

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer		: IDS	
Product line		: W22 IE3 Three-Phase	Product code : 12862500
Frame	: 180L	Locked rotor time	: 19s (cold) 11s (hot)
Output	: 22 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	: 41.0/23.8 A	Protection degree	: IP55
L. R. Amperes	: 299/174 A	Cooling method	: IC411 - TEFC
LRC	: 7.3	Mounting	: B3T
No load current	: 19.0/11.0 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	: 14.6 kgfm	Approx. weight <sup>3</sup>	: 196 kg
Locked rotor torque	: 340 %		
Breakdown torque	: 340 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 0.2097 kgm <sup>2</sup>		
Design	: N		
Output	50%	75%	100%
Efficiency (%)	92.3	93.0	93.2
Power Factor	0.66	0.77	0.83
Foundation loads			
Max. traction		: 559 kgf	
Max. compression		: 755 kgf	
		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 C3	6211 Z C3
Sealing	:	V'Ring	V'Ring
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

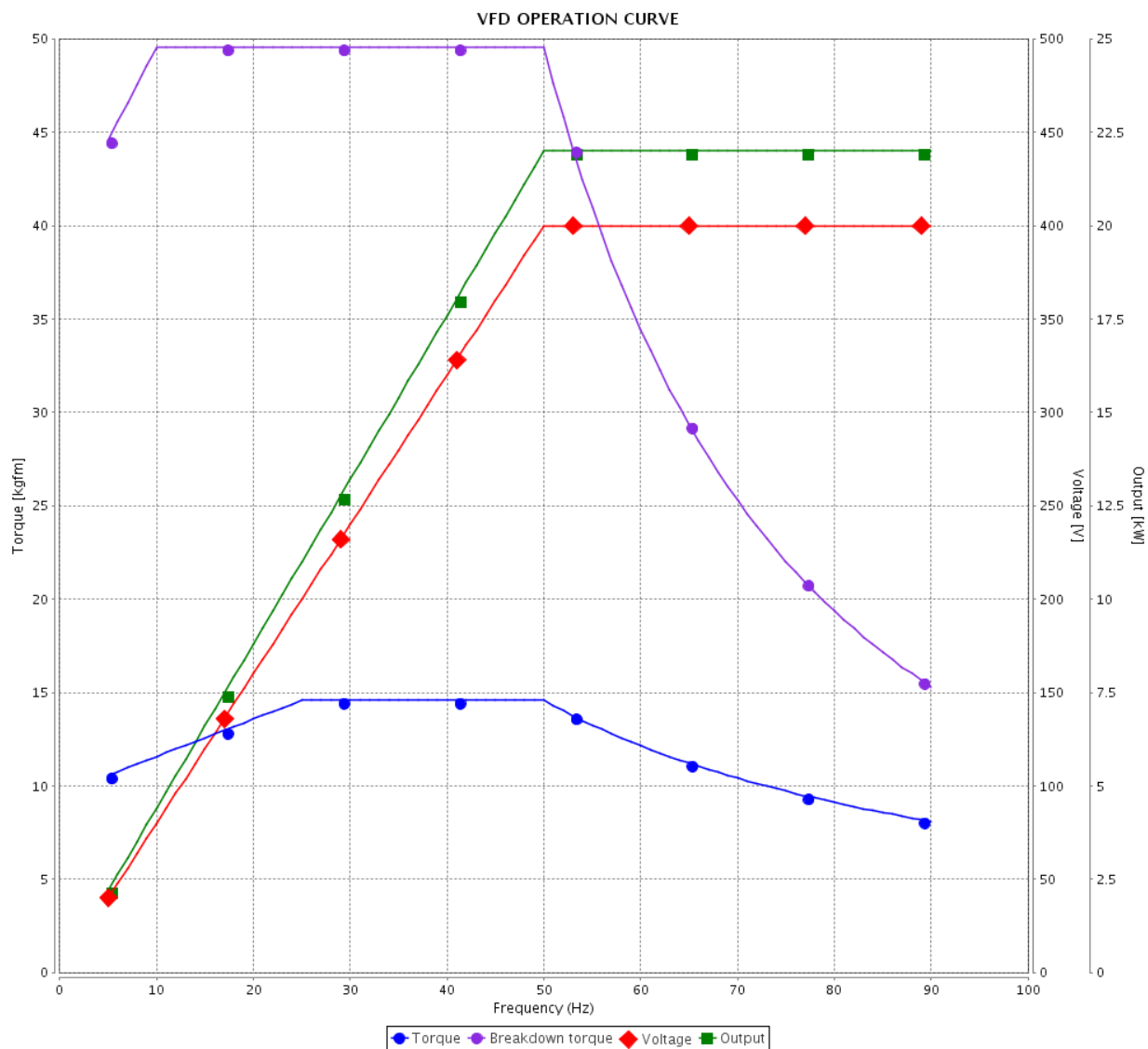
Three Phase Induction Motor - Squirrel Cage



Customer : IDS

Product line : W22 IE3 Three-Phase

Product code : 12862500



Performance : 400/690 V 50 Hz 4P

Rated current : 41.0/23.8 A  
 LRC : 7.3  
 Rated torque : 14.6 kgfm  
 Locked rotor torque : 340 %  
 Breakdown torque : 340 %  
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.2097 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : N

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