## **DATA SHEET**



Three Phase Induction Motor - Squirrel Cage Customer Product line : W22 IEEE 841 NEMA Premium Efficiency Product code: 16689665 Catalog #: 02518ST3QAP284T-W22 Frame : 284/6T Cooling method : IC411 - TEFC Insulation class Mounting : W-8 Duty cycle : Cont.(S1) Rotation<sup>1</sup> : Both (CW and CCW) : -20°C to +40°C Ambient temperature Starting method : Direct On Line : 1000 m.a.s.l. Approx. weight<sup>3</sup> Altitude : 401 lb Protection degree : IP56 Moment of inertia (J) : 5.11 sq.ft.lb Design : B Output [HP] 25 25 25 25 Poles 4 4 4 60 50 50 50 Frequency [Hz] Rated voltage [V] 415 460 380 400 Rated current [A] 29.5 35.9 34.3 33.2 L. R. Amperes [A] 183 190 189 196 6.2x(Code G) 5.9x(Code G) LRC [A] 5.3x(Code F) 5.5x(Code F) No load current [A] 11.0 11.0 11.7 12.4 Rated speed [RPM] 1770 1455 1460 1465 Slip [%] 1.67 3.00 2.67 2.33 Rated torque [ft.lb] 74.2 90.2 89.9 89.6 Locked rotor torque [%] 240 180 200 220 Breakdown torque [%] 270 210 240 260 Service factor 1.15 1.00 1.00 1.00 Temperature rise 80 K 105 K 105 K 105 K Locked rotor time 43s (cold) 24s (hot) 25s (cold) 14s (hot) 25s (cold) 14s (hot) 25s (cold) 14s (hot) Noise level<sup>2</sup> 63.0 dB(A) 61.0 dB(A) 61.0 dB(A) 61.0 dB(A) 25% 91.7 92.9 92.8 92.2 50% 92.4 92.4 92.4 92.4 Efficiency (%) 75% 92.4 93.0 91.7 92.4 100% 93.6 91.0 91.7 92.4 25% 0.45 0.52 0.48 0.45 0.73 0.70 50% 0.70 0.76 Power Factor 75% 0.80 0.84 0.82 0.80 100% 0.84 0.86 0.85 0.84 Losses at normative operating points (speed;torque), in percentage of rated output power 6.8 P1 (0,9;1,0) 6.8 6.8 6.8 P2 (0,5;1,0) 5.8 5.8 5.8 5.8 P3 (0,25;1,0) 5.3 5.3 5.3 5.3 P4 (0,9;0,5) 3.1 3.1 3.1 3.1 Losses (%) 2.2 2.2 2.2 P5 (0,5;0,5) 2.2 P6 (0,5;0,25) 1.4 1.4 1.4 1.4 P7 (0,25;0,25) 1.0 1.0 1.0 1.0 Drive end Non drive end Foundation loads Bearing type NU-311 C3 6211 C3 Max. traction : 815 lb Inpro/Seal Inpro/Seal Sealing Max. compression : 1217 lb 17000 h 12000 h Lubrication interval Lubricant amount 18 g 11 g Lubricant type Mobil Polyrex EM This revision replaces and cancel the previous one, which These are average values based on tests with sinusoidal must be eliminated. power supply, subject to the tolerances stipulated in NEMA (1) Looking the motor from the shaft end. MG-1.

(2) Measured at	im and with tolera	ance of +3dB(A).			
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## Three Phase Induction Motor - Squirrel Cage

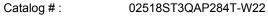


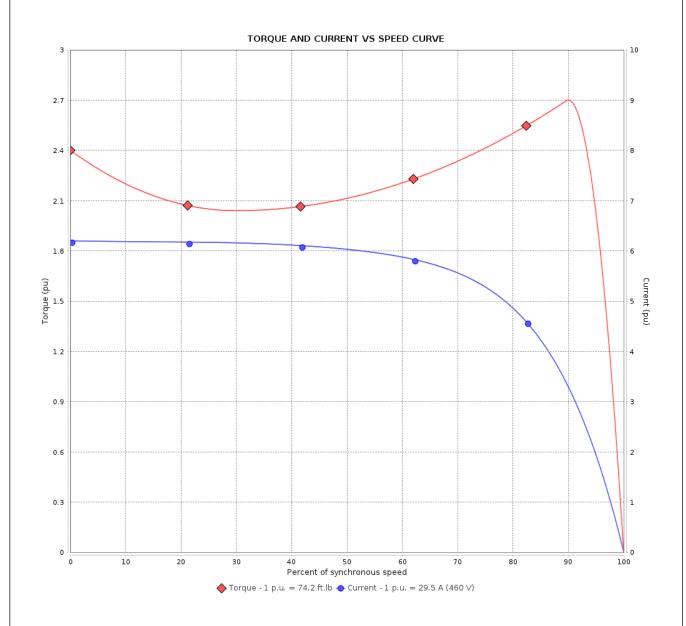
Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency

