

# PRODUCT INFORMATION PACKET

Model No: 254TTGN6531

Catalog No: E503

Hazardous Duty® Explosion Proof Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,  
1800 & 1500 RPM, 254T Frame, EPFC



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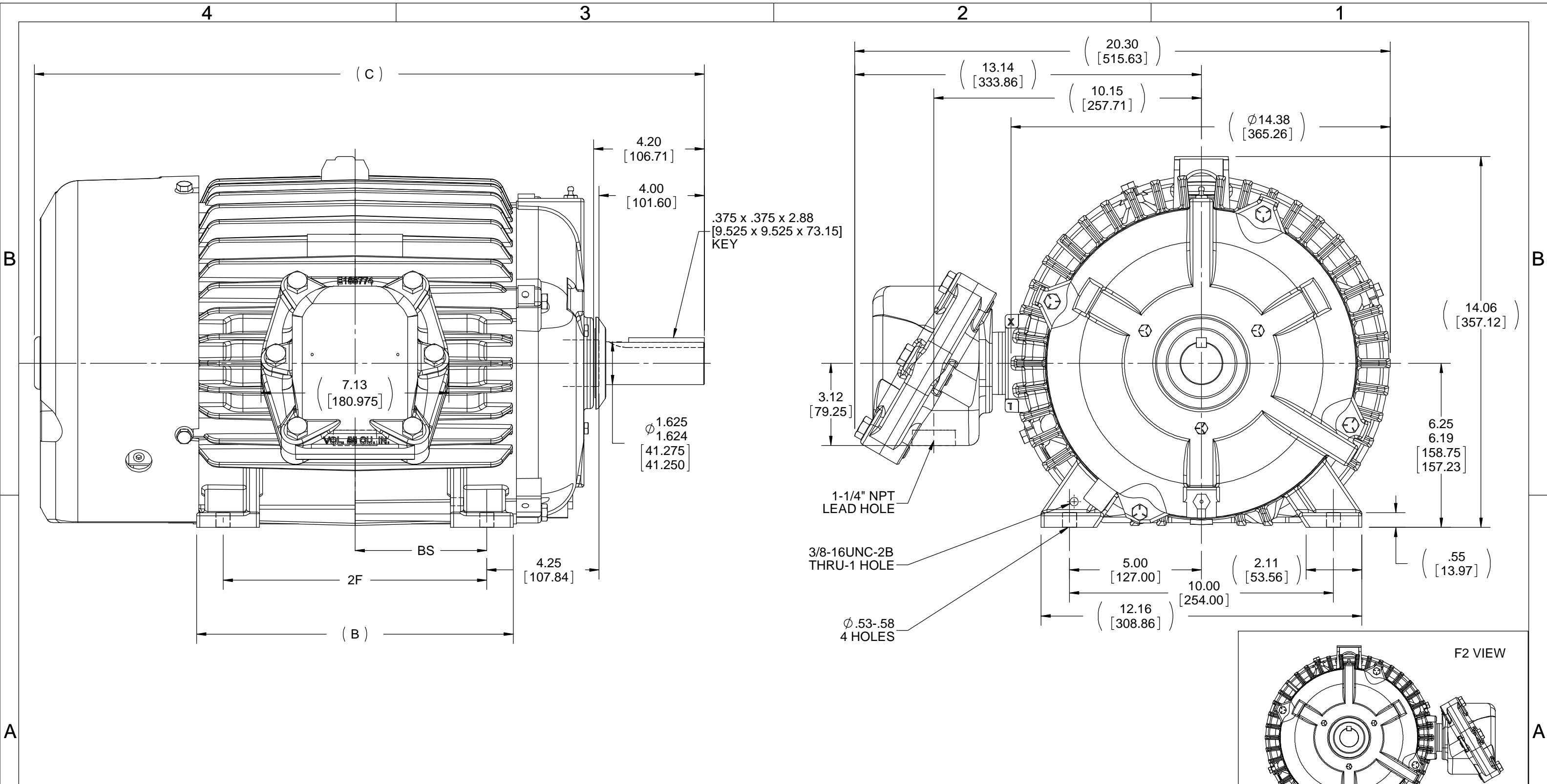
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>15 &amp; 10 Hp</b>
Output KW	<b>11.2 &amp; 7.5 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>1775 &amp; 1478 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>254T</b>	Enclosure	<b>Explosion Proof Fan cooled</b>
Thermal Protection	<b>Thermostat</b>	Efficiency	<b>92.4 &amp; 91.7 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>37.5/18.8 &amp; 31/15.5 A</b>	Power Factor	<b>81</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Drive End Bearing Size	<b>6309</b>	Opp Drive End Bearing Size	<b>6210</b>
UL	<b>No</b>	CSA	<b>Y</b>
CE	<b>N</b>	IP Code	<b>54</b>
Number of Speeds	<b>1</b>	Hazardous Location	<b>EXP PROOF CL I GR C&amp;D CL II GR F&amp;G T3B</b>

