### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : W22 IE3 Three-Phase Product code: 15834893 Frame : 225S/M Cooling method : IC411 - TEFC Insulation class Mounting : B3T : F Duty cycle : S1 Rotation<sup>1</sup> : Both (CW and CCW) Ambient temperature : -20°C to +40°C Starting method : Direct On Line Altitude : 1000 m.a.s.l. Approx. weight<sup>3</sup> : 394 kg Protection degree : IP55 Moment of inertia (J) : 0.2861 kgm<sup>2</sup> Design : N Output [kW] 45 45 45 45 2 Poles 2 2 2 Frequency [Hz] 50 50 50 60 Rated voltage [V] 380/660 400/690 415 460 Rated current [A] 83.6/48.1 80.3/46.6 79.3 71.8 L. R. Amperes [A] 644/371 666/386 706 653 LRC [A] 8.9 9.1 7.7 8.3 No load current [A] 27.0/15.5 29.0/16.8 31.0 27.0 Rated speed [RPM] 2970 2973 3575 2965 Slip [%] 0.90 1.17 1.00 0.69 Rated torque [kgfm] 14.7 12.3 14.8 14.8 Locked rotor torque [%] 320 320 260 290 Breakdown torque [%] 370 400 420 320 Service factor 1.00 1.00 1.00 1.00 Temperature rise 80 K 80 K 80 K 80 K 16s (cold) 9s (hot) Locked rotor time 14s (cold) 8s (hot) 14s (cold) 8s (hot) 12s (cold) 7s (hot) Noise level<sup>2</sup> 74.0 dB(A) 74.0 dB(A) 74.0 dB(A) 79.0 dB(A) 25% 0.000 0.000 0.000 50% 92.5 92.0 91.5 92.0 Efficiency (%) 75% 93.5 93.0 93.0 93.6 94.0 100% 94.0 94.0 93.6 0.00 0.00 0.00 25% 0.74 0.72 0.69 50% 0.68 Power Factor 75% 0.83 0.82 0.79 0.79 100% 0.87 0.86 0.84 0.84 Losses at normative operating points (speed;torque), in percentage of rated output power P1 (0,9;1,0) 6.0 6.0 6.0 6.4 P2 (0,5;1,0) 4.6 4.6 4.6 4.9 P3 (0,25;1,0) 4.2 4.2 4.2 4.5 3.3 Losses (%) P4 (0,9;0,5) 3.3 3.3 3.6 P5 (0,5;0,5) 2.0 2.0 2.0 2.1 P6 (0,5;0,25) 1.4 1.4 1.4 1.5 P7 (0,25;0,25) 0.9 0.9 0.9 0.9 Drive end Non drive end Foundation loads 6314 C3 Bearing type 6314 C3 Max. traction : 381 kgf Sealing WSeal WSeal : 775 kaf Max. compression Lubrication interval 5000 h 5000 h Lubricant amount 27 g 27 g Lubricant type Mobil Polyrex EM This revision replaces and cancel the previous one, which These are average values based on tests with sinusoidal must be eliminated. power supply, subject to the tolerances stipulated in IEC (1) Looking the motor from the shaft end. 60034-1. (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

( <del>4</del> ) At 100 % of it	iii load.				
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# **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



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# DATA SHEET

### Three Phase Induction Motor - Squirrel Cage



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Customer	

Thermal protection
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ID	Application	Туре	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	155 °C

#### Space heater information

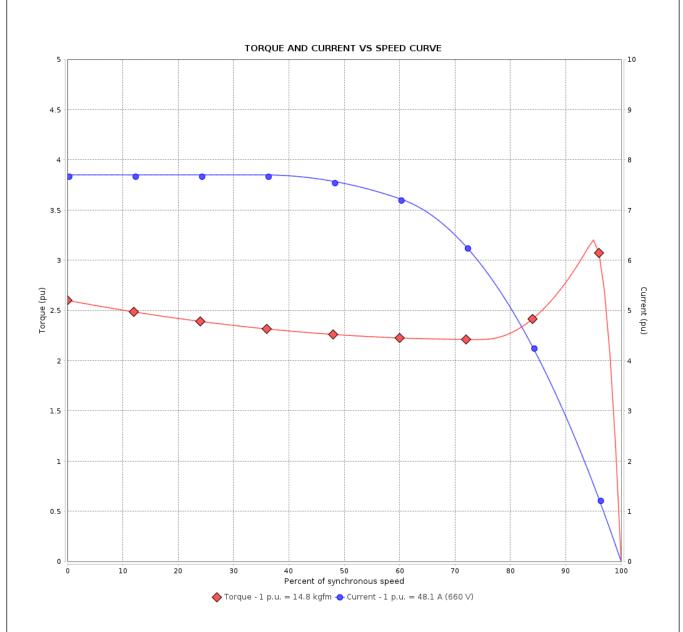
Voltage: 110-127/200-240 V

### Three Phase Induction Motor - Squirrel Cage



Customer		
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Product line : W22 IE3 Three-Phase Product code : 15834893



