

# 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 : 16170269

Frame : 200M/L	Cooling method : IC411 - TEFC
Insulation class : F	Mounting : B3T
Duty cycle : S1	Rotation <sup>1</sup> : Both (CW and CCW)
Ambient temperature : -20°C to +40°C	Starting method : Direct On Line
Altitude : 1000	Approx. weight <sup>3</sup> : 252 kg
Protection degree : IP55	Moment of inertia (J) : 0.1950 kgm <sup>2</sup>
Design : N	

Output [kW]	37	37
Poles	2	2
Frequency [Hz]	50	60
Rated voltage [V]	400/690	460
Rated current [A]	66.3/38.4	58.7
L. R. Amperes [A]	477/277	470
LRC [A]	7.2	8.0
No load current [A]	23.0/13.3	21.8
Rated speed [RPM]	2960	3565
Slip [%]	1.33	0.97
Rated torque [Nm]	119	99.2
Locked rotor torque [%]	350	360
Breakdown torque [%]	330	380
Service factor	1.00	1.00
Temperature rise	80 K	80 K
Locked rotor time	25s (cold) 14s (hot)	34s (cold) 19s (hot)
Noise level <sup>2</sup>	72.0 dB(A)	77.0 dB(A)
Efficiency (%)	25%	
	50%	92.6
	75%	93.5
	100%	93.7
Power Factor	25%	
	50%	0.73
	75%	0.82
	100%	0.86

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

Losses (%)	P1 (0,9;1,0)	6.5	7.3
	P2 (0,5;1,0)	5.4	6.0
	P3 (0,25;1,0)	4.8	5.4
	P4 (0,9;0,5)	3.1	3.5
	P5 (0,5;0,5)	2.0	2.3
	P6 (0,5;0,25)	1.3	1.4
	P7 (0,25;0,25)	0.8	0.9

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6212 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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	20/09/2024		Page 1 / 5	Revision

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer : Grupa MGE  
Customer reference : Grupa MGE

Notes

Rev.	Changes Summary		Performed	Checked	Date
Performed by			Page 2 / 5		Revision
Checked by					
Date	20/09/2024				

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer : Grupa MGE  
Customer reference : Grupa MGE

Thermal protection					
ID	Application	Type	Quantity	Sensing Temperature	
1	Winding	Thermistor - 2 wires	1 x Phase	155 °C	
Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 3 / 5	Revision
Checked by					
Date		20/09/2024			

