

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer : Grupa MGE
Customer reference : Grupa MGE

Product line : WEG GENERAL PURPOSE IE3 Three-Phase Product code : 16017726

Frame : 160M	Cooling method : IC411 - TEFC
Insulation class : F	Mounting : B3T
Duty cycle : S1	Rotation ¹ : Both (CW and CCW)
Ambient temperature : -20°C to +40°C	Starting method : Direct On Line
Altitude : 1000	Approx. weight ³ : 122 kg
Protection degree : IP55	Moment of inertia (J) : 0.0417 kgm ²
Design : N	

Output [kW]	15	15
Poles	2	2
Frequency [Hz]	50	60
Rated voltage [V]	400/690	460
Rated current [A]	27.1/15.7	24.3
L. R. Amperes [A]	211/123	216
LRC [A]	7.8	8.9
No load current [A]	10.8/6.26	10.2
Rated speed [RPM]	2950	3555
Slip [%]	1.67	1.25
Rated torque [Nm]	48.6	40.3
Locked rotor torque [%]	280	380
Breakdown torque [%]	370	430
Service factor	1.00	1.00
Temperature rise	80 K	80 K
Locked rotor time	21s (cold) 12s (hot)	27s (cold) 15s (hot)
Noise level ²	67.0 dB(A)	72.0 dB(A)
Efficiency (%)	25%	
	50%	91.1
	75%	91.9
	100%	91.9
Power Factor	25%	
	50%	0.71
	75%	0.82
	100%	0.87

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	8.5	9.6
	P2 (0,5;1,0)	7.3	8.2
	P3 (0,25;1,0)	6.9	7.8
	P4 (0,9;0,5)	4.1	4.6
	P5 (0,5;0,5)	2.8	3.1
	P6 (0,5;0,25)	1.7	1.9
	P7 (0,25;0,25)	1.2	1.4

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6209 ZZ C3	6209 ZZ C3	Max. traction
Sealing	: V'Ring	V'Ring	Max. compression
Lubrication interval	: -	-	
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		

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.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.

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Notes

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

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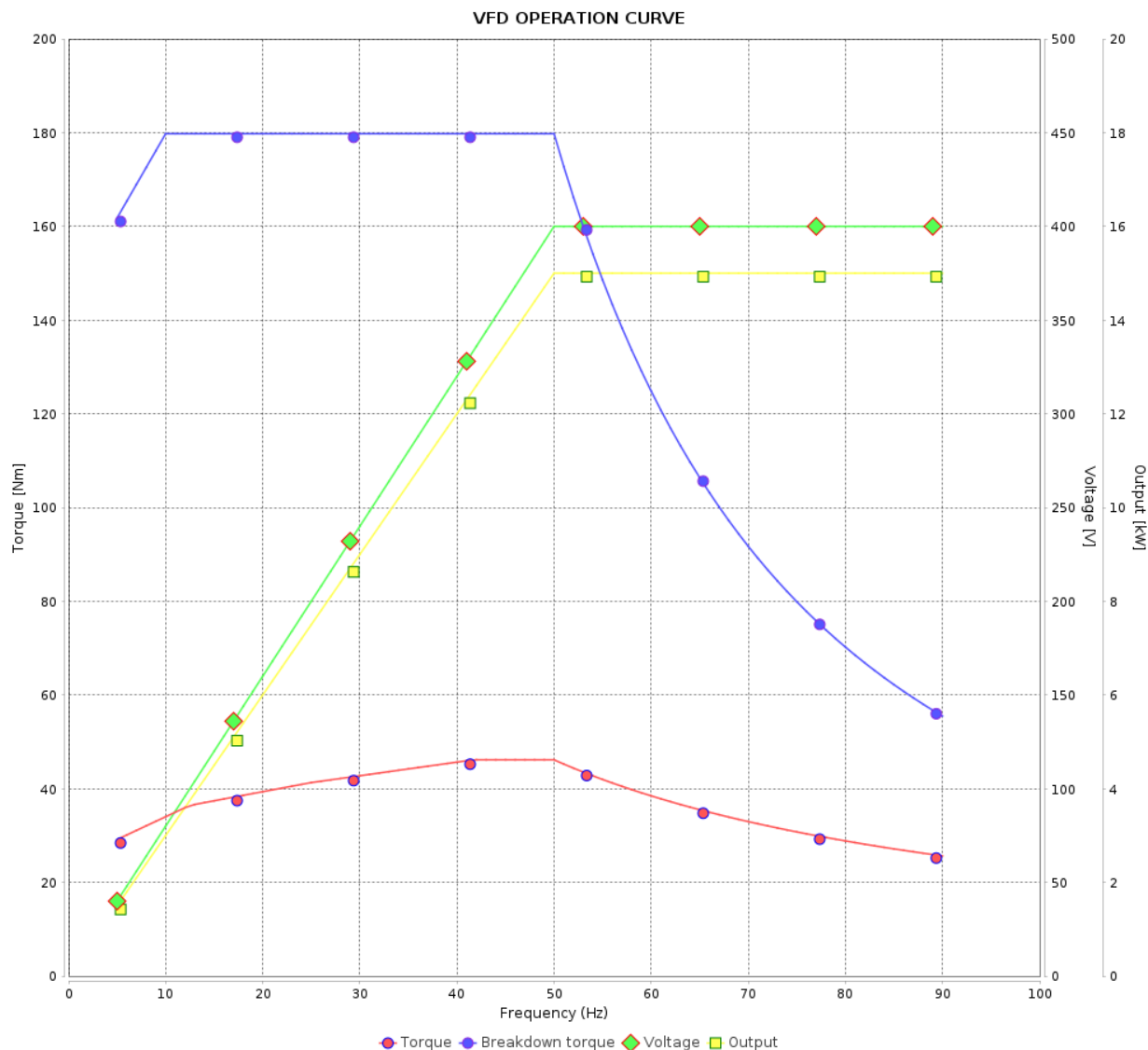
VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : Grupa MGE
Customer reference : Grupa MGE