Performance	: 380/660 V 50 HZ 2P		
Rated current	: 83.6/48.1 A	Moment of inertia (J)	: 0.2861 kgm²
LRC	: 7.7	Duty cycle	: S1
Rated torque	: 14.8 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 2965 rpm	Design	: N

Locked rotor time : 14s (cold) 8s (hot)

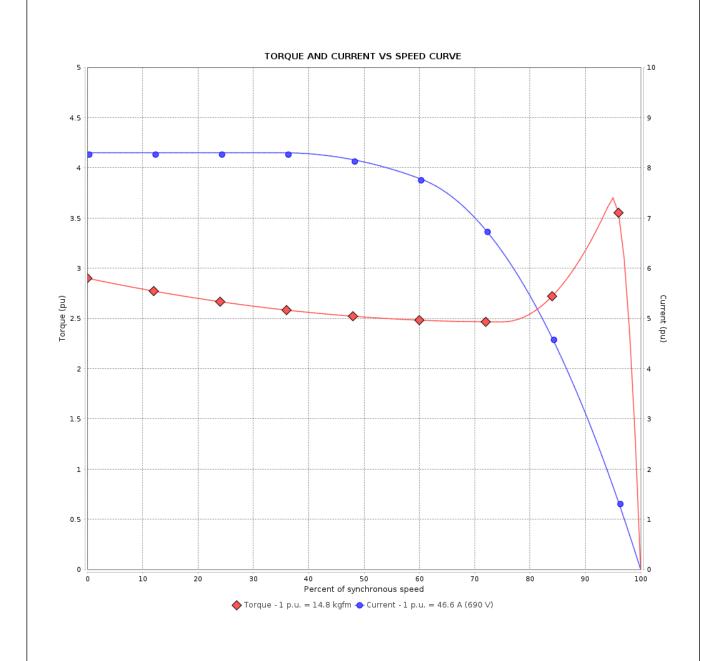
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### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE3 Three-Phase Product code : 15834893



Performance	: 400/690 V 50 Hz 2P		
Rated current LRC Rated torque Locked rotor torque	: 80.3/46.6 A : 8.3 : 14.8 kgfm : 290 %	Moment of inertia (J) Duty cycle Insulation class Service factor	: 0.2861 kgm² : S1 : F : 1.00
Breakdown torque Rated speed	: 370 % : 2970 rpm	Temperature rise Design	: 80 K : N

Locked rotor time : 14s (cold) 8s (hot)

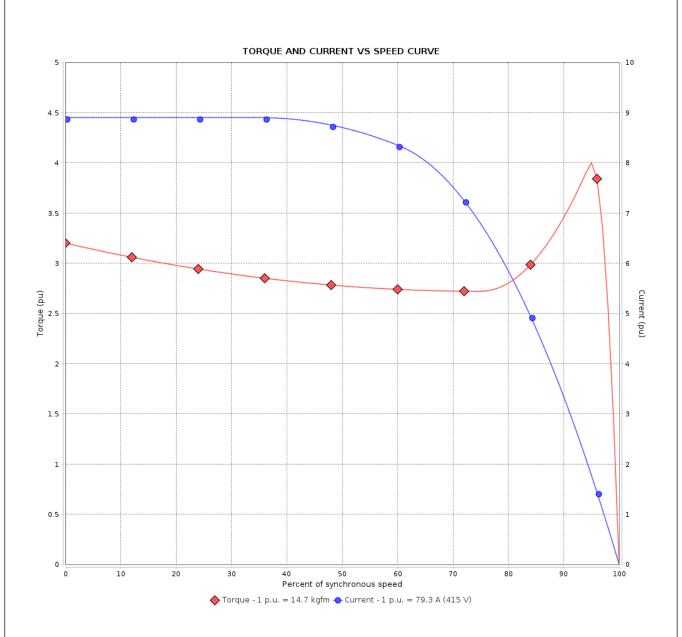
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### Three Phase Induction Motor - Squirrel Cage