Three-Phase

Product code: 16689665





Performance	: 460 V 60 Hz 4P			
Rated current	: 29.5 A	Moment of inertia (J)	: 5.11 sq.ft.lb	
LRC	: 6.2	Duty cycle	: Cont.(S1)	
Rated torque	: 74.2 ft.lb	Insulation class	: F	
Locked rotor torque	: 240 %	Service factor	: 1.15	
Breakdown torque	: 270 %	Temperature rise	: 80 K	
Rated speed	: 1770 rpm	Design	: B	
Locked rotor time	: 43e (cold) 24e (hot)			

Locked rotor time : 43s (cold) 24s (hot)

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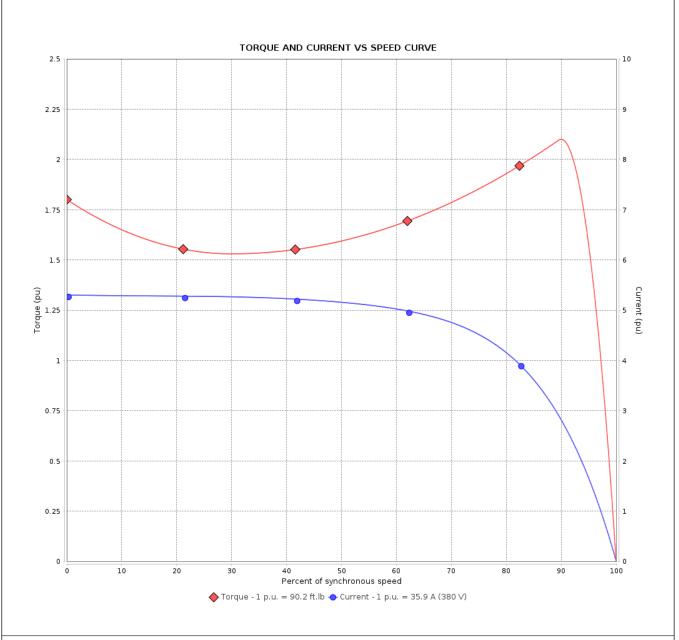
Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency

Three-Phase

Product code: 16689665

Catalog #: 02518ST3QAP284T-W22



Performance : 380 V 50 Hz 4P IE1 Rated current : 35.9 A Moment of inertia (J) : 5.11 sq.ft.lb **LRC** : 5.3 Duty cycle : Cont.(S1) Insulation class Rated torque : 90.2 ft.lb : F Locked rotor torque : 180 % Service factor : 1.00 Breakdown torque : 210 % Temperature rise : 105 K

Rated speed : 1455 rpm Design

 Locked rotor time
 : 25s (cold) 14s (hot)

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## Three Phase Induction Motor - Squirrel Cage



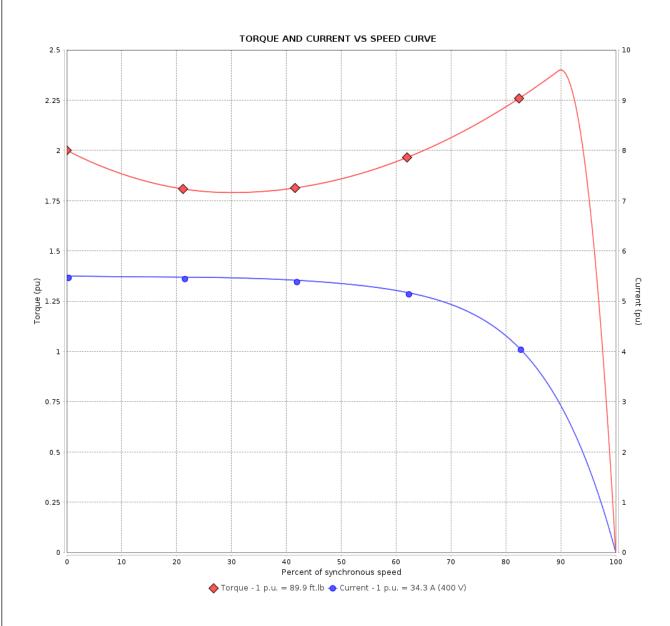
Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency

Three-Phase

Product code: 16689665

Catalog #: 02518ST3QAP284T-W22



Performance	: 400 V 50 Hz 4P IE2			
Rated current	: 34.3 A	Moment of inertia (J)	: 5.11 sq.ft.lb	
LRC	: 5.5	Duty cycle	: Cont.(S1)	
Rated torque	: 89.9 ft.lb	Insulation class	: F	
Locked rotor torque	: 200 %	Service factor	: 1.00	
Breakdown torque	: 240 %	Temperature rise	: 105 K	
Rated speed	: 1460 rpm	Design	: B	
Locked rotor time	: 25s (cold) 14s (bot)			

Locked rotor time : 25s (cold) 14s (hot)

