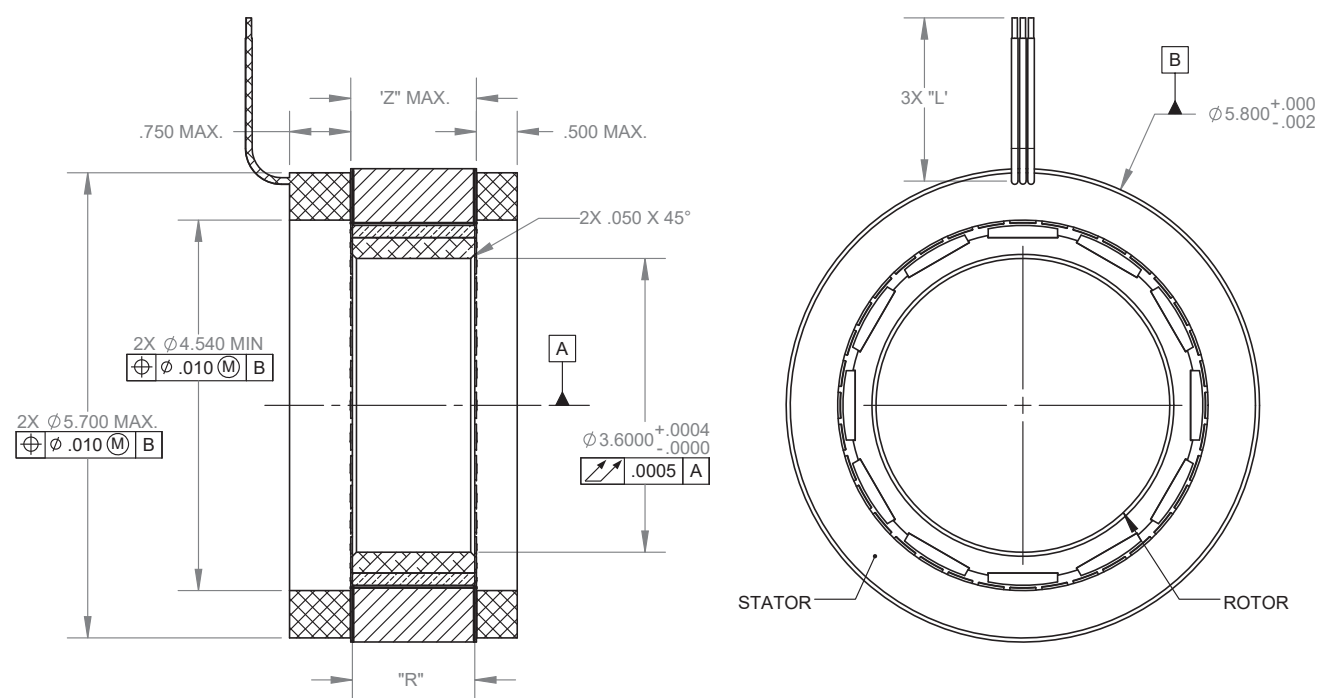
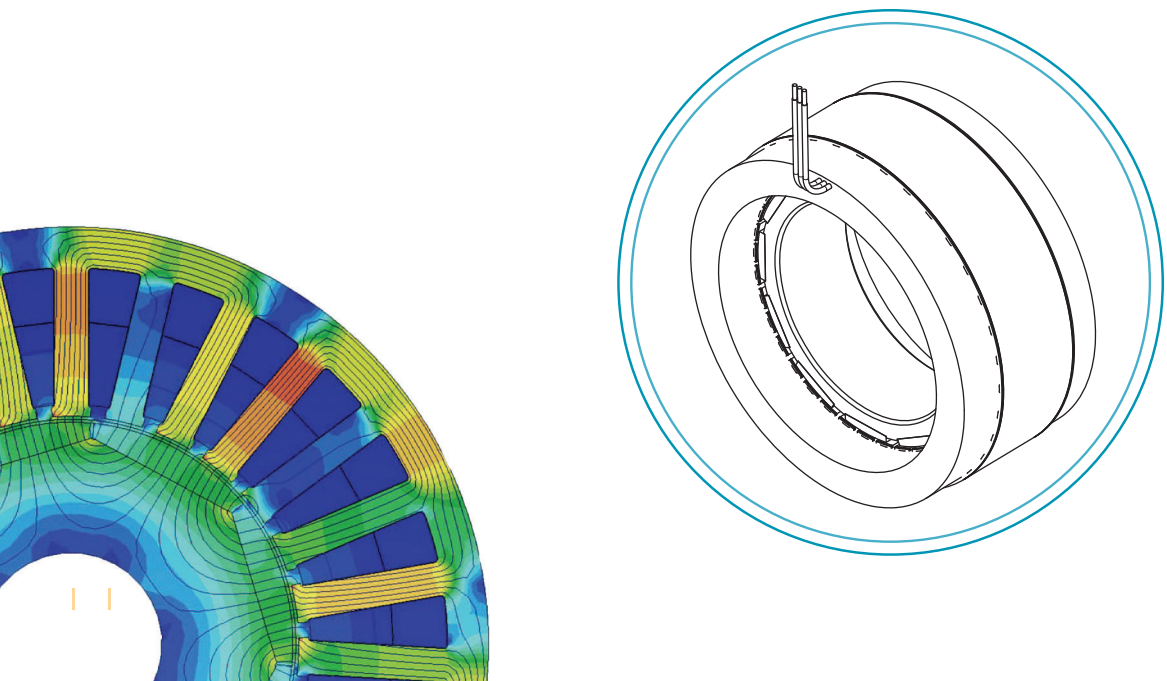


