

NOTES:
 ALL DIMENSIONS ARE +/- 1/8" UNLESS OTHERWISE SPECIFIED. UNIT DRY WEIGHT IS APPROXIMATELY 225 LBS.

PARTS LIST		
KEY	ITEM	DESCRIPTION
1	INLET	2" FNPT
2	STRAINER	2" CAST IRON PRE-STRAINER
3	SKID	CARBON STEEL SKID WITH ZINC PRIMER AND EPOXY TOP COAT
4	PUMP	SCOT: MODEL 50 40GPM @ 40TDH 3/4HP 460VAC TEFC
5	SEPARATOR	XTI-0100
6	CONTROL PANEL	NEMA 4X ENCLOSURE MAIN POWER DISCONNECT MAIN POWER LED INDICATOR PUMP H-O-A SWITCH PUMP RUNNING LED INDICATOR PURGE H-O-A SWITCH SYSTEM PURGING LEDD INDICATOR 460VAC TO 120VAC TRANSFORMER PUMP CONTACTOR AND OVERLOAD PROGRAMMABLE PURGE CONTROLLER
7	MOTORIZED PURGE	3/4" FNPT 120VAC
8	DISCHARGE	1" FNPT

DRAWN	RB	3/23/2020
CHECKED		
QA		
MFG		
APPROVED		
SCALE	1 / 11	



TITLE		
JLW 40GPM @ 40TDH SEPARATOR SYSTEM		
SIZE	DWG NO	REV
C	CT-0040-04-MPK/BS-IV	
SCALE	1 / 11	SHEET 1 OF 1

Item number	: 001	Size	: Scot 050-C56-6.50-2x1.5
Service	:	Stages	: 1
Quantity	: 1	Based on curve number	: 40.000.210 Rev O
Quote number	: 1139119	Article Number	:
		Date last saved	: 23 Mar 2020 4:58 PM

Operating Conditions

Flow, rated	: 40.00 USgpm
Head, rated (requested)	: 40.00 ft
Head, rated (actual)	: 39.76 ft
Suction pressure, rated / max	: 0.00 / 0.00 psi.g
NPSH available	: Ample
Frequency	: 60 Hz

Performance

Speed	: 1750 rpm
Impeller dia.	: 6.50 in
Impeller diameter, maximum	: 6.50 in
Impeller diameter, minimum	: 5.00 in
Efficiency	: 70.78 %
PEI (CL)	: -
NPSH required / margin required	: 5.12 / 0.00 ft
Ns (imp. eye flow) / Nss (imp. eye flow)	: 676 / 3,214 US Units
MCSF	: 15.00 USgpm
Head max.	: 45.25 ft
Head rise to shutoff	: 13.43 %
Flow, best eff. point	: 38.36 USgpm
Flow ratio, rated / BEP	: 104.28 %
Diameter ratio (rated / max)	: 100.00 %
Head ratio (rated dia / max dia)	: 100.00 %
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00
Selection status	: Near miss

Liquid

Liquid type	: Water
Additional liquid description	:
Solids Diameter, required / pump max	: 0.00 in / 0.22 in
Solids concentration, by volume	: 0.00 %
Temperature	: 68.00 deg F
Fluid density	: 1.000 / 1.000 SG
Viscosity	: 1.00 cP
Vapor pressure, rated	: 0.34 psi.a

