

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | |
|--|---|-----------|---------|----------|
| Customer : | | | | |
| Product line | : NEMA Premium Efficiency Three-Phase | | | |
| Product code : | 13500656 | | | |
| Catalog # : | 35018ET3GKD580Z-W22 | | | |
| Frame | : 586/7TZ | | | |
| Output | : 350 HP (260 kW) | | | |
| Poles | : 4 | | | |
| Frequency | : 60 Hz | | | |
| Rated voltage | : 460 V | | | |
| Rated current | : 414 A | | | |
| L. R. Amperes | : 2939 A | | | |
| LRC | : 7.1x(Code H) | | | |
| No load current | : 160 A | | | |
| Rated speed | : 1791 rpm | | | |
| Slip | : 0.50 % | | | |
| Rated torque | : 1030 ft.lb | | | |
| Locked rotor torque | : 260 % | | | |
| Breakdown torque | : 260 % | | | |
| Insulation class | : F | | | |
| Service factor | : 1.15 | | | |
| Design | : A | | | |
| Locked rotor time | : 45s (cold) 25s (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 | : 78.0 dB(A) | | | |
| Starting method | : Direct On Line | | | |
| Approx. weight ³ | : 3473 lb | | | |
| Output | 25% 50% 75% 100% | | | |
| Efficiency (%) | 0.000 95.4 95.8 96.2 | | | |
| Power Factor | 0.00 0.67 0.77 0.82 | | | |
| Foundation loads | | | | |
| Max. traction | : 3830 lb | | | |
| Max. compression | : 7303 lb | | | |
| Bearing type | : <u>Drive end</u> NU-324 C3 <u>Non drive end</u> 6319 C3 | | | |
| Sealing | : Taconite Labyrinth Taconite Labyrinth | | | |
| Lubrication interval | : 3000 h 8000 h | | | |
| Lubricant amount | : 72 g 45 g | | | |
| Lubricant type | : Mobil Polyrex EM | | | |
| 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 | 13/04/2022 | | 1 / 7 | |

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Thermal protection

| ID | Application | Type | Quantity | Sensing Temperature |
|----|-------------|----------------------|-----------|---------------------|
| 1 | Winding | Thermostat - 2 wires | 1 x Phase | 155 °C |

Space heater information

Voltage: 200 - 240 V

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| Performed by | | | | |
| Checked by | | | Page | Revision |
| Date | 13/04/2022 | | 2 / 7 | |

