DATA SHEET

Three Phase Induction Motor - Squirrel Cage

:

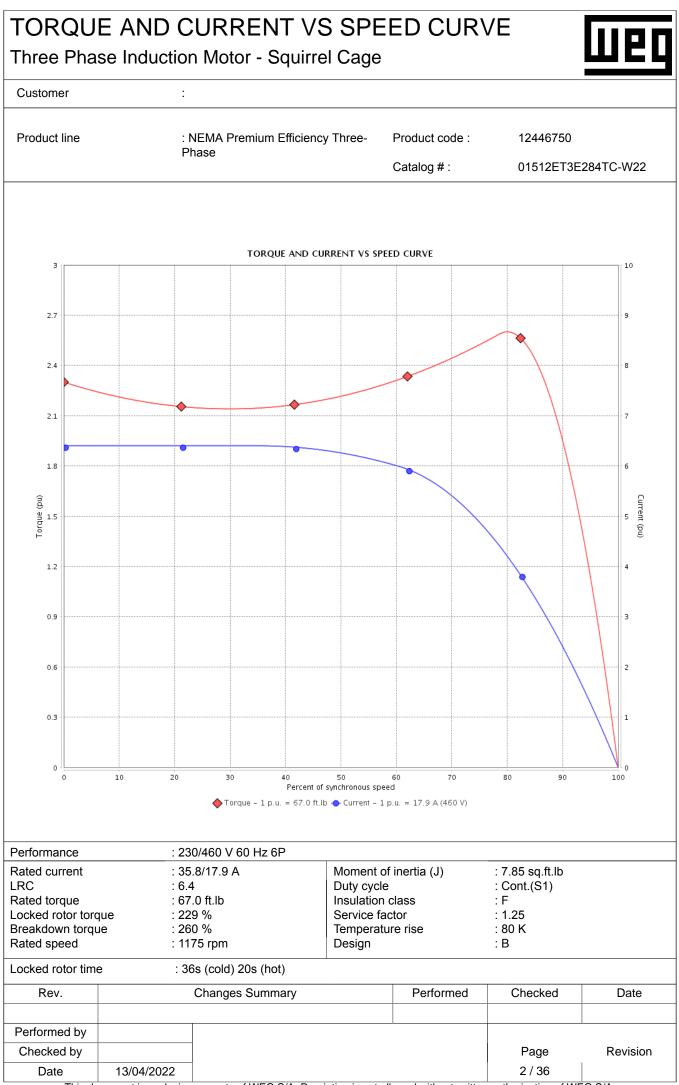
Customer

| | | Phase | emium Efficien | cy Three- | Product code | e: 12 | 446750 | |
|-----------------------------------------------------------------------------------|----------------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------------------|-------------------------|-------------------------|-------------------------|
| | | Phase | | | Catalog # : | 01 | 512ET3E284 | TC-W22 |
| Frame Insulation class | | : 284/6TC : F | | Cooling Mounti | g method | : I(: F | C411 - TEFC | |
| Duty cycle | | : Cont.(S1) | | Rotatic | | | Soth (CW and | CCW) |
| Ambient tempera | ature | : -20°C to + | 40°C | | g method | | Direct On Line | , |
| Altitude | | : 1000 m.a. | | | . weight ³ | | 21 lb | |
| Protection degre | е | : IP55 | | | nt of inertia (J) | : 7 | .85 sq.ft.lb | |
| Design | | : B | | | | | | |
| Output [HP] | | 15 | 10 | 10 | 10 | 15 | 15 | 15 |
| Poles | | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Frequency [Hz] | | 60 | 50 | 50 | 50 | 50 | 50 | 50 |
| Rated voltage [V] | | 230/460 | 380 | 400 | 415 | 380 | 400 | 415 |
| Rated current [A] | | 35.8/17.9 | 15.5 | 15.1 | 14.9 | 22.0 | 20.9 | 20.2 |
| . R. Amperes [A] | | 229/115 | 112 | 119 7 0x(Codo K) | 124 8 2x(Codo K) | 103 4 7x(Codo E) | 111 5 2x(Codo E) | 115 |
| _RC [A] | | 6.4x(Code G) | /.∠x(Code J) | I. SX(CODE K) | 8.3x(Code K) | 4.7 X(CODE E) | 5.5X(CODE F) | |
| No load current [A |] | 14.0/7.00 | 7.00 | 7.40 | 7.70 | 7.00 | 7.40 | 7.70 |
| Rated speed [RPN | | 1175 | 985 | 985 | 985 | 965 | 970 | 975 |
| Slip [%] | 1 | 2.08 | 1.50 | 1.50 | 1.50 | 3.50 | 3.00 | 2.50 |
| Rated torque [ft.lb | 1 | 67.0 | 53.3 | 53.3 | 53.3 | 81.6 | 81.2 | 80.8 |
| Locked rotor torqu | | 229 | 270 | 300 | 330 | 170 | 200 | 220 |
| Breakdown torque | | 260 | 300 | 340 | 360 | 210 | 229 | 250 |
| Service factor | | 1.25 | 1.25 | 1.25 | 1.25 | 1.00 | 1.15 | 1.15 |
| Temperature rise | | 80 K | 80 K | 80 K | 80 K | 80 K | 80 K | 80 K |
| _ocked rotor time | | 36s (cold) 20s (hot) | 61s (cold) 34s (hot) | 54s (cold) 30s (hot) | 52s (cold) 29s (hot) | 27s (cold) 15s (hot) | 27s (cold) 15s (hot) | 27s (cold) 15s (hot) |
| Noise level ² | | 59.0 dB(A) | 56.0 dB(A) | 56.0 dB(A) | 56.0 dB(A) | 56.0 dB(A) | 56.0 dB(A) | 56.0 dB(A) |
| | 25% | | | | | | | |
| Efficiency (%) | 50% | 91.0 | 89.0 | 89.1 | 89.1 | 91.0 | 90.2 | 90.2 |
| | 75% | 91.7 | 89.4 | 89.5 | 89.5 | 90.2 | 90.2 | 91.0 |
| | 100% | 91.7 | 89.4 | 89.5 | 89.5 | 88.5 | 89.5 | 90.2 |
| | 25% | 0.69 | 0.04 | 0.01 | 0.59 | 0.75 | 0.70 | 0.70 |
| Power Factor | 50% 75% | 0.69 | 0.64 0.76 | 0.61 0.73 | 0.58 | 0.75 0.84 | 0.72 | 0.70 |
| | 100% | 0.80 | 0.70 | 0.73 | 0.71 | 0.86 | 0.85 | 0.81 |
| | 100 /8 | | | | tion loads | 0.00 | 0.05 | 0.04 |
| Bearing type | | <u>Drive end</u> : 6311 C3 | | | | | 70 11- | |
| Sealing | | : V'Ring | | | action ompression | | 70 lb | |
| Lubrication interv | val | : 20000 ł | | | Inpression | . 10 | : 1091 lb | |
| Lubricant amour | | : 18 g | 11 g | | | | | |
| Lubricant type | | | I Polyrex EM | | | | | |
| Notes USABLE @208∨ | 39.6A SF 1. | 15 SFA 45.5A | | | | | | |
| This revision repl must be eliminate (1) Looking the m (2) Measured at 2 | ed. lotor from the Im and with t | e shaft end. tolerance of +3 | 3dB(A). | | are average va supply, subject | | | |
| (3) Approximate v | ocess. | | | | | | | |
| manufacturing pro (4) At 100% of ful | | | | | Performe | d Cha | ecked | D - 4 - |
| manufacturing pro | | Changes | Summary | | Fenome | | | Date |
| manufacturing pro (4) At 100% of ful | | Changes | Summary | | Fenome | | | Date |
| manufacturing pro (4) At 100% of ful Rev. | | Changes | Summary | | Fenome | | age | Date |

