

UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS											CONDUIT BOX						
	A	B	C	D	G	J	K	M	O	P	T	AA[NPT]	AB	AC	AE	AF	XL	XN
5810USS	28.0	42.2	72.5	14.50	1.6	6.3	9.3	27.6	30.5	31.6	5.1	3.00	31.1	23.8	14.5	9.5	23.4	14.2
5810US	28.0	42.2	72.3	14.50	1.6	6.3	9.3	27.6	30.5	31.6	5.1	3.00	31.1	23.8	14.5	9.5	23.4	14.2
5810UZ	28.0	42.2	77.6	14.50	1.6	6.3	9.3	27.6	30.5	31.6	5.1	3.00	31.1	23.8	14.5	9.5	23.4	14.2

FRAME SIZE	MOUNTING				SHAFT EXTENSION			KEY SEAT			BEARINGS		MAXIMUM WEIGHT
	E	2F	H	BA	N-W	V	U	R	S	ES	LS	OS	
5810USS	11.50	36.00/32.00	1.2	10.00	6.75	6.50	2.375	2.021	0.625	5.00	6313C3	NU313C3	7800 lbs.
5810US	11.50	36.00/32.00	1.2	10.00	6.25	6.19	3.625	3.134	0.875	5.00	6320C3	6320C3	7800 lbs.
5810UZ	11.50	36.00/32.00	1.2	10.00	11.62	11.38	5.250	4.550	1.250	10.00	NU328C3	6320C3	7800 lbs.

NOTES:

1. DIMENSION V REPRESENTS LENGTH OF STRAIGHT PART OF SHAFT
2. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
3. KEY DIMENSIONS EQUAL S x S x 10.00 FOR UZ AND S x S x 5.00 FOR USS & US (MOTOR SUPPLIED WITH KEY)
4. MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
5. THIS DIMENSION EQUALS 2F FOR 5809USS/US/UZ MOUNTING
6. STANDARD PRODUCT USE BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE

CUSTOMER: _____ MOTOR MODEL NO.: _____ TAG NO's.: _____
 P.O. NO.: _____ HP: _____ VOLTAGE: _____ RPM(SYN.): _____ Hz: _____
 FRAME SIZE: _____ PRODUCT TYPE: TEFC EQP III, EPACT, & HIGH EFFICIENCY QUARRY DUTY
 COMMENTS: _____

 PER: _____ DATE: _____

STANDARD (NO AUX. BOXES)
 RTD AUX. BOX
 SPACE HEATER AUX. BOX
 BEARING RTD's

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TOTALLY-ENCLOSED FAN-COOLED
 HORIZONTAL FOOT-MOUNTED
 3 PHASE INDUCTION MOTOR
 F1 ASSEMBLY

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TYPICAL MOTOR PERFORMANCE DATA

Model: 5004QDAC41-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
500	373	4	1795	5810UZ	575	60	3	457
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	96.2	A		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	500.00	372.9	457	96.8	84.6
¾ Load	375.00	279.6	363	96.0	80.6
½ Load	250.00	186.4	277	94.2	71.5
¼ Load	125.00	93.2	211	89.0	49.8
No Load			130.7		4.8
Locked Rotor			3378		37.7

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
1463	320	245	330	342.29

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
19	12	-	NU328C3	6320C3	

*Bearings are the only recommended spare part(s).

Motor Options:
Product Family:Quarry
Mounting:Footed,Shaft:UZ Shaft
Motor Specification:Quarry Duty