Customer	

Product line : W22 IE3 Three-Phase Product code : 15834893



: 415 V 50 Hz 2P		
: 79.3 A	Moment of inertia (J)	: 0.2861 kgm²
: 8.9	Duty cycle	: S1
: 14.7 kgfm	Insulation class	:F
: 320 %	Service factor	: 1.00
: 400 %	Temperature rise	: 80 K
: 2973 rpm	Design	: N
	: 8.9 : 14.7 kgfm : 320 % : 400 %	: 79.3 A Moment of inertia (J) : 8.9 Duty cycle : 14.7 kgfm Insulation class : 320 % Service factor : 400 % Temperature rise

Locked rotor time : 12s (cold) 7s (hot)

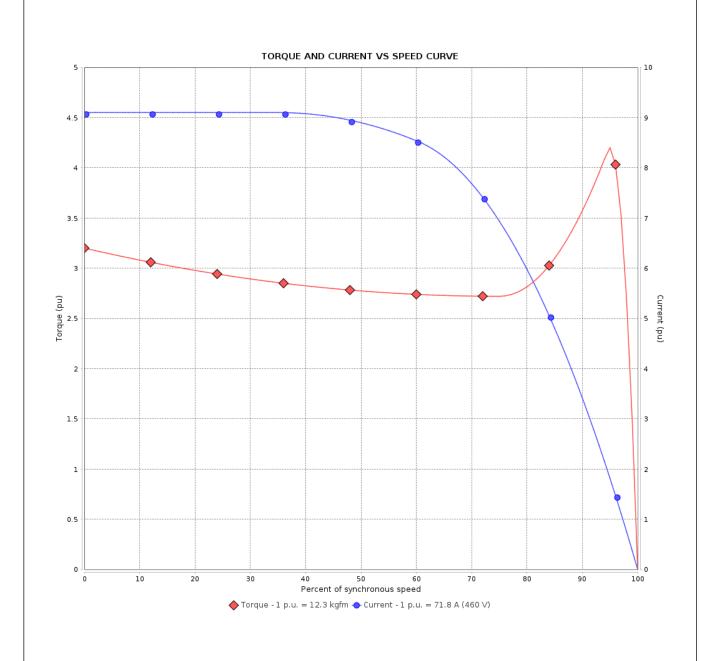
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### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE3 Three-Phase Product code : 15834893



Performance	: 460 V 60 Hz 2P			
Rated current	: 71.8 A	Moment of inertia (J)	: 0.2861 kgm²	
LRC	: 9.1	Duty cycle	: S1	
Rated torque	: 12.3 kgfm	Insulation class	: F	
Locked rotor torque	: 320 %	Service factor	: 1.00	
Breakdown torque	: 420 %	Temperature rise	: 80 K	
Rated speed	: 3575 rpm	Design	: N	

Locked rotor time : 16s (cold) 9s (hot)

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### Three Phase Induction Motor - Squirrel Cage



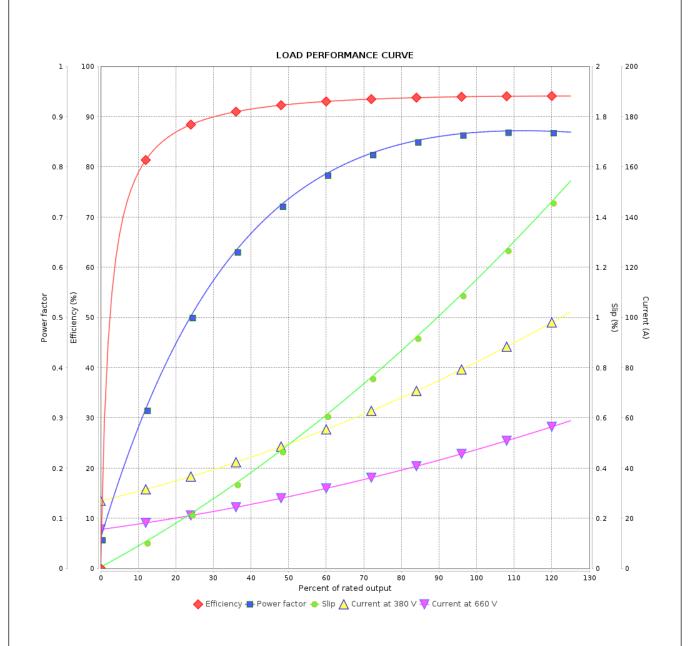
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Product line : W22 IE3 Three-Phase Product code : 15834893



