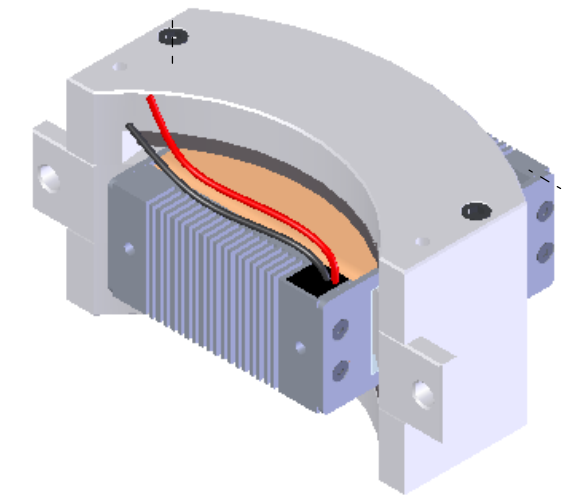
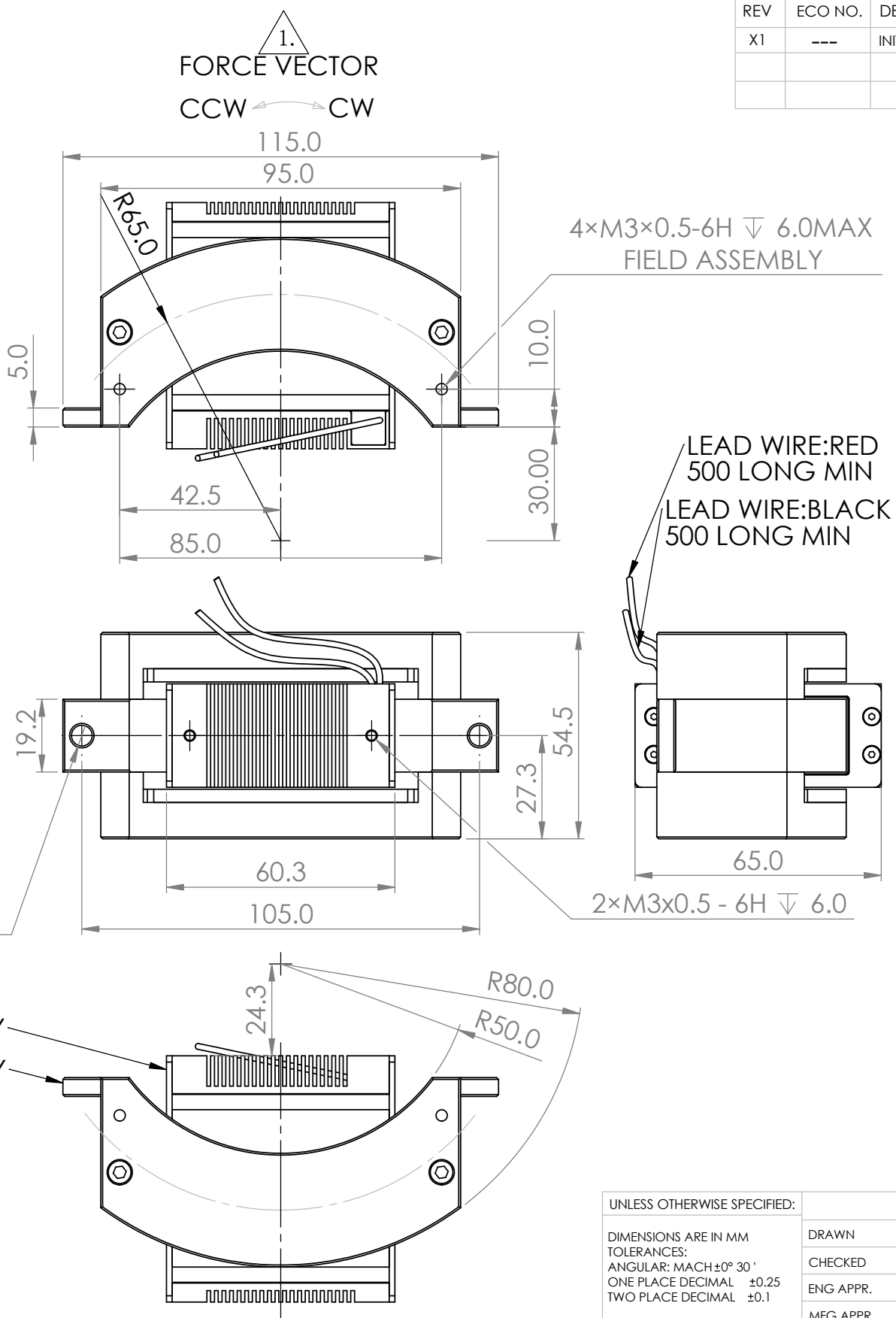