Шер

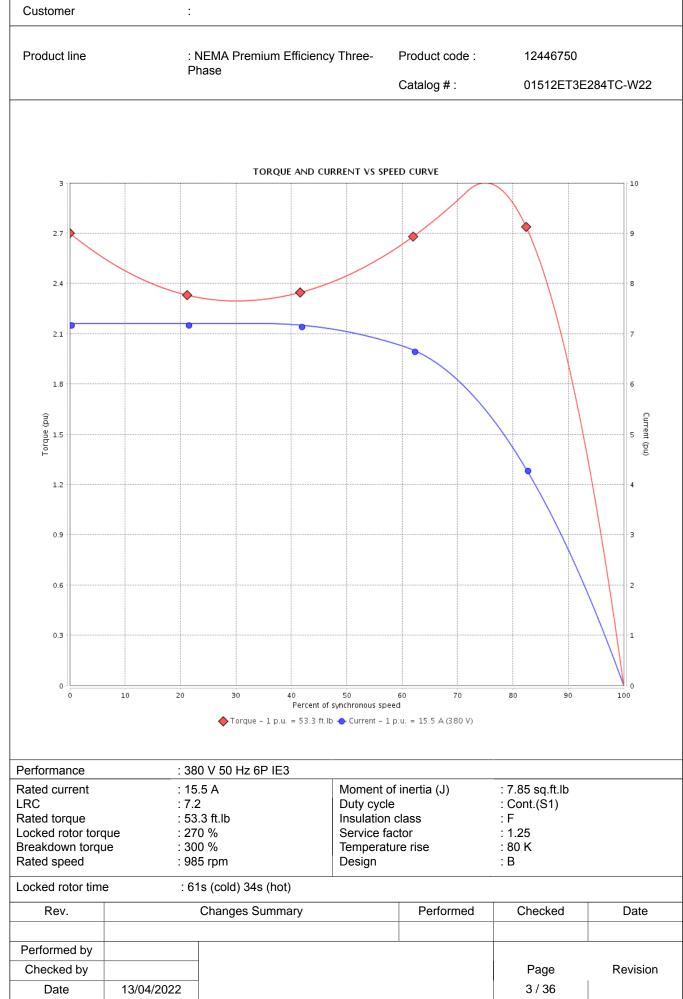
 Date
 13/04/2022
 1 / 36

 This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.
 1 / 36

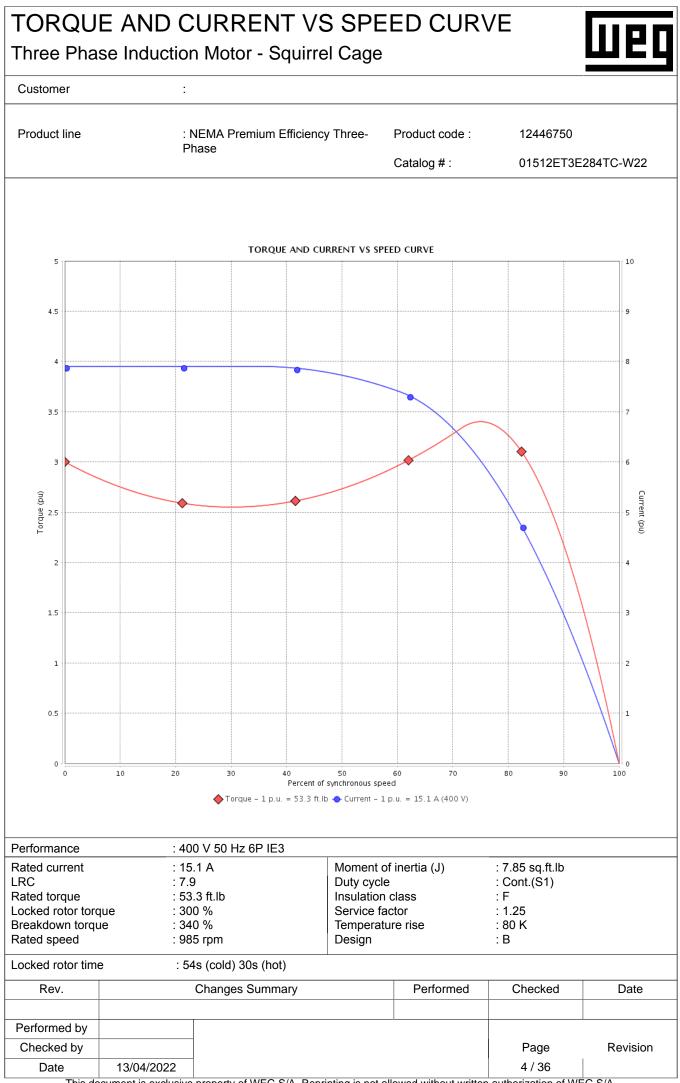


TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



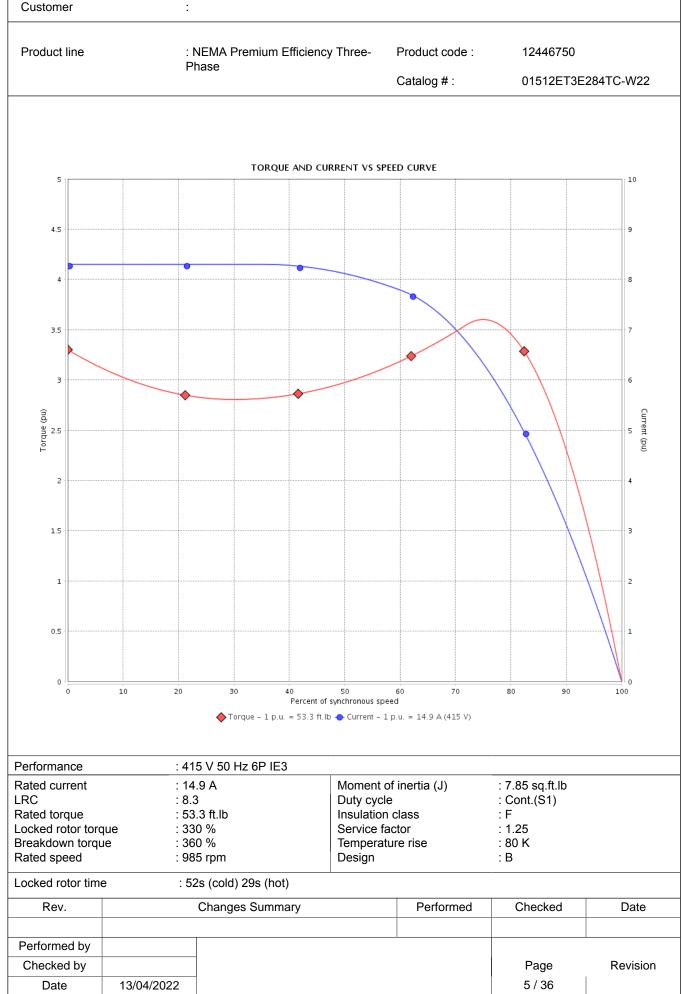
This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.



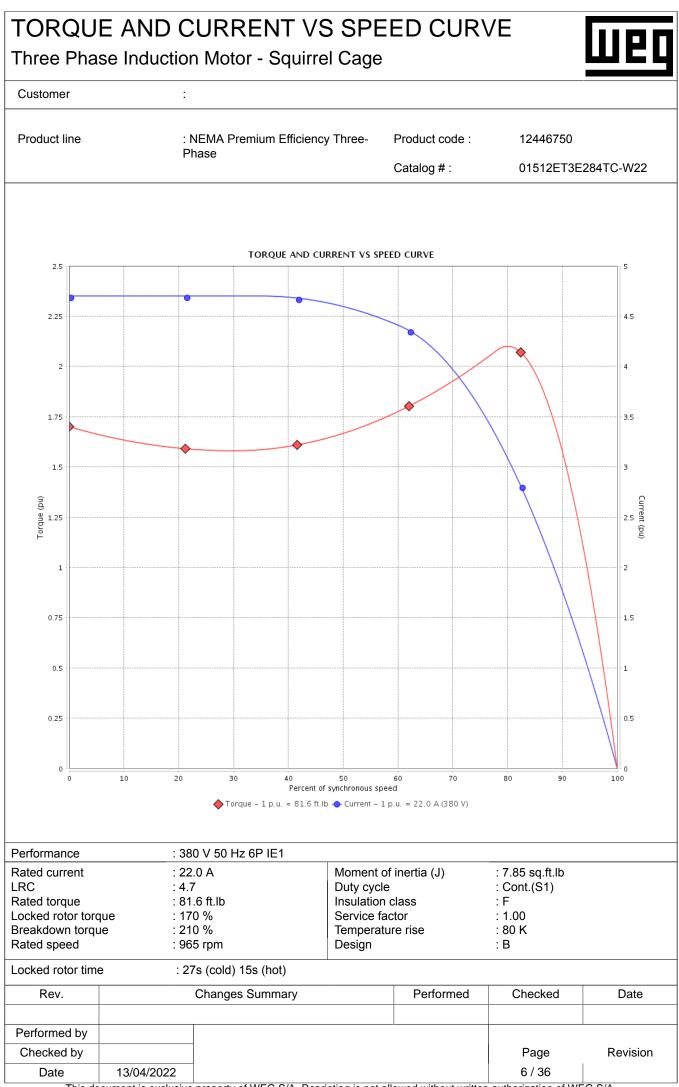
TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage





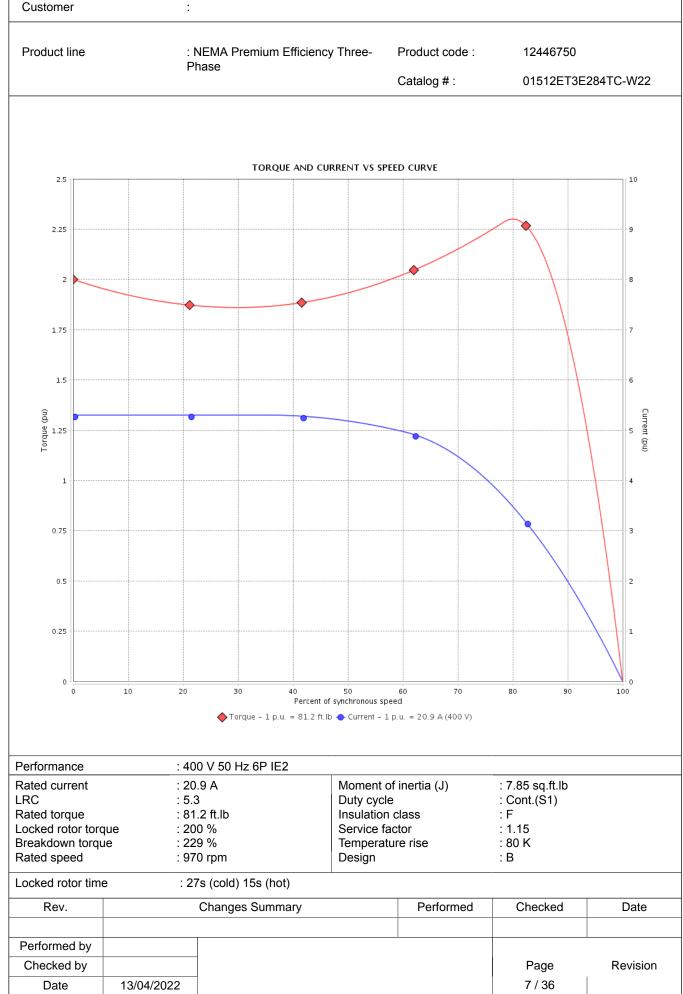
This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.



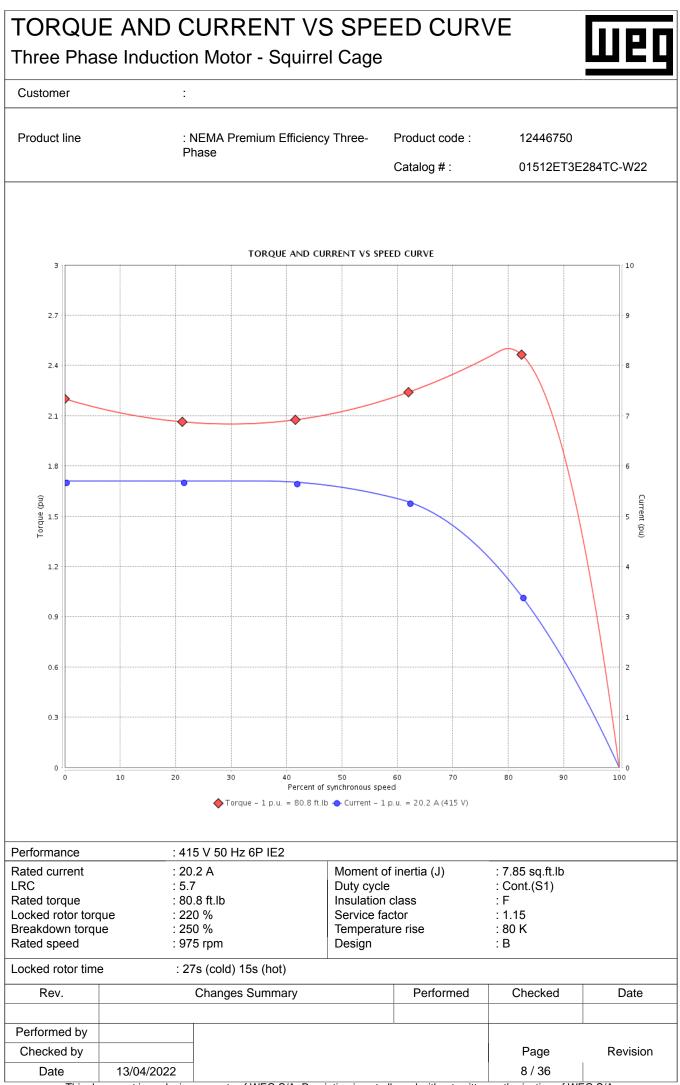
TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