Performance		: 380/660 V 50 Hz 2	 2P			
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	•	: 7.7 Duty cycle : 14.8 kgfm Insulation c		n class actor	: 0.2861 kgm² : S1 : F : 1.00 : 80 K : N	
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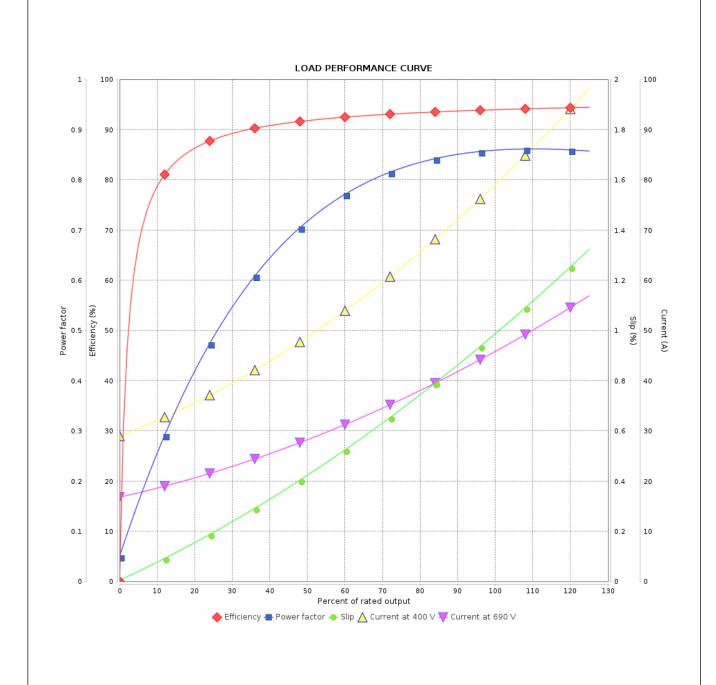
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### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE3 Three-Phase Product code : 15834893



Performance	: 40	00/690 V 50 Hz 2P				
Rated current	: 80	0.3/46.6 A	Moment of	of inertia (J)	: 0.2861 kgm²	
LRC	: 8	.3	Duty cycle	9	: S1	
Rated torque	: 14	4.8 kgfm	Insulation	class	: F	
Locked rotor torq	jue : 29	90 %	Service fa	ector	: 1.00	
Breakdown torqu	ie : 3	: 370 % Temperature rise		: 80 K		
Rated speed	Rated speed : 2970 rpm		Design		: N	
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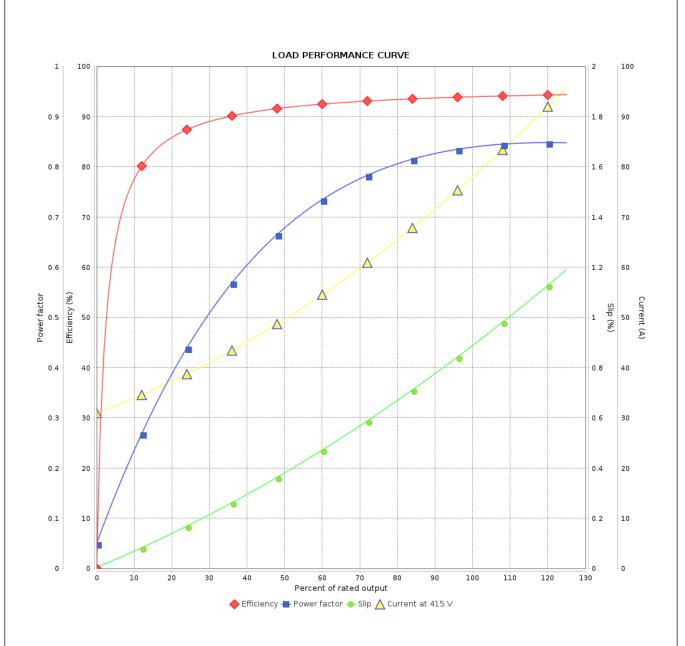
### Three Phase Induction Motor - Squirrel Cage



Customer :

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Product line : W22 IE3 Three-Phase Product code : 15834893