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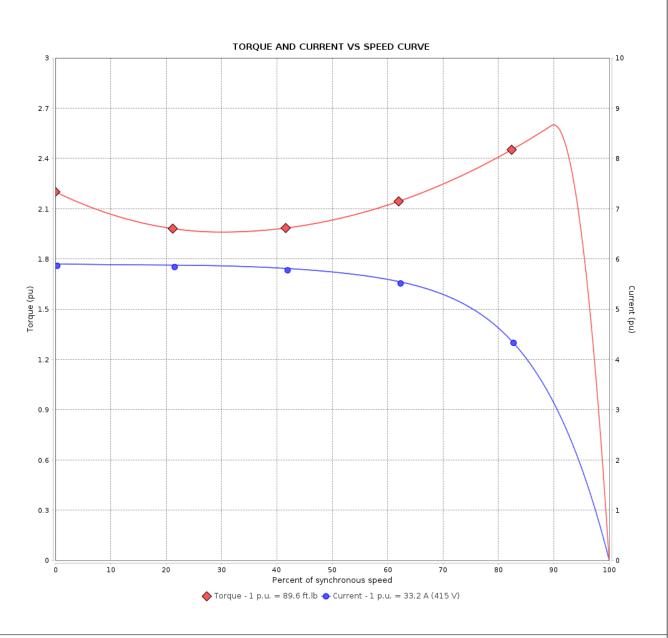


Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency

Three-Phase

Product code: 16689665



Performance	: 415 V 50 Hz 4P IE2			
Rated current	: 33.2 A	Moment of inertia (J)	: 5.11 sq.ft.lb	
LRC	: 5.9	Duty cycle	: Cont.(S1)	
Rated torque	: 89.6 ft.lb	Insulation class	: F	
Locked rotor torque	: 220 %	Service factor	: 1.00	
Breakdown torque	: 260 %	Temperature rise	: 105 K	
Rated speed	: 1465 rpm	Design	: B	
Locked rotor time	: 25s (cold) 14s (hot)			

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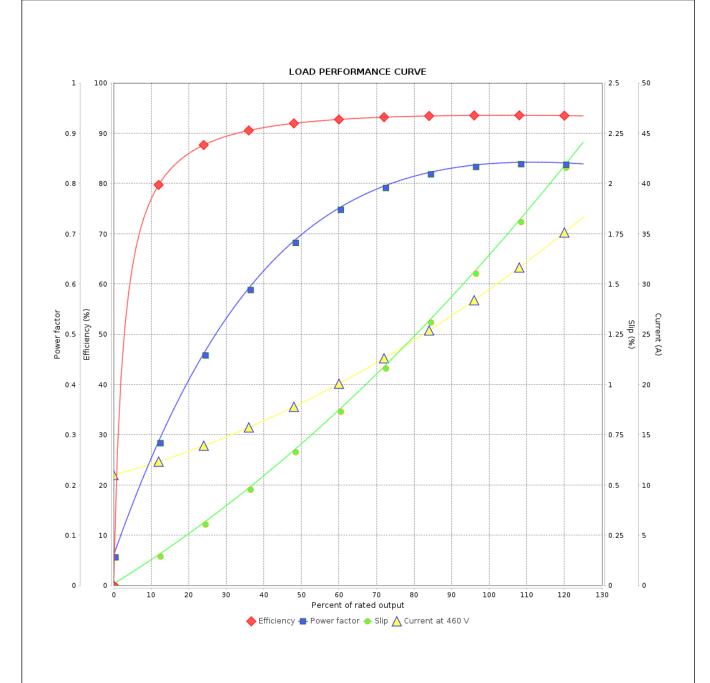


Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency

Three-Phase

Product code: 16689665



Performance	: 4	60 V 60 Hz 4P				
Rated current	: 2	9.5 A	Moment o	f inertia (J)	: 5.11 sq.ft.lb	
LRC	: 6	.2	Duty cycle	<b>;</b>	: Cont.(S1)	
Rated torque	: 7	4.2 ft.lb	Insulation	class	: F	
Locked rotor torqu	ue : 2	40 %	Service fa	ctor	: 1.15	
Breakdown torque		70 %	Temperati	ıre rise	: 80 K	
Rated speed :		770 rpm	Design		: B	
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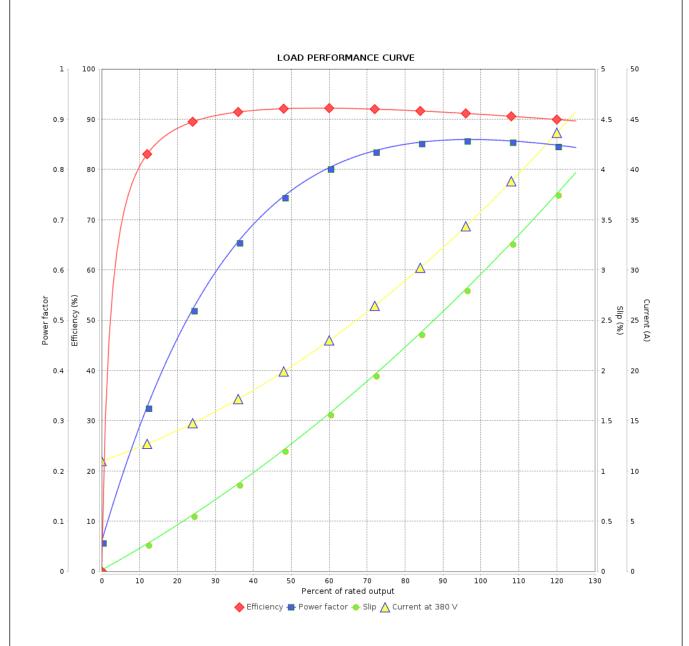
Product line : W22 IEEE 841 NEMA Premium Efficiency