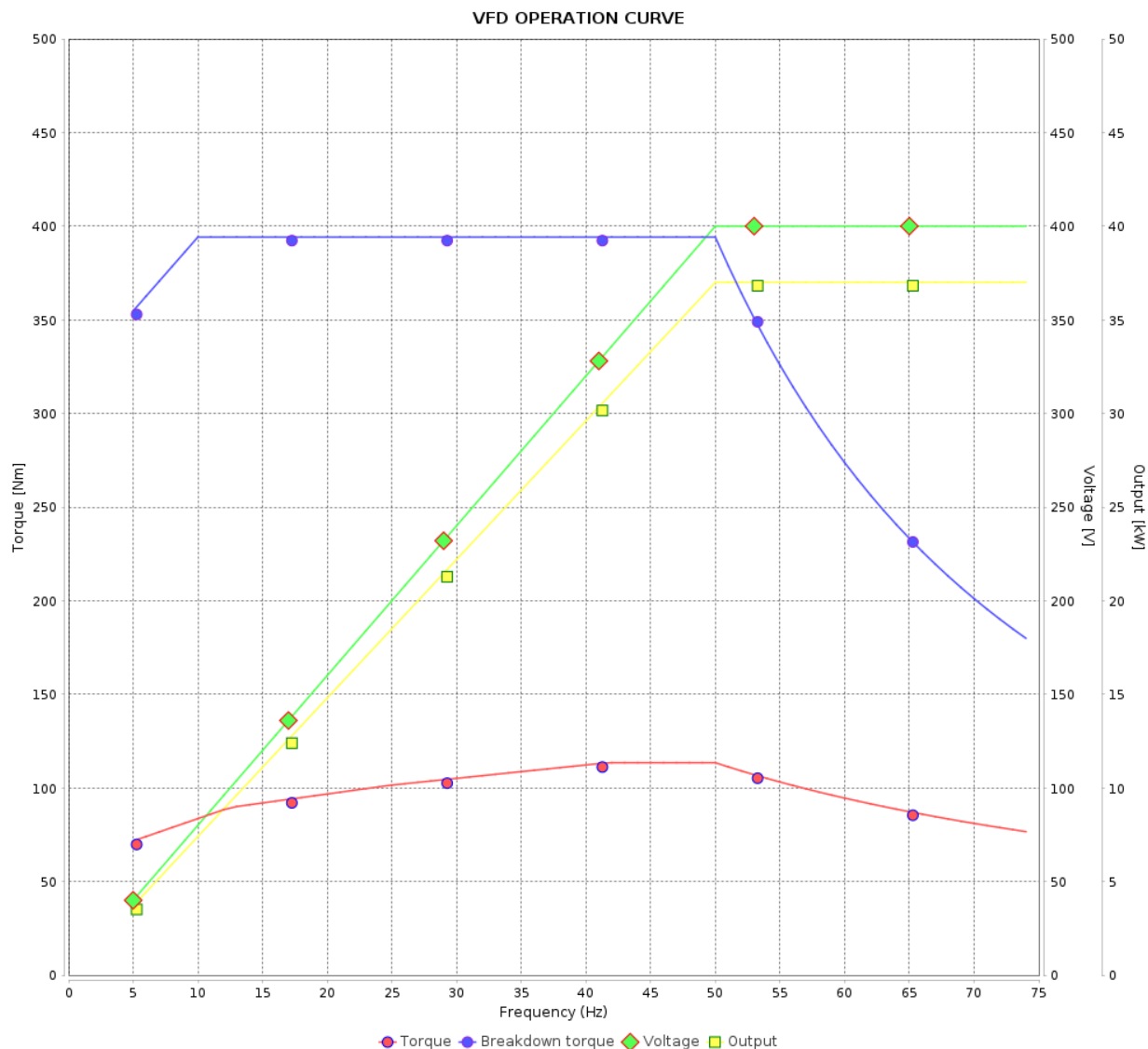
# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer : Grupa MGE  
Customer reference : Grupa MGE

Product line : WEG GENERAL PURPOSE IE3  
Three-Phase  
Product code : 16170269



Performance : 400/690 V 50 Hz 2P

Rated current : 66.3/38.4 A  
LRC : 7.2  
Rated torque : 119 Nm  
Locked rotor torque : 350 %  
Breakdown torque : 330 %  
Rated speed : 2960 rpm

Moment of inertia (J) : 0.1950 kgm<sup>2</sup>  
Duty cycle : S1  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 80 K  
Design : N

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 4 / 5	Revision
Checked by					
Date	20/09/2024				