Performance		: 415 V 50 Hz 2P				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	•	: 79.3 A : 8.9 : 14.7 kgfm : 320 % : 400 % : 2973 rpm	Moment of Duty cycle Insulation Service fa Temperat Design	class ctor	: 0.2861 kgm² : S1 : F : 1.00 : 80 K : N	
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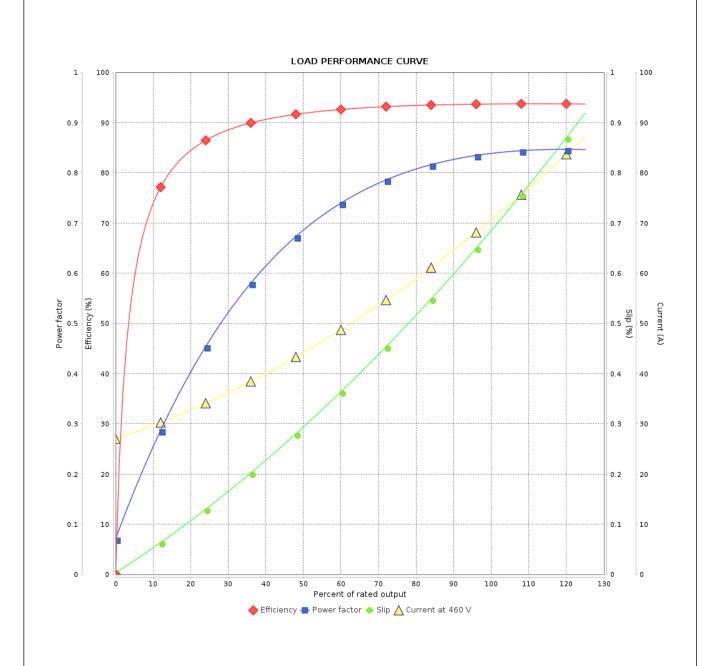
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### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE3 Three-Phase Product code : 15834893



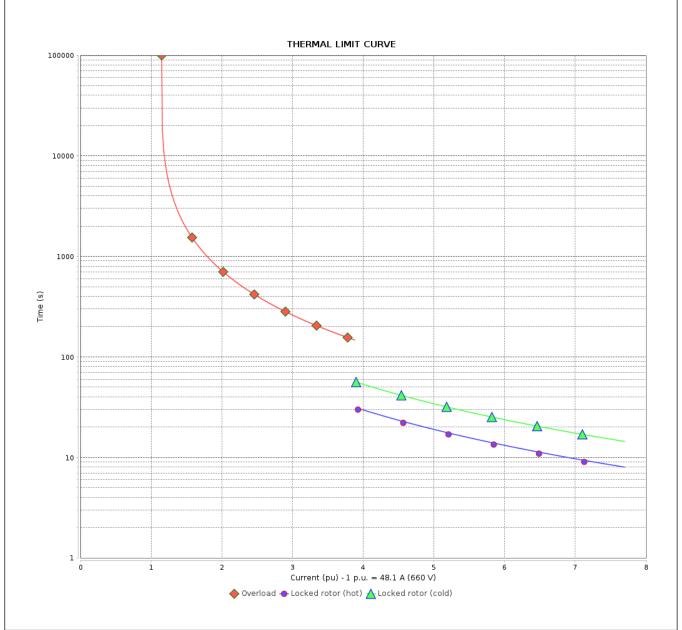
Performance	: 4	60 V 60 Hz 2P				
Rated current	: 7	1.8 A	Moment o	of inertia (J)	: 0.2861 kgm²	2
LRC	: 9	.1	Duty cycle	e	: S1	
Rated torque	: 1:	2.3 kgfm	Insulation	class	: F	
Locked rotor torqu	ue : 3	20 %	Service factor		: 1.00	
Breakdown torque : 420 %		Temperati	Temperature rise		: 80 K	
Rated speed	: 3	575 rpm	Design		: N	
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### Three Phase Induction Motor - Squirrel Cage



Customer			
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Product line : W22 IE3 Three-Phase Product code : 15834893



Performance	: 380/660 V 50 Hz 2P			
Rated current	: 83.6/48.1 A	Moment of inertia (J)	: 0.2861 kgm²	
LRC	: 7.7	Duty cycle	: S1	
Rated torque	: 14.8 kgfm	Insulation class	: F	
Locked rotor torque	: 260 %	Service factor	: 1.00	
Breakdown torque	: 320 %	Temperature rise	: 80 K	
Rated speed	: 2965 rpm	Design	: N	
Heating constant				
0 11 1				