Three-Phase

Product code: 16689665

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Performance : 380 V 50 Hz 4P IE1 Rated current : 35.9 A Moment of inertia (J) : 5.11 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 5.3 : 90.2 ft.lb Insulation class Rated torque : F Locked rotor torque : 180 % Service factor : 1.00 Breakdown torque : 210 % Temperature rise : 105 K Rated speed : 1455 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by Checked by Revision Page

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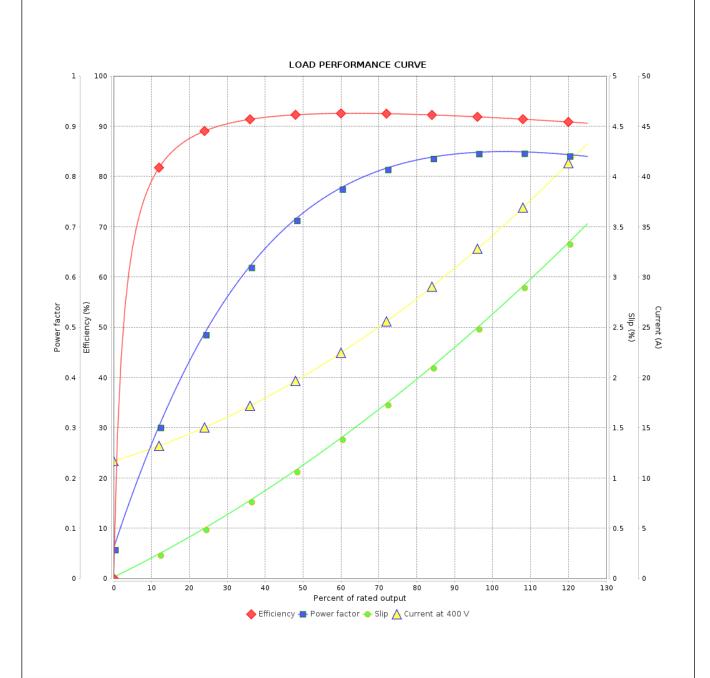


Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency

Three-Phase

Product code: 16689665



Performance	:	400 V 50 Hz 4P IE2				
Rated current	:	34.3 A	Moment o	f inertia (J)	: 5.11 sq.ft.lb	
LRC	:	5.5	Duty cycle	;	: Cont.(S1)	
Rated torque	:	89.9 ft.lb	Insulation	class	: F	
Locked rotor torqu	ue :	200 %	Service fa	ctor	: 1.00	
Breakdown torque	e :	240 %	Temperati	Temperature rise		
Rated speed	:	1460 rpm	Design		: B	
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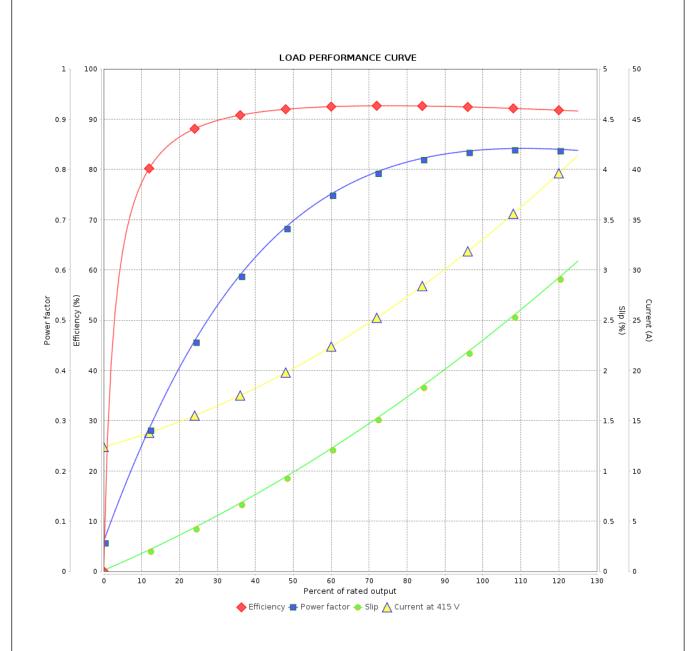
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Three-Phase