TORQUE AND CURRENT VS SPEED CURVE



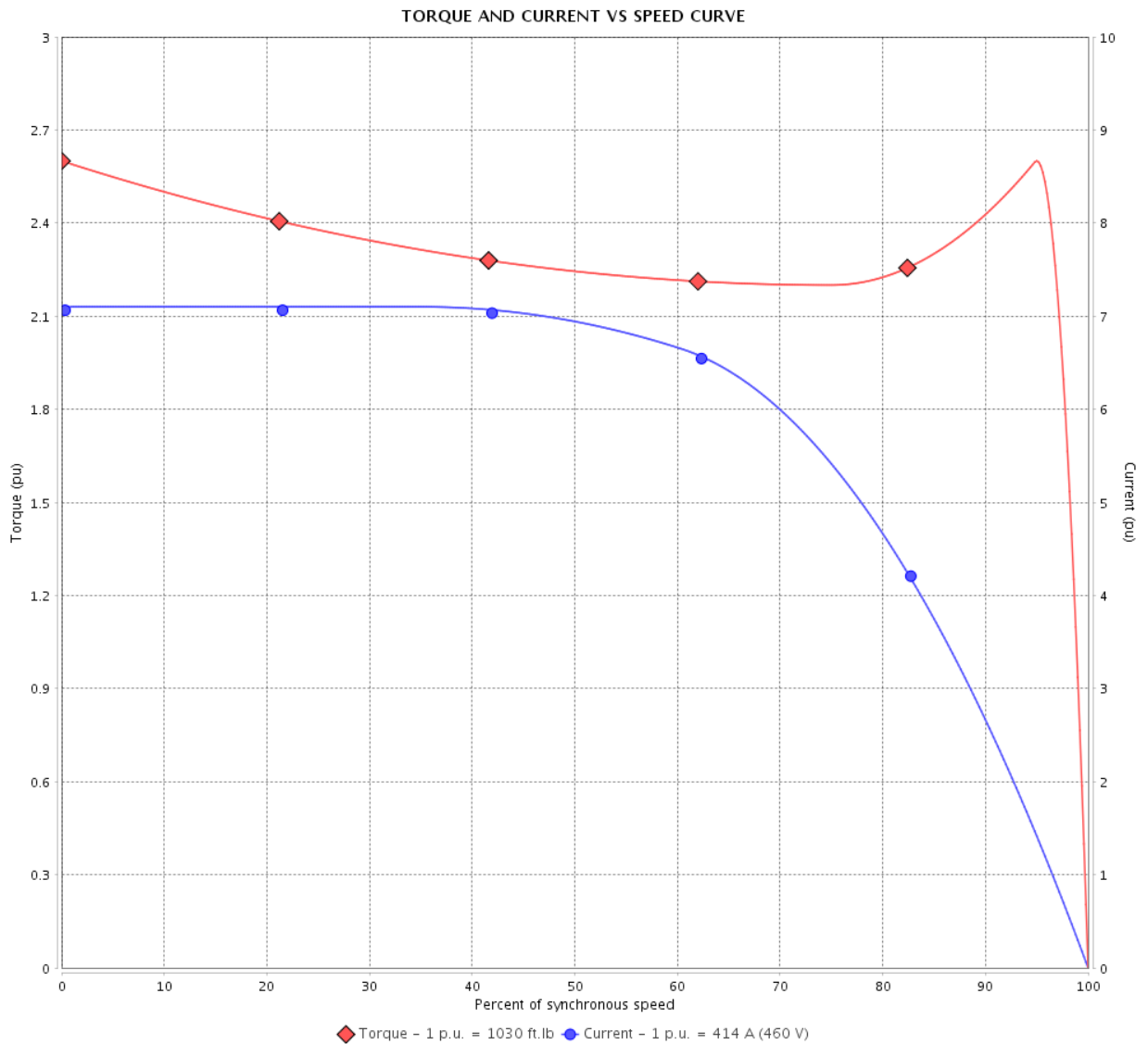
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13500656

Catalog # : 35018ET3GKD580Z-W22



Performance : 460 V 60 Hz 4P

Rated current : 414 A
 LRC : 7.1
 Rated torque : 1030 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 260 %
 Rated speed : 1791 rpm

Moment of inertia (J)
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

Locked rotor time : 45s (cold) 25s (hot)

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------------|----------|
| | | | | |
| Performed by | | | Page 3 / 7 | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