Cooling constant

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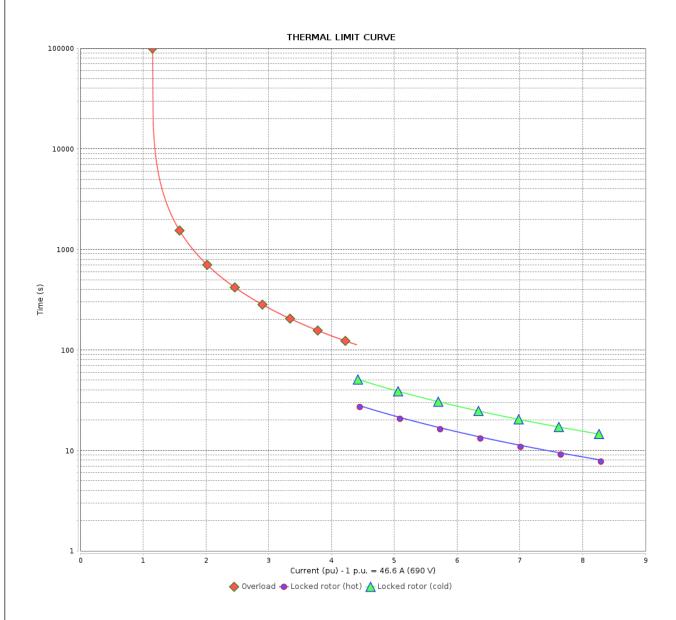
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### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE3 Three-Phase Product code : 15834893



Performance : 400/690 V 50 Hz 2P Rated current : 80.3/46.6 A Moment of inertia (J) : 0.2861 kgm<sup>2</sup> **LRC** : 8.3 Duty cycle : S1 Insulation class : F Rated torque : 14.8 kgfm : 290 % : 1.00 Locked rotor torque Service factor Breakdown torque : 370 % Temperature rise : 80 K Rated speed : 2970 rpm Design : N Heating constant Cooling constant

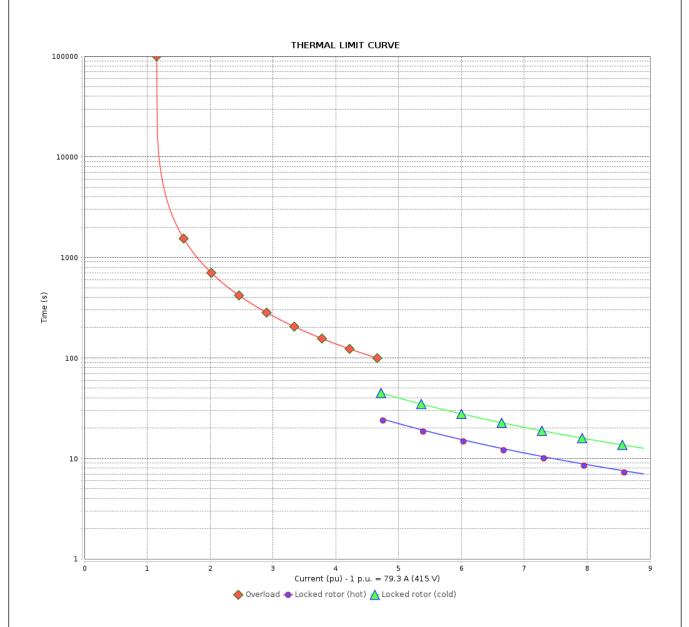
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### Three Phase Induction Motor - Squirrel Cage



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Product line : W22 IE3 Three-Phase Product code: 15834893



: 415 V 50 Hz 2P Performance Rated current : 79.3 A Moment of inertia (J) : 0.2861 kgm<sup>2</sup> **LRC** : 8.9 Duty cycle : S1 Insulation class : 14.7 kgfm : F Rated torque : 320 % : 1.00 Locked rotor torque Service factor Breakdown torque : 400 % Temperature rise : 80 K Rated speed : 2973 rpm Design Heating constant

