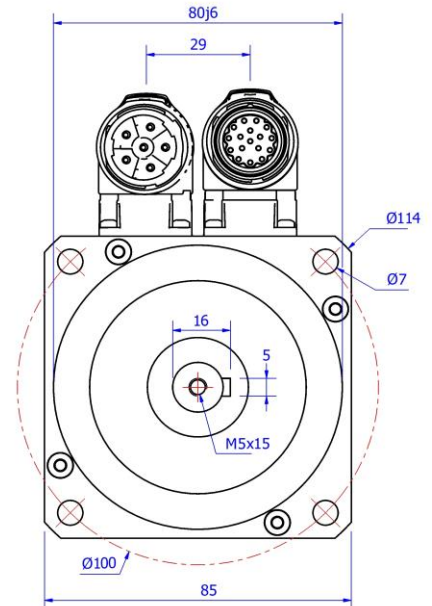
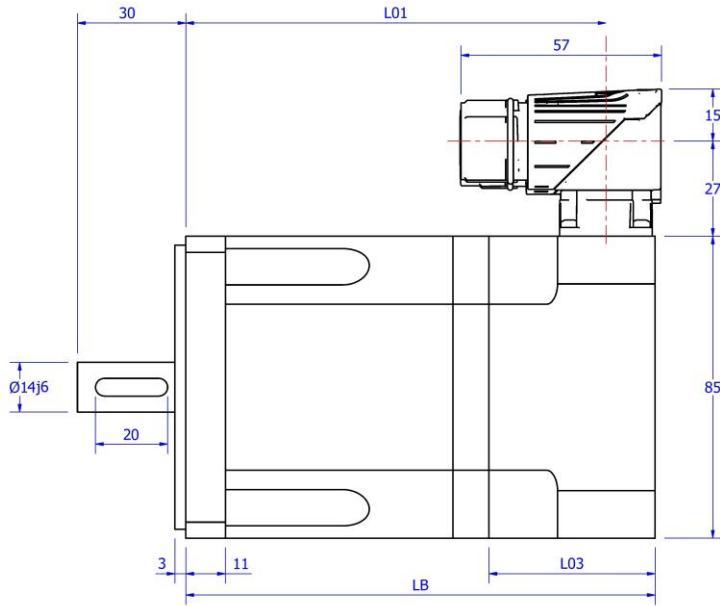


9MDSM533xx - 9MDSM534xx

	9MDSM5331xx	9MDSM5332xx	9MDSM5341xx	9MDSM5342xx
Stall Torque (Nm)	4,2		5,3	
Peak Torque (Nm)	14	14	18	18
Stall Current (A)	4,6	2,9	5,8	3,4
Peak Current (A)	19	12	24	15
Max Mechanical Speed (rpm)	7000		6000	
Max Speed @ 230 Vac (rpm)	3300	2000	3300	1900
Max Speed @ 400 Vac (rpm)	6000	3500	5000	3000
Voltage Constant (V/Krpm)	55	88	55	93
Torque Constant (Nm/A)	0,91	1,45	0,91	1,54
Rotor Inertia (kgcm ²)	2,53		3,33	
Resistance @ 20°C (ohm)	1,9	5	1,4	4
Inductance @ 1 kHz (mH)	4,5	12	3,5	11
Thermal Sensor	PTC			
Operating Temperature (°C)	0 .. 40 (derating 1%/K in a range of 40°C to 50°C)			
Storage Temperature (°C)	-25 .. +70			
Humidity	5% .. 95% not condensing			
Altitude	Up to 1000 m sea level			
Weight (kg)	4,6		5,7	
Protection degree	IP64			
Certifications	2014/35/UE - 2014/30/UE - 2011/65/UE - EN 60034-1:2010 - EN 60034-2-1:2014 - EN 60204- 1:2006/A1:2009 - EN 60204-1:2006/A1:2010			
UL	Yes			



DIMENSIONS:





9MDSM541xx - 9MDSM542xx

	9MDSM541xx	9MDSM542xx	9MDSM5421xx	9MDSM5422xx
Stall Torque (Nm)	4		7,6	
Peak Torque (Nm)	14	14	26	26
Stall Current (A)	4,4	2,5	7,8	4,7
Peak Current (A)	18	10	31	19
Max Mechanical Speed (rpm)	6500		6500	
Max Speed @ 230 Vac (rpm)	3200	1800	3100	1800
Max Speed @ 400 Vac (rpm)	6000	3000	5000	3000
Voltage Constant (V/Krpm)	55	96	59	98
Torque Constant (Nm/A)	0,91	1,59	0,98	1,62
Rotor Inertia (kgcm ²)	5		9,6	
Resistance @ 20°C (ohm)	2,3	6,9	0,95	2,7
Inductance @ 1 kHz (mH)	5,6	16	2,9	7,5
Thermal Sensor	PTC			
Operating Temperature (°C)	0 .. 40 (derating 1%/K in a range of 40°C to 50°C)			
Storage Temperature (°C)	-25 .. +70			
Humidity	5% .. 95% not condensing			
Altitude	Up to 1000 m sea level			
Weight (kg)	5,6		8,5	
Protection degree	IP64			
Certifications	2014/35/UE - 2014/30/UE - 2011/65/UE - EN 60034-1:2010 - EN 60034-2-1:2014 - EN 60204- 1:2006/A1:2009 - EN 60204-1:2006/A1:2010			
UL	Yes			

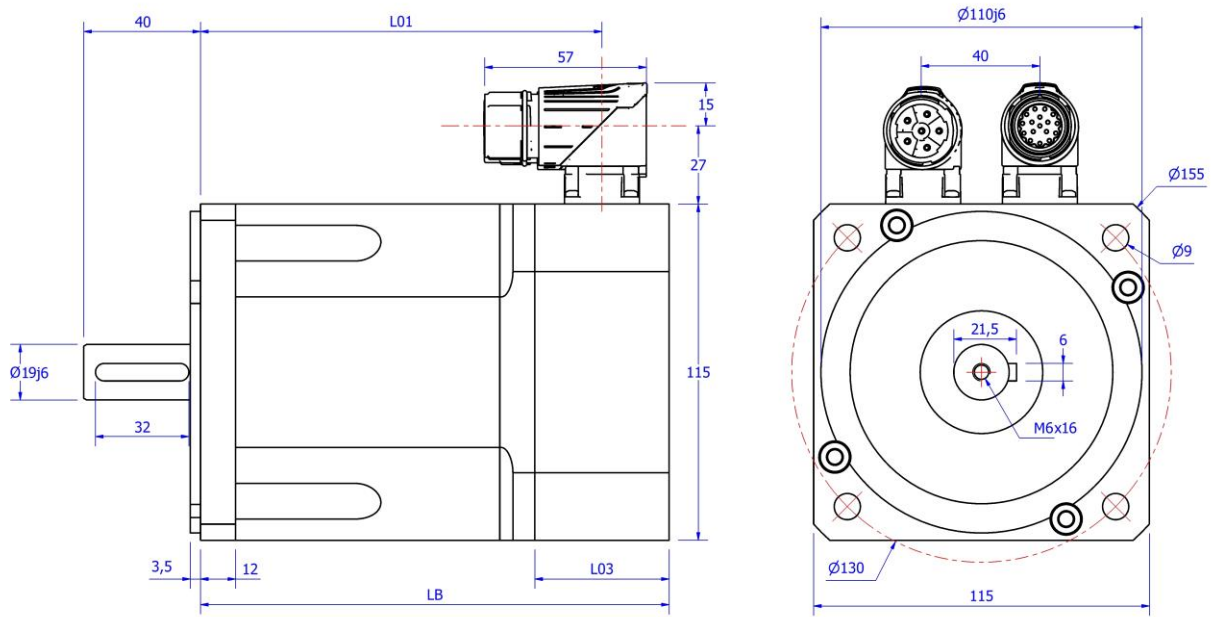


9MDSM543xx

	9MDSM5431xx	9MDSM5432xx
Stall Torque (Nm)	11,3	
Peak Torque (Nm)	40	39
Stall Current (A)	11,9	7
Peak Current (A)	47	28
Max Mechanical Speed (rpm)	6500	
Max Speed @ 230 Vac (rpm)	3200	1800
Max Speed @ 400 Vac (rpm)	5000	3000
Voltage Constant (V/Krpm)	59	98
Torque Constant (Nm/A)	0,98	1,62
Rotor Inertia (kgcm ²)	14	
Resistance @ 20°C (ohm)	0,5	1,5
Inductance @ 1 kHz (mH)	1,6	4,9
Thermal Sensor	PTC	
Operating Temperature (°C)	0 .. 40 (derating 1%/K in a range of 40°C to 50°C)	
Storage Temperature (°C)	-25 .. +70	
Humidity	5% .. 95% not condensing	
Altitude	Up to 1000 m sea level	
Weight (kg)	11,4	
Protection degree	IP64	
Certifications	2014/35/UE - 2014/30/UE - 2011/65/UE - EN 60034-1:2010 - EN 60034-2-1:2014 - EN 60204- 1:2006/A1:2009 - EN 60204-1:2006/A1:2010	
UL	Yes	