Product code: 16689665

Catalog #: 02518ST3QAP284T-W22

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Performance : 415 V 50 Hz 4P IE2 Rated current : 33.2 A Moment of inertia (J) : 5.11 sq.ft.lb **LRC** : 5.9 Duty cycle : Cont.(S1) : 89.6 ft.lb Insulation class Rated torque : F Locked rotor torque : 220 % Service factor : 1.00 Breakdown torque : 260 % Temperature rise : 105 K Rated speed : 1465 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by Page Checked by Revision

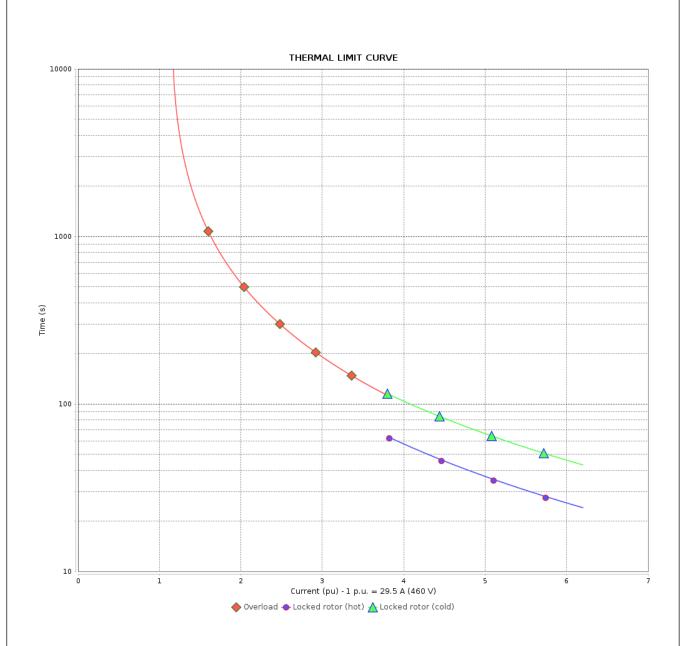


Customer	:				
Product line	: W22 IEEE 841 NEMA Premiun	n Efficiencv	Product code :	16689665	
	Three-Phase	,	Catalog # :	02518ST3QA	\P284T_\\/2
			Catalog # .	02516513Q	AP2041-VV2
	: 460 V 60 Hz 4P				
Rated current	: 29.5 A		t of inertia (J)	: 5.11 sq.ft.lb : Cont (S1)	
Performance Rated current LRC Rated torque	: 29.5 A : 6.2 : 74.2 ft.lb	Duty cyc Insulatio	cle on class	: Cont.(S1) : F	
Rated current LRC Rated torque Locked rotor torque	: 29.5 A : 6.2 : 74.2 ft.lb : 240 %	Duty cyc Insulatio Service	cle on class factor	: Cont.(S1) : F : 1.15	
Rated current LRC Rated torque Locked rotor torque Breakdown torque	: 29.5 A : 6.2 : 74.2 ft.lb : 240 % : 270 %	Duty cyc Insulation Service Tempera	cle on class	: Cont.(S1) : F	
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 29.5 A : 6.2 : 74.2 ft.lb : 240 %	Duty cyc Insulatio Service	cle on class factor	: Cont.(S1) : F : 1.15 : 80 K	
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed Heating constant	: 29.5 A : 6.2 : 74.2 ft.lb : 240 % : 270 %	Duty cyc Insulation Service Tempera	cle on class factor	: Cont.(S1) : F : 1.15 : 80 K	
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed Heating constant Cooling constant	: 29.5 A : 6.2 : 74.2 ft.lb : 240 % : 270 % : 1770 rpm	Duty cyc Insulation Service Tempera	cle on class factor ature rise	: Cont.(S1) : F : 1.15 : 80 K : B	Date
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 29.5 A : 6.2 : 74.2 ft.lb : 240 % : 270 %	Duty cyc Insulation Service Tempera	cle on class factor	: Cont.(S1) : F : 1.15 : 80 K	Date
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed Heating constant Cooling constant Rev.	: 29.5 A : 6.2 : 74.2 ft.lb : 240 % : 270 % : 1770 rpm	Duty cyc Insulation Service Tempera	cle on class factor ature rise	: Cont.(S1) : F : 1.15 : 80 K : B	Date
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed Heating constant Cooling constant	: 29.5 A : 6.2 : 74.2 ft.lb : 240 % : 270 % : 1770 rpm	Duty cyc Insulation Service Tempera	cle on class factor ature rise	: Cont.(S1) : F : 1.15 : 80 K : B	Date