Product line : WEG GENERAL PURPOSE IE3 Three-Phase
Product code : 16017726



Performance : 400/690 V 50 Hz 2P

Rated current : 27.1/15.7 A
LRC : 7.8
Rated torque : 48.6 Nm
Locked rotor torque : 280 %
Breakdown torque : 370 %
Rated speed : 2950 rpm

Moment of inertia (J) : 0.0417 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : N

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VFD OPERATION CURVE

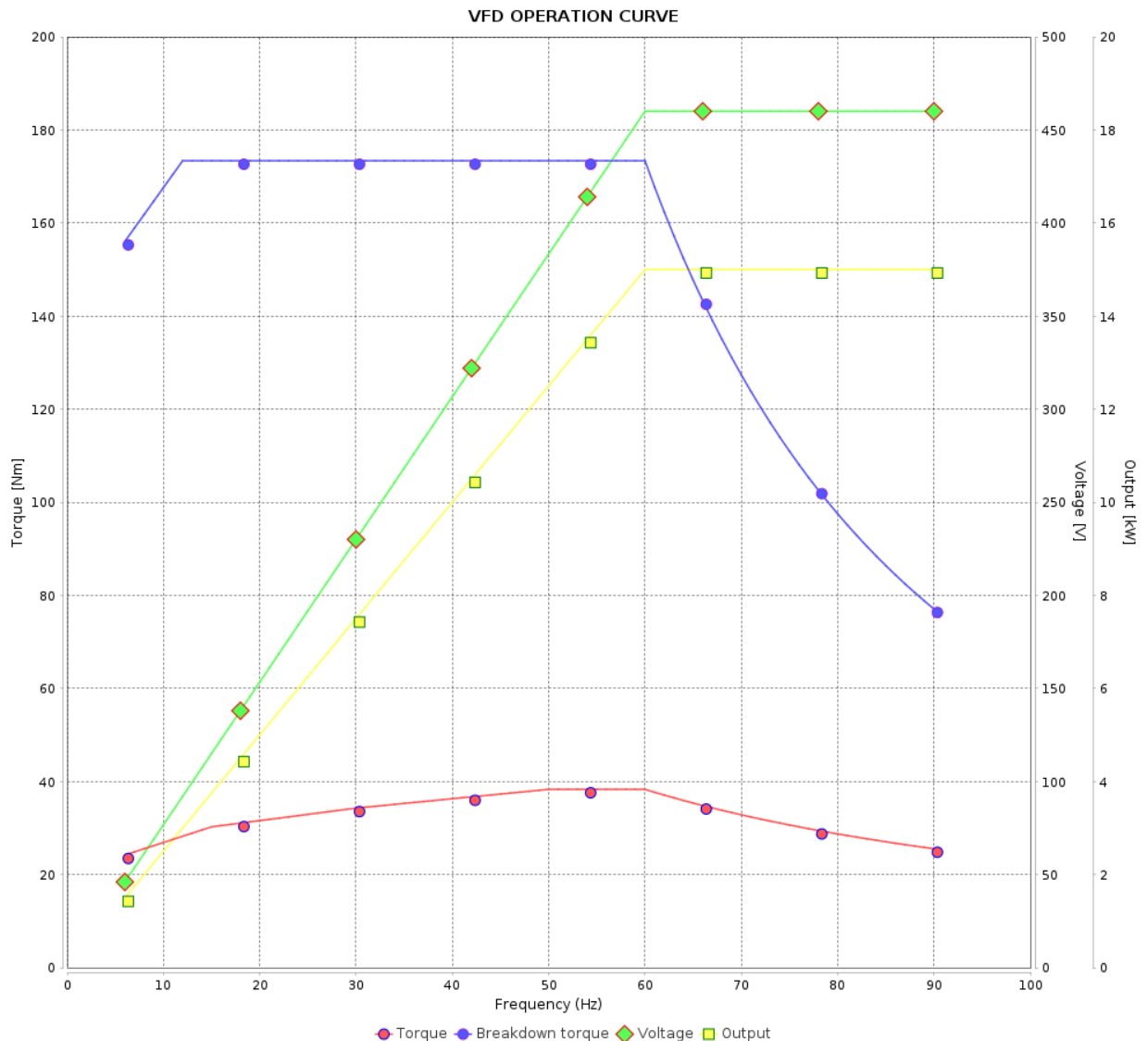
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Product line : WEG GENERAL PURPOSE IE3
Three-Phase

Product code : 16017726

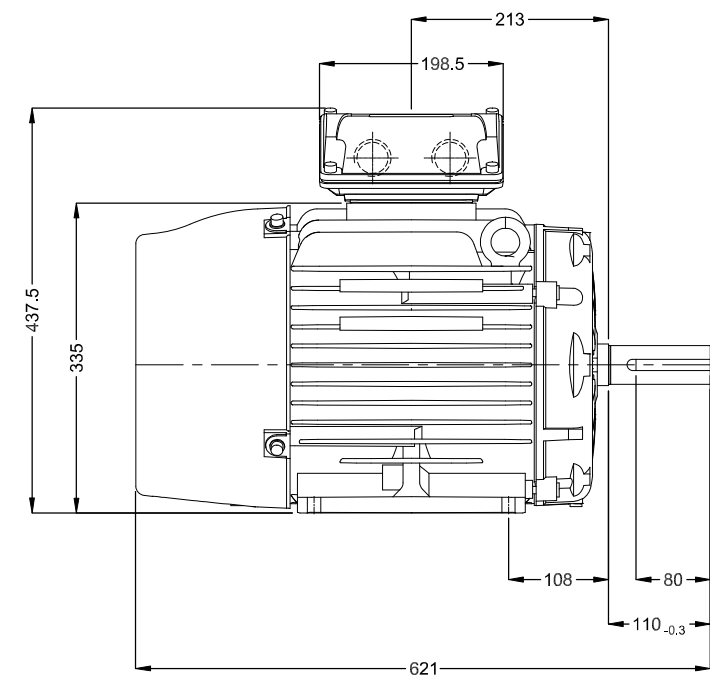


Performance : 460 V 60 Hz 2P

Rated current : 24.3 A
LRC : 8.9
Rated torque : 40.3 Nm
Locked rotor torque : 380 %
Breakdown torque : 430 %
Rated speed : 3555 rpm

Moment of inertia (J) : 0.0417 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : N

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DE Shaft End

12^{N9}_{h9}



42^{k6}

8^{h11}

37^{-0.2}

(DS DIN332)

DM16 WEG WPR-7339

15 kW 02 Poles 50 Hz										A
						Scale		1 : 8		
						HYBRISUSER				00
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER	
EXECUTED	HYBRISUSER			THREE PH. MOTOR W20 GENERAL PURPOSE IE3 FRAME 160M IP55 TEFC			<div>PREVIEW</div> <div>WDD 00</div>			
CHECKED										
RELEASED										
REL. DATE										
						SHEET		1 / 1		