Cooling constant

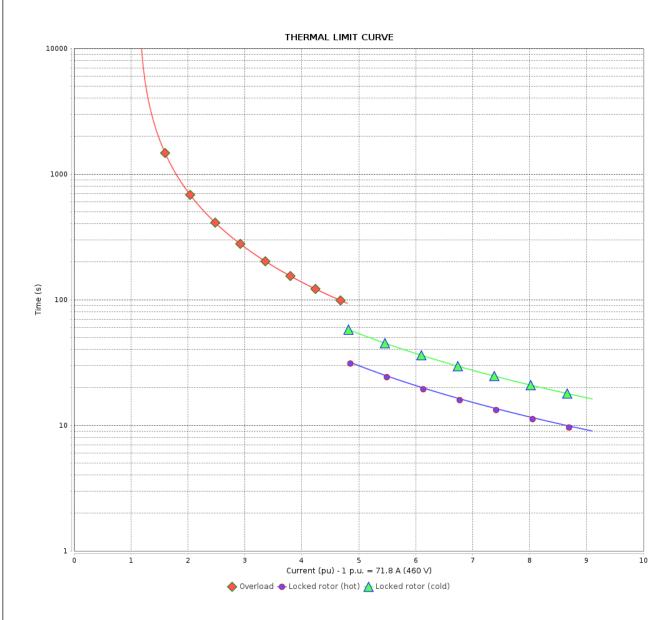
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### Three Phase Induction Motor - Squirrel Cage



Customer

Product line : W22 IE3 Three-Phase Product code: 15834893



Performance : 460 V 60 Hz 2P Rated current : 71.8 A Moment of inertia (J) : 0.2861 kgm<sup>2</sup> **LRC** : 9.1 Duty cycle : S1 Insulation class : F Rated torque : 12.3 kgfm : 1.00 Locked rotor torque : 320 % Service factor Temperature rise Breakdown torque : 420 % : 80 K Rated speed : 3575 rpm Design : N Heating constant

Cooling constant

Cooling Constant	<u>-</u>				
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### Three Phase Induction Motor - Squirrel Cage



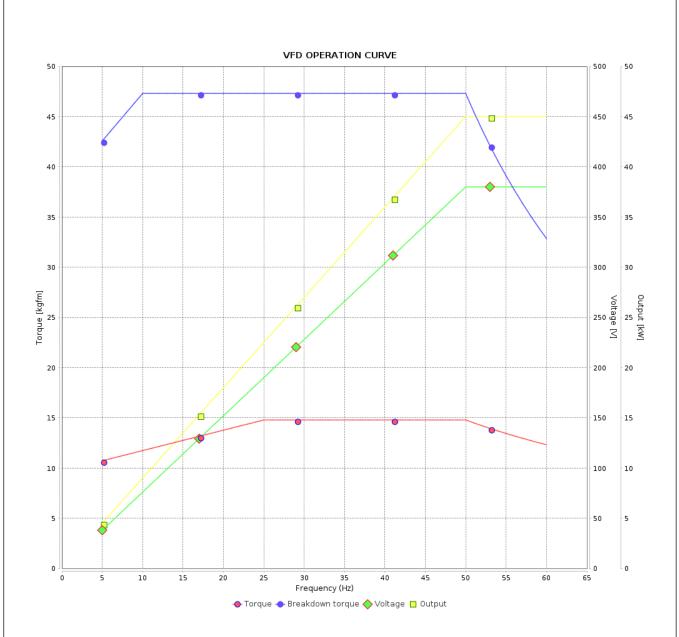
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Product line : W22 IE3 Three-Phase Product code : 15834893



Performance		: 380/660 V 50 Hz	2P			
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	•	: 83.6/48.1 A : 7.7 : 14.8 kgfm : 260 % : 320 % : 2965 rpm	Moment of Duty cycle Insulation Service fa Temperat Design	ı class actor	: 0.2861 kgm² : S1 : F : 1.00 : 80 K : N	2
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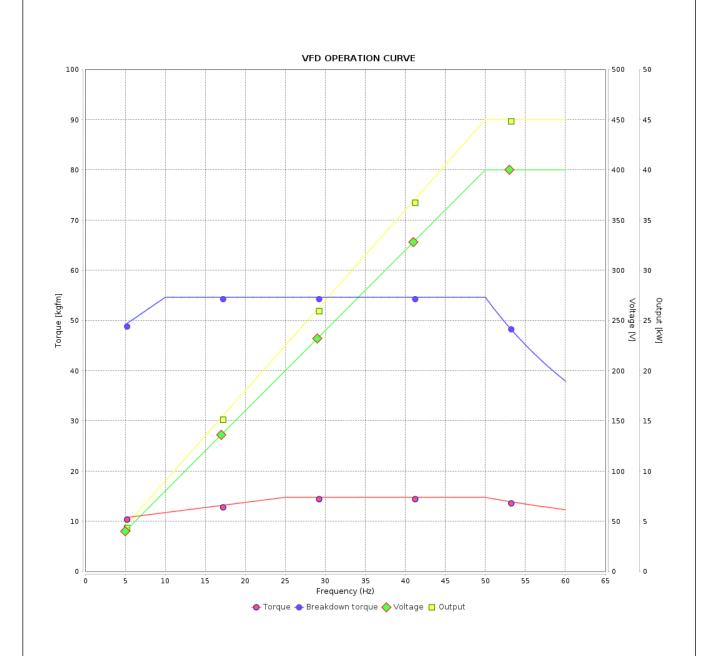
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### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE3 Three-Phase Product code : 15834893