"Superior Torque" (ST) 5800 Series Technical Illustration



PART NO.	DESCRIPTION	"Z" MAX	LEAD WIRE GAGE	"L" ± .500	"R" ± .005
6100256-01	O&M DWG, 5815/6 STD ROTOR AND STATOR SET	1.570	14	12	1.500
6100256-02	O&M DWG, 5815/15 STD ROTOR AND STATOR SET	1.570	16	12	1.500
6100256-03	O&M DWG, 5830/3 STD ROTOR AND STATOR SET	3.070	14	12	3.000
6100256-04	O&M DWG, 5830/7 STD ROTOR AND STATOR SET	3.070	16	12	3.000



GENERIC PART NUMBER	5815/6	5815/15	5830/3	5830/7
STATOR OD (IN)	5.8	5.8	5.8	5.8
STATOR STACK LENGTH (IN)	1.5	1.5	3	3
ROTOR ID (IN)	3.6	3.6	3.6	3.6
ROTOR LENGTH (IN)	1.5	1.5	3	3
TURNS PER COIL	6	15	3	7
RESISTANCE (L-L)	0.125	0.79	0.0431	0.244
INDUCTANCE (L-L)	0.6185	3.825	0.297	1.62
LEAD WIRE AWG	14	16	14	16
KE (V/1KRPM, PEAK)	56.7	142	56.6	132
KT (IN-OZ/A, PEAK)	93.8	234	93.8	219
KT (IN-OZ/ARMS), TIME-AVERAGED	86.6	217	86.6	202
KM (IN-OZ/SQRT(W))	265.31	263.27	451.82	443.35
WEIGHT (OZ)	99.3	99.1	190	189
ROTOR INERTIA (KG-M ²)	2.39E-03	2.39E-03	4.76E-03	4.76E-03
POLE COUNT	12	12	12	12
COGGING TORQUE, PEAK (IN-OZ)	128	128	259	259
HYSTERESIS DRAG TORQUE (IN-OZ)	16.8	16.8	33.7	33.7
ELECTROMAGNETICS VISCOUS DRAG (IN-OZ/RPM ²)	7.79E-07	7.81E-07	1.56E-06	1.56E-06
DESIGN CURRENT (RMS, SINE DRIVE)	16.30	6.44	32.50	14.00
DESIGN VOLTAGE	270	600	270	600
DESIGN RPM	3600	3600	3600	3600
NO-LOAD RPM	4766	4238	4767	4540
DESIGN TORQUE (IN-OZ)	1421	1408	2842	2851
DESIGN OUPUT POWER (W)	3782	3748	7566	7589
ELECTROMECHANICAL EFFICIENCY AT DESIGN OUTPUT POWER	95.3	95.3	96.1	96

