

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :																																																																																														
Product line	: W22 NEMA Premium Efficiency Three-Phase		Product code :	11165996																																																																																										
				Catalog # : 10036ET3E405TS-W22																																																																																										
<table> <tr><td>Frame</td><td>:</td><td>404/5TS</td><td>Locked rotor time</td><td>: 25s (cold) 14s (hot)</td></tr> <tr><td>Output</td><td>:</td><td>100 HP (75 kW)</td><td>Temperature rise</td><td>: 80 K</td></tr> <tr><td>Poles</td><td>:</td><td>2</td><td>Duty cycle</td><td>: Cont.(S1)</td></tr> <tr><td>Frequency</td><td>:</td><td>60 Hz</td><td>Ambient temperature</td><td>: -20°C to +40°C</td></tr> <tr><td>Rated voltage</td><td>:</td><td>230/460 V</td><td>Altitude</td><td>: 1000 m.a.s.l.</td></tr> <tr><td>Rated current</td><td>:</td><td>224/112 A</td><td>Protection degree</td><td>: IP55</td></tr> <tr><td>L. R. Amperes</td><td>:</td><td>1456/728 A</td><td>Cooling method</td><td>: IC411 - TEFC</td></tr> <tr><td>LRC</td><td>:</td><td>6.5x(Code G)</td><td>Mounting</td><td>: F-1</td></tr> <tr><td>No load current</td><td>:</td><td>52.0/26.0 A</td><td>Rotation¹</td><td>: Both (CW and CCW)</td></tr> <tr><td>Rated speed</td><td>:</td><td>3545 rpm</td><td>Noise level²</td><td>: 79.0 dB(A)</td></tr> <tr><td>Slip</td><td>:</td><td>1.53 %</td><td>Starting method</td><td>: Direct On Line</td></tr> <tr><td>Rated torque</td><td>:</td><td>148 ft.lb</td><td>Approx. weight³</td><td>: 1109 lb</td></tr> <tr><td>Locked rotor torque</td><td>:</td><td>240 %</td><td></td><td></td></tr> <tr><td>Breakdown torque</td><td>:</td><td>260 %</td><td></td><td></td></tr> <tr><td>Insulation class</td><td>:</td><td>F</td><td></td><td></td></tr> <tr><td>Service factor</td><td>:</td><td>1.25</td><td></td><td></td></tr> <tr><td>Moment of inertia (J)</td><td>:</td><td>13.2 sq.ft.lb</td><td></td><td></td></tr> <tr><td>Design</td><td>:</td><td>B</td><td></td><td></td></tr> </table>				Frame	:	404/5TS	Locked rotor time	: 25s (cold) 14s (hot)	Output	:	100 HP (75 kW)	Temperature rise	: 80 K	Poles	:	2	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	:	224/112 A	Protection degree	: IP55	L. R. Amperes	:	1456/728 A	Cooling method	: IC411 - TEFC	LRC	:	6.5x(Code G)	Mounting	: F-1	No load current	:	52.0/26.0 A	Rotation ¹	: Both (CW and CCW)	Rated speed	:	3545 rpm	Noise level ²	: 79.0 dB(A)	Slip	:	1.53 %	Starting method	: Direct On Line	Rated torque	:	148 ft.lb	Approx. weight ³	: 1109 lb	Locked rotor torque	:	240 %			Breakdown torque	:	260 %			Insulation class	:	F			Service factor	:	1.25			Moment of inertia (J)	:	13.2 sq.ft.lb			Design	:	B			
Frame	:	404/5TS	Locked rotor time	: 25s (cold) 14s (hot)																																																																																										
Output	:	100 HP (75 kW)	Temperature rise	: 80 K																																																																																										
Poles	:	2	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	:	224/112 A	Protection degree	: IP55																																																																																										
L. R. Amperes	:	1456/728 A	Cooling method	: IC411 - TEFC																																																																																										
LRC	:	6.5x(Code G)	Mounting	: F-1																																																																																										
No load current	:	52.0/26.0 A	Rotation ¹	: Both (CW and CCW)																																																																																										
Rated speed	:	3545 rpm	Noise level ²	: 79.0 dB(A)																																																																																										
Slip	:	1.53 %	Starting method	: Direct On Line																																																																																										
Rated torque	:	148 ft.lb	Approx. weight ³	: 1109 lb																																																																																										
Locked rotor torque	:	240 %																																																																																												
Breakdown torque	:	260 %																																																																																												
Insulation class	:	F																																																																																												
Service factor	:	1.25																																																																																												
Moment of inertia (J)	:	13.2 sq.ft.lb																																																																																												
Design	:	B																																																																																												
Output	25%	50%	75%	100%	Foundation loads																																																																																									