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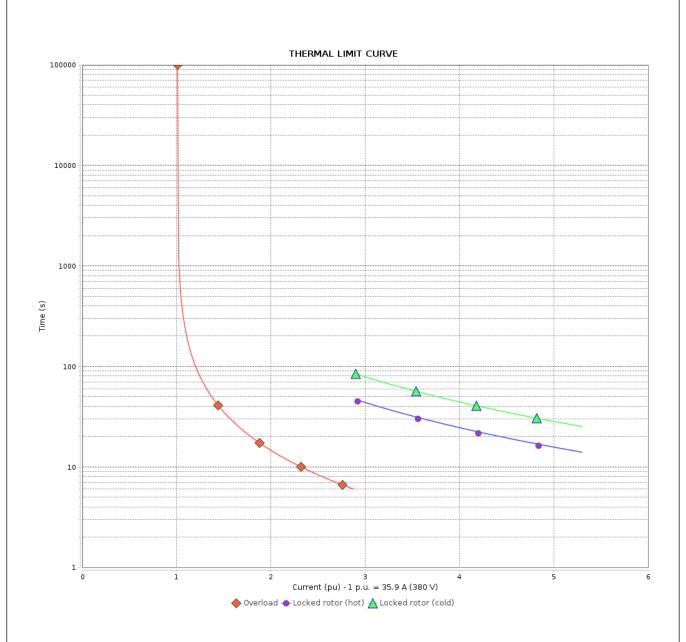


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Product line	: W22 IEEE 841 NEMA Premium Efficiency		ncy Product co	ode: 1668	9665
	Three-Pha	Se	Catalog #	: 0251	8ST3QAP284T-W22
		0 V 50 Hz 4P IE1			
Rated current LRC Rated torque	: 35 : 5. : 90	.9 A N 3 E .2 ft.lb II	Moment of inertia (J) Outy cycle Insulation class	: Cont : F	sq.ft.lb .(S1)
Rated current LRC Rated torque Locked rotor tor Breakdown torq	: 35 : 5. : 90 que : 18 ue : 2 <sup>7</sup>	.9 A	outy cycle	: Cont	.(S1)
Performance Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constar	: 35 : 5. : 90 que : 15 ue : 2' : 14	.9 A	Outy cycle Insulation class Service factor Semperature rise	: Cont : F : 1.00 : 105 I	.(S1)
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed	: 35 : 5. : 90 que : 15 ue : 2' : 14	.9 A	Outy cycle Insulation class Service factor Semperature rise	: Cont : F : 1.00 : 105 I : B	.(S1) <
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constar Cooling constan	: 35 : 5. : 90 que : 15 ue : 2' : 14	.9 A B C C C C C C C C C C C C C C C C C C	Outy cycle Insulation class Service factor Temperature rise Design	: Cont : F : 1.00 : 105 I : B	ed Date

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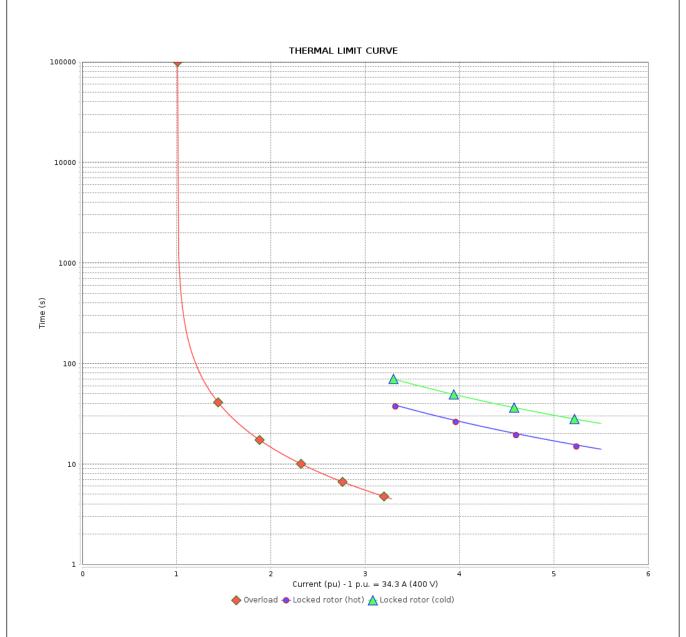


Customer	:					
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Product line	: W22 IEEE 841 NEMA Premium Efficiency Three-Phase		Efficiency	Product code :	16689665	
	Inree-P	nase		Catalog # :	02518ST3QA	.P284T-W2
Performance		400 V 50 Hz 4P IE2				
Rated current -RC		34.3 A 5.5	Moment Duty cyc	of inertia (J) le	: 5.11 sq.ft.lb : Cont.(S1)	
Rated torque	:	89.9 ft.lb	Insulation	n class	: F	
Locked rotor tord Breakdown torqu		200 % 240 %	Service f Tempera		: 1.00 : 105 K	
Rated speed		1460 rpm	Design		: B	
Heating constant	t					
Cooling constant						
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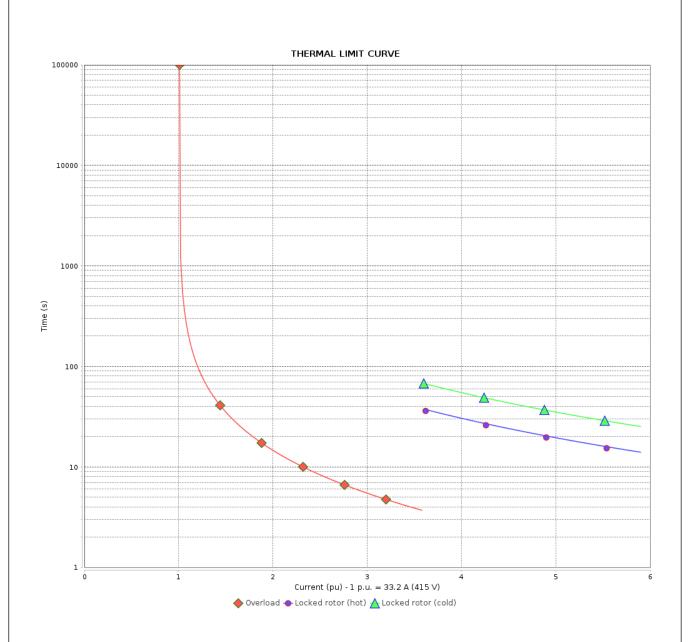


