

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer		: IDS	
Product line		: W22 IE3 Three-Phase	Product code : 12862394
Frame	: 160L	Locked rotor time	: 10s (cold) 6s (hot)
Output	: 18.5 kW	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 400/690 V	Altitude	: 1000 m.a.s.l.
Rated current	: 33.9/19.7 A	Protection degree	: IP55
L. R. Amperes	: 292/169 A	Cooling method	: IC411 - TEFC
LRC	: 8.6	Mounting	: B3T
No load current	: 15.2/8.79 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 2945 rpm	Noise level <sup>2</sup>	: 67.0 dB(A)
Slip	: 1.83 %	Starting method	: Direct On Line
Rated torque	: 6.12 kgfm	Approx. weight <sup>3</sup>	: 137 kg
Locked rotor torque	: 310 %		
Breakdown torque	: 370 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 0.0663 kgm <sup>2</sup>		
Design	: N		
Output	50%	75%	100%
Efficiency (%)	91.5	92.3	92.6
Power Factor	0.69	0.80	0.85
Foundation loads			
Max. traction		: 274 kgf	
Max. compression		: 411 kgf	
Bearing type		Drive end	Non drive end
Sealing		6309 C3	6209 Z C3
Lubrication interval		V'Ring	V'Ring
Lubricant amount		20000 h	20000 h
Lubricant type		13 g	9 g
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 IEC 60034-1.	
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### Thermal protection

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

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# VFD OPERATION CURVE

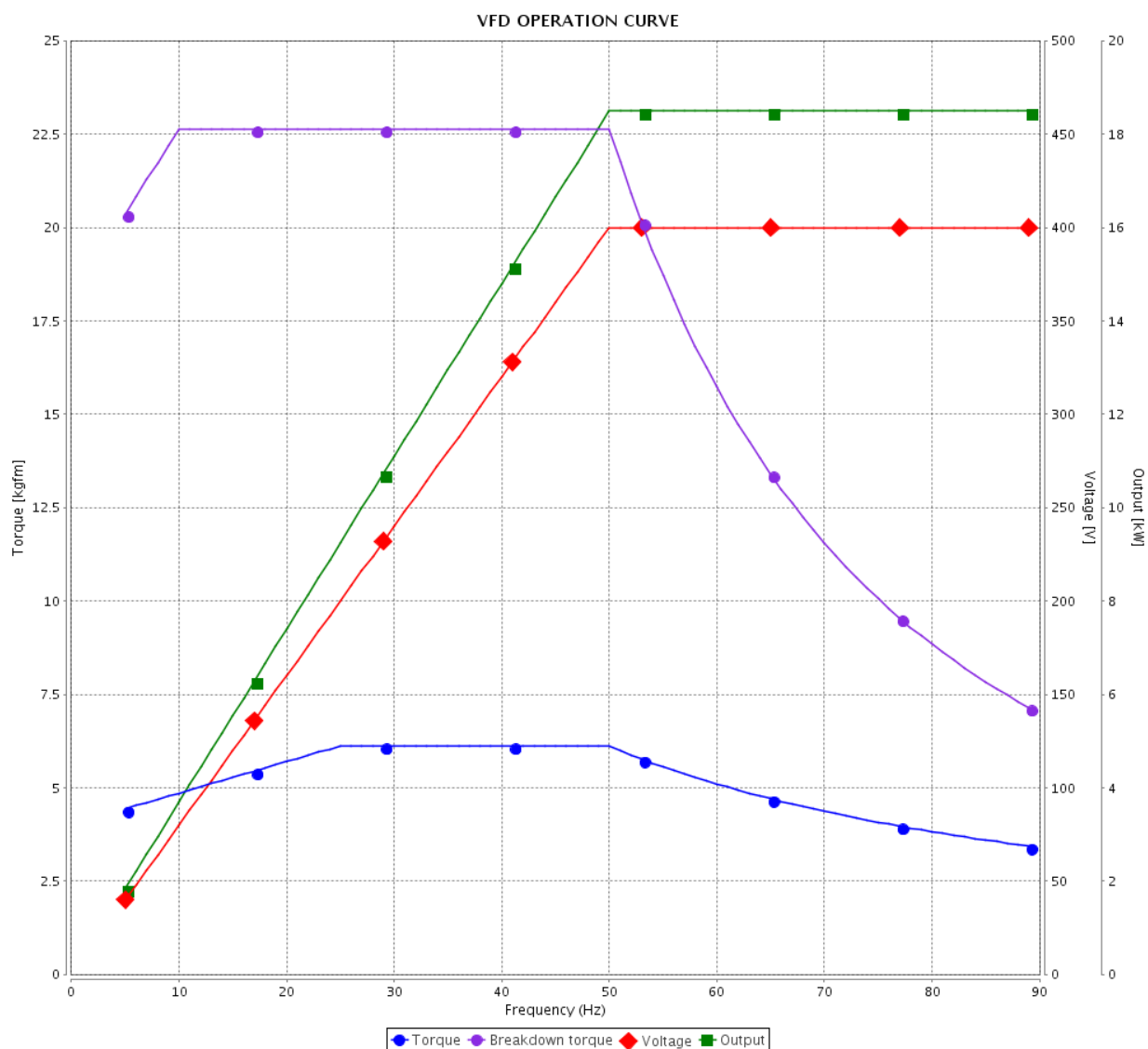
Three Phase Induction Motor - Squirrel Cage



Customer : IDS

Product line : W22 IE3 Three-Phase

Product code : 12862394



Performance : 400/690 V 50 Hz 2P

Rated current : 33.9/19.7 A  
 LRC : 8.6  
 Rated torque : 6.12 kgfm  
 Locked rotor torque : 310 %  
 Breakdown torque : 370 %  
 Rated speed : 2945 rpm

Moment of inertia (J) : 0.0663 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : N

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