

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer		: IDS	
Product line		: W22 IE3 Three-Phase	Product code : 12862504
Frame	: 280S/M	Locked rotor time	: 54s (cold) 30s (hot)
Output	: 90 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	: 158/91.6 A	Protection degree	: IP55
L. R. Amperes	: 1106/641 A	Cooling method	: IC411 - TEFC
LRC	: 7.0	Mounting	: B3T
No load current	: 55.0/31.9 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1485 rpm	Noise level <sup>2</sup>	: 69.0 dB(A)
Slip	: 1.00 %	Starting method	: Direct On Line
Rated torque	: 59.0 kgfm	Approx. weight <sup>3</sup>	: 761 kg
Locked rotor torque	: 220 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 2.17 kgm <sup>2</sup>		
Design	: N		
Output	50%	75%	100%
Efficiency (%)	94.9	95.4	95.4
Power Factor	0.75	0.83	0.86
Foundation loads			
Max. traction		: 823 kgf	
Max. compression		: 1583 kgf	
		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6316 C3	6316 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	13000 h	13000 h
Lubricant amount	:	34 g	34 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

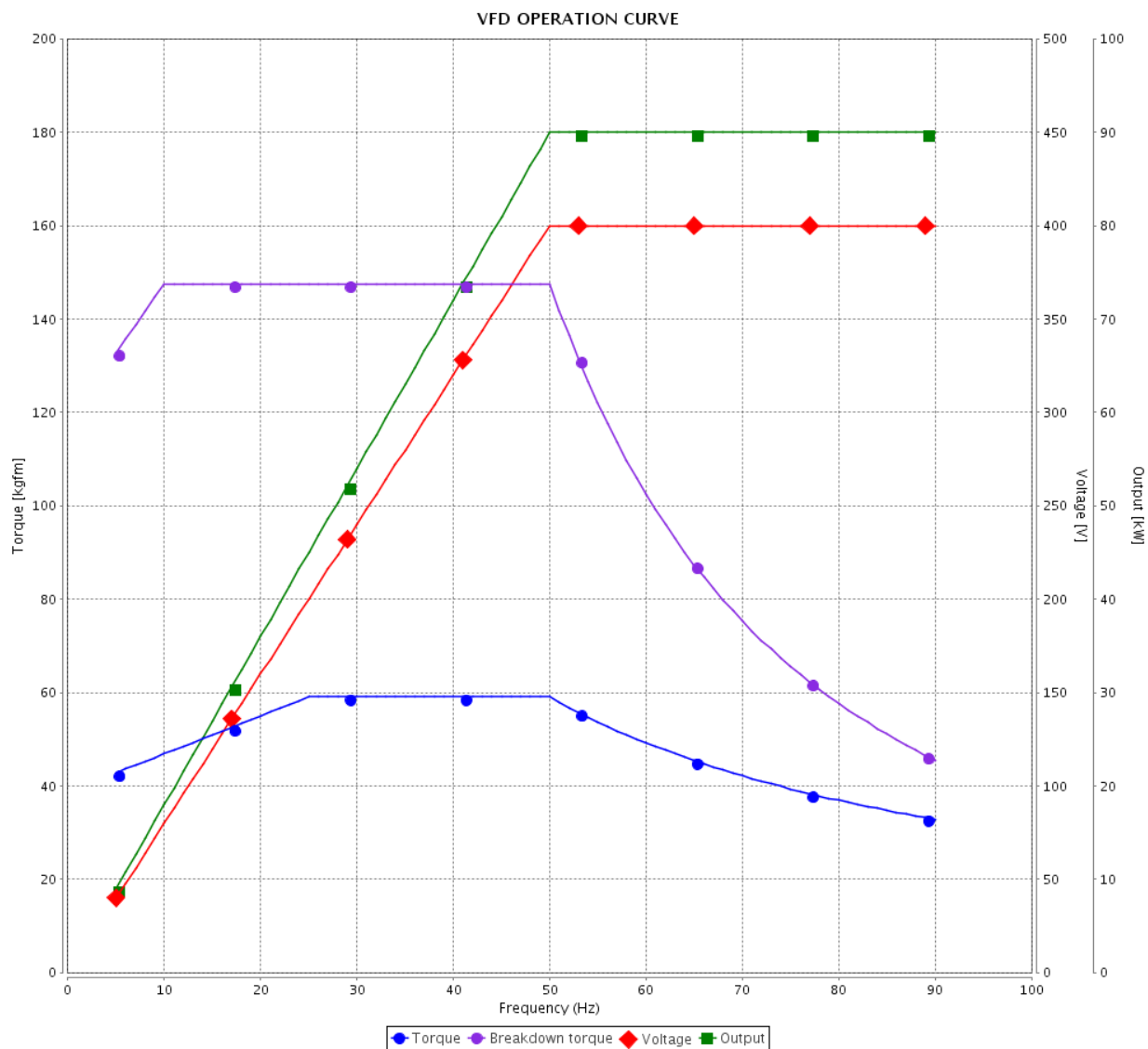
Three Phase Induction Motor - Squirrel Cage



Customer : IDS

Product line : W22 IE3 Three-Phase

Product code : 12862504



Performance : 400/690 V 50 Hz 4P

Rated current : 158/91.6 A  
 LRC : 7.0  
 Rated torque : 59.0 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 250 %  
 Rated speed : 1485 rpm

Moment of inertia (J) : 2.17 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : N

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