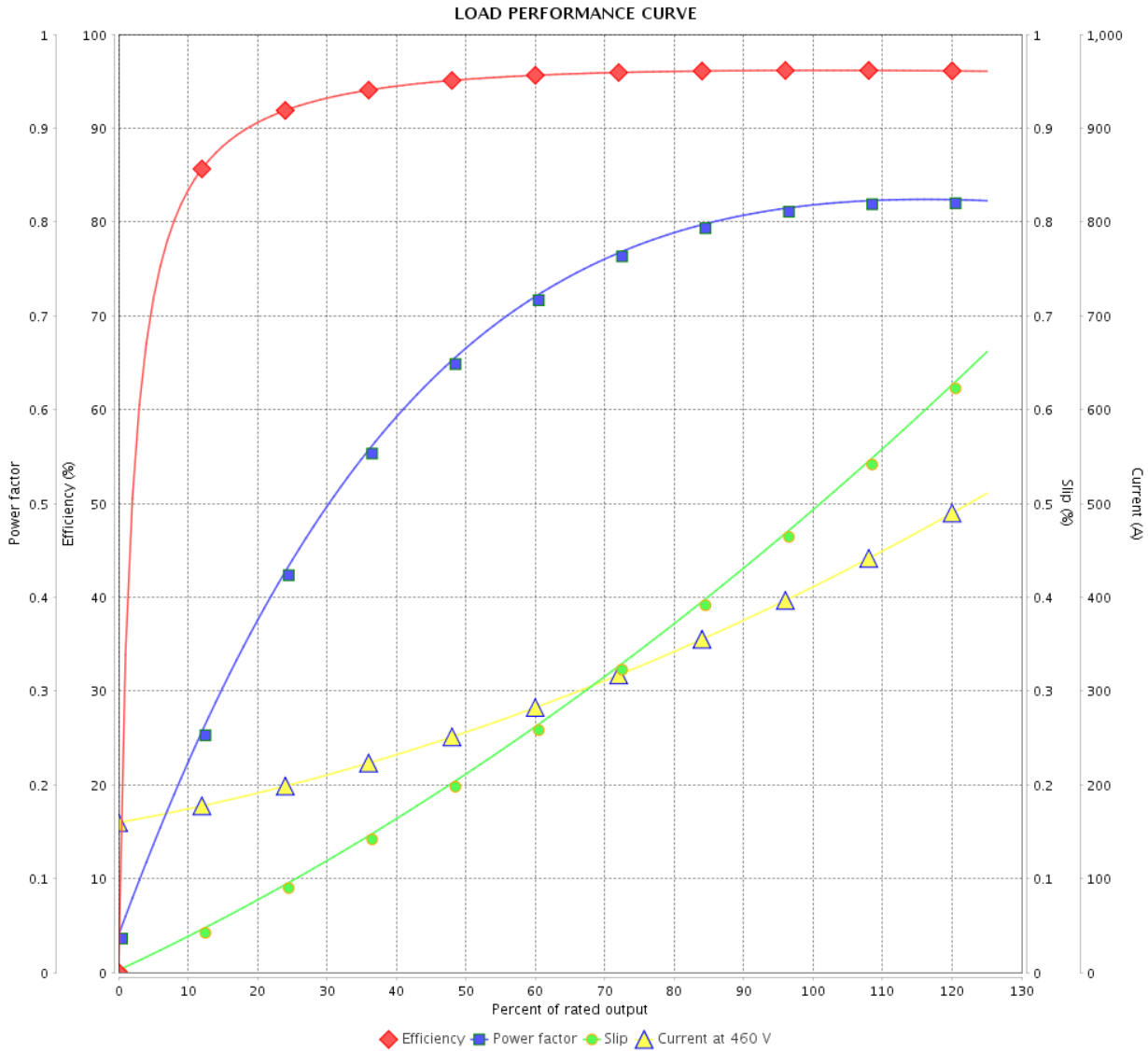


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13500656

Catalog # : 35018ET3GKD580Z-W22



Performance : 460 V 60 Hz 4P

Rated current : 414 A
 LRC : 7.1
 Rated torque : 1030 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 260 %
 Rated speed : 1791 rpm

Moment of inertia (J)
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| | | | | |
| Performed by | | Page | | Revision |
| Checked by | | 4 / 7 | | |
| Date | 13/04/2022 | | | |

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
 Product code : 13500656
 Catalog # : 35018ET3GKD580Z-W22

Performance : 460 V 60 Hz 4P

| | |
|-----------------------------|-------------------------|
| Rated current : 414 A | Moment of inertia (J) |
| LRC : 7.1 | Duty cycle : Cont.(S1) |
| Rated torque : 1030 ft.lb | Insulation class : F |
| Locked rotor torque : 260 % | Service factor : 1.15 |
| Breakdown torque : 260 % | Temperature rise : 80 K |
| Rated speed : 1791 rpm | Design : A |