Material

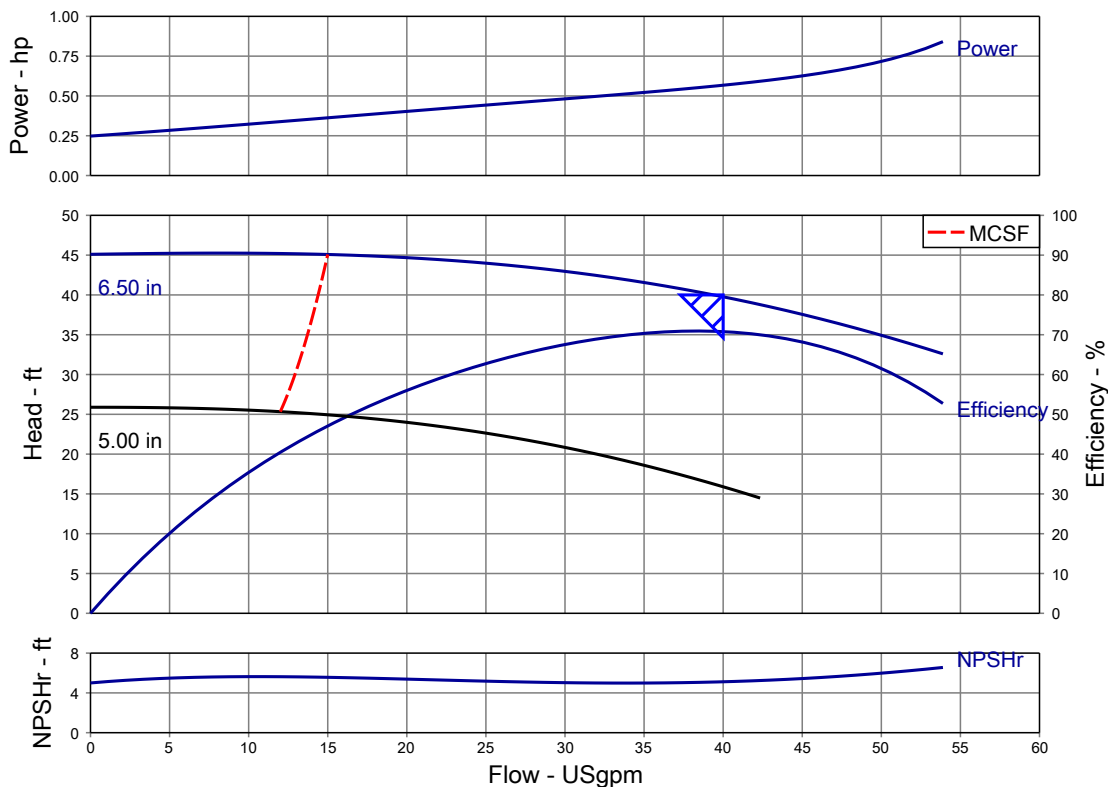
Material selected	: Standard
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Pressure Data

Maximum working pressure	: 19.59 psi.g
Maximum allowable working pressure	: 175.0 psi.g
Maximum allowable suction pressure	: N/A
Hydrostatic test pressure	: N/A

Driver & Power Data (@Max density)

Driver sizing specification	: Rated power
Margin over specification	: 0.00 %
Service factor	: 1.00
Power, hydraulic	: 0.40 hp
Power, rated	: 0.57 hp
Power, maximum	: 0.84 hp
Motor rating	: 0.75 hp / 0.56 kW



DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: Rolled Steel Standard Efficiency Three-Phase																		
Product code :	14797711																		
Catalog # :	.7518ES3E56C-S																		
Frame : 56C Output : 0.75 HP (0.550 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 208-230/460 V Rated current : 2.70-2.44/1.22 A L. R. Amperes : 18.6-16.8/8.42 A LRC : 6.9x(Code K) No load current : 1.55-1.80/0.900 A Rated speed : 1755 rpm Slip : 2.50 % Rated torque : 2.24 ft.lb Locked rotor torque : 240 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.0648 sq.ft.lb	Locked rotor time : 30s (cold) 17s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 52.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 23.8 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	70.4 72.0 77.0 78.5																		
Power Factor	0.26 0.48 0.61 0.72																		
Foundation loads																			
Max. traction	: 57 lb																		
Max. compression	: 81 lb																		
	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"></td> <td style="text-align: center;"><u>Drive end</u></td> <td style="text-align: center;"><u>Non drive end</u></td> </tr> <tr> <td>Bearing type :</td> <td style="text-align: center;">6203 ZZ</td> <td style="text-align: center;">6202 ZZ</td> </tr> <tr> <td>Sealing :</td> <td style="text-align: center;">V'Ring</td> <td style="text-align: center;">V'Ring</td> </tr> <tr> <td>Lubrication interval :</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Lubricant amount :</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Lubricant type :</td> <td colspan="2" style="text-align: center;">Mobil Polyrex EM</td> </tr> </table>		<u>Drive end</u>	<u>Non drive end</u>	Bearing type :	6203 ZZ	6202 ZZ	Sealing :	V'Ring	V'Ring	Lubrication interval :	-	-	Lubricant amount :	-	-	Lubricant type :	Mobil Polyrex EM	
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Notes																			
This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process. (4) At 100% of full load.																			
These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.																			
Rev.	Changes Summary	Performed	Checked	Date															
Performed by																			
Checked by																			
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