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.649 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>T</b>	Overall Length	<b>23.52 in</b>
Frame Length	<b>10.50 in</b>	Shaft Diameter	<b>1.625 in</b>
Shaft Extension	<b>4.2 in</b>	Assembly/Box Mounting	<b>F1 ONLY</b>
Inverter Load	<b>CONSTANT 10:1</b>		
Outline Drawing	<b>B-SS203001-1050</b>	Connection Drawing	<b>A-EE7308T</b>





NOTES:  
 1. CONDUIT BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.  
 2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	2FF	BS
1050	254T	10.25 [260.35]	23.65 [600.71]	---	8.25 [209.55]	4.12 [104.65]
1225	256T	12.00 [304.80]	25.40 [645.16]	---	10.00 [254.00]	5.00 [127.00]

DRAWING REVISION F	REVISION BY SD	DATE 11/18/2019
ECO ECO-0177002	APPROVED BY VMR	DATE 11/18/2019
ECO DESCRIPTION OUTLINE DESCRIPTION AND C DIMENSION UPDATED		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP  
 EDGES: .003/.015 [0.076/.381]  
 CORNER FILLETS: .02 [0.51]  
 MACHINED SURFACES: 200 INCH/mm 5.1  
 mm SHOWN IN [BRACKETS]

DRAWN BY RM	DATE 12-14-1993
APPROVED BY FG	DATE 12-15-1993
REFERENCE	
THIRD ANGLE PROJECTION	

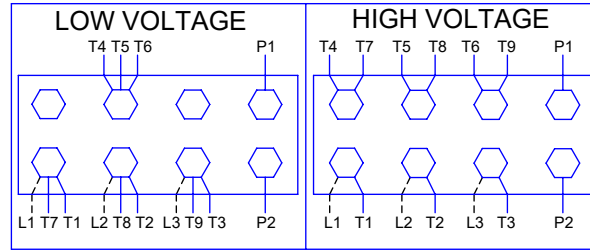
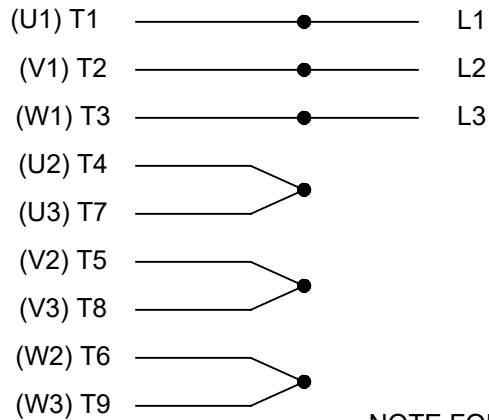
**REGAL**™ Regal Beloit America, Inc.

DESCRIPTION  
**OUTLINE**  
 250T FR. EXP. PR. - BB - T - STD.