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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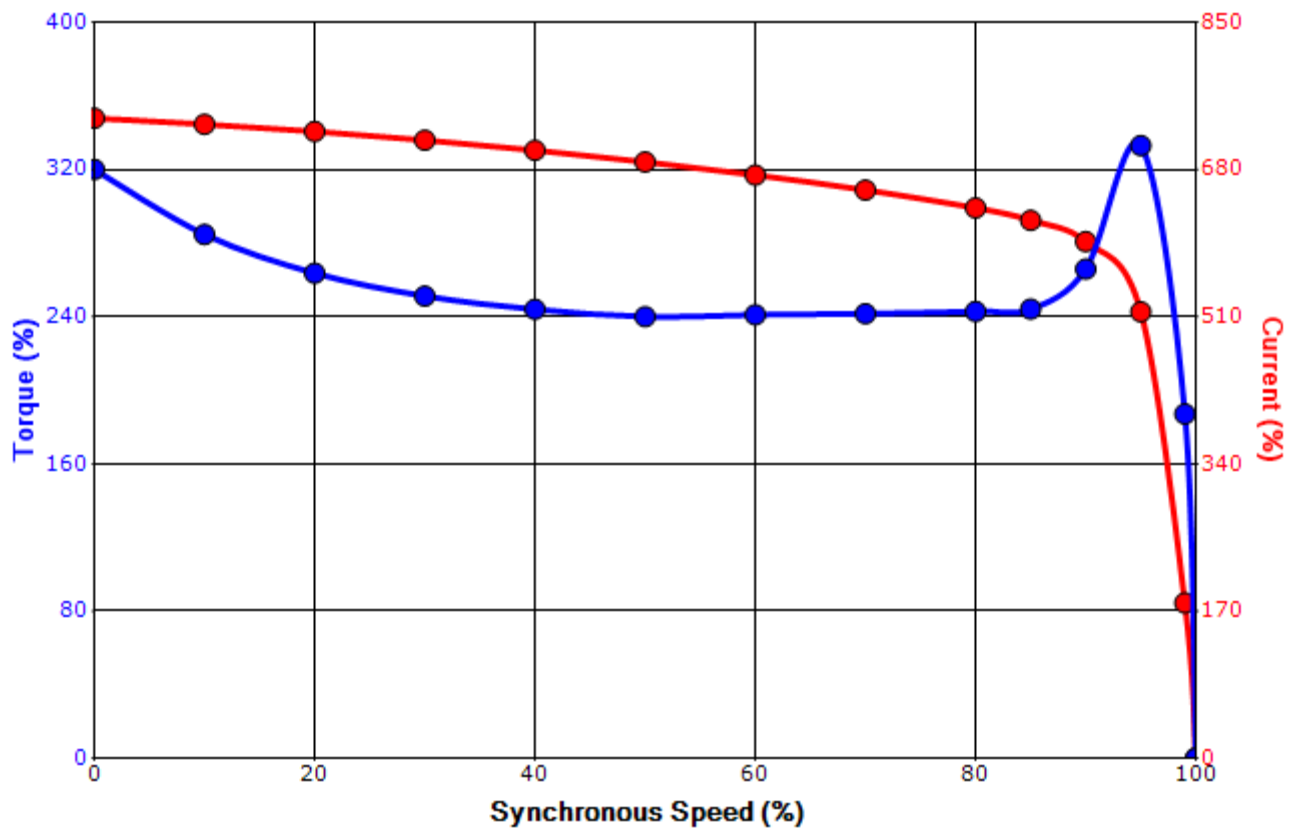
Engineering	zxie	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	6/18/2021	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

SPEED TORQUE/CURRENT CURVE

Model: 5004QDAC41-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
500	373	4	1795	5810UZ	575	60	3	457
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	96.2	A		40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						Break Down (%)
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)				
3378	342.29	1463	320	245			330	

Design Values



Customer		wk ² Load Inertia (lb-ft ²)	-
Customer PO		Load Type	-
Sales Order		Voltage (%)	100
Project #		Accel. Time	-

Tag:

All characteristics are average expected values.

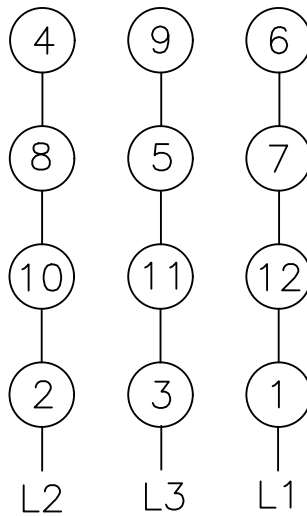
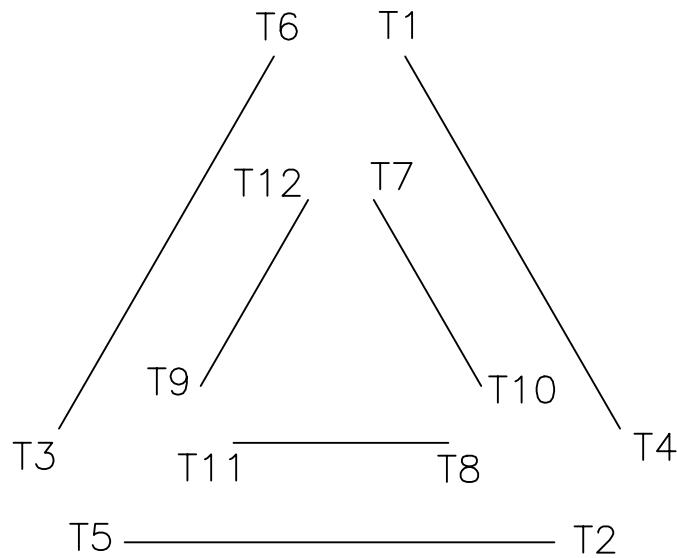
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Motor Connection Diagram

12 Leads

Single Voltage



Switch L1 and L2 to reverse rotation