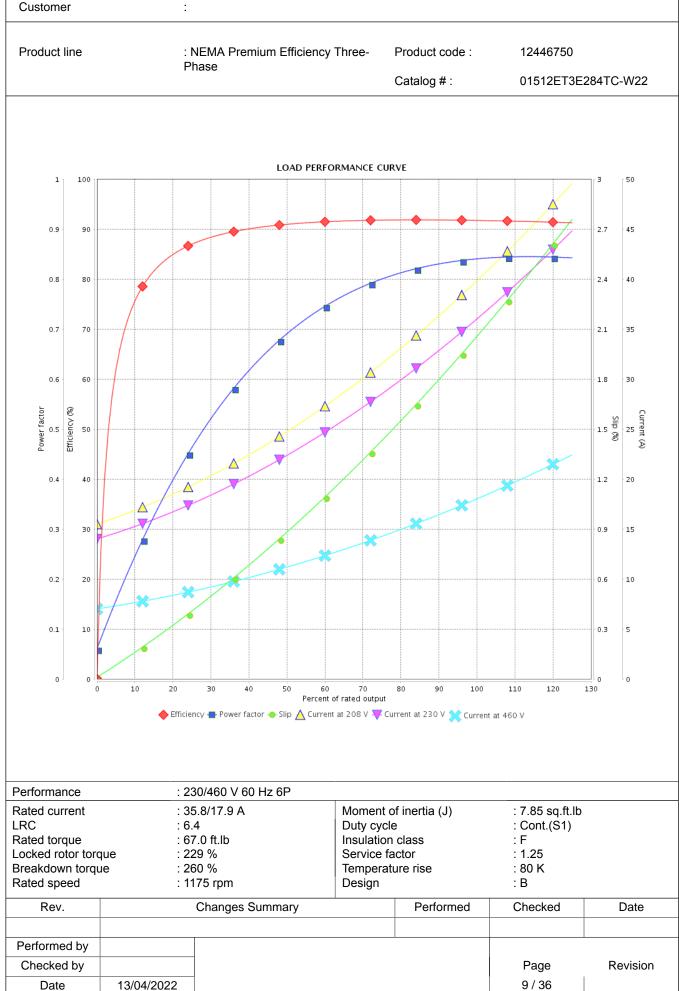


This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.



Three Phase Induction Motor - Squirrel Cage

Customer



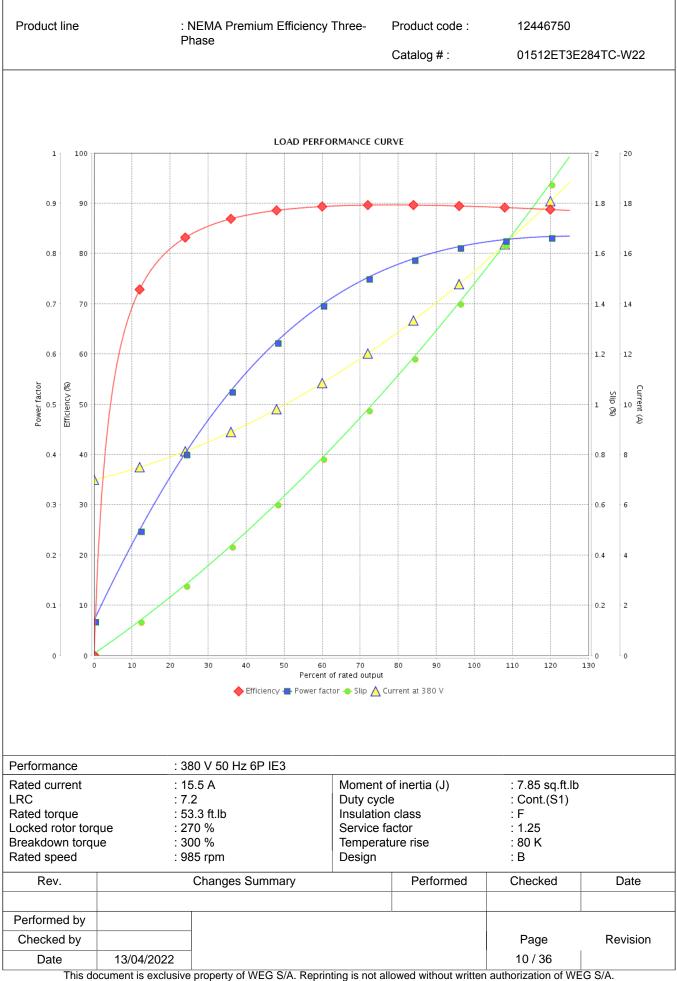
This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.

Three Phase Induction Motor - Squirrel Cage

:

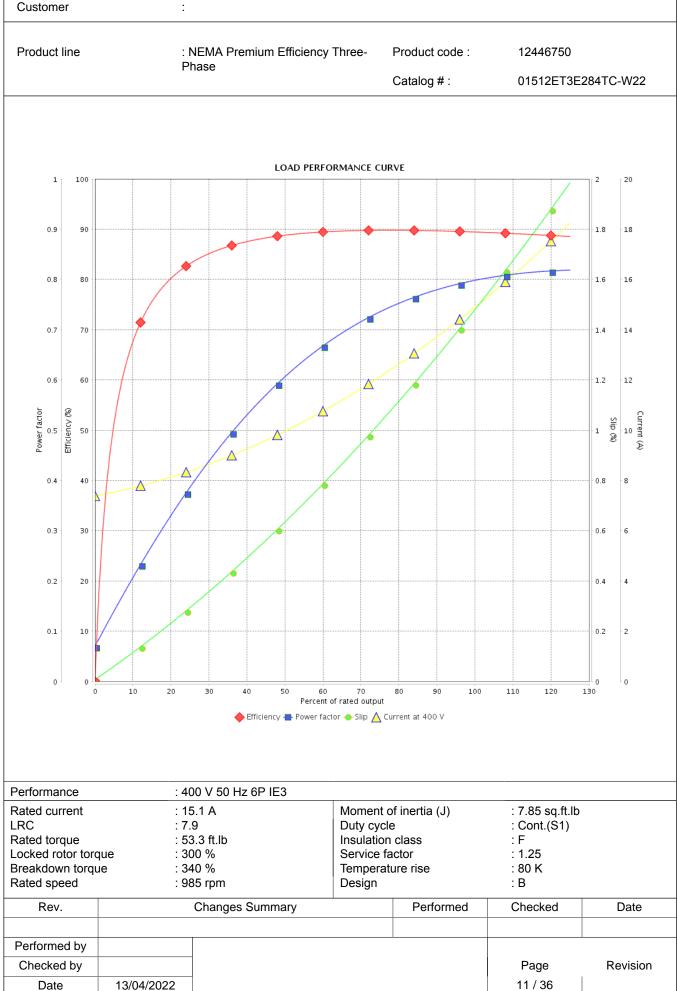


Customer



Three Phase Induction Motor - Squirrel Cage

Customer



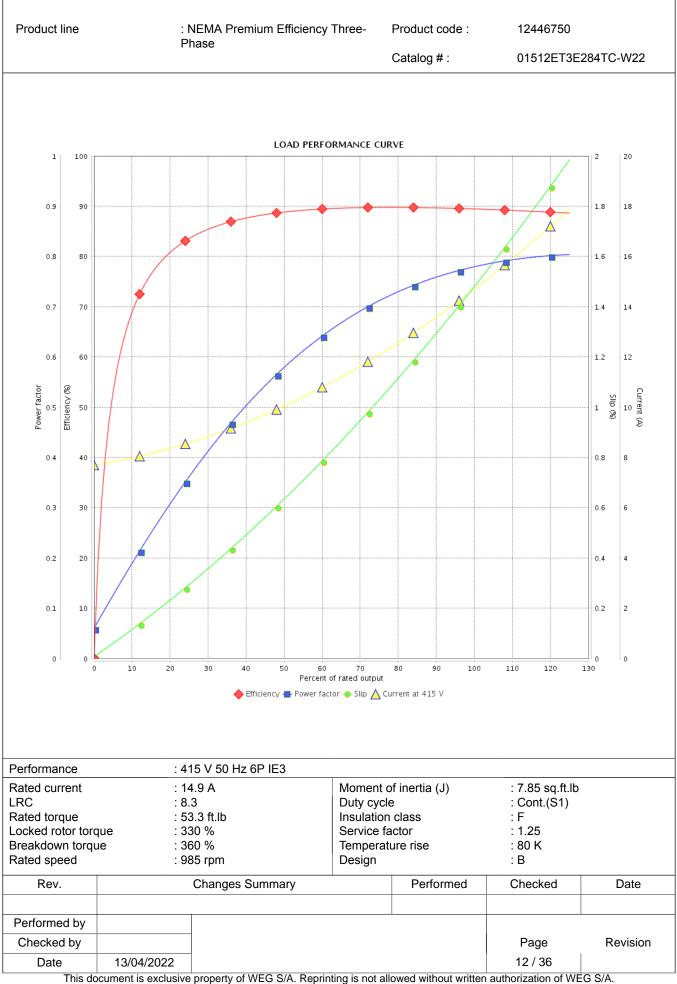
This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.