MATERIAL  
 PROCESS/FINISH

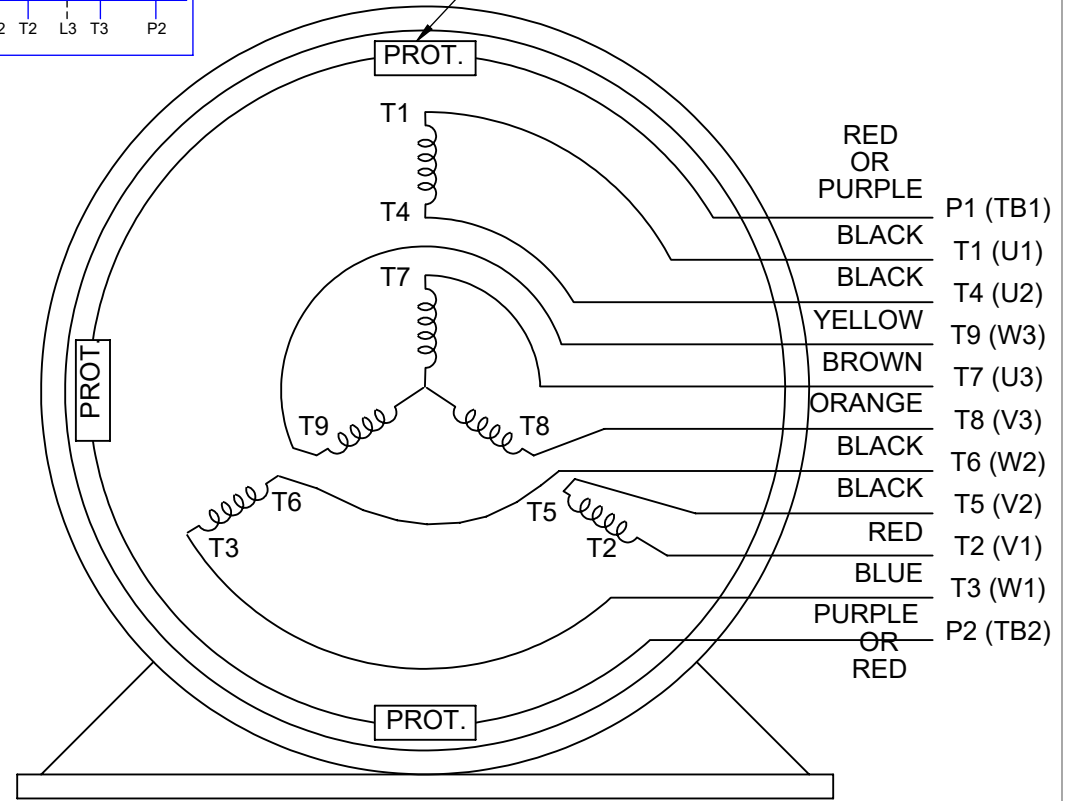
SIZE **B** DRAWING NUMBER **SS203001** SHEET **1 OF 1**

**HIGH VOLTAGE**



**THREE PHASE  
DUAL VOLTAGE MOTOR**

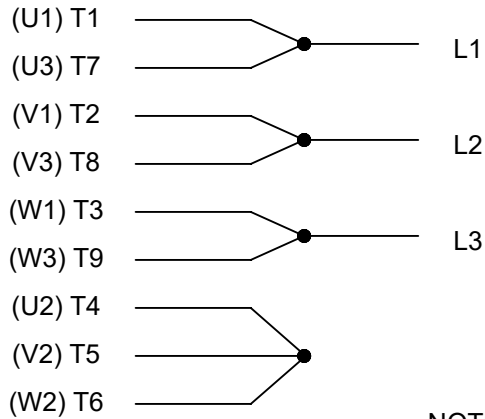
THERMO-PROTECTORS  
CONNECTED IN SERIES



- RED OR PURPLE P1 (TB1)
- BLACK T1 (U1)
- BLACK T4 (U2)
- YELLOW T9 (W3)
- BROWN T7 (U3)
- ORANGE T8 (V3)
- BLACK T6 (W2)
- BLACK T5 (V2)
- RED T2 (V1)
- BLUE T3 (W1)
- PURPLE OR RED P2 (TB2)