Heating constant

Cooling constant

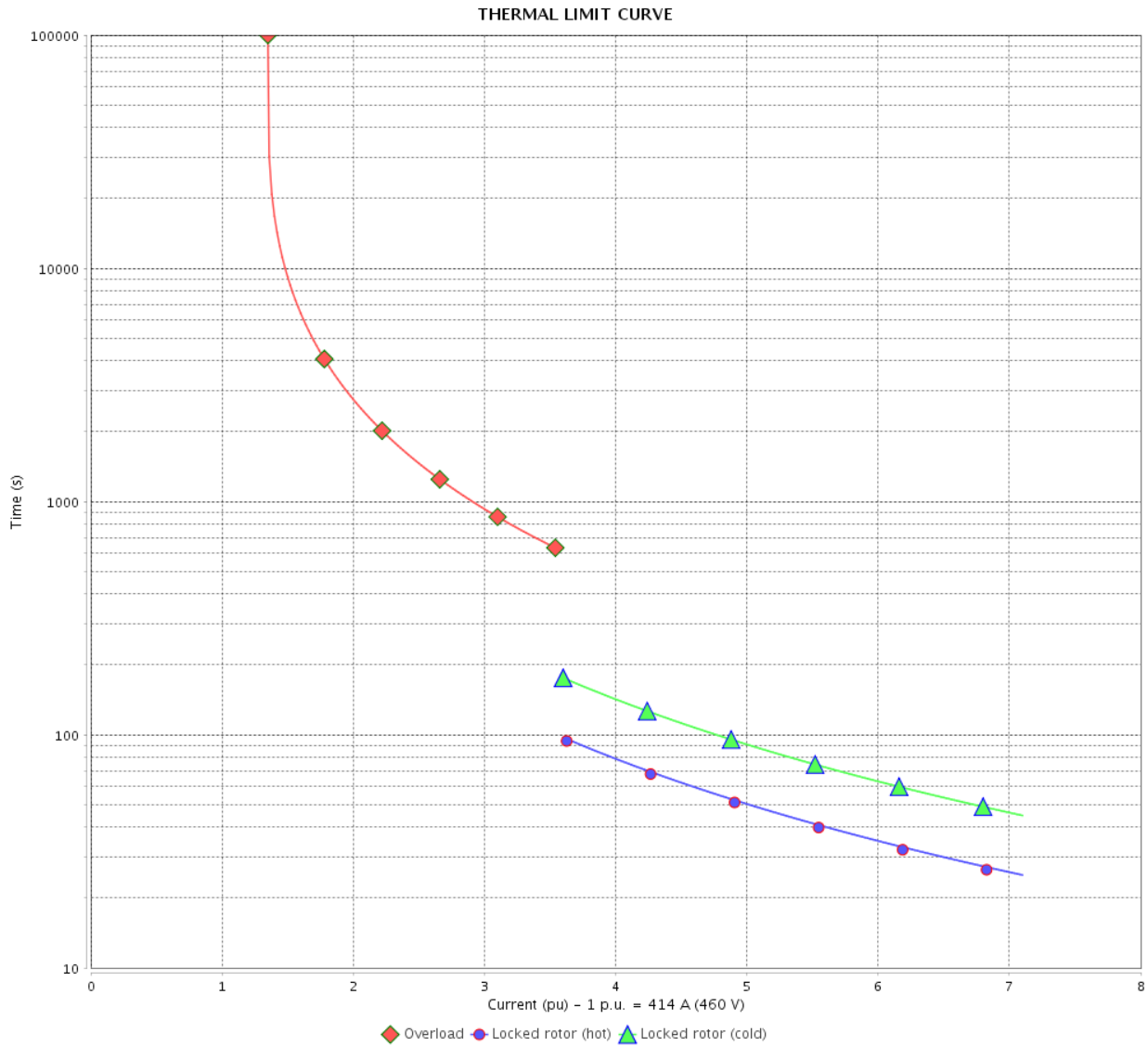
| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------------|----------|
| | | | | |
| Performed by | | | Page 5 / 7 | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|---------------|---------|----------|
| | | | | |
| Performed by | | Page 6 / 7 | | Revision |
| Checked by | | | | |
| Date | | | | |