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Customer	:					
Product line	: W22 IEEE 841 NEMA Premium Efficiency Three-Phase		Product code :	16689665		
	iniee-r	mase		Catalog # :	02518ST3QA	P284T-W
Performance		: 415 V 50 Hz 4P I	 E2			
Rated current		: 33.2 A	Mon	nent of inertia (J)	: 5.11 sq.ft.lb	
.RC Rated torque		: 5.9 : 89.6 ft.lb		rcycle lation class	: Cont.(S1) : F	
ocked rotor tor	que	220 %	Serv	rice factor	: 1.00	
Breakdown torqı Rated speed		: 260 % : 1465 rpm	Tem Des	perature rise	: 105 K : B	
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Heating constan Cooling constan						
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## Three Phase Induction Motor - Squirrel Cage

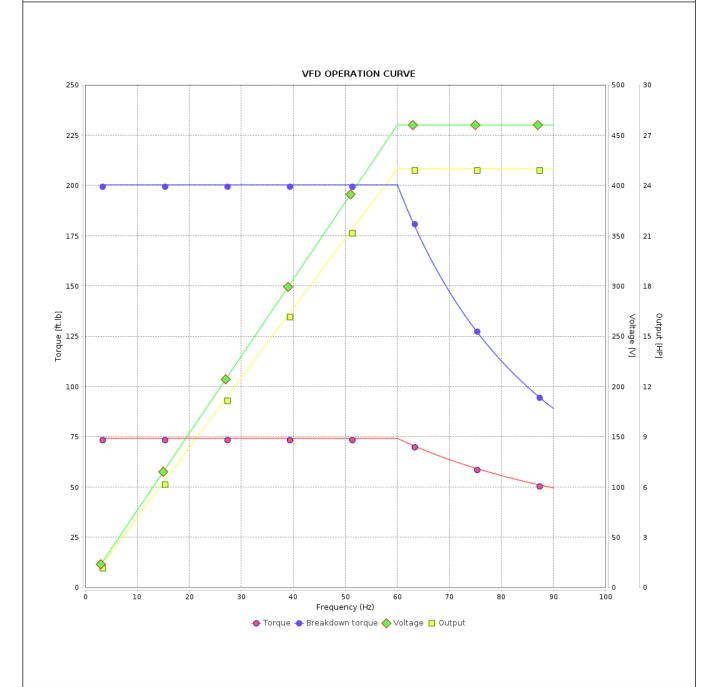


Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency

Three-Phase

Product code: 16689665



Performance	:	460 V 60 Hz 4P				
Rated current :		29.5 A	Moment o	Moment of inertia (J)		
LRC	:	6.2	Duty cycle	;	: Cont.(S1)	
Rated torque	:	74.2 ft.lb	Insulation	class	: F	
Locked rotor torqu	ue :	240 %	Service fa	ctor	: 1.15	
Breakdown torque	e :	270 %	Temperati	Temperature rise		
Rated speed		1770 rpm	Design		: B	
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## Three Phase Induction Motor - Squirrel Cage



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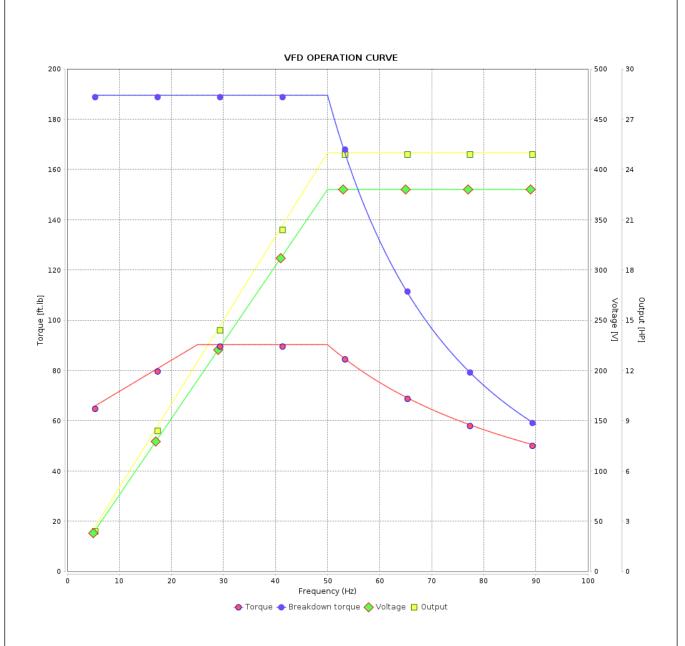
Product line : W22 IEEE 841 NEMA Premium Efficiency