Three Phase Induction Motor - Squirrel Cage

:



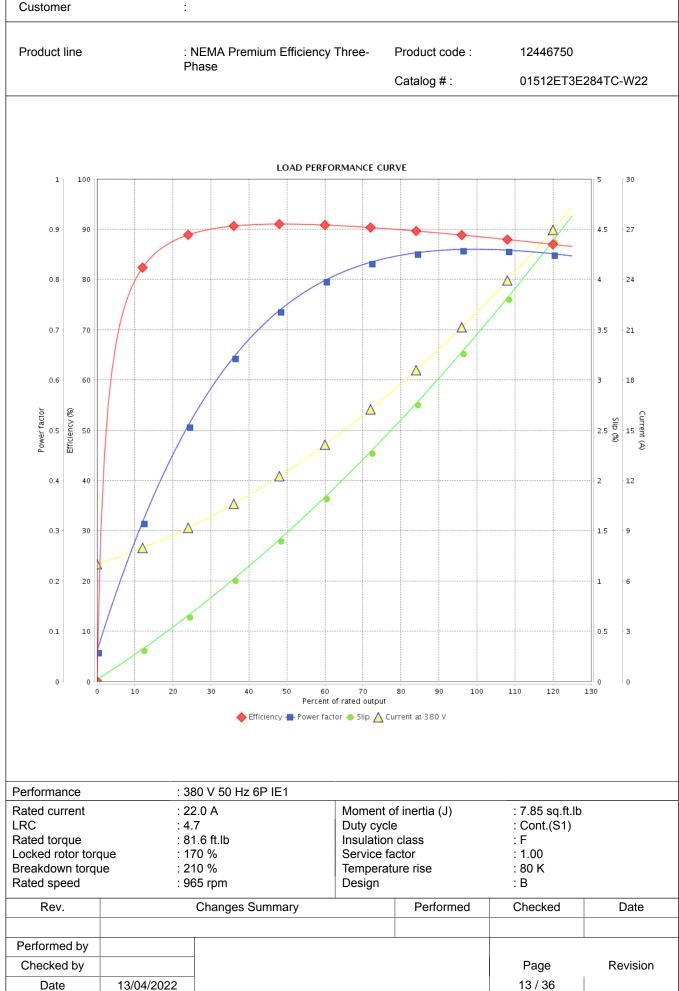
Customer



property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/ Subject to change without notice

Three Phase Induction Motor - Squirrel Cage

Customer



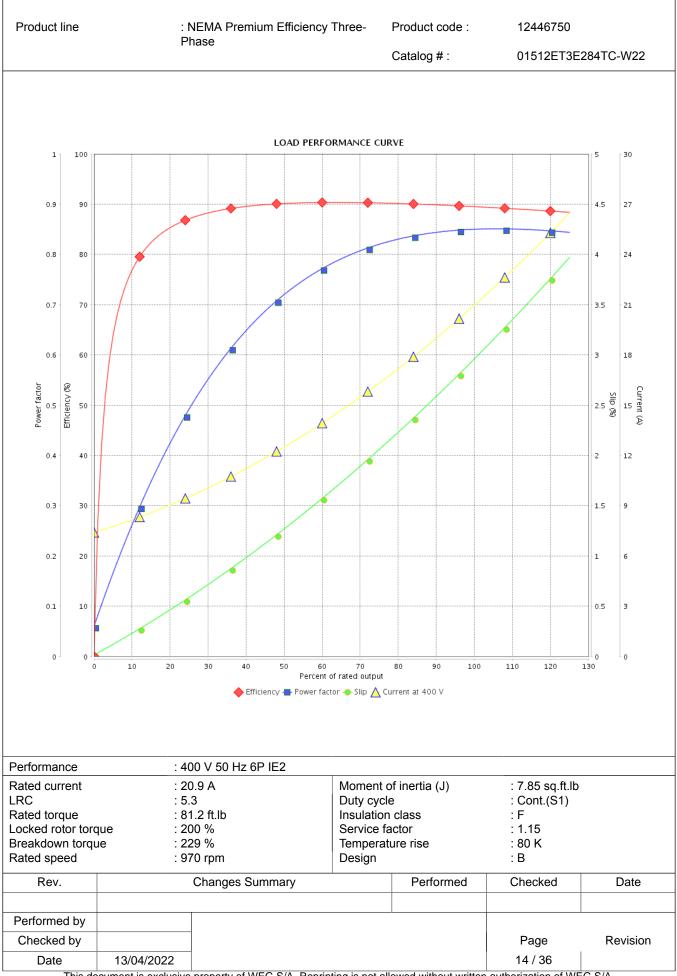
This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.

Three Phase Induction Motor - Squirrel Cage

:

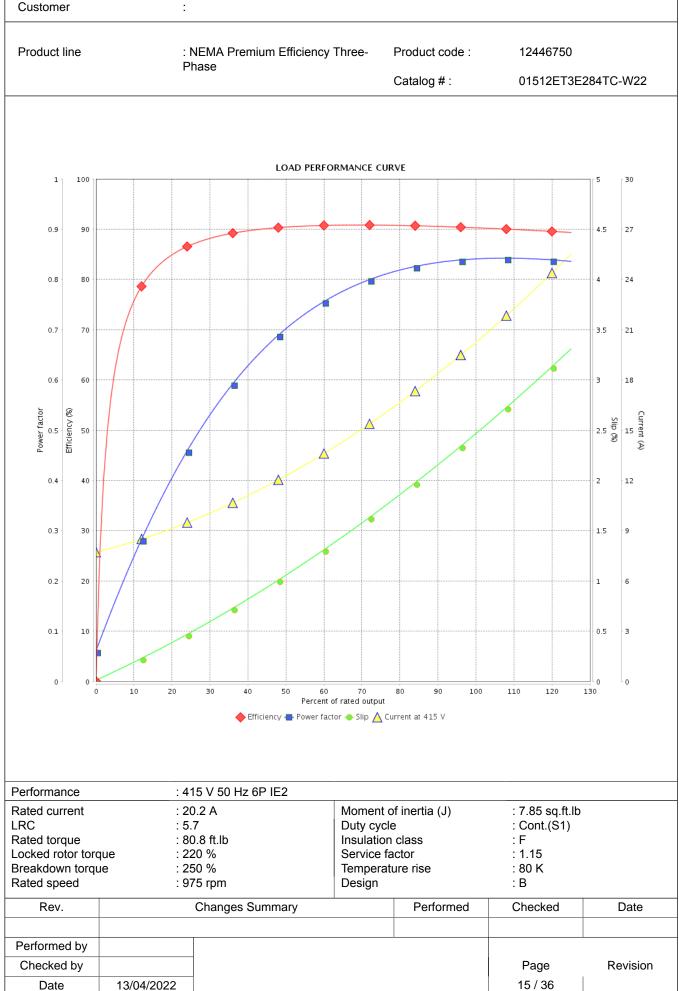


Customer



Three Phase Induction Motor - Squirrel Cage

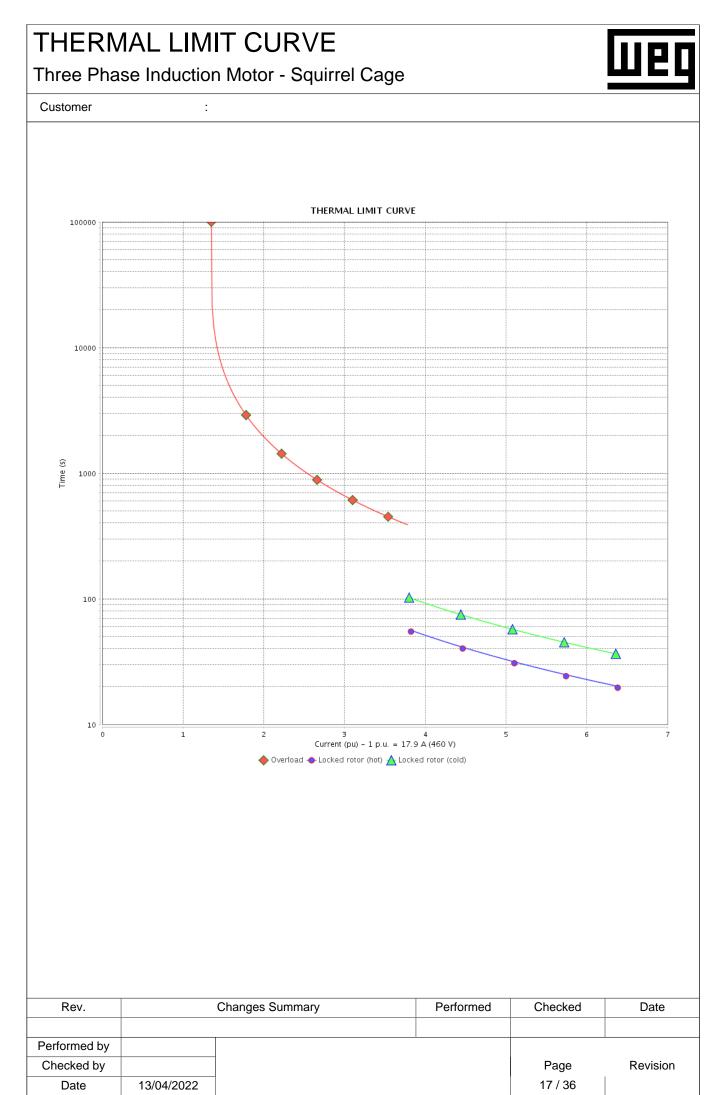
Customer



This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.

| | | | шер |
|--------------|-------------------------------------------|----------------|--------------------|
| Customer | ction Motor - Squirrel Cage | | |
| | : | | |
| Product line | : NEMA Premium Efficiency Three- Phase | Product code : | 12446750 |
| | | Catalog # : | 01512ET3E284TC-W22 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Performance | : 230/460 V 60 Hz 6P | | |

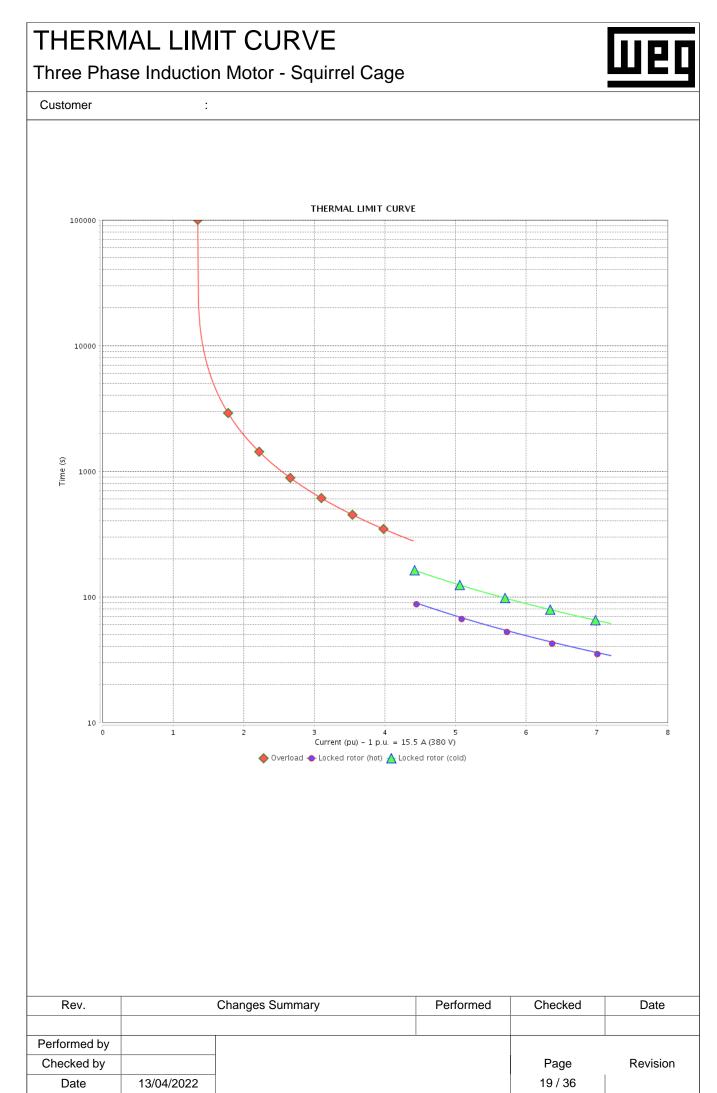
| Performance | : 23 | 30/460 V 60 HZ 6P | | | | |
|---------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------------|---------------------------------------------------------------------------|---------------|------------------------------------------------------------------|----------|
| Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed | : 6. : 67 que : 22 ue : 26 | 5.8/17.9 A 4 7.0 ft.lb 29 % 60 % 175 rpm | Moment o Duty cycle Insulation Service fa Temperatu Design | class ctor | : 7.85 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B | |
| Heating constant | t | | | | | |
| Cooling constant | t | | | | | |
| Rev. | | Changes Summary | | Performed | Checked | Date |
| | | | | | | |
| Performed by | | | | | | |
| Checked by | | | | | Page | Revision |
| Date | 13/04/2022 | | | | 16 / 36 | |



