

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer		: IDS			
Product line		: W22 IE3 Three-Phase		Product code : 12862535	
Frame	: 180M	Locked rotor time	: 23s (cold) 13s (hot)		
Output	: 18.5 kW	Temperature rise	: 80 K		
Poles	: 4	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	: 35.1/20.3 A	Protection degree	: IP55		
L. R. Amperes	: 260/151 A	Cooling method	: IC411 - TEFC		
LRC	: 7.4	Mounting	: B5T		
No load current	: 17.0/9.86 A	Rotation <sup>1</sup>	: Both (CW and CCW)		
Rated speed	: 1470 rpm	Noise level <sup>2</sup>	: 61.0 dB(A)		
Slip	: 2.00 %	Starting method	: Direct On Line		
Rated torque	: 12.3 kgfm	Approx. weight <sup>3</sup>	: 175 kg		
Locked rotor torque	: 300 %				
Breakdown torque	: 320 %				
Insulation class	: F				
Service factor	: 1.00				
Moment of inertia (J)	: 0.1740 kgm <sup>2</sup>				
Design	: N				
Output	50%	75%	100%	Foundation loads	
Efficiency (%)	92.2	92.8	92.8	Max. traction : 436 kgf	
Power Factor	0.64	0.76	0.82	Max. compression : 611 kgf	
		<u>Drive end</u>		<u>Non drive end</u>	
Bearing type	:	6311 C3		6211 Z C3	
Sealing	:	Oil Seal		Oil Seal	
Lubrication interval	:	20000 h		20000 h	
Lubricant amount	:	18 g		11 g	
Lubricant type	:	Mobil Polyrex EM			
Notes					
<p>This revision replaces and cancel the previous one, which must be eliminated.</p> <p>(1) Looking the motor from the shaft end.</p> <p>(2) Measured at 1m and with tolerance of +3dB(A).</p> <p>(3) Approximate weight subject to changes after manufacturing process.</p> <p>(4) At 100% of full load.</p>					
<p>These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.</p>					
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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

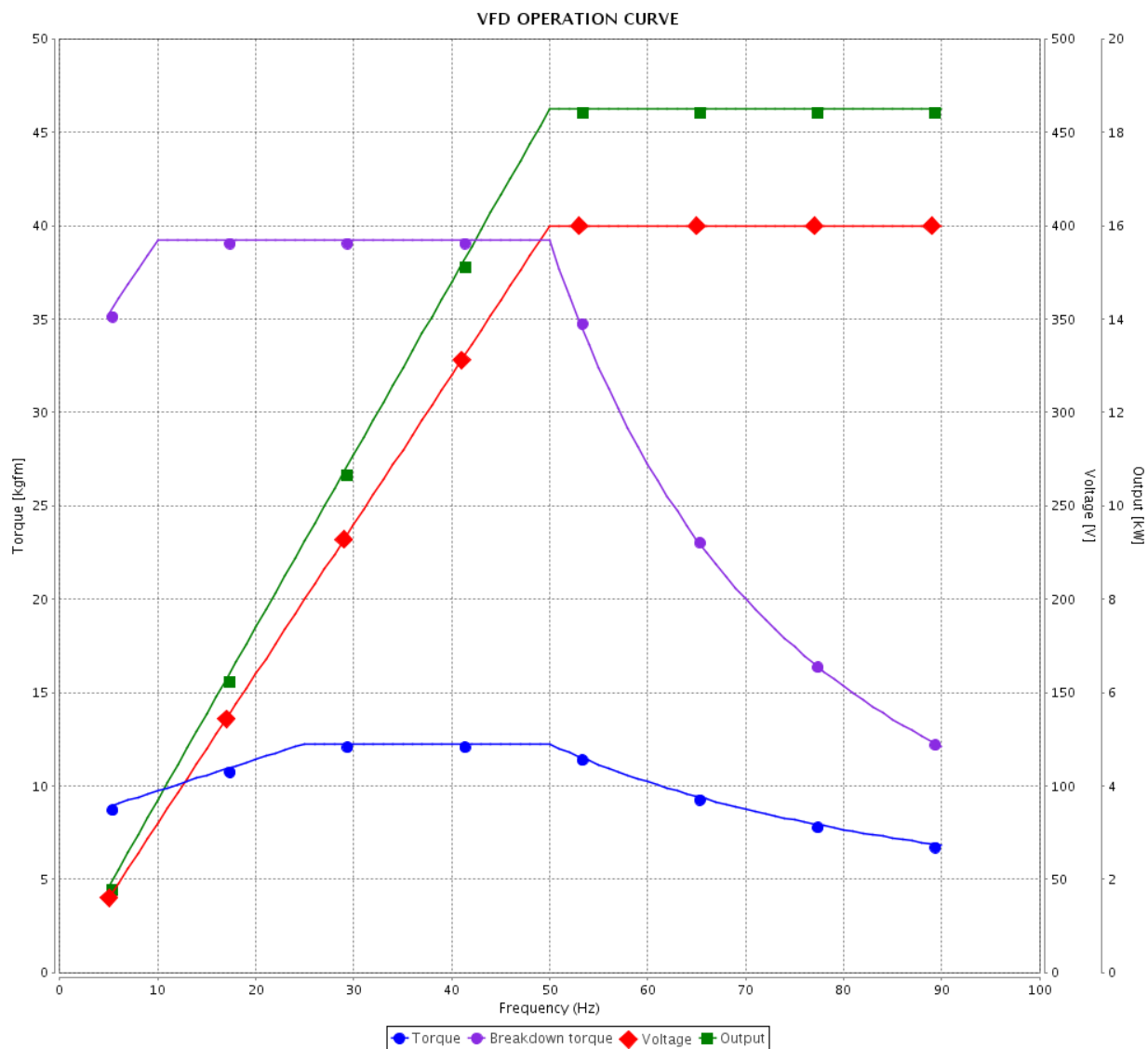
Three Phase Induction Motor - Squirrel Cage



Customer : IDS

Product line : W22 IE3 Three-Phase

Product code : 12862535



Performance : 400/690 V 50 Hz 4P

Rated current : 35.1/20.3 A  
 LRC : 7.4  
 Rated torque : 12.3 kgfm  
 Locked rotor torque : 300 %  
 Breakdown torque : 320 %  
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.1740 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : N

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