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

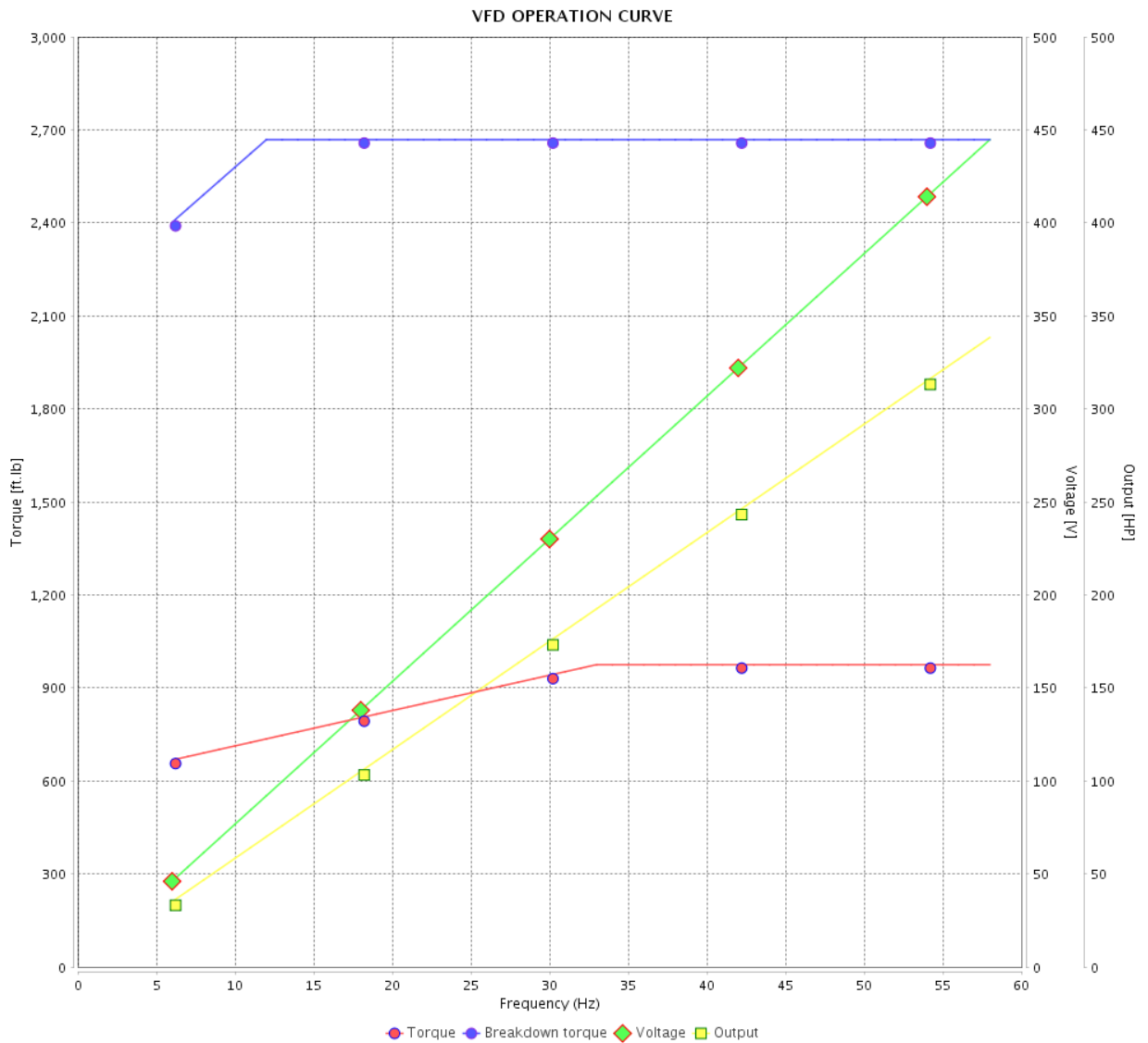


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13500656

Catalog # : 35018ET3GKD580Z-W22



Performance : 460 V 60 Hz 4P

Rated current : 414 A
 LRC : 7.1
 Rated torque : 1030 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 260 %
 Rated speed : 1791 rpm