NOTE FOR FACTORY USE ONLY:  
TO SURGE TEST FOR COMMON CONNECT:  
HIGH VOLT: CONNECT P1 TO T1  
THEN P2 TO L1  
LOW VOLT: CONNECT P1 TO T1 & T7,  
THEN P2 TO L1

**LOW VOLTAGE**



**VIEW OF TERMINAL END**

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019		DRAWN BY SMC	Regal Beloit America, Inc.
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019		DATE 05-13-1992	
ECO DESCRIPTION <b>ADDED TERMINAL CONNECTION DIAGRAM</b>				APPROVED BY TB	DESCRIPTION <b>CONN DIAGRAM-INTERNAL</b> 3 PHASE - DUAL VOLTAGE MOTOR
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			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T



Data Sheet

Date: 6/20/2017

Customer: \_\_\_\_\_

Attention: \_\_\_\_\_

Submitted by: FAREEDA DUDEKULA



254TTGN6531

Submittal

Data @ 460 V

Motor Load Data

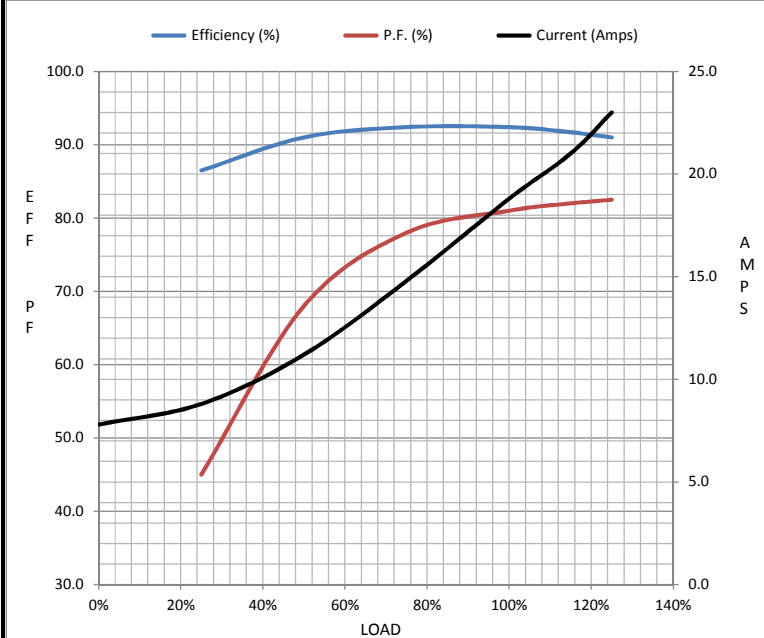
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	7.8	8.8	11.2	14.8	18.8	21.0	23.0	110
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.4	50.5	56.0	85.0
RPM	1800	1792	1788	1780	1775	1,770	1765	0
Efficiency (%)		86.5	91.0	92.4	92.4	91.7	91.0	
P.F. (%)	11.5	45.0	68.0	78.0	81.0	82.0	82.5	40.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1775	1800
Current (Amps)	110	95.0	69.0	18.8	7.8
Torque (ft-lb)	85.0	75.0	125	44.4	0.00

Information Block

HP	15.0			
Sync. RPM	1800			
Frame	254			
Enclosure	TEFC			
Construction	TFN			
Voltage	30/460#190/381V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	55 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	2.40 Lb-Ft <sup>2</sup>			
Ref Wdg	K2564165 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS203001-1050			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3760	0.2380	1.3510	1.7770	32.5080



Speed -Torque Curve