This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A. Subject to change without notice

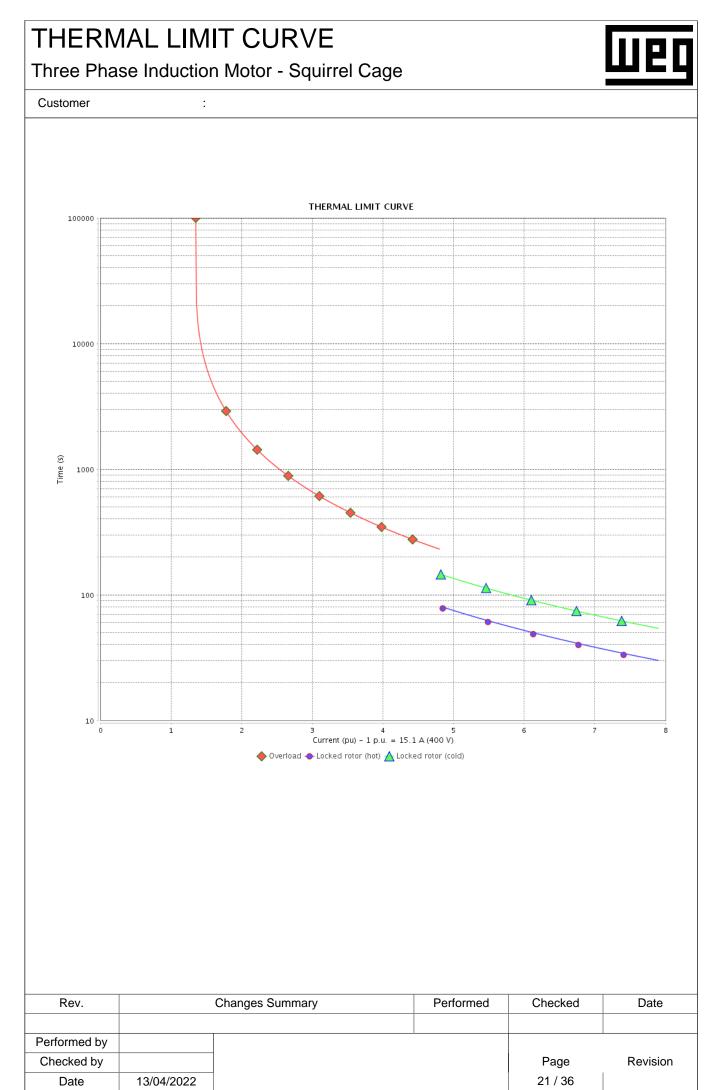
| [| | | |
|----------------------|------------------------------|-------------------------------------|--------------------------------|
| THERMAL | LIMIT CURVE | | шер |
| Three Phase Inc | duction Motor - Squirrel (| Cage | |
| Customer | : | | |
| Product line | : NEMA Premium Efficiency Th | nree- Product code : | 12446750 |
| | Phase | Catalog # : | 01512ET3E284TC-W22 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Performance | : 380 V 50 Hz 6P IE3 | | |
| Rated current LRC | : 15.5 A I : 7.2 I | Moment of inertia (J) Duty cycle | : 7.85 sq.ft.lb : Cont.(S1) |

| Rated current LRC Rated torque Locked rotor torq Breakdown torqu Rated speed | : 7 : 55 ue : 2 ie : 3 | 5.5 A .2 3.3 ft.lb 70 % 00 % 85 rpm | Moment or Duty cycle Insulation Service fa Temperatu Design | class ctor | : 7.85 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B | |
|---------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------------------|----------------------------------------------------------------------------|---------------|------------------------------------------------------------------|----------|
| Heating constant | | | | | | |
| Cooling constant | | | | | | |
| Rev. | | Changes Summary | | Performed | Checked | Date |
| | | | | | | |
| Performed by | | | | | | |
| Checked by | | | | | Page | Revision |
| Date | 13/04/2022 | | | | 18 / 36 | |



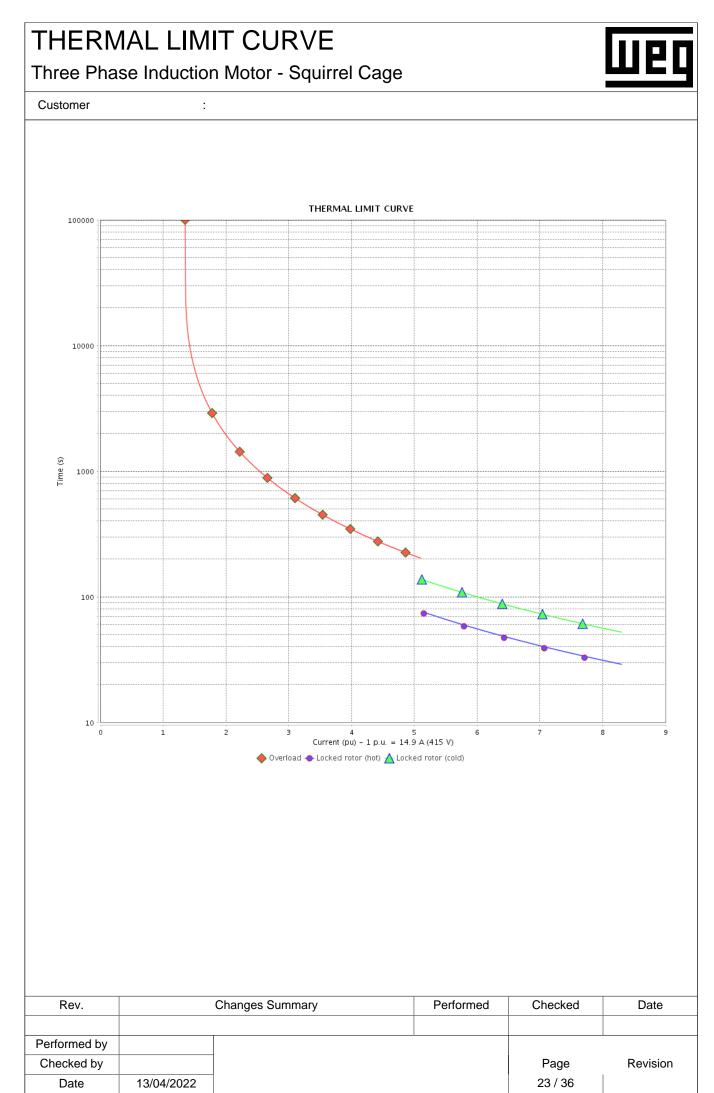
| THERMAL | LIMIT CURVE | | |
|---------------|-------------------------------------------|-------------------------------|--------------------------------|
| | nduction Motor - Squirrel Cag | je | Шег |
| Customer | : | | |
| Product line | : NEMA Premium Efficiency Three- Phase | Product code : Catalog # : | 12446750 01512ET3E284TC-W22 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Performance | : 400 V 50 Hz 6P IE3 | | |
| Rated current | : 15.1 A Mom | ent of inertia (J) | : 7.85 sq.ft.lb : Cont (S1) |

| Rated current LRC | : 15 : 7. | 5.1 A | | f inertia (J) | : 7.85 sq.ft.lb | |
|----------------------|--------------|-----------------|------------|---------------|-----------------|----------|
| | | - | Duty cycle | | : Cont.(S1) | |
| Rated torque | | 3.3 ft.lb | Insulation | | : F | |
| Locked rotor torg | ue : 30 | 00 % | Service fa | ctor | : 1.25 | |
| Breakdown torqu | ie : 34 | 40 % | Temperatu | ire rise | : 80 K | |
| Rated speed | : 98 | 35 rpm | Design | | : B | |
| Heating constant | | | | | · | |
| Cooling constant | | | | | | |
| Rev. | | Changes Summary | | Performed | Checked | Date |
| | | | | | | |
| Performed by | | | | | | |
| Checked by | | | | | Page | Revision |
| Date | 13/04/2022 | | | | 20 / 36 | |



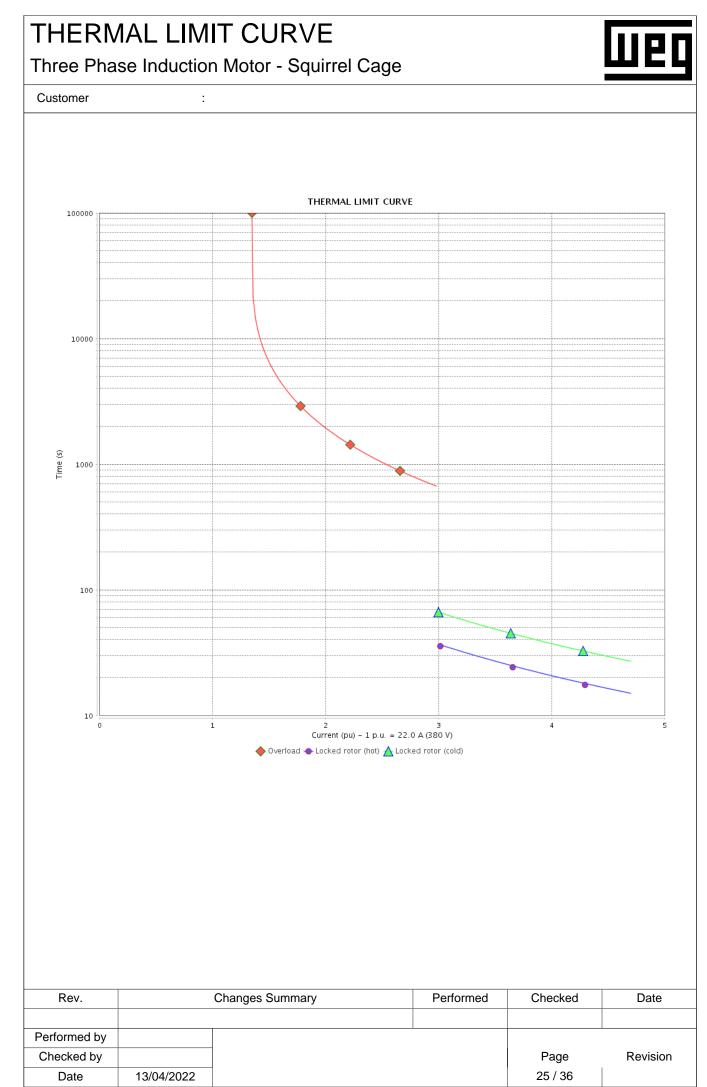
| | LIMIT CURVE | | шер |
|--------------------------------------|---------------------------------|---------------------------------------------|---------------------------------------|
| Customer | nduction Motor - Squirrel Cag | ge | |
| Product line | : NEMA Premium Efficiency Three | - Product code : | 12446750 |
| | Phase | Catalog # : | 01512ET3E284TC-W22 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Performance | : 415 V 50 Hz 6P IE3 | | |
| Rated current LRC Rated torque | : 8.3 Duty | nent of inertia (J) cycle ation class | : 7.85 sq.ft.lb : Cont.(S1) : F |