Moment of inertia (J)
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

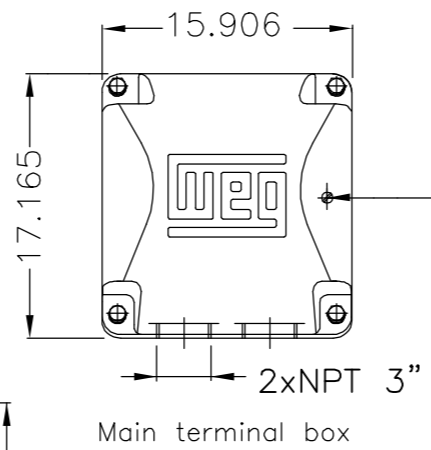
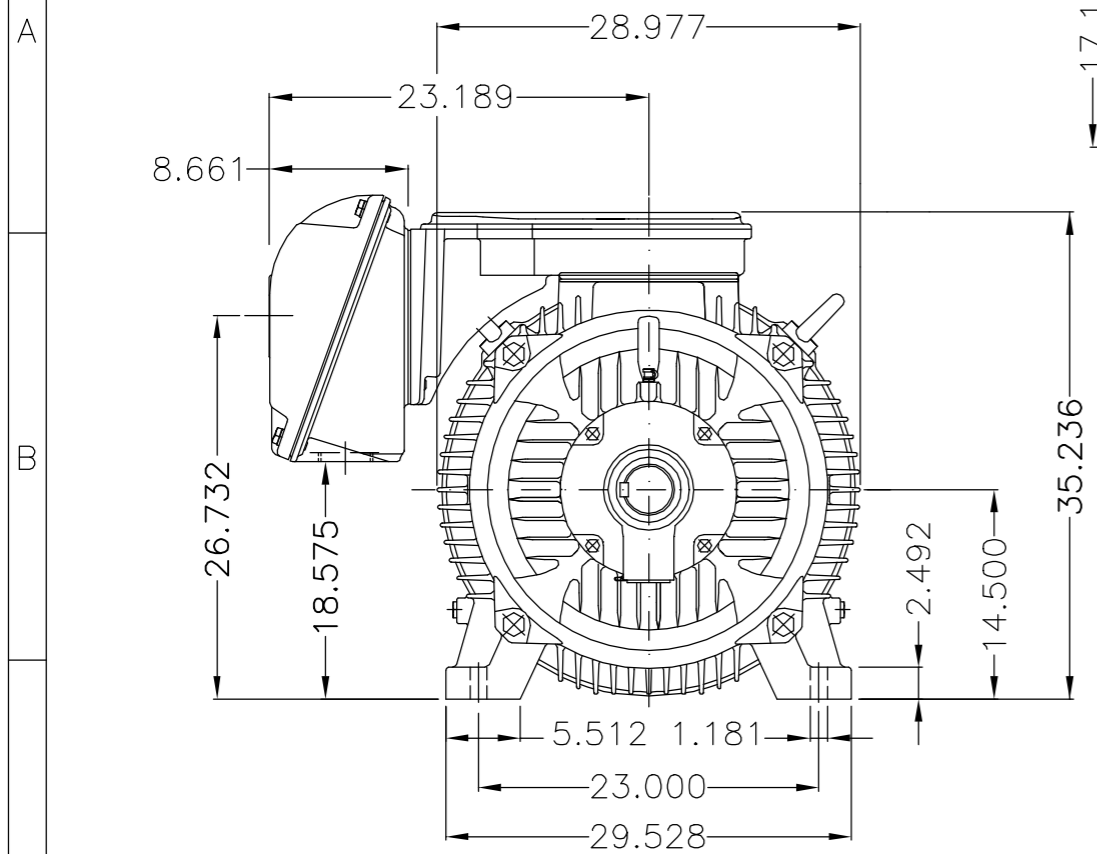
| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------------|----------|
| | | | | |
| Performed by | | | Page 7 / 7 | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |

| | |
|-------------------|---|
| EIXO/SHAFT | |
| PADRÃO/STANDARD | |
| OPCIONAL/OPTIONAL | |
| ESPECIAL/SPECIAL | X |

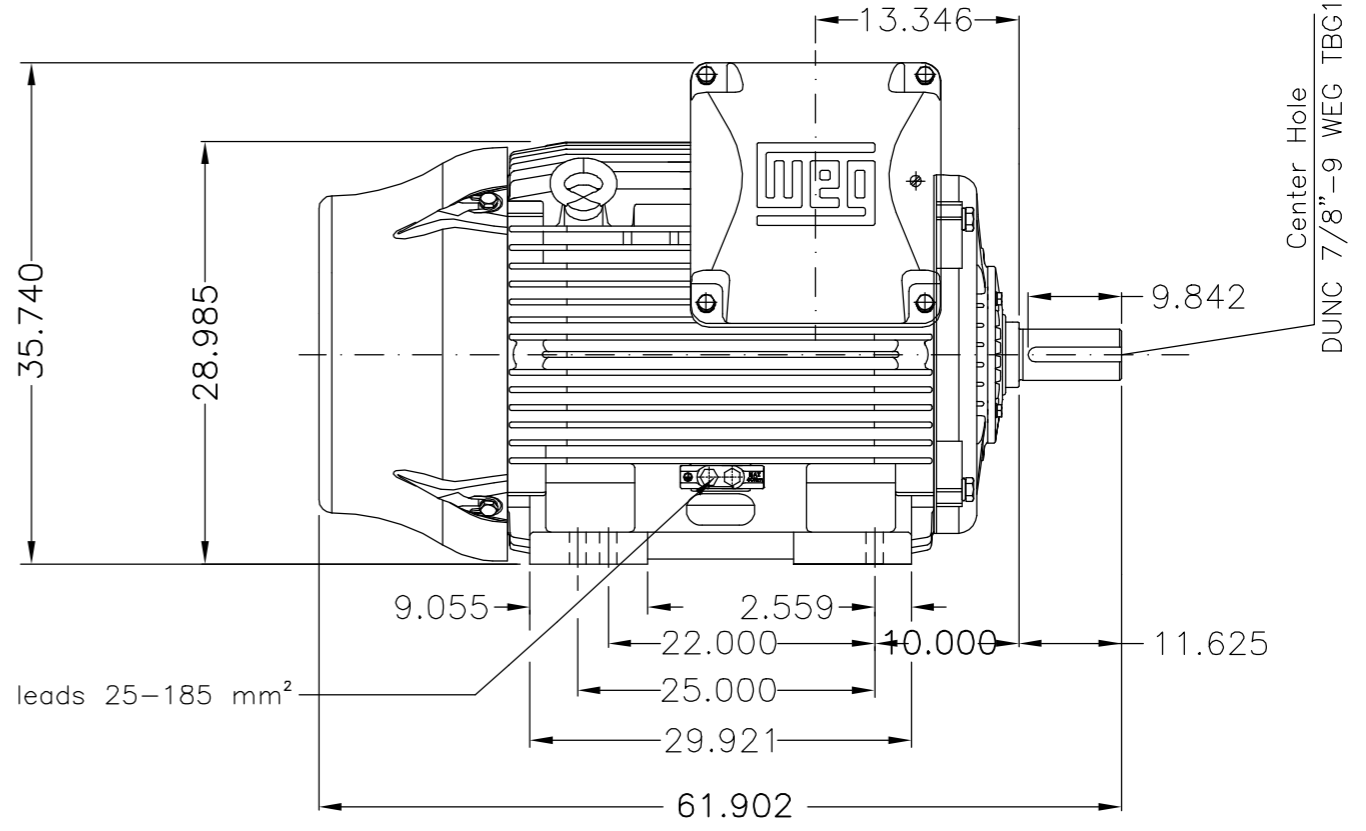
Dimensões em polegada
Dimensions in inches

CERTIFIED WEG MOTORES
Certified document.
Not subject to changes.

THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.

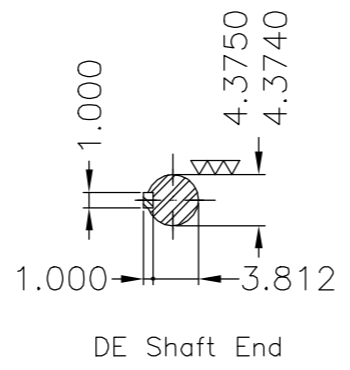
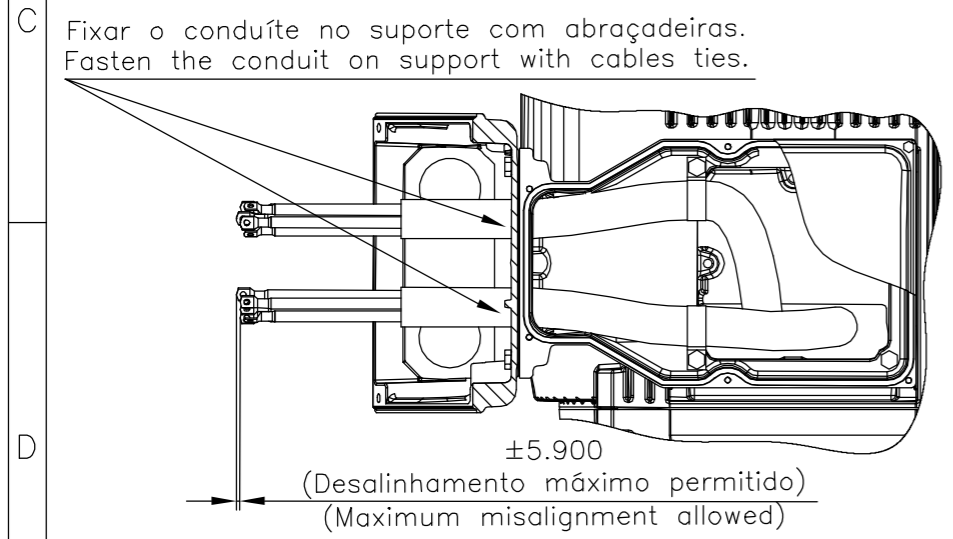