# VFD OPERATION CURVE

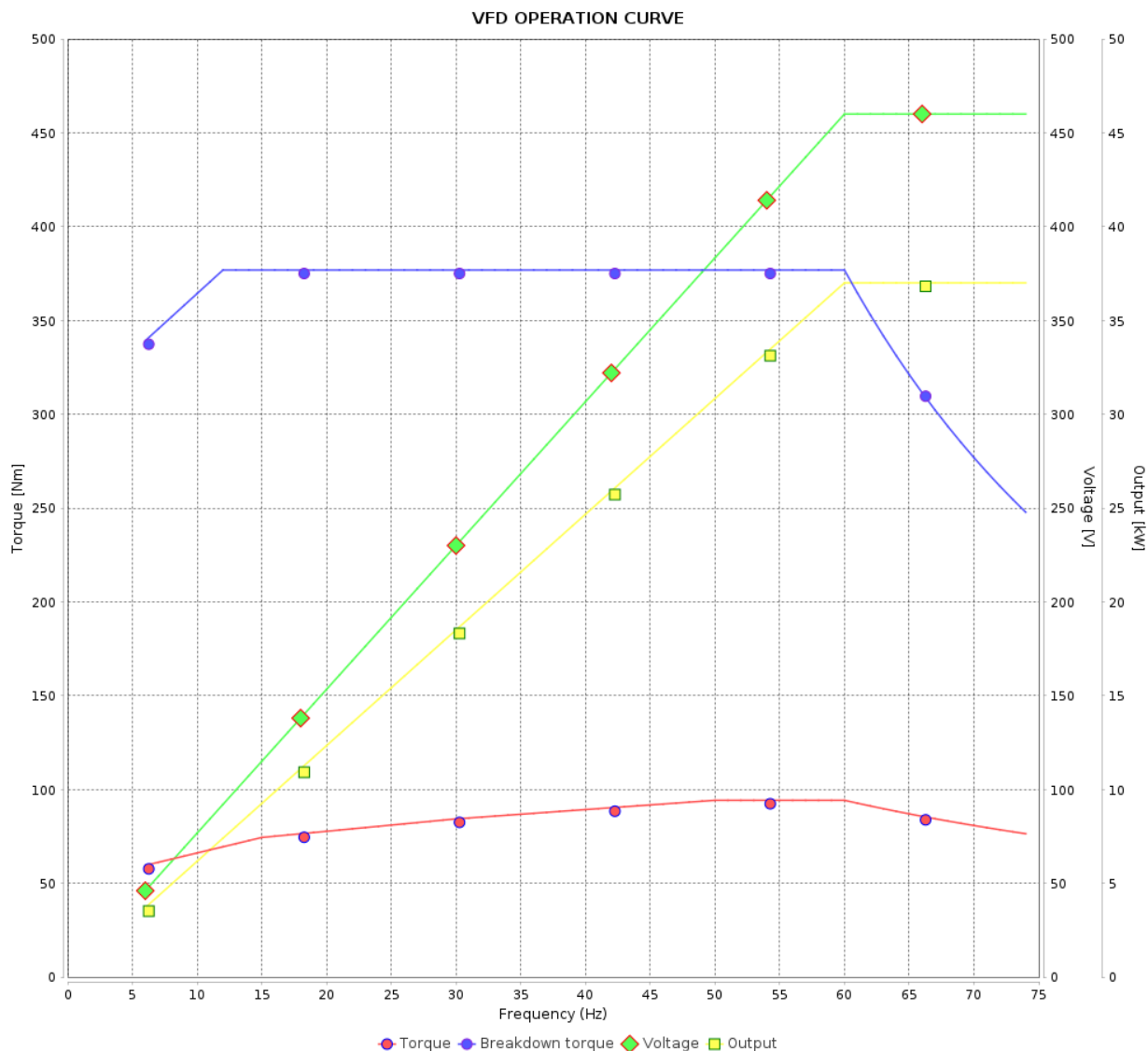
## Three Phase Induction Motor - Squirrel Cage