WINDING CONSTANT	TOL	SYM	VALUE	UNITS
DC RESISTANCE	± 10%	R	7.6	OHMS
VOLTAGE @ Fp	NOMINAL	Vp	52.4	VOLTS
CURRENT @ Fp	NOMINAL	Ip	6.9	AMPS
TORQUE SENSITIVITY	± 10%	Kt	1.03	N-m / A
BACK EMF CONSTANT	NOMINAL	Kb	1.03	V/Rad/Sec
INDUCTANCE *****	± 30%	L	7.5	mH

ACTUATOR PARAMETER	SYM	VALUE	UNITS
PEAK TORQUE *	Tp	7.1	N-m
CONTINUOUS STALL TORQUE **	Tcs	2.1	N-m
CONTINUOUS TORQUE WITH HEAT SINK	Tcs	2.6	N-m
ACTUATOR CONSTANT	Ka	0.37	N-m/√w
ELECT TIME CONSTANT	Te	1.0	milli-sec
POWER I ² R@Fp	Pp	361	W
TOTAL STROKE(ANGULAR)	S	14	degree
CLEARANCE ON SIDE OF COIL	CL	0.5	mm
THERMAL RESISTANCE ***	θth	3.8	C / W
THERMAL RESISTANCE WITH HEAT SINK****	θth	2.6	C / W
MAX WINDING TEMP	Tmax	150	C
WEIGHT OF COIL ASSEMBLY	WTc	220	g
INERTIA OF COIL ASSEMBLY	Ic	11520	g-cm ²
WEIGHT OF FIELD ASSEMBLY	WTF	1170	g
WEIGHT OF ACTUATOR	WTa	1390	g

* 10 sec @ 25C ambient, 150C coil temp.
 ** 25C ambient, 150C coil temp.
 *** In free air.
 **** Measured with 250×250×10mm heat sink.
 ***** Measured with TONGHUI TH2821A.

REV	ECO NO.	DESCRIPTION	DRN	APP'D	Q.A	DATE
X1	---	INITIAL RELEASE	BWZ	WYG	LBQ	07-12-13



D
C
B
A

D
C
B
A

2.INSULATION RESISANCE:100 MEGOHMS MINIMUM AT 500 VDC.
 1.A POSITIVE(+)VOLTAGE APPLIED TO THE RED LEAD WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN CLOCKWISE(CW) DIRECTION.
 NOTES:UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MM
 TOLERANCES:
 ANGULAR: MACH±0° 30'
 ONE PLACE DECIMAL ±0.25
 TWO PLACE DECIMAL ±0.1

INTERPRET GEOMETRIC TOLERANCING PER:
 ANSI Y14.5M-1982.

DO NOT SCALE DRAWING

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NAME	DATE
DRAWN BWZ	07-08-25
CHECKED	
ENG APPR. WYG	07-08-25
MFG APPR.	
Q.A. LBQ	07-08-25

usas motion Suzhou, China

TITLE:
ROTARY ACTUATOR

SIZE **B** DWG. NO. VRS0706-014-00A REV X1

SCALE: 1:1.5 SHEET 1 OF 1