| Rated torque Locked rotor toro Breakdown torqu Rated speed | que : 3 Je : 3 | .3 3.3 ft.lb 30 % 60 % 85 rpm | Insulation Service fa Temperat Design | class actor | : Cont.(S1) : F : 1.25 : 80 K : B | |
|---------------------------------------------------------------------|-------------------|-------------------------------------------|------------------------------------------------|----------------|-----------------------------------------------|----------|
| Heating constant | | | 200.9.1 | | | |
| Cooling constant | | | | | | |
| Rev. | | Changes Summary | | Performed | Checked | Date |
| | | | | | | |
| Performed by | | | | | | |
| Checked by | | | | | Page | Revision |
| Date | 13/04/2022 | 7 | | | 22 / 36 | |



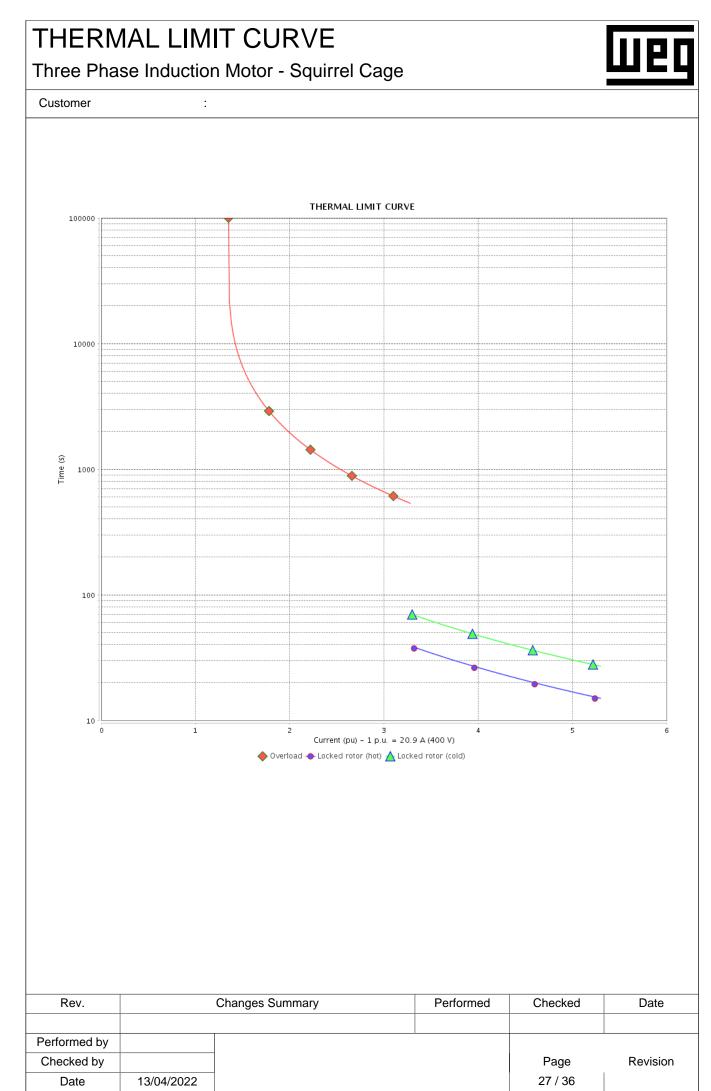
| THERMAI | LIMIT CURVE | | |
|----------------------|------------------------------------------|---------------------------------|--------------------------------|
| | nduction Motor - Squirrel Ca | ge | ше |
| Customer | : | | |
| Product line | : NEMA Premium Efficiency Three Phase | - Product code : Catalog # : | 12446750 01512ET3E284TC-W22 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Performance | : 380 V 50 Hz 6P IE1 | | |
| Rated current LRC | : 22.0 A Mon : 4.7 Duty | nent of inertia (J) / cycle | : 7.85 sq.ft.lb : Cont.(S1) |

| Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed | : 4. : 8' jue : 17 ie : 2' | 2.0 A 7 1.6 ft.lb 70 % 10 % 65 rpm | Moment o Duty cycle Insulation Service fa Temperatu Design | class ctor | : 7.85 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B | |
|---------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------|---------------|------------------------------------------------------------------|----------|
| Heating constant | t | | | | | |
| Cooling constant | t | | | | | |
| Rev. | | Changes Summary | | Performed | Checked | Date |
| | | | | | | |
| Performed by | | | | | | |
| Checked by | | | | | Page | Revision |
| Date | 13/04/2022 | | | | 24 / 36 | |



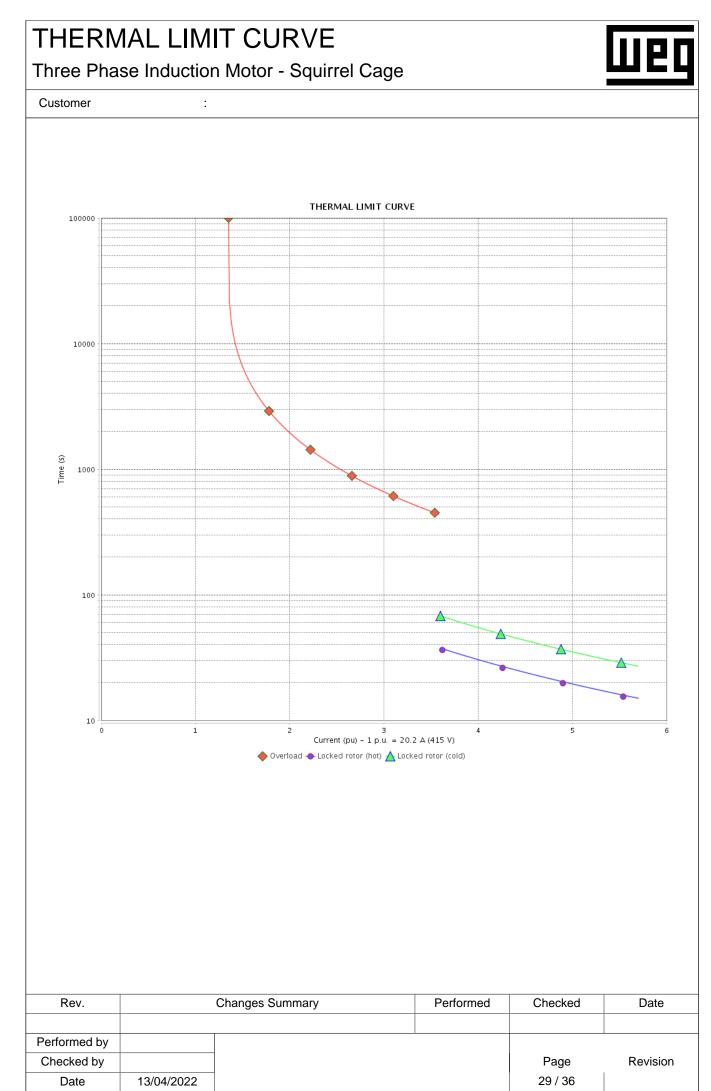
| Customer | : | | |
|--------------|-------------------------------------------|-------------------------------|-------------------------------|
| Product line | : NEMA Premium Efficiency Three- Phase | Product code : Catalog # : | 12446750 01512ET3E284TC-W2 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| erformance | : 400 V 50 Hz 6P IE2 | | |

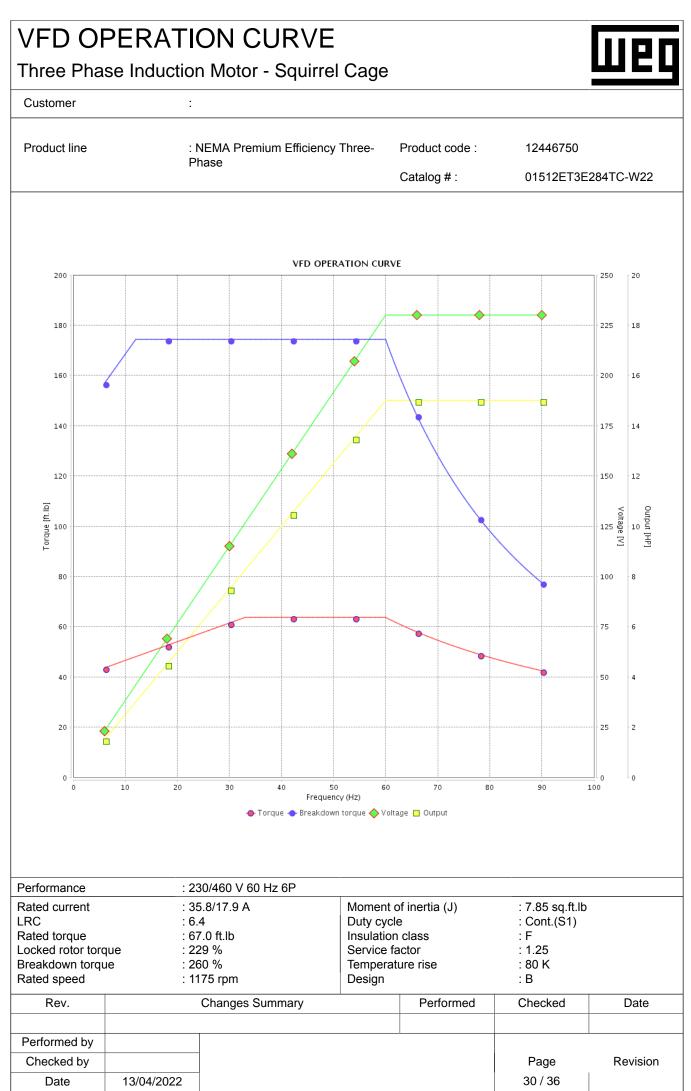
| LRC: 5.Rated torque: 8'Locked rotor torque: 20Breakdown torque: 22 | | 0.9 A 3 1.2 ft.lb 00 % 29 % 70 rpm | Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design | | : 7.85 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B | |
|--------------------------------------------------------------------|------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------|----------|
| Heating constant | t | | | | | |
| Cooling constant | t | | | | | |
| Rev. Changes Summary | | | Performed | Checked | Date | |
| | | | | | | |
| Performed by | | | | | | |
| Checked by | | | | | Page | Revision |
| Date | 13/04/2022 | | | | 26 / 36 | |
| | | | | | | |