Performance	: 400/690 V 50 Hz 2P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 80.3/46.6 A : 8.3 : 14.8 kgfm : 290 % : 370 % : 2970 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 0.2861 kgm² : S1 : F : 1.00 : 80 K : N	
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### Three Phase Induction Motor - Squirrel Cage



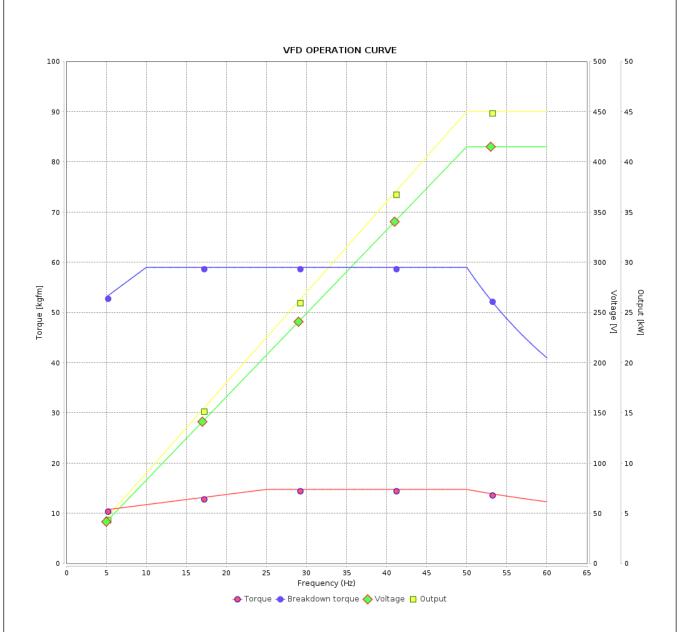
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Product line : W22 IE3 Three-Phase Product code : 15834893



Performance	: 415 V 50 Hz 2P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 79.3 A : 8.9 : 14.7 kgfm : 320 % : 400 % : 2973 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.2861 kgm² : S1 : F : 1.00 : 80 K : N	
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### Three Phase Induction Motor - Squirrel Cage



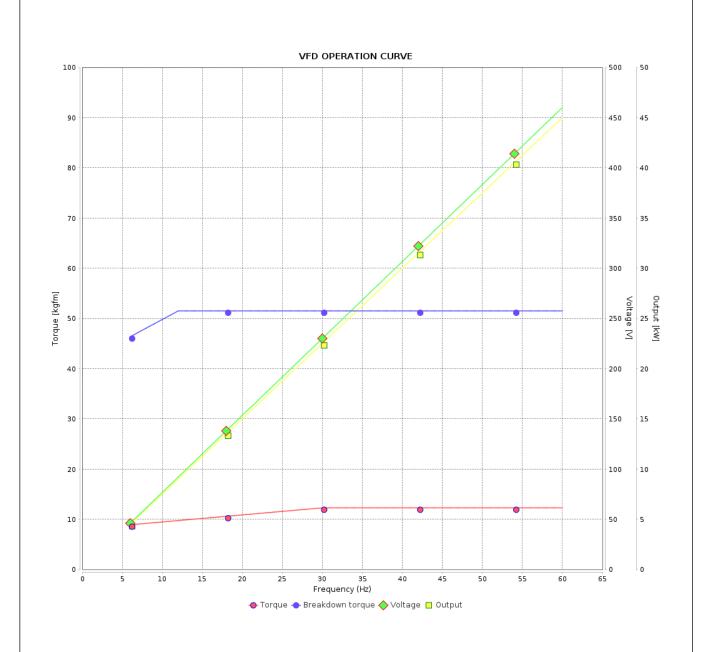
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Product line : W22 IE3 Three-Phase Product code : 15834893



Performance	: 460 V 60 Hz 2P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 71.8 A : 9.1 : 12.3 kgfm : 320 % : 420 % : 3575 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.2861 kgm² : S1 : F : 1.00 : 80 K : N	
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