DIMENSIONS:





9MDSM551xx - 9MDSM552xx

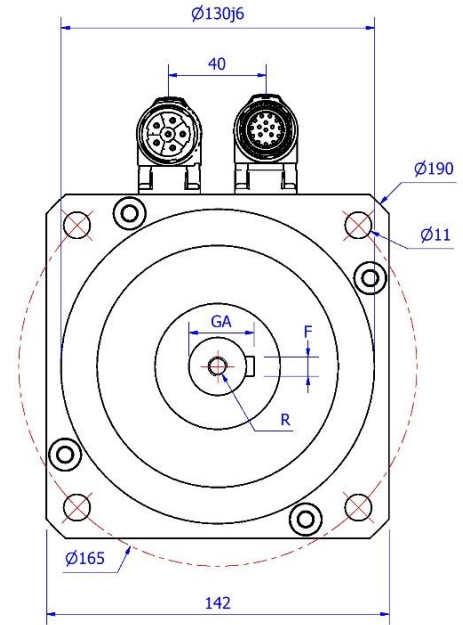
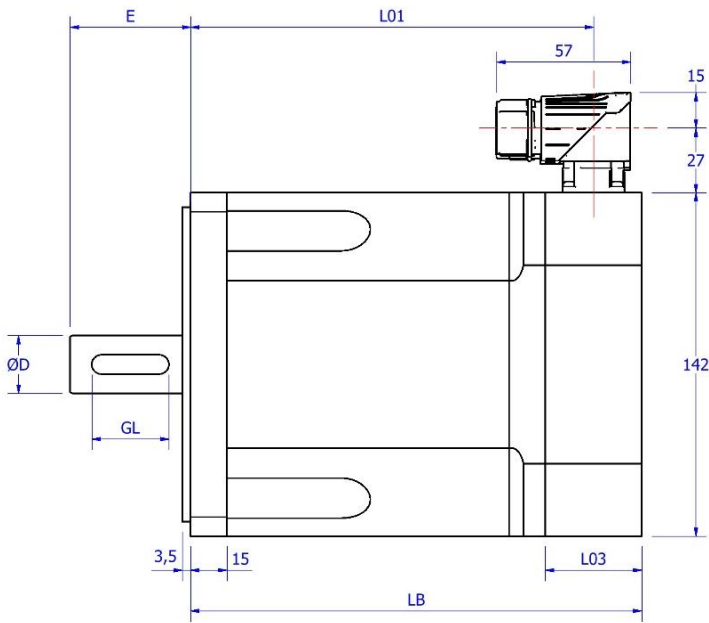
	9MDSM551xx	9MDSM5512xx	9MDSM5521xx	9MDSM5522xx
Stall Torque (Nm)	10		19	
Peak Torque (Nm)	36	34	65	66
Stall Current (A)	10,5	6,5	16	12,3
Peak Current (A)	42	26	64	50
Max Mechanical Speed (rpm)	6500		6500	
Max Speed @ 230 Vac (rpm)	3000	1900	2600	2000
Max Speed @ 400 Vac (rpm)	5000	3000	4500	3000
Voltage Constant (V/Krpm)	62	93	72	93
Torque Constant (Nm/A)	1,02	1,54	1,2	1,54
Rotor Inertia (kgcm ²)	22		43	
Resistance @ 20°C (ohm)	0,65	1,61	0,34	0,61
Inductance @ 1 kHz (mH)	2,6	7	1,9	3,3
Thermal Sensor	PTC			
Operating Temperature (°C)	0 .. 40 (derating 1%/K in a range of 40°C to 50°C)			
Storage Temperature (°C)	-25 .. +70			
Humidity	5% .. 95% not condensing			
Altitude	Up to 1000 m sea level			
Weight (kg)	11		16	
Protection degree	IP64			
Certifications	2014/35/UE - 2014/30/UE - 2011/65/UE - EN 60034-1:2010 - EN 60034-2-1:2014 - EN 60204- 1:2006/A1:2009 - EN 60204-1:2006/A1:2010			
UL	Yes			