Customer : Grupa MGE  
Customer reference : Grupa MGE

Product line : WEG GENERAL PURPOSE IE3  
Three-Phase

Product code : 16170269

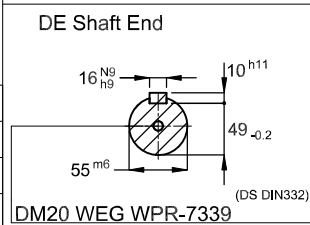
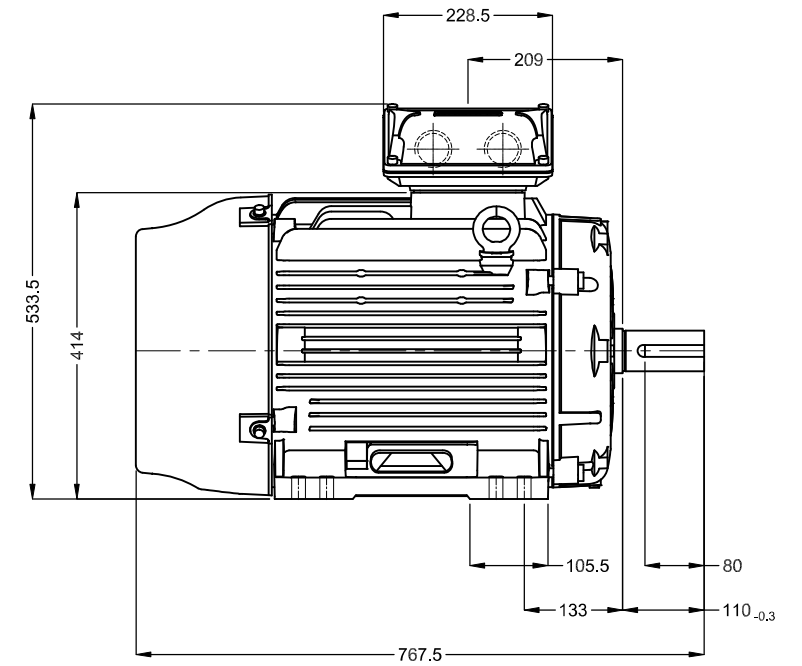
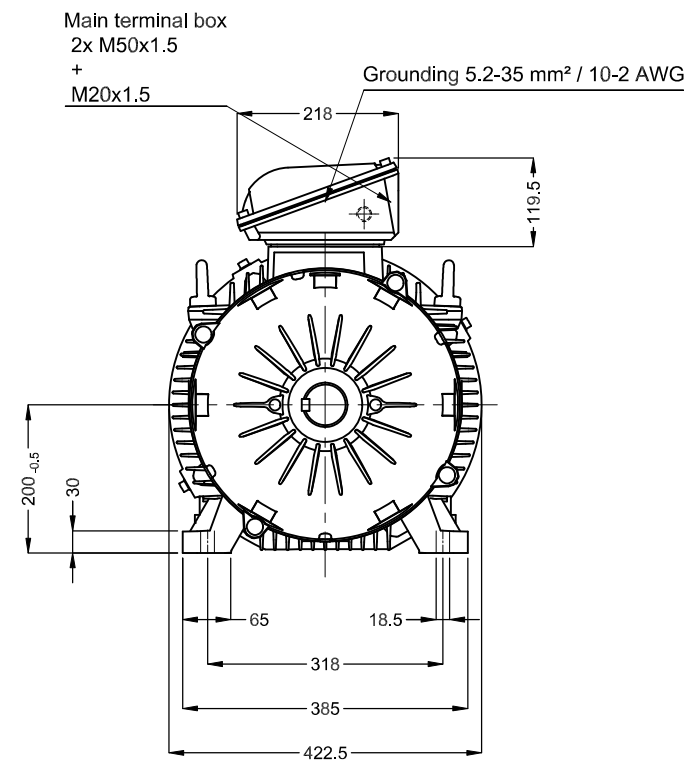
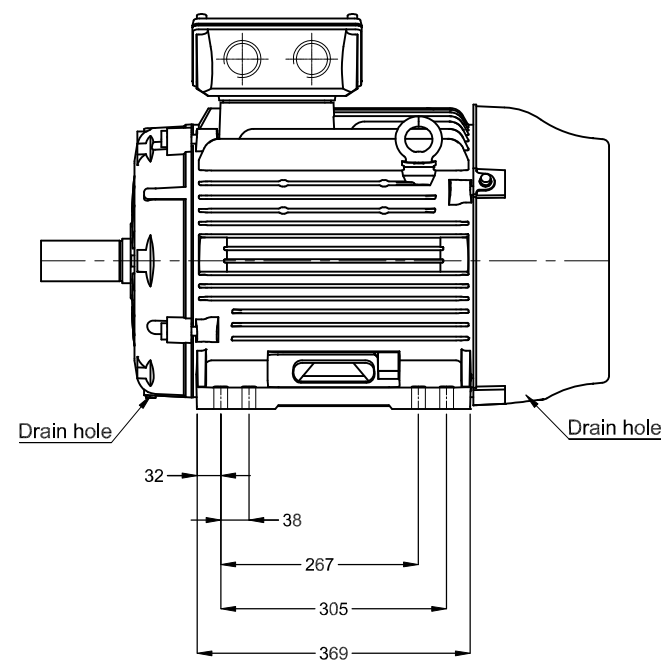




Performance : 460 V 60 Hz 2P

Rated current : 58.7 A  
LRC : 8.0  
Rated torque : 99.2 Nm  
Locked rotor torque : 360 %  
Breakdown torque : 380 %  
Rated speed : 3565 rpm

Moment of inertia (J) : 0.1950 kgm<sup>2</sup>  
Duty cycle : S1  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 80 K  
Design : N

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by					
Date	20/09/2024				
				Page	Revision
				5 / 5	



37 kW   02 Poles   50 Hz										A
						Scale		1 : 10		
						HYBRISUSER			00	
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER		THREE PH. MOTOR W20 GENERAL PURPOSE IE3 FRAME 200M/L IP55 TEFC				PREVIEW WDD   00			
CHECKED										
RELEASED										
REL. DATE										
						SHEET		1 / 1		