Efficiency (%)	0.000	93.0	94.1	94.1	Max. traction : 601 lb																																																																																									
Power Factor	0.00	0.83	0.88	0.89	Max. compression : 1710 lb																																																																																									
<table> <tr><td colspan="2"></td><td>Drive end</td><td colspan="2">Non drive end</td></tr> <tr><td>Bearing type</td><td>:</td><td>6314 C3</td><td colspan="2">6314 C3</td></tr> <tr><td>Sealing</td><td>:</td><td>WSeal</td><td colspan="2">WSeal</td></tr> <tr><td>Lubrication interval</td><td>:</td><td>4000 h</td><td colspan="2">4000 h</td></tr> <tr><td>Lubricant amount</td><td>:</td><td>27 g</td><td colspan="2" rowspan="5">27 g</td></tr> <tr><td>Lubricant type</td><td>:</td><td colspan="3" rowspan="4">Mobil Polyrex EM</td></tr> </table>							Drive end	Non drive end		Bearing type	:	6314 C3	6314 C3		Sealing	:	WSeal	WSeal		Lubrication interval	:	4000 h	4000 h		Lubricant amount	:	27 g	27 g		Lubricant type	:	Mobil Polyrex EM																																																														
		Drive end	Non drive end																																																																																											
Bearing type	:	6314 C3	6314 C3																																																																																											
Sealing	:	WSeal	WSeal																																																																																											
Lubrication interval	:	4000 h	4000 h																																																																																											
Lubricant amount	:	27 g	27 g																																																																																											
Lubricant type	:	Mobil Polyrex EM																																																																																												
<p>Notes: USABLE @208V 243A SF 1.10 SFA 268A</p>																																																																																														
<p>This revision replaces and cancel the previous one, which must be eliminated.</p> <p>(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.</p>																																																																																														
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					Page 1 / 1																																																																																									
Checked by																																																																																														
Date	26/03/2024																																																																																													
Customer :																																																																																														
Product line	: W22 NEMA Premium Efficiency Three-Phase		Product code :	11165996																																																																																										
				Catalog # : 10036ET3E405TS-W22																																																																																										
<table> <tr><td>Frame</td><td>:</td><td>404/5TS</td><td>Locked rotor time</td><td>: 25s (cold) 14s (hot)</td></tr> <tr><td>Output</td><td>:</td><td>100 HP (75 kW)</td><td>Temperature rise</td><td>: 80 K</td></tr> <tr><td>Poles</td><td>:</td><td>2</td><td>Duty cycle</td><td>: Cont.(S1)</td></tr> <tr><td>Frequency</td><td>:</td><td>60 Hz</td><td>Ambient temperature</td><td>: -20°C to +40°C</td></tr> <tr><td>Rated voltage</td><td>:</td><td>230/460 V</td><td>Altitude</td><td>: 1000 m.a.s.l.</td></tr> <tr><td>Rated current</td><td>:</td><td>224/112 A</td><td>Protection degree</td><td>: IP55</td></tr> <tr><td>L. R. Amperes</td><td>:</td><td>1456/728 A</td><td>Cooling method</td><td>: IC411 - TEFC</td></tr> <tr><td>LRC</td><td>:</td><td>6.5x(Code G)</td><td>Mounting</td><td>: F-1</td></tr> <tr><td>No load current</td><td>:</td><td>52.0/26.0 A</td><td>Rotation¹</td><td>: Both (CW and CCW)</td></tr> <tr><td>Rated speed</td><td>:</td><td>3545 rpm</td><td>Noise level²</td><td>: 79.0 dB(A)</td></tr> <tr><td>Slip</td><td>:</td><td>1.53 %</td><td>Starting method</td><td>: Direct On Line</td></tr> <tr><td>Rated torque</td><td>:</td><td>148 ft.lb</td><td>Approx. weight³</td><td>: 1109 lb</td></tr> <tr><td>Locked rotor torque</td><td>:</td><td>240 %</td><td></td><td></td></tr> <tr><td>Breakdown torque</td><td>:</td><td>260 %</td><td></td><td></td></tr> <tr><td>Insulation class</td><td>:</td><td>F</td><td></td><td></td></tr> <tr><td>Service factor</td><td>:</td><td>1.25</td><td></td><td></td></tr> <tr><td>Moment of inertia (J)</td><td>:</td><td>13.2 sq.ft.lb</td><td></td><td></td></tr> <tr><td>Design</td><td>:</td><td>B</td><td></td><td></td></tr> </table>				Frame	:	404/5TS	Locked rotor time	: 25s (cold) 14s (hot)	Output	:	100 HP (75 kW)	Temperature rise	: 80 K	Poles	:	2	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	:	224/112 A	Protection degree	: IP55	L. R. Amperes	:	1456/728 A	Cooling method	: IC411 - TEFC	LRC	:	6.5x(Code G)	Mounting	: F-1	No load current	:	52.0/26.0 A	Rotation ¹	: Both (CW and CCW)	Rated speed	:	3545 rpm	Noise level ²	: 79.0 dB(A)	Slip	:	1.53 %	Starting method	: Direct On Line	Rated torque	:	148 ft.lb	Approx. weight ³	: 1109 lb	Locked rotor torque	:	240 %			Breakdown torque	:	260 %			Insulation class	:	F			Service factor	:	1.25			Moment of inertia (J)	:	13.2 sq.ft.lb			Design	:	B			