Three-Phase

Product code: 16689665

Catalog #: 02518ST3QAP284T-W22

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Performance : 380 V 50 Hz 4P IE1					
Rated current LRC Rated torque	: 35.9 A : 5.3 : 90.2 ft.lb	Moment of inertia (J) Duty cycle Insulation class		: 5.11 sq.ft.lb : Cont.(S1) : F	
Locked rotor torque Breakdown torque Rated speed	: 180 % : 210 % : 1455 rpm	Service factor Temperature rise Design		: 1.00 : 105 K : B	
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## Three Phase Induction Motor - Squirrel Cage

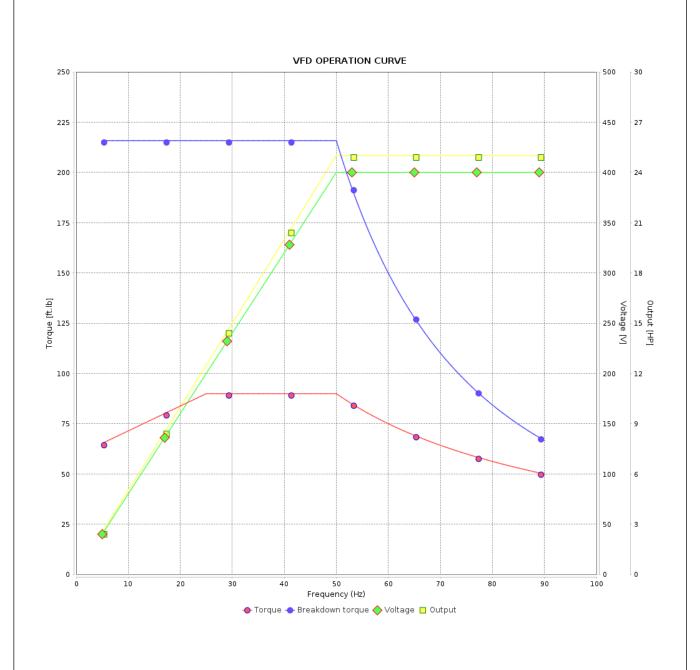


Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency

Three-Phase

Product code: 16689665



Performance	:	400 V 50 Hz 4P IE2				
Rated current	:	34.3 A	Moment o	Moment of inertia (J)		
LRC	:	5.5	Duty cycle	<b>)</b>	: Cont.(S1)	
Rated torque	:	89.9 ft.lb	Insulation	class	: F	
Locked rotor torque	e :	200 %	Service fa	ctor	: 1.00	
Breakdown torque	:	240 %	Temperature rise		: 105 K	
Rated speed	:	1460 rpm	Design		: B	
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## Three Phase Induction Motor - Squirrel Cage



Customer :

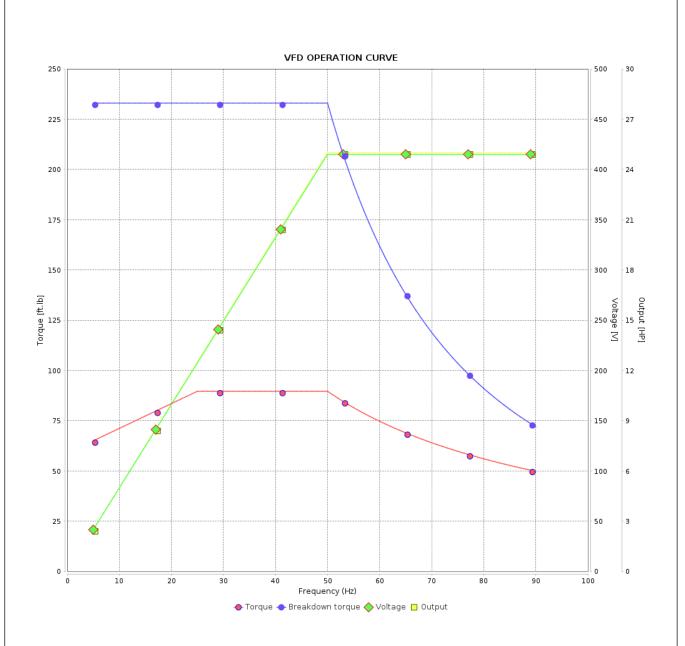
Product line : W22 IEEE 841 NEMA Premium Efficiency

Three-Phase

Product code: 16689665

Catalog #: 02518ST3QAP284T-W22

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Performance	: 415 V 50 Hz 4P IE2				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 33.2 A : 5.9 : 89.6 ft.lb : 220 % : 260 % : 1465 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 5.11 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K : B	
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