

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase
Product code : 14406916
Catalog # : 02518XT3E284TC

| | | | |
|-----------------------|-------------------|-----------------------------|------------------------|
| Frame | : 284TC | Locked rotor time | : 36s (cold) 20s (hot) |
| Output | : 25 HP (18.5 kW) | Temperature rise | : 80 K |
| Poles | : 4 | Duty cycle | : Cont.(S1) |
| Frequency | : 60 Hz | Ambient temperature | : -20°C to +40°C |
| Rated voltage | : 230/460 V | Altitude | : 1000 m.a.s.l. |
| Rated current | : 59.8/29.9 A | Protection degree | : IP55 |
| L. R. Amperes | : 490/245 A | Cooling method | : IC411 - TEFC |
| LRC | : 8.2x(Code J) | Mounting | : F-1 |
| No load current | : 25.0/12.5 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 1770 rpm | Noise level ² | : 68.0 dB(A) |
| Slip | : 1.67 % | Starting method | : Direct On Line |
| Rated torque | : 74.2 ft.lb | Approx. weight ³ | : 483 lb |
| Locked rotor torque | : 320 % | | |
| Breakdown torque | : 320 % | | |
| Insulation class | : F | | |
| Service factor | : 1.15 | | |
| Moment of inertia (J) | : 4.54 sq.ft.lb | | |
| Design | : B | | |

| | | | | | | |
|----------------|------|------|------|------|------------------|-----------|
| Output | 25% | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 92.2 | 92.4 | 93.6 | 93.6 | Max. traction | : 810 lb |
| Power Factor | 0.42 | 0.67 | 0.78 | 0.83 | Max. compression | : 1293 lb |

| | Drive end | Non drive end |
|----------------------|------------------|---------------|
| Bearing type | : 6311 C3 | 6211 C3 |
| Sealing | : Oil Seal | Lip Seal |
| Lubrication interval | : 20000 h | 20000 h |
| Lubricant amount | : 18 g | 11 g |
| Lubricant type | Mobil Polyrex EM | |

Notes
USABLE @208V 64.5A SF 1.15 SFA 74.2A

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 | | | | |
| Date | 17/02/2022 | | | |

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Revision

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Customer : _____

Thermal protection

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

| Rev. | Changes Summary | | Performed | Checked | Date |
|--------------|-----------------|--|-----------|---------|----------|
| | | | | | |
| Performed by | | | | Page | Revision |
| Checked by | | | | 2 / 2 | |
| Date | 17/02/2022 | | | | |


W21X NEMA
Premium

14406916

CC029A

Inverter Duty Motor
Severe Duty


LISTED

MODEL 02518XT3E284TC

PH 3 | FR 284TC

HP(kW) 25.0(18.5)

HZ 60

IP55

V 230/460

A 59.8/29.9

RPM 1770

NEMA NOM EFF 93.6%

PF 0.83

SFA 68.8/34.4

DES B

INS CL F ΔT 80 K | SF 1.15

ENCL TEFC

DUTY CONT.

CODE J

ALT 1000

m.a.s.l.

AMB 40°C

USABLE @208V

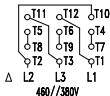
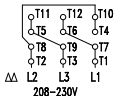
64.5 A

SF 1.15

SFA 74.2

AMB 55°C SF1.0

25HP 18.5kW 50Hz 380V 36.5A 1460RPM SF1.00 EFF 91.7% (IE2)



→ 6311-C3 MOBIL POLYREX EM

→ 6211-C3 18 g 20000 h

483 Lbs


 C US
 Energy Verified

TEMP CODE T3C

CSA/UL: Class I - Div. 1 - Groups C and D

CSA: Class II - Div. 1 - Groups F and G

CSA: Class I - Zone 1 - IIB

EXPLOSION PROOF MOTOR

FOR USE ON VPWM VFD 1000:1VT, 6:1CT, 1.0SF, T3C, AMB 40°C.