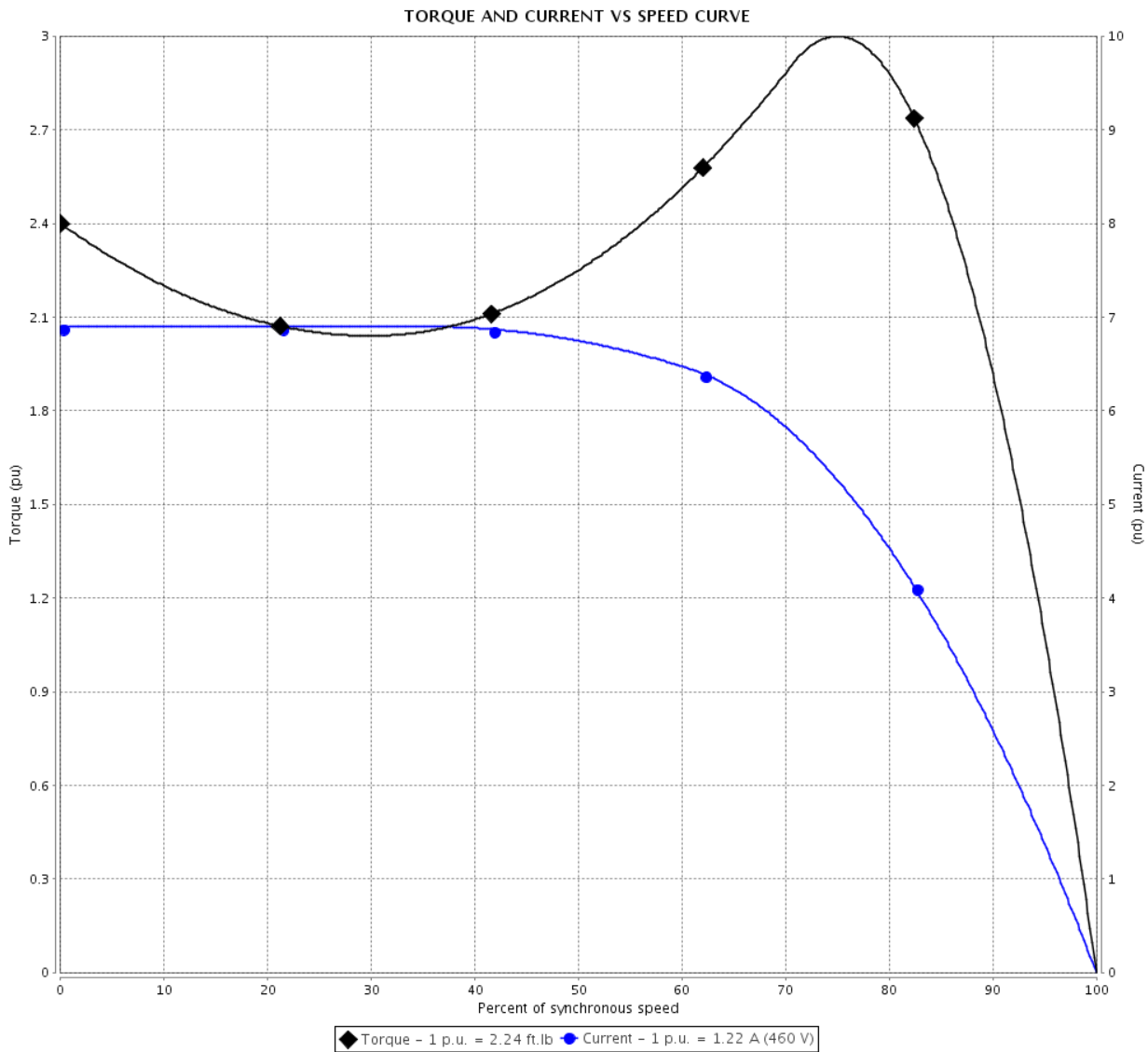


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Product line : Rolled Steel Standard Efficiency
Three-Phase