Frame	:	404/5TS	Locked rotor time	: 25s (cold) 14s (hot)																																																																																										
Output	:	100 HP (75 kW)	Temperature rise	: 80 K																																																																																										
Poles	:	2	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	:	224/112 A	Protection degree	: IP55																																																																																										
L. R. Amperes	:	1456/728 A	Cooling method	: IC411 - TEFC																																																																																										
LRC	:	6.5x(Code G)	Mounting	: F-1																																																																																										
No load current	:	52.0/26.0 A	Rotation ¹	: Both (CW and CCW)																																																																																										
Rated speed	:	3545 rpm	Noise level ²	: 79.0 dB(A)																																																																																										
Slip	:	1.53 %	Starting method	: Direct On Line																																																																																										
Rated torque	:	148 ft.lb	Approx. weight ³	: 1109 lb																																																																																										
Locked rotor torque	:	240 %																																																																																												
Breakdown torque	:	260 %																																																																																												
Insulation class	:	F																																																																																												
Service factor	:	1.25																																																																																												
Moment of inertia (J)	:	13.2 sq.ft.lb																																																																																												
Design	:	B																																																																																												
Output	25%	50%	75%	100%	Foundation loads																																																																																									
Efficiency (%)	0.000	93.0	94.1	94.1	Max. traction	: 601 lb																																																																																								
Power Factor	0.00	0.83	0.88	0.89	Max. compression	: 1710 lb																																																																																								
<table> <tr><td colspan="2"></td><td>Drive end</td><td colspan="2">Non drive end</td></tr> <tr><td>Bearing type</td><td>:</td><td>6314 C3</td><td colspan="2">6314 C3</td></tr> <tr><td>Sealing</td><td>:</td><td>WSeal</td><td colspan="2">WSeal</td></tr> <tr><td>Lubrication interval</td><td>:</td><td>4000 h</td><td colspan="2">4000 h</td></tr> <tr><td>Lubricant amount</td><td>:</td><td>27 g</td><td colspan="2" rowspan="5">27 g</td></tr> <tr><td>Lubricant type</td><td>:</td><td colspan="3" rowspan="4">Mobil Polyrex EM</td></tr> </table>							Drive end	Non drive end		Bearing type	:	6314 C3	6314 C3		Sealing	:	WSeal	WSeal		Lubrication interval	:	4000 h	4000 h		Lubricant amount	:	27 g	27 g		Lubricant type	:	Mobil Polyrex EM																																																														
		Drive end	Non drive end																																																																																											
Bearing type	:	6314 C3	6314 C3																																																																																											
Sealing	:	WSeal	WSeal																																																																																											
Lubrication interval	:	4000 h	4000 h																																																																																											
Lubricant amount	:	27 g	27 g																																																																																											
Lubricant type	:	Mobil Polyrex EM																																																																																												
<p>Notes: USABLE @208V 243A SF 1.10 SFA 268A</p>																																																																																														
<p>This revision replaces and cancel the previous one, which must be eliminated.</p> <p>(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.</p>																																																																																														
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					Page 1 / 1																																																																																									
Checked by																																																																																														
Date	26/03/2024																																																																																													