DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer Product line : W22 NEMA Premium Efficiency Product code: 12700685 Three-Phase Catalog #: 02518ET3E284T-W22G Frame : 284/6T Cooling method : IC411 - TEFC Insulation class Mounting : F-1 Duty cycle : Cont.(S1) Rotation¹ : Both (CW and CCW) Ambient temperature : -20°C to +40°C Starting method : Direct On Line : 1000 m.a.s.l. Approx. weight3 Altitude : 185 kg : IP55 Moment of inertia (J) Protection degree Design : B Output [HP] 25 25 Poles 4 Frequency [Hz] 60 50 Rated voltage [V] 208-230/460 380 Rated current [A] 65.2-59.0/29.5 35.6 L. R. Amperes [A] 404-366/183 174 LRC [A] 6.2x(Code G) 4.9x(Code E) No load current [A] 18.1-21.0/10.5 10.4 Rated speed [RPM] 1765 1445 Slip [%] 1.94 3.67 Rated torque [kgfm] 10.3 12.6 Locked rotor torque [%] 240 180 Breakdown torque [%] 270 210 Service factor 1.25 1.00 Temperature rise 80 K 80 K Locked rotor time 43s (cold) 24s (hot) 32s (cold) 18s (hot) Noise level² 64.0 dB(A) 61.0 dB(A) 25% 0.000 0.000 50% 92.4 92.4 Efficiency (%) 75% 93.0 91.7 100% 91.7 93.6 25% 0.00 0.00 0.70 50% 0.76 Power Factor 75% 0.80 0.84 100% 0.84 0.86 Drive end Non drive end Foundation loads Bearing type 6211 C3 6311 C3 Max. traction : 284 kgf Sealing V'Ring V'Ring Max. compression : 469 kgf 20000 h Lubrication interval 20000 h Lubricant amount 18 g 11 g Mobil Polyrex EM Lubricant type

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				Page	Revision
Date	22/03/2021			1 / 11	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



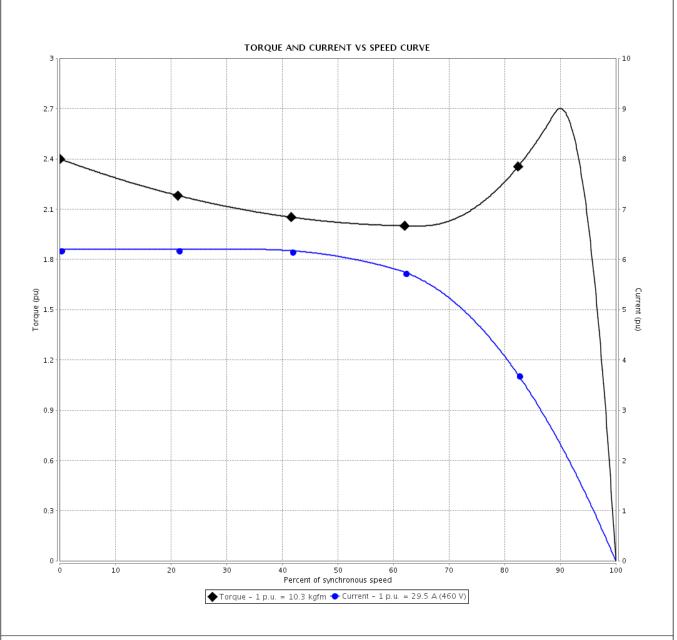
Customer :

Product line : W22 NEMA Premium Efficiency

Three-Phase

Product code: 12700685

Catalog #: 02518ET3E284T-W22G



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

: 1765 rpm

Rated current : 65.2-59.0/29.5 A

LRC : 6.2
Rated torque : 10.3 kgfm
Locked rotor torque : 240 %
Breakdown torque : 270 %

Rated speed

Moment of inertia (J)

Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K

Design : B

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

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	22/03/2021			2/11	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



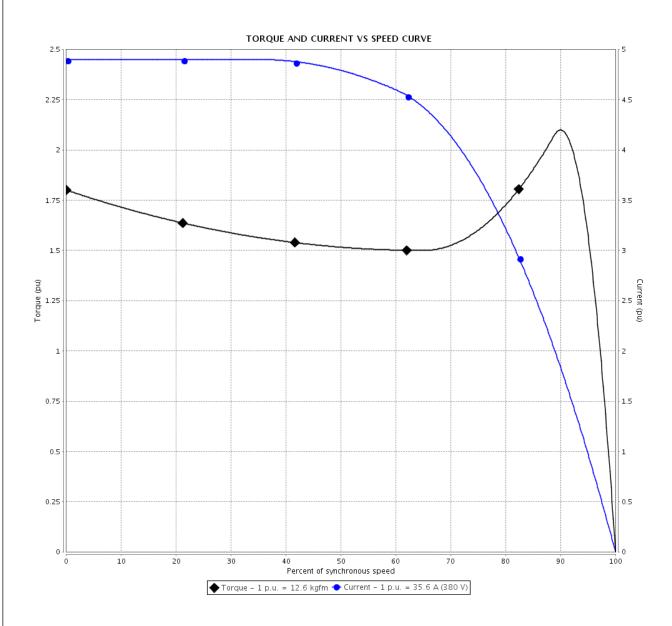
Customer

Product line : W22 NEMA Premium Efficiency

Three-Phase

Product code: 12700685

Catalog #: 02518ET3E284T-W22G



Performance : 380 V 50 Hz 4P Rated current : 35.6 A Moment of inertia (J) **LRC** : 4.9 Duty cycle : Cont.(S1) Insulation class : F Rated torque : 12.6 kgfm : 180 % : 1.00 Locked rotor torque Service factor : 80 K Breakdown torque : 210 % Temperature rise : B Rated speed : 1445 rpm Design Locked rotor time

: 32s (cold) 18s (hot)

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	22/03/2021			3 / 11	

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Date

22/03/2021

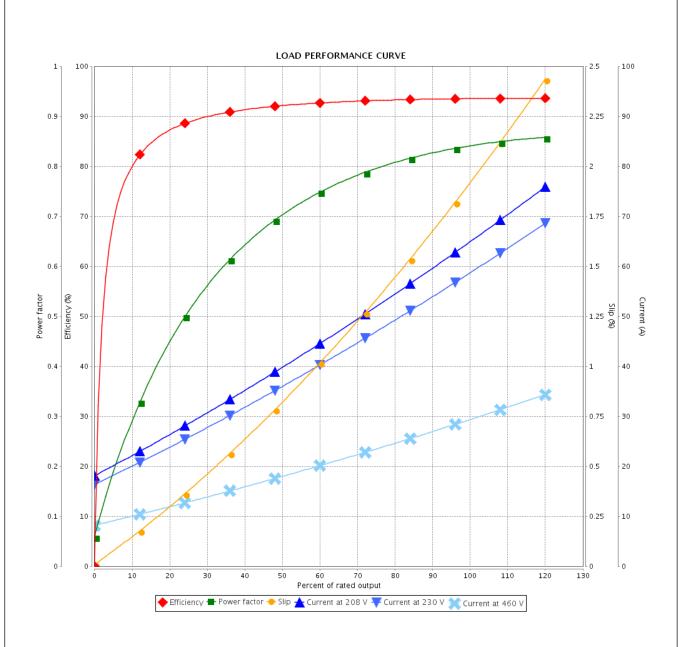
Product line : W22 NEMA Premium Efficiency

Three-Phase

Product code: 12700685

Catalog #: 02518ET3E284T-W22G

4/11



Performance : 208-230/460 V 60 Hz 4P Rated current : 65.2-59.0/29.5 A Moment of inertia (J) **LRC** Duty cycle : Cont.(S1) : 6.2 : 10.3 kgfm Insulation class : F Rated torque Locked rotor torque : 240 % Service factor : 1.25 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1765 rpm Design : B Performed Checked Rev. **Changes Summary** Date Performed by Checked by Revision Page

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



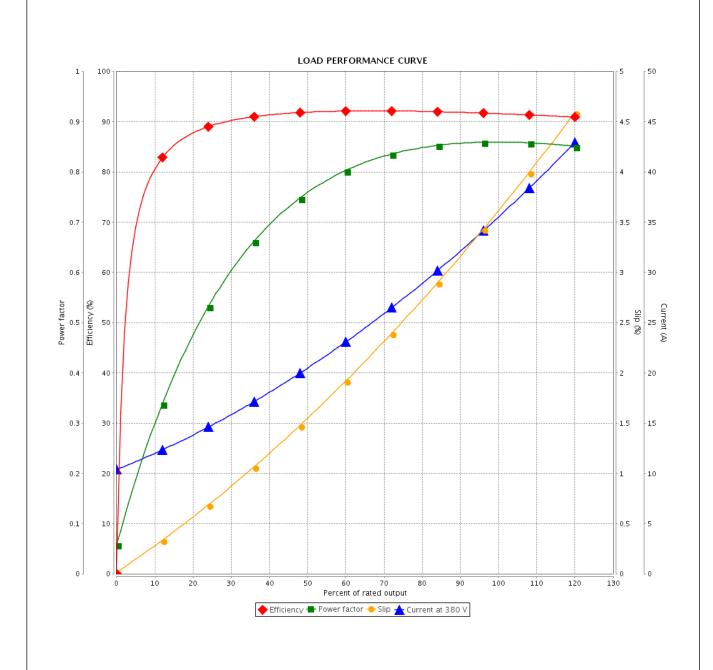
Customer

Product line : W22 NEMA Premium Efficiency Product

Three-Phase

Product code: 12700685

Catalog #: 02518ET3E284T-W22G



Performance	: 38	880 V 50 Hz 4P				
Rated current	: 35	B5.6 A Moment of		f inertia (J)		
LRC : 4.9		9	Duty cycle	Duty cycle		
Rated torque		2.6 kgfm	Insulation class		:F	
		30 %	Service fa	Service factor		
Breakdown torqu	ie : 2′	10 %	Temperature rise		: 80 K	
Rated speed	: 14	145 rpm	Design		: B	
Rev.	Rev. Changes Summary		1	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	22/03/2021				5 / 11	

Three Phase Induction Motor - Squirrel Cage

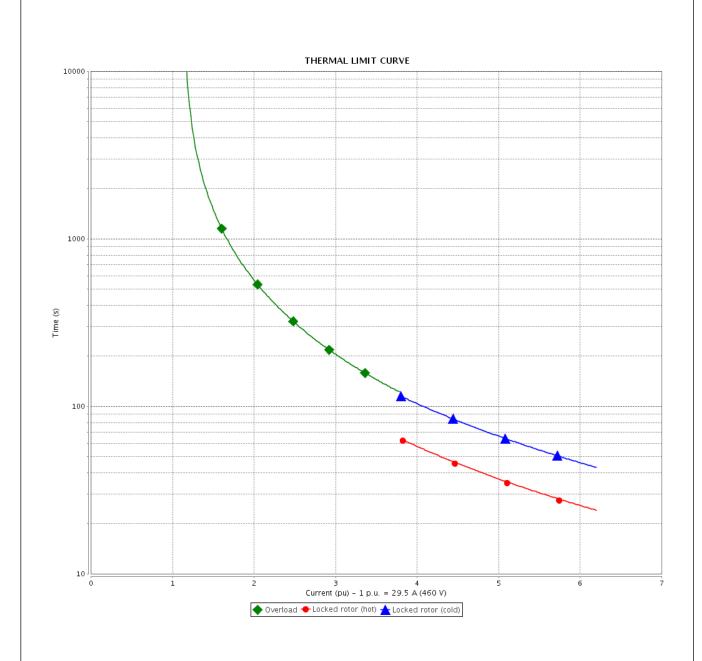


Customer		:					
Product line		: W22 NEMA Premium Efficie	ency Product code :		40700005		
Product line		Three-Phase	ency	Froduct code .	12700685		
				Catalog # :	02518ET3E2	84T-W22G	
Performance		208-230/460 V 60 Hz 4P	N.4.	61			
Rated current LRC		65.2-59.0/29.5 A 6.2	Moment of Duty cycle	of inertia (J) e	: Cont.(S1)		
Rated torque	:	10.3 kgfm	Insulation	class	: F		
Locked rotor tord Breakdown torqu		240 % 270 %	Service fa Temperate		: 1.25 : 80 K		
Rated speed		1765 rpm	Design	uic iisc	: B		
Heating constan	t						
Cooling constant							
Rev.		Changes Summary		Performed	Checked	Date	
Performed by							
Checked by					Page	Revision	
Date	22/03/2021				6 / 11		

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary		Checked	Date
Performed by					
Checked by				Page	Revision
Date	22/03/2021			7 / 11	

Three Phase Induction Motor - Squirrel Cage

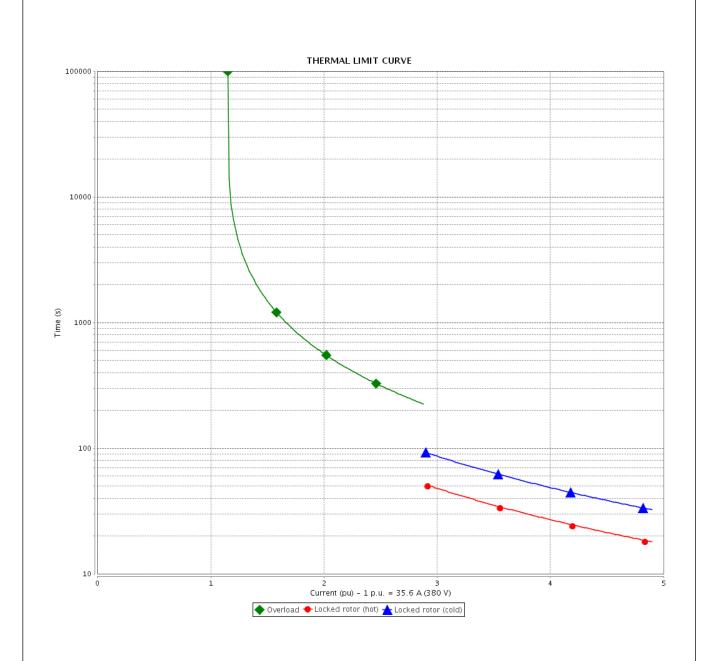


Customer	:				
Product line	: W22 NEMA Premium Effici Three-Phase		Product code :	12700685 02518ET3E2	84T-W22G
Performance	: 380 V 50 Hz 4P	M	: : (I)		
Rated current LRC	: 35.6 A : 4.9	Moment of Duty cycle	inertia (J)	: Cont.(S1)	
Rated torque	: 12.6 kgfm	Insulation	class	: F	
Locked rotor torque Breakdown torque	: 180 % : 210 %	Service fac Temperatu		: 1.00 : 80 K	
Rated speed	: 1445 rpm	Design		: 80 K : B	
Heating constant Cooling constant					
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
· ·	2/2021			8/11	