Product code : 14797711

Catalog # : .7518ES3E56C-S



Performance : 208-230/460 V 60 Hz 4P

Rated current	: 2.70-2.44/1.22 A	Moment of inertia (J)	: 0.0648 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 2.24 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	:
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1755 rpm		

Locked rotor time : 30s (cold) 17s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

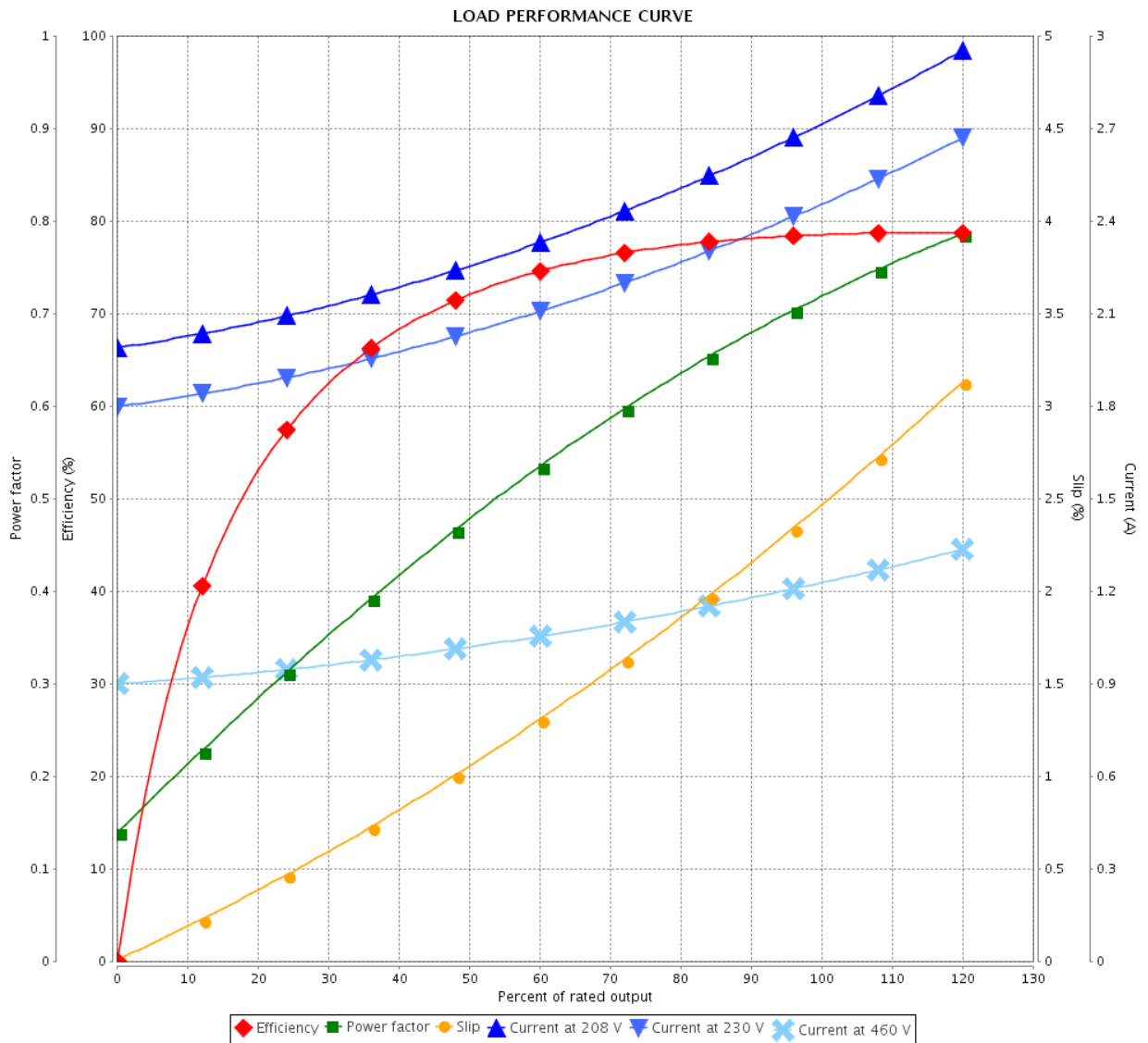


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