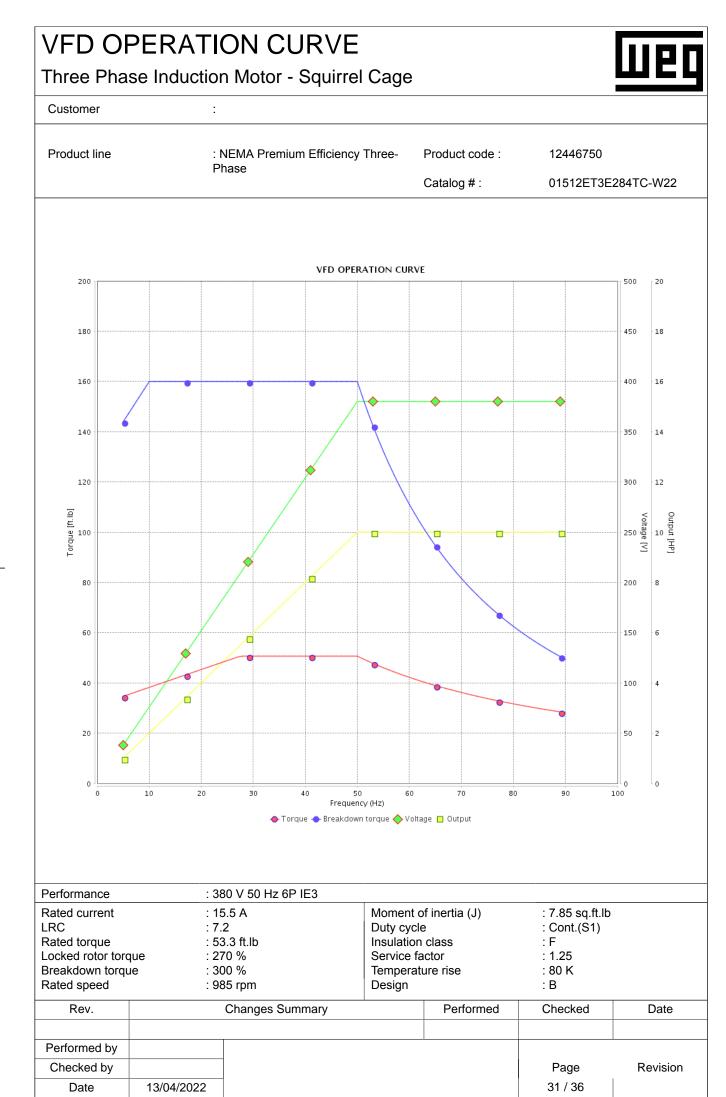


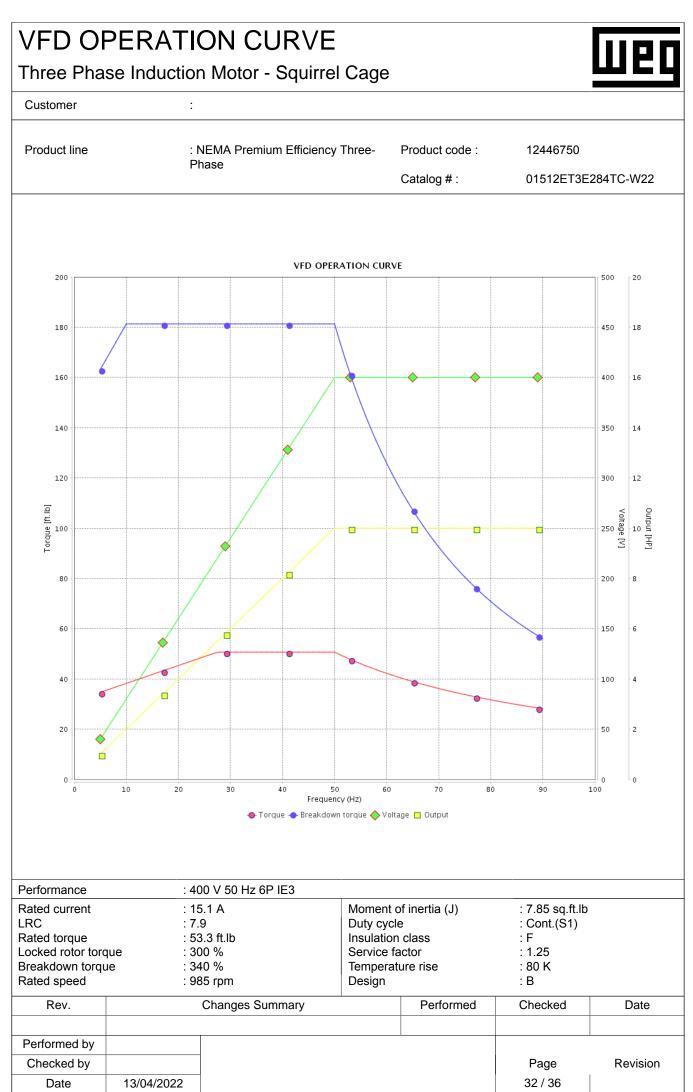
| | IMIT CURVE | | |
|--------------|----------------------------------|--------------------|--------------------|
| | LIVITI CORVE | e | шед |
| Customer | : | - | |
| Product line | : NEMA Premium Efficiency Three- | Product code : | 12446750 |
| | Phase | Catalog # : | 01512ET3E284TC-W22 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Performance | : 415 V 50 Hz 6P IE2 | ant of inartia (1) | |

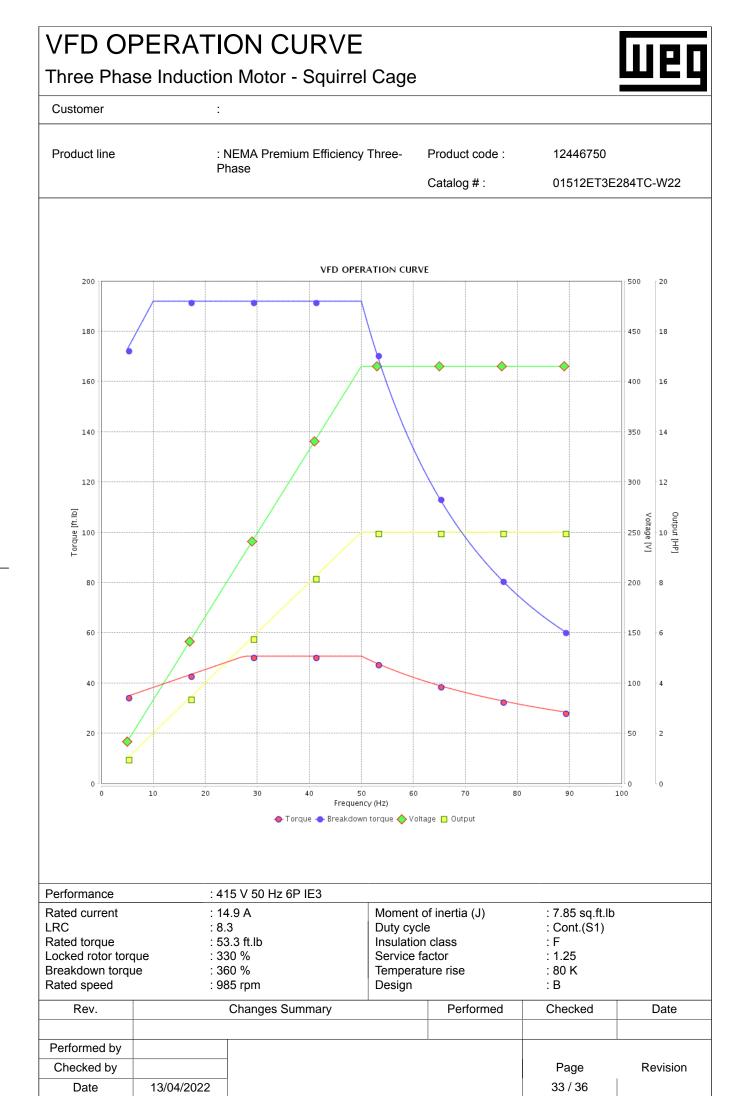
| Performance | : 41 | 15 V 50 Hz 6P IE2 | | | | |
|---------------------------------------------------------------------------|----------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------|----------|
| Rated current:2LRC:2Rated torque:2Locked rotor torque:2Breakdown torque:2 | | D.2 A 7 D.8 ft.lb 20 % 50 % 75 rpm | Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design | | : 7.85 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B | |
| Heating constant | t | | | | | |
| Cooling constant | t | | | | | |
| Rev. | Rev. Changes Summary | | | Performed | Checked | Date |
| | | | | | | |
| Performed by | | | | | | - |
| Checked by | | | | | Page | Revision |
| Date | 13/04/2022 | | | | 28 / 36 | |