9MDSM553xx - 9MDSM554xx

	9MDSM5531xx	9MDSM5532xx	9MDSM5541xx	9MDSM5542xx
Stall Torque (Nm)	27		35	
Peak Torque (Nm)	93	93	119	118
Stall Current (A)	21	15,4	25	20
Peak Current (A)	84	62	100	80
Max Mechanical Speed (rpm)	5500		5500	
Max Speed @ 230 Vac (rpm)	2400	1700	2200	1800
Max Speed @ 400 Vac (rpm)	4500	3000	4000	3000
Voltage Constant (V/Krpm)	78	106	85	106
Torque Constant (Nm/A)	1,3	1,74	1,4	1,74
Rotor Inertia (kgcm ²)	65		87	
Resistance @ 20°C (ohm)	0,25	0,46	0,18	0,32
Inductance @ 1 kHz (mH)	1,7	2,7	1,7	1,9
Thermal Sensor	PTC			
Operating Temperature (°C)	0 .. 40 (derating 1%/K in a range of 40°C to 50°C)			
Storage Temperature (°C)	-25 .. +70			
Humidity	5% .. 95% not condensing			
Altitude	Up to 1000 m sea level			
Weight (kg)	21		26	
Protection degree	IP64			
Certifications	2014/35/UE - 2014/30/UE - 2011/65/UE - EN 60034-1:2010 - EN 60034-2-1:2014 - EN 60204- 1:2006/A1:2009 - EN 60204-1:2006/A1:2010			
UL	Yes			

DIMENSIONS:





9MDSM561xx - 9MDSM562xx

	9MDSM5611xx	9MDSM5612xx	9MDSM5621xx	9MDSM5622xx
Stall Torque (Nm)	15		28	
Peak Torque (Nm)	42	38	72	72
Stall Current (A)	12	9	24	12,5
Peak Current (A)	37	27	72	38
Max Mechanical Speed (rpm)	5500		5500	
Max Speed @ 230 Vac (rpm)	2300	1800	2400	1300
Max Speed @ 400 Vac (rpm)	4000	3000	4000	2500
Voltage Constant (V/Krpm)	79	100	72	134
Torque Constant (Nm/A)	1,32	1,66	1,17	2,22
Rotor Inertia (kgcm ²)	54		91	
Resistance @ 20°C (ohm)	0,6	0,95	0,26	0,74
Inductance @ 1 kHz (mH)	3,4	6,5	2,1	5,3
Thermal Sensor	PTC			
Operating Temperature (°C)	0 .. 40 (derating 1%/K in a range of 40°C to 50°C)			
Storage Temperature (°C)	-25 .. +70			
Humidity	5% .. 95% not condensing			
Altitude	Up to 1000 m sea level			
Weight (kg)	17		23	
Protection degree	IP64			
Certifications	2014/35/UE - 2014/30/UE - 2011/65/UE - EN 60034-1:2010 - EN 60034-2-1:2014 - EN 60204- 1:2006/A1:2009 - EN 60204-1:2006/A1:2010			
UL	Yes			



9MDSM563xx - 9MDSM564xx

	9MDSM5631xx	9MDSM5632xx	9MDSM5641xx	9MDSM5642xx
Stall Torque (Nm)	50		70	
Peak Torque (Nm)	127	130	177	184
Stall Current (A)	28	18	39	26
Peak Current (A)	84	55	117	80
Max Mechanical Speed (rpm)	4500		4500	
Max Speed @ 230 Vac (rpm)	1800	1100	1800	1200
Max Speed @ 400 Vac (rpm)	3000	2000	3000	2000
Voltage Constant (V/Krpm)	108	169	108	162
Torque Constant (Nm/A)	1,78	2,8	1,78	2,7
Rotor Inertia (kgcm ²)	177		264	
Resistance @ 20°C (ohm)	0,16	0,36	0,09	0,16
Inductance @ 1 kHz (mH)	1,3	3,2	0,8	1,8
Thermal Sensor	PTC			
Operating Temperature (°C)	0 .. 40 (derating 1%/K in a range of 40°C to 50°C)			
Storage Temperature (°C)	-25 .. +70			
Humidity	5% .. 95% not condensing			
Altitude	Up to 1000 m sea level			
Weight (kg)	36		50	
Protection degree	IP64			
Certifications	2014/35/UE - 2014/30/UE - 2011/65/UE - EN 60034-1:2010 - EN 60034-2-1:2014 - EN 60204- 1:2006/A1:2009 - EN 60204-1:2006/A1:2010			
UL	Yes			



MOTORS

DIMENSIONS:

