



225 to 450 frame

Flange No	MØ	NØ	PØ	Clearance Hole		T	LA	AD	AK	L	LC	LK	E EA	DB DC	D DA	GA GC	F X FA	GD X GF
				No	S													
FF300	300	250	350	4	18.	5	20	225	303	600	716	657	110	M16	42	45	12	X8

Electrical	
kW	1.7/6.8 ✓
Frame	GM160L ✓
Poles	16/4 ✓
Frequency	Hz
Speed Full Load	rpm
Rated Voltage	v
Current	amps
Duty Rating	
Service Factor	
Ambient	Deg C
Altitude Asl m	m asl
Insulation Class	
Temperature Rise	Deg C
Rated Torque	Nm
Locked Rotor Torque DOL	$M_A/M_N$
Breakdown Torque	$M_k/M_N$
Locked Rotor Current DOL	$I_{A/IN}$
Power factor	Efficiency
Full	%
3/4 L	%
1/2 L	%

Bearings	
Drive End	Non Drive End
Notes	
Mechanical	
Enclosure	
Mounting	Flange mounted (B5) ✓
Rotation from DE	Bi-directional
Approx. Wt. net	kg
Rotor inertia	kgm <sup>2</sup>
Shipping dimensions	

DATE OF ISSUE	APPROVED	CHECKED	SERIAL No
18/08/2015			

# TEST CERTIFICATE



**GAMAK MOTORS LTD**

SUPPLIERS OF QUALITY ELECTRIC MOTORS

## 3-Ph CAGE INDUCTION MOTOR (TEFV)

Type: GM 160 L 16 - 4  
 Power Output (kW): 1.7/6.8 ✓  
 Supply Voltage (V): 380 - 415 Y ✓  
 Frequency (Hz): 50  
 Current (A): 7.5 - 7.5  
 Speed (min): 360 ✓  
 Efficiency IE2:  
 Cos  $\phi$ : 0.47 ✓  
 Insulation Class: F  
 Protection Class: IP55  
 Duty Type: S1

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Ambient Temp °C	Resistance of Stator Winding ( $U - \checkmark$ )		Temperature Rise after 3 hours Full Load	
	At Amb Temp	At Thermal Equilibrium	Frame	Stator Winding
23 °C	6.55 Ohm	8.52 Ohm	60 °C	78 K

NO LOAD TEST			
Volts (V)	Current (A)	Power Input (KW)	Cos $\phi$
400	5.90	0.48	0.12

High Voltage Test (One Minute)
Stator 2000V

Insulation Resistance
Stator Mega Ohm

LOOKED - ROTOR TEST DOL						BREAKDOWN	
Volts (V)	Current (A)	Power Input (KW)	Cos $\phi$	Torque		Current	
				(Nm)	(Ma/Mn)	(Ia/In)	Torque ( D.O.L.) (Nm) (Mk/Mn)
400	25	6.4	0.370	65	1.4	3.4	95 2.1

LOAD TEST								
Volts (V)	Current (A)	Power Input (kW)	Cos $\phi$	Efficiency (%)	Speed (min <sup>-1</sup> )	Torque (Nm)	Power Output	
							kW	At
380	7.50	2.40	0.49	70.8	355	45.7	1.70	4/4
400	6.00	1.27	0.31	66.9	367	22.1	0.90	1/2
400	6.80	1.83	0.39	71.0	364	34.1	1.30	3/4
400	7.40	2.40	0.47	70.8	360	45.1	1.70	4/4
400	9.20	3.15	0.49	69.8	355	59.2	2.20	5/4
415	7.50	2.41	0.45	70.5	363	44.7	1.70	4/4

Test No 20/07-56 Date 16/5/2007	<b>TEST CERTIFICATE</b>	Tested by Orhan Tanoglu
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# TEST CERTIFICATE



**GAMAK MOTORS LTD**

SUPPLIERS OF QUALITY ELECTRIC MOTORS

## 3-Ph CAGE INDUCTION MOTOR (TEFV)

Type: GM 160 L 16-4  
 Power Output (kW): 1.7/6.8  
 Supply Voltage (V): 380 - 415 Y  
 Frequency (Hz): 50  
 Current (A): 15 - 14.5 ✓  
 Speed (min): 1455 ✓  
 Efficiency IE2:  
 Cos  $\phi$ : 0.85 ✓  
 Insulation Class: F  
 Protection Class: IP55 ✓  
 Duty Type: S1 ✓

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Ambient Temp °C	Resistance of Stator Winding ( $\bar{U} - \bar{V}$ )		Temperature Rise after 3 hours Full Load	
	At Amb Temp	At Thermal Equilibrium	Frame	Stator Winding
23 °C	1.76 Ohm	2.29 Ohm	50 °C	78 K

NO LOAD TEST			
Volts (V)	Current (A)	Power Input (KW)	Cos $\phi$
400	6.00	0.85	0.20

High Voltage Test (One Minute)
Stator 2000V

Insulation Resistance
Stator Mega Ohm

LOCKED - ROTOR TEST DOL							BREAKDOWN	
Volts (V)	Current (A)	Power Input (KW)	Cos $\phi$	Torque		Current (Ia/In)	Torque ( D.O.L. )	
				(Nm)	(Ma/Mn)		(Nm)	(Mk/Mn)
400	95	52	0.790	95	2.1	6.6	140	3.1

LOAD TEST								
Volts (V)	Current (A)	Power Input (kW)	Cos $\phi$	Efficiency (%)	Speed (min <sup>-1</sup> )	Torque (Nm)	Power Output	
							kW	At
380	15.00	8.50	0.86	80.0	1450	44.8	6.80	4/4
400	8.60	4.30	0.72	79.1	1477	22.0	3.40	1/2
400	12.00	6.25	0.75	80.0	1466	32.6	5.00	3/4
400	14.50	8.50	0.85	80.0	1455	44.6	6.80	4/4
400	18.00	10.60	0.85	79.2	1445	55.5	8.40	5/4
415	14.50	8.50	0.82	80.0	1458	44.5	6.80	4/4

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Test No 20/07-56 Date 6/5/2007	<b>TEST CERTIFICATE</b>	Tested by Orhan Tanoglu
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