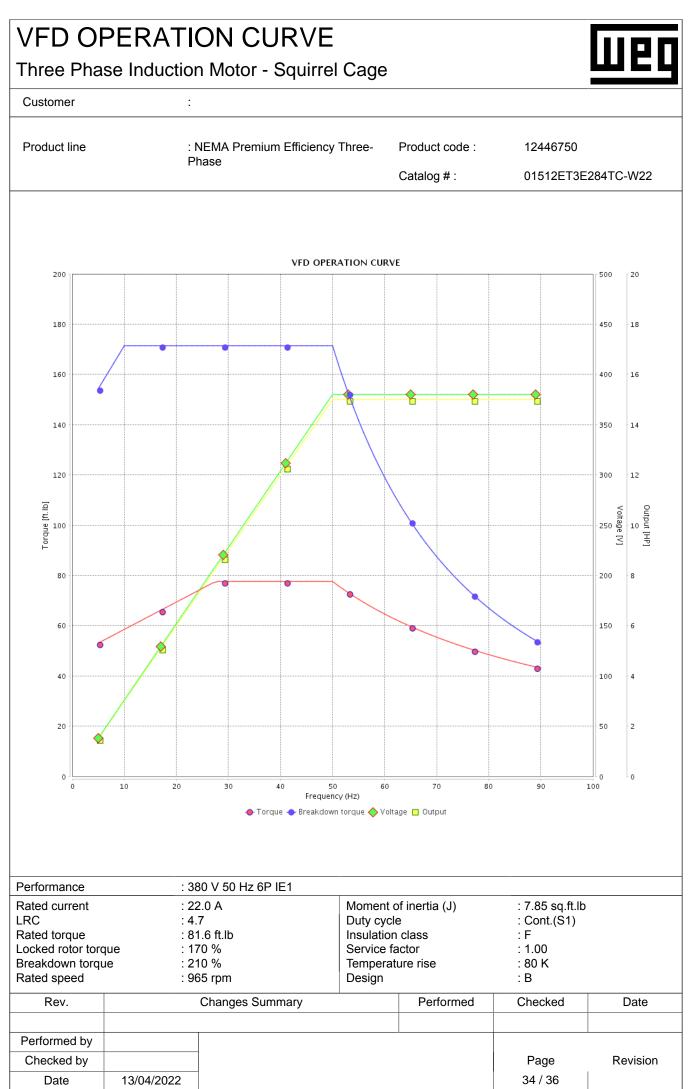


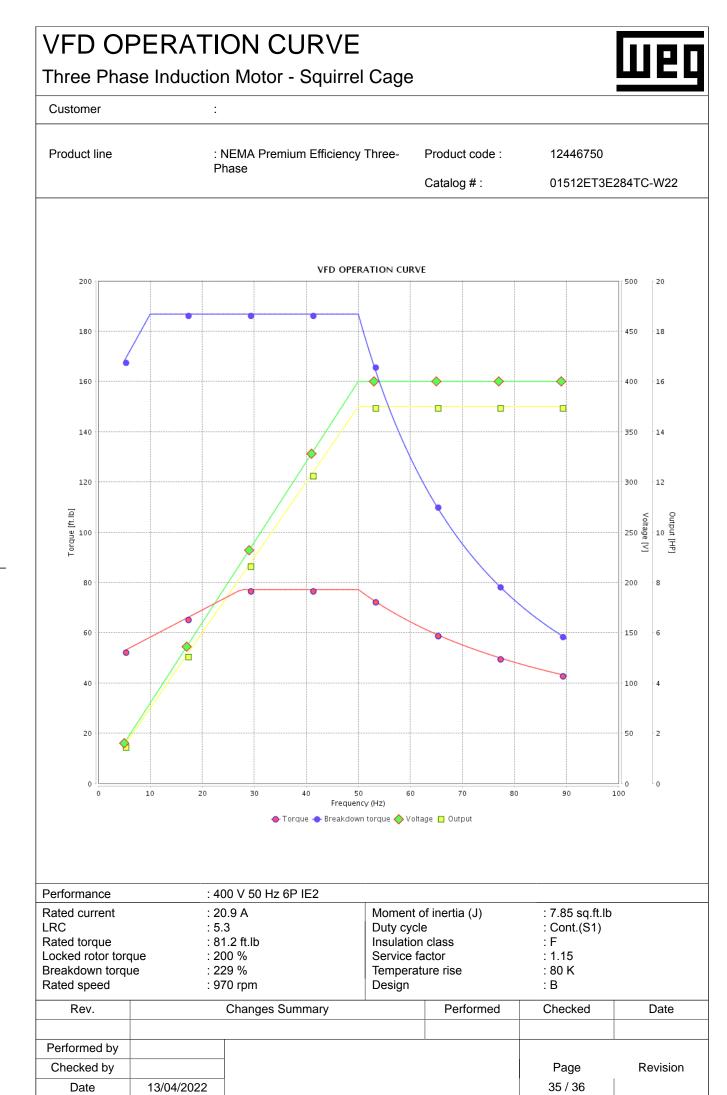


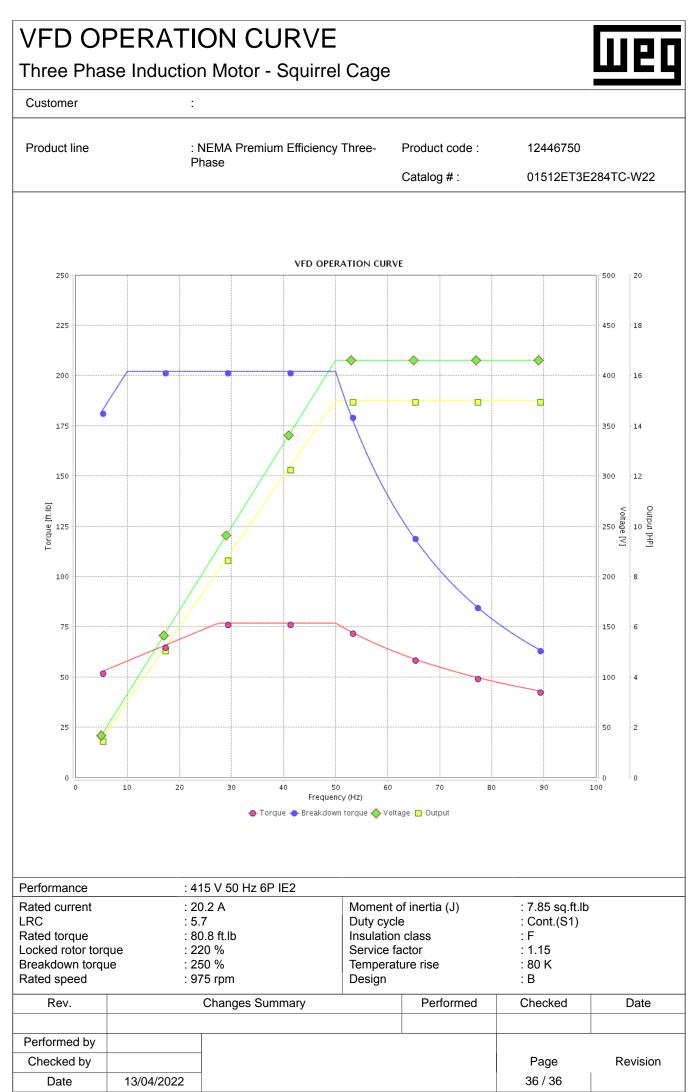


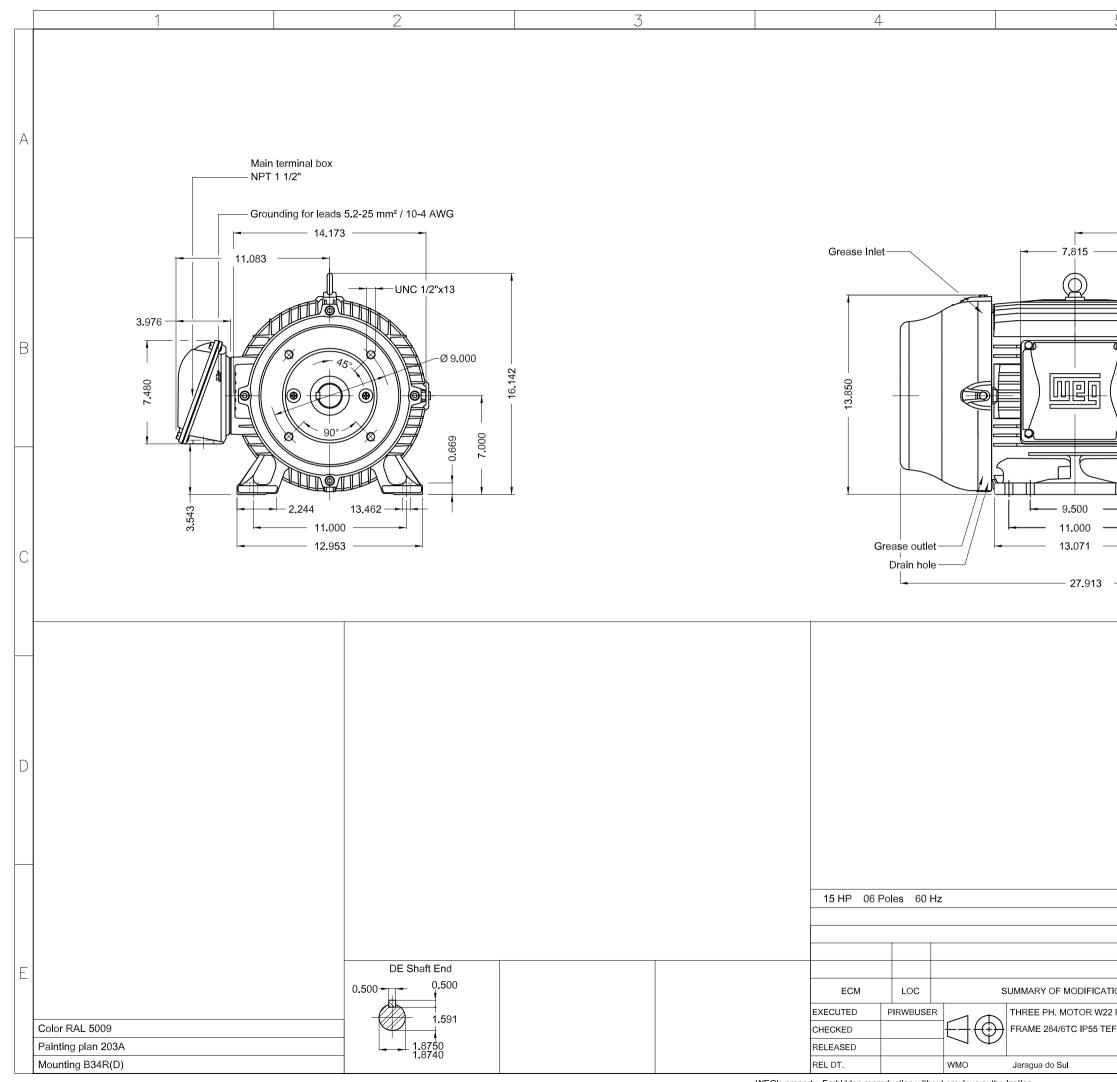












WEG's property. Forbidden reproduction without previous authorization.

| 5 | | | 6 | | | |
|------------|---------------|----------|----------|------|-----|----------------------|
| 5 | 0.250 | se Inlet | 6 | | | Dimensions in inches |
| | | | | | | |
| | | | | | | |
| IONS | EXECUTED | CHECKED | RELEASED | DATE | VER | |
| PREM. EFF. | | | | | | |
| FC | | PREVI | EVV | | | A3 |
| | | WDD | | ШВ | | |
| Produc | t Engineering | SHEET | 1 / 1 | | | XME |
| | | | | | | |