Grounding for leads 35-120 mm²



Grounding for leads 25-185 mm²

Center Hole
DUNC 7/8"-9 WEG TBG12



| |
|--|
| Categoria A / Design A |
| Proteção térmica desligamento - termostato 155°C / Thermostats 155°C to trip |
| Tampa dianteira especial / Special DE endshield |
| Conduite para cabos no interior do suporte da caixa de ligação Cables conduit inside terminal box support |
| Linha do motor: Crusher Duty / Motor purpose: Crusher Duty |
| Rolamento dianteiro de rolos / DE roller bearing |
| Rolamento dianteiro de rolos NU-324 / NU-324 DE roller bearing |
| Dispositivo de travamento de eixo / Shaft locking device |
| Tampa traseira com mancal eletricamente isolado NDE endshield with electrically insulated bearing hub |
| Cor RAL 5009 / Color RAL 5009 |
| Plano de pintura 203A / Painting plan 203A |
| Forma construtiva NEMA F-1 / Mounting NEMA F-1 |
| Forma construtiva B3D / Mounting B3R(D) |

WEG ELECTRIC CORPORATION - WEC

| | | | |
|--------|----------|------|---|
| 500 HP | 04 Poles | 60Hz | J |
| 500 HP | 06 Poles | 60Hz | I |
| 450 HP | 04 Poles | 60Hz | H |
| 450 HP | 06 Poles | 60Hz | G |
| 400 HP | 04 Poles | 60Hz | F |
| 400 HP | 06 Poles | 60Hz | E |
| 350 HP | 04 Poles | 60Hz | D |
| 350 HP | 06 Poles | 60Hz | C |
| 300 HP | 04 Poles | 60Hz | B |
| 300 HP | 06 Poles | 60Hz | A |

| | | | | | | | | |
|--------------|--|--|----------------|---------------------|---------|----------|------|-----|
| 500001331189 | ADIC.NOTA CONDUITE/ADD NOTE CONDUIT | MENSOR | EANJOS | 05.07.2017 | 05 | | | |
| 500001331411 | ADIC. NOTA CONDUITE / ADD NOTE CONDUIT | JOSIELS | JMANENTE | 04.07.2017 | 04 | | | |
| ECM | LOC | SUMMARY OF MODIFICATIONS | | EXECUTED | CHECKED | RELEASED | DATE | VER |
| EXECUTED | DVEGINI | THREE PHASE W22 MOTOR - NEMA PREMIUM EFF | | 10004040391 | | | | |
| CHECKED | | FRAME 586/7TZ IP55 | | 000 05 | | | | |
| RELEASED | NSCHMIDT | | | | | | | |
| REL DT | 25.01.2016 | WMO | Jaraguá do Sul | Product Engineering | SHEET | 1 / 1 | | |

UNCONTROLLED COPY

RELEASED

ZME A3

MADE IN BRAZIL
13500656



NEMA
Premium
W22



FOR SAFE AREA
Mod.TE1BFOXON
CC029A



Class I, Div 2, Gr A, B, C and D - T3
Class I, Zone 2, IIC - T3
Class II, Div 2, Gr F and G - T3C
For use on PWM: Gr. A, B, C, D and F,
VT 1000:1, CT 6:1, 1.00SF - T3

MODEL 35018ET3GKD580Z-W22

Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. 586/7TZ 1000m.a.s.l. IP55 TEFC 3484lb

V 460

A 414

HP 350

kW 260

SF 1.15

SFA 476

RPM 1791

PF 0.82

AMB 40°C

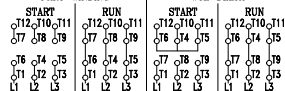
INS cl. F DT80K

NEMA NOM EFF 96.2%

DUTY CONT.

DES A Code H

PART-WINDING



→ NU-324-C3 (72g)

→ 6319-C3 (45g)



MOBIL POLYREX EM (3000h)