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	22/03/2021			9/11	

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

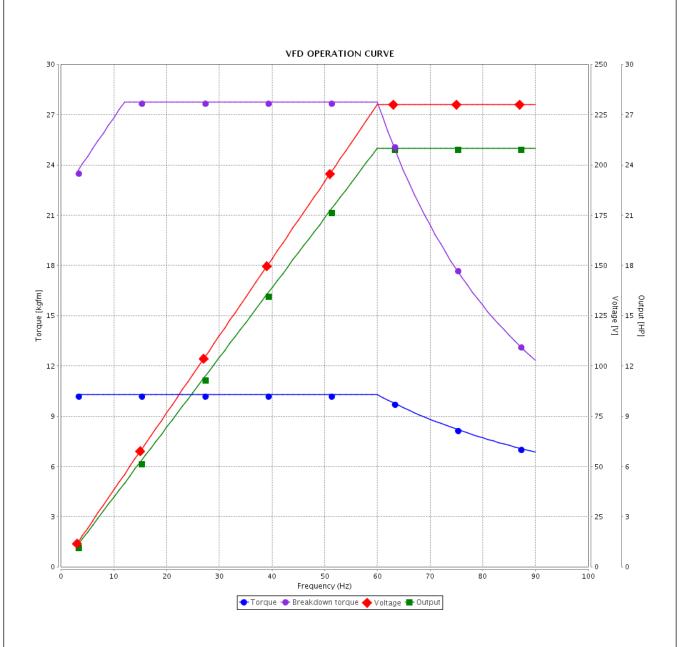
Product line : W22 NEMA Premium Efficiency

Three-Phase

Product code: 12700685

Catalog #: 02518ET3E284T-W22G

10/11



Performance	: 20	08-230/460 V 60 Hz 4P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed		5.2-59.0/29.5 A .2 0.3 kgfm 40 % 70 % 765 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class actor	: Cont.(S1) : F : 1.25 : 80 K : B	
Rev.	Changes Summary		,	Performed	Checked	Date
Performed by						
Checked by		1			Page	Revision

22/03/2021

Date

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



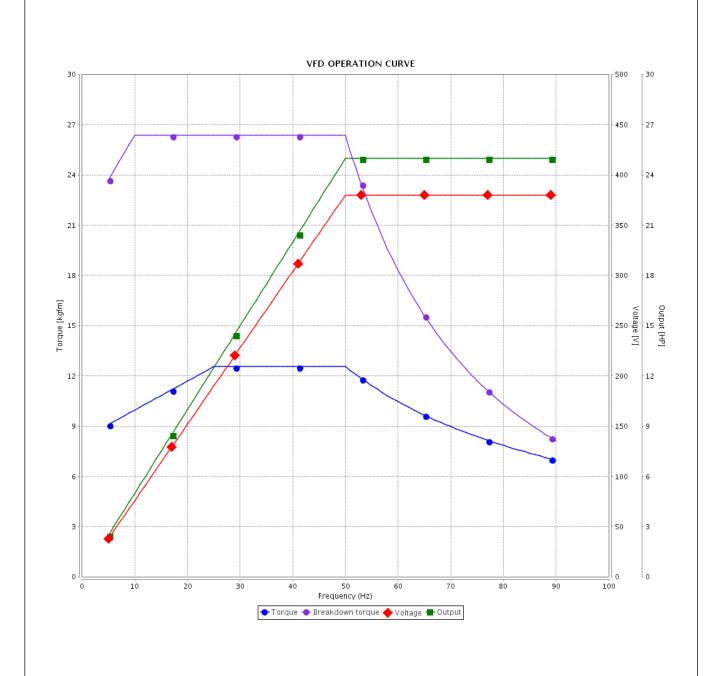
Customer

Product line : W22 NEMA Premium Efficiency

Three-Phase

Product code: 12700685

Catalog #: 02518ET3E284T-W22G



Performance		: 380 V 50 Hz 4P				
Rated current		: 35.6 A	Moment o	f inertia (J)		
LRC		: 4.9 Duty o		;	: Cont.(S1)	
Rated torque		: 12.6 kgfm	Insulation	Insulation class		
Locked rotor torque		: 180 %	Service fa	Service factor		
Breakdown torque		: 210 %	Temperati	Temperature rise		
Rated speed		: 1445 rpm	1445 rpm Design		: B	
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	22/03/202